

**REPORT
of
THE
UNESCO EDUCATIONAL
SURVEY MISSION
to
BRITISH GUIANA**

BRIGUIED

4 November 1962 to 28 March 1963

C.L. Germanacos, H. Wonder, G.S. Congreve

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FOREWORD

On the assumption of responsibilities under the new Constitution (1961) the Government of British Guiana made clear its awareness of the important role education would play in helping the country, and it sought United Nations assistance to pin-point the needs, to identify the bottlenecks and to indicate lines of advance. In particular the government was concerned over the absence of facilities for higher education and for agricultural education.

The response of the United Nations was sympathetic and Unesco was asked to administer the project. There was unfortunately a delay in assembling and dispatching a team of experts (three months' assignment) to carry out the appraisal and to make recommendations. The Government of British Guiana in this period of delay proceeded to work on its educational problems and many policy decisions of consequence were taken. On its arrival the Unesco Mission was required to make certain modifications to its terms of reference.(1) The mission would no longer be involved with major lines of advance, but would advise within the framework of the policy decision taken, and on details of the implementation of these policies. In practice this limitation was widely interpreted and the government at no time resented comments on policies to which it had committed itself.

The mission laboured under certain other difficulties. One of its members did not join the mission for some three weeks after the arrival in British Guiana of the other two members; the duration of the assignment was for some time not fixed and the investigations of the team were considerably hampered by this uncertainty; one of the team returned within 11 weeks, the second member was recalled to her post in the middle of an important manpower survey, and the third member alone carried on for a further two months. The team met in Paris again to work on the report. The mission found these obstacles of less significance than the problems presented by the inadequacy of the statistical data, and the fact that educational planning could not be related to overall economic development plans as the latter had not yet been formulated. The mission, perforce, has tackled the latter problem by making, it is hoped, intelligent forecasting of probable trends and needs.

As regards statistical data the mission was able to unearth a great deal of material which was lying unused, to collate it after some supplementation, to process and analyse it and interpret it. The data assembled, however, was not without gaps and not always free from inconsistencies.

For these and other reasons the mission confined itself to a great extent to in-school education and only just touched on out-of school and adult education. On the question of the provision of post-secondary facilities, other than teacher training, the mission was not prepared to commit itself on the evidence available in the early stages of its investigations. It was convinced that a comprehensive manpower survey was a prerequisite to consideration of the question, that the educational provisions leading to university education needed to be carefully appraised, the financial and human resources, present and potential for such a venture more deliberately scrutinized, and the social and academic implications considered.

(1) See Appendix A.

The mission is, therefore, painfully conscious of the limitations of this report. And yet it feels that a great deal has been achieved; bottlenecks have been underlined and possible solutions offered; needs and priorities indicated; problems following upon policy decisions identified, analysed and tackled. Personnel were given, directly or indirectly, insight into the "philosophy" and the modes of work and approach of educational planners; techniques illustrated; outmoded machinery renovated and the necessity for reinforcement of essential administrative and organizational services grasped. In fact, the mission found early on that planning within the context of the educational policy laid down was greatly appreciated, but not anything to the same extent as was the programming of the Ministry's or the mission's plans, or as was the actual involvement of the mission at the operational level. If nothing else has been achieved the mission is happy with the knowledge that it has left behind it a more significant awareness of the critical importance of the acceptance of educational plans only after they have been thoroughly scrutinized from all angles and their implications seriously assessed.

In the course of and for the purposes of the assignment the mission travelled widely; visited schools; examined documents, reports, memoranda, papers, and unpublished research theses; conducted and attended conferences and seminars; carried out sample surveys; sought and studied memoranda submitted to it; held discussions with individuals, agencies, organizations, and bodies, official, public and private.

Schools visited

100 all-age schools; the 3 government secondary schools; the 14 government-aided secondary schools; 14 private secondary schools; 5 kindergarten schools; the 2 trade schools.

Other educational establishments, etc.

The government training college; the government technical institute; the Carnegie School of Home Education; 8 community centres.

Regional visits

Surinam, Trinidad and Jamaica: visits to educational establishments, discussions with the Prime Ministers of Surinam and Trinidad, and ministers and top officials of various ministries of all three.

Ministries and officials in British Guiana

The Prime Minister.

Permanent Secretaries and/or officers of the Premier's Office, Ministries of Development and Planning, Finance, Trade and Industry, Natural Resources, Labour, Health and Housing, Attorney-General's Office, Public Works. District Commissioners and field officers; The Commissioner of Local Government; The Director of Audit; The Public Service Commission.

Organizations, associations, agencies in British Guiana

The Mayor and officers of the New Amsterdam Municipality; Local Authorities; Community Development Committees; the British Guiana Teachers' Association

and District Branches; the Association of Science Teachers; the Aided Secondary Schools' Association; the Caribbean Headmasters' and Headmistresses' Association, B.G. Branch; the Adult Education Association and Branches; the Private Secondary Schools Headmasters' Association; the Association of Masters and Mistresses; Queen's College Staff Association; Guild of Graduates; a number of Parent-Teachers' Associations and Old Students' Associations; the Christian Social Council and managers of denominational schools; the B.G. Sanatan Dharma Maha Saba; the Rotarians; the Trade Union Council; the Association of Certified Corporate Accountants; the Georgetown Chamber of Commerce; the Association of Engineers; the Director of the Consultative Association of Guyanese Industry; the Civil Service Association.

International organizations, etc. in B.G.

U.S.A. I.D.; Resident Representative, U.N.T.A.B.; United Nations experts in various fields; U.W.I. Extra-Mural Department; the British Council.

Advisory Committees

Pre-School Advisory Committee; Publications Committee; University Working Party.

Individuals

It would be impossible to name all the individuals who so kindly and so generously gave us the benefit of their advice both as individuals and in their employment capacity. They represent a wide cross-section of the public and of the economic, social and cultural pursuits, activities and interests of the community.

The Ministry of Education and Social Development

The Minister gave us many, many hours, in fact days, of his very valuable time to discuss difficulties and clarify policies. The Permanent Secretary and the senior administrative officers were always at hand to deal with knotty points; the wisdom and thinking of the senior professional officers at our disposal; the experience and co-operation of the other professional officers always available; all gave of their labour and time unstintedly to assist us. We consider ourselves very privileged to have been made so welcome and to have been shown so many kindnesses.

To all who gave of their time to advise us, who made our stay so pleasant and our task so much the lighter and so much more worth while we express our sincere gratitude and deep sense of friendship.

PART 1**THE PROBLEM AND APPRAISAL OF THE EDUCATIONAL PROVISIONS****CHAPTER 1**

The purpose of the mission was to indicate desirable main lines of advance and improvement against the background of the national setting and within the limits of the educational philosophy and policy to which the government was committed and such social and economic development plans as could be deduced from relevant policy statements. Detailed planning and programming - perhaps on the lines of the few papers prepared by the mission when it ventured into this field to guide the way - is the function of the Planning Unit of the Ministry of Education and Social Development (now in its embryonic stage), working in the closest co-operation with, among others, the Central Planning Unit of the Government.

2. No government can afford to lose sight of the fact that progress in the economic and educational fields accelerates the tempo of cultural and attitudinal changes, of reorientation of spiritual and moral values. These changes need to have been foreseen and directed if the process is to evolve smoothly. Consequently the demands of projected economic developments cannot be the sole criterion when establishing and orientating an educational system and determining priorities. The educational philosophy of a community as propounded by its elected government should embody within it full recognition of these factors of immense human impact. We assume, therefore, that a government will evolve its economic and social plans after giving due weight to socio-cultural factors. We are not discounting the powerful force of economic criteria, but wish to ensure that other dynamic criteria are not subordinated. Finally, we would emphasize that any proposed radical change in a deep-rooted educational system - no matter how faulty - may meet with strong opposition from the public and from interested professional bodies if the way has not been prepared or opinion not geared for this change.

THE PROBLEM

3. On the threshold of independence the Government of British Guiana wishes to establish a comprehensive, fully articulated, national system of education, both formal and functional, which can be sustained by its resources, human and economic, existing and potential, which would be consistent with, foster and maintain the social and economic objectives of the nation, and which, at the same time, would weld the different races which make up the population into a united community with a common basic culture and a common pride in their nationhood.

4. The government, conscious of the inadequacies, concluded that a complete overhaul of the educational system was required, of its organization and administration, and of the content of and approach to education; new targets had to be set and new goals to be aimed at. The government proceeded to formulate an educational policy, the immediate result of which was threefold:

- (a) an expansion and reorganization of the educational system at the primary and secondary level;
- (b) the preparation of a draft curriculum guide for the majority of schools, and
- (c) the preparation of plans for the establishment of a tertiary level of education within British Guiana itself.

5. The urgency of the problem led to the speedy application of measures before the full implications of each separately, or of all conjointly, could be worked out and steps taken to meet the situations created. In itself the re-organization proposed was admirable. In view, however, of the limited resources and of the lack of any definite overall economic and social development plans and of a manpower survey, the mission considered that a great deal more thought should be given to the timing and staging of the operations, and that only after priorities had been established. The mission, too, considered it advisable to give further consideration to possible repercussions of the educational policy in general and simultaneous application and go more closely into its impact on the public, the economy, the educational authorities, the teaching profession and the pupil population. It felt, too, that there was a danger that quantitative expansion would override considerations of qualitative advance; that the administrative machinery could still not bear the load placed upon it; that there was still room for more efficient integration and articulation of the educational system, and that a great deal more was required to be done to interpret the content and the intent of the draft curriculum guide to those who would apply it. These problems the mission considered and advised upon when it had had time to define and analyse the problems arising from the stated educational policy and aims. It was concerned not with the aims of that policy as such, but with the best ways of applying the policy to achieve the aims. Its advice on these matters was always given careful and genuine consideration.

ECONOMICS OF EDUCATION

6. It is generally accepted that the level of education bears a strong relationship to the structure and efficiency of the economy. This relationship is reciprocal. On the one hand, economic development requires and induces educational advancements, on the other hand, educational advancements tend to stimulate and support economic growth.

7. We shall not discuss in detail all problems included in what is understood by "economics of education". It may, however, be pertinent to explain some specific principles which guided us in our survey. From the viewpoint of the economy, there are two broad and intimately related aspects with which we are mainly concerned, i.e. the financing of education and the provision of skills needed for economic development.

8. The problem of finance is most important in the realization of educational improvements. It would be wrong to regard it only under quantitative aspects; it does not simply comprise the question of what portion of the available funds can be spared for educational purposes; it embraces the whole complex of structural interrelationships, competing needs and integrated changes in the society as a whole. This is, at least in part, acknowledged in respect of

economic development in that it is planned and financed outside the restrictive procedure of annual decisions and votes. Education, however, also designed to serve future needs and expected to support economic growth, is in practice still mainly financed out of yearly assessed budgets and residual development funds, with the result that allocation becomes liable to short-term economic cycles and political considerations. This is clearly a contradiction in terms and in disagreement with the rising expectations assigned to education.

9. In the financial practice of most countries, education is treated in the same way as public health, housing and social welfare. In fact, education holds an intermediate position in that it renders individual and economic benefits through a much closer and much more direct relation to the economic system than any of the other so-called social services. However, any attempt to systematize its objectives according to their productive or non-productive elements is prone to error. There are indeed very few instances of educational attainment which could as such be grouped under the one or the other heading; even investment in vocational training may turn out to be largely unproductive if the skills cannot be utilized later, while, on the other hand, stimulation of intellectual abilities to serve individual happiness and satisfaction may well generate a common drive towards higher proficiency and economic progress. Another reason for inadequate financial treatment is that only the input but not the output of education can accurately be measured in terms of money.

10. It is necessary to point to this indistinct nature of education and the consequences in respect of finance so as to avoid wrong expectations and to explain why it is so dangerous to generalize foreign experiences and to copy alien systems. What proved to be right in one country may be wrong in the other; what may appear adequate for today may be inadequate ten years later. It follows that educational improvements must be planned for and kept in line with the specific needs of a country and its capacity for future development.

11. Turning back to the problem of finance, it must be stressed that in the promotion of social and economic development it is not the absolute amount of money spent on education that counts but the way in which it is spent. A great sum of money indiscriminately distributed among many projects will be of less economic effect than a smaller sum invested in a few well-chosen and properly designed projects. This brings us to the next necessity, namely the establishment of priorities in the educational budget. How is it to be determined what is more and what is less important if the returns of education cannot be measured? In general one would be inclined to say that those improvements which respond in content and order to present and projected economic needs would promise highest returns and as such constitute the best basis for funds to expand and to become more flexible. In practice, however, social and political considerations must always be taken into account. Observation of such considerations, although likely to lead to renunciation of possible maximum economic returns, may nevertheless contribute to make returns more certain if they lead to greater social and political stability.

12. Another problem conditioning the relation between education and economic progress and the establishment of priorities is the provision of skills. Education is rightly considered a major source of skills and trained abilities, but there is no perfect correspondence between labour demand and the skills supplied through education. The economy requires a wide and constantly varying

compass of skills and talents. All skills require as a basis some degree of formal education, but all reach their full potential only by way of specific instruction, guided experience and constant efforts in everyday working life. Education is not designed to produce technical experts; it aims at embracing all human qualities and potentials. The economic importance arises from the fact that through education people become better trainable for economic purposes and more prepared to promote progress.

13. In a modernizing economy skills and techniques are steadily changing in number and complexity. For that reason, the amount of knowledge which the average person is likely to use during his lifetime is constantly increasing. It becomes less and less expedient to restrict education to selected groups or to elementary subjects. In this respect, the needs of the economy are in accordance with the emerging desires of broader social groups for better and expanded education. However, if education is accepted to be part of the total complex of social and economic change, it must be accepted that the speed of educational expansion has to be kept in line with the development in other sectors.

CHAPTER 2**FACTORS IMPINGING UPON THE PROBLEM**

14. A government proposing radical changes in an established educational system cannot afford to ignore the social, historical and political factors, the economic realities, and all the pertinent factors of the culture, the tradition, the religious observances and convictions, the aspirations of the community or communities which determine or may determine educational processes. And the educational system of British Guiana, although alien to the people when first instituted has taken deep root. Reform and reorganization is necessary, all see this, but certain institutions are considered sacrosanct; the control of schools brings up questions linked with traditional practices, with religion, with concepts of the freedom of the individual; the financing of educational programmes goes back to the history of the development of education; the content of education is intimately and fiercely bound up with the psycho-synthesis of the people.

ENVIRONMENTAL, HISTORICAL AND SOCIAL DETERMINANTS

15. British Guiana has been referred to as the "Land of Many Rivers", the "Land of the Six Peoples", and in those titles are to be found many of the factors which determined and may determine the educational policies and the educational system. It is a land of 83,000 square miles, most of which is covered by almost impenetrable equatorial forest giving way in parts to sparsely populated savannah country, access to which is possible only by plane or by long river boat and exhausting overland journeys. The population of 600,000 is compressed into and stretched along the long, narrow coastal belt. The capital, Georgetown, and its environs, with more than a quarter of the population is centrally placed in this belt but the road along the coast is not an easy one to travel; the two extremities of the populated line can only be reached after a combination of tiring car and ferry journeys. The coastal belt is well populated and socially and economically comparatively advanced. The villages stretch along the main road and have little or no depth. The riverain areas are accessible only by boat. The houses are single units in clearings in the forest which reaches the water's edge. Children paddle to the schools which stand alongside churches in clearings. The Amerindians in the interior live in small scattered settlements, engage in fishing, hunting and simple subsistence farming on a "shifting cultivation" system.

16. The coastal belt served by one single road and partly by a single-track railway is cut off by forests and rivers from the neighbouring countries of Venezuela, Brazil and Surinam. There are few commercial and no cultural contacts with these countries. The British Guianese has never in the past looked to Latin America for ties of any kind; his eyes have been riveted on England and on the West Indies.

17. The country was ruled by the Dutch for two centuries and in 1814 finally ceded to the British. The European plantation owners imported slave labour from Africa and, when in 1834 the slaves were emancipated, introduced indentured

labour from Madeira (Portuguese) and from India and to a lesser extent from China. Neither the Chinese nor the Portuguese proved amenable and their importation for labour purposes ceased. On the whole they left the land to go into retail trade and commerce. The Indians proved more amenable and as one batch of indentured labour completed its service, replacements were brought in at an ever-quickenning tempo until the second decade of this century. Many of the Indians preferred to stay on in British Guiana at the completion of their service and remained on the land. In the meantime the Africans in revulsion from the memories of the slave-days turned their backs on the land and made for the town. Those that remained on the land occupied themselves with vegetable gardening plots and with selling their labour at the highest price, particularly in the more skilled aspects of estate farming. The indigenous population, the Amerindians, had moved further and further inland along the waterways away from the settled coastal plain. There was a good deal of mixing of all the peoples except for the Indian population which kept itself to itself. Consequently the country has a population made up of Amerindians, Chinese, Europeans, Africans, Indians and people of mixed descent. In very general terms, of the major racial groups it may be said that the Indians predominate in the rural areas and are farmers, the Africans predominate in the towns and mining areas and are in the main employees, skilled workers, labourers and miners. The Indians in the towns are merchants, retail traders or in the free professions.

18. The European churches had begun to work among the people from the days of slavery. They had, often in the face of opposition, attempted to mitigate the lot of the slave and to bring to him some alleviation and enlightenment in the form of the Christian faith and rudimentary schooling. After emancipation the churches were able to work more effectively and they took the initiative in opening schools adjoining their churches. Education, rudimentary as it was, was provided and the foundations for a stronger structure laid and the pattern set. Zealous, devoted missionaries carried the torch into the interior. The older established churches worked in consequence for the most part with the African and the Amerindian. Canadian and American denominations, on the other hand, moved in later to work among the newly-imported Indians. Their impact in the religious field was limited, but in the educational field they provided schools, as the European churches had done before them. The government appointed from time to time commissions to inquire into the state of education, but implementation of recommendations did not follow. The churches carried on and the government continued to make annual grants. In the secondary field the government showed a little more direct interest and established one grammar school (for boys) and then a second (for girls), both in Georgetown, initially to ensure for itself a supply of candidates for the lower and middle echelons of the Civil Service. The churches, on the other hand, entered the secondary field in two of the three counties, and were followed by private individuals who established secondary schools on a profit-making basis. It was not until 1946 that the government realized that it had to assume greater responsibilities for primary education. Small subventions and payment of teachers' salaries through grants were no longer enough; the churches could not meet the expense of providing new school places, and the government began to build new schools - never quickly enough to catch up with the increase in school population - and promptly handed most over to the churches to manage. In 1957 the government came to the assistance of secondary schools mainly in the form of a grant towards salaries and in 1961 established

its own third secondary grammar school, this time in the Cinderella County of Essequibo. The school system was on the whole thus dominated by the Christian churches. The Department of Education held a watching brief, trained teachers for primary schools and administered the law and the funds voted for education by the Legislative Assembly.

19. The evolution of education in the Nineteenth century under the direct sponsorship and management of the clergy led to the wholesale transference of the English system and content of education to British Guiana with no adaptation to its new environment and its new receivers. And this, despite occasional realistic advice offered by educationists seated six thousand miles away in the Metropolis. The well-intentioned clergy acted within the limits of their knowledge; the administrators could hardly be expected to believe that what was good enough for the British working-class was not good enough or appropriate for the Guianese.
20. We must remember that these attitudes were ingrained at a time when the African had lost his own roots, his own culture, his own language, at a time when he had to survive the indignities of slavery, and again on emancipation when he was seeking to escape from the nightmare, seeking for security, acceptance and new roots. He had accepted the religion and the language of the Europeans, he now embraced the culture of the Europeans and all that led to that culture as he conceived it. Education was the key, a certain type of education - "academic", "traditional" - the education provided in the grammar school established by the government. Anything different would lead to failure in his driving aims. Non-government institutions were obliged to follow the same pattern if they wished to attract pupils. Certain subjects became prestige subjects; the teaching of Latin in a school placed that school in the category of acceptable secondary establishments. Certain subjects were taboo; an academic education did not in the prototype include practical subjects - handicrafts, agriculture, etc. - and therefore, were never considered in the curricula of secondary schools; in any case they were anathema to the African in that they savoured of an education leading back to manual occupations, recalling unhappy, undesired memories which must at all costs be expunged. This psychological repulsion from vocational education and training is beginning to break down in the field of technical education because of better economic incentives, but little change has been observed in attitudes towards pre-vocational education generally and vocational agricultural training in particular except at the professional level.
21. With the Indian, development has not been quite the same, although he too has by and large lost his roots and his language. The Indian farmer has a land hunger and attitudes of thrift and caution. The hard facts of economics necessitated that he use as little hired labour as possible. Large families have been an insurance against a wage bill. In the periods of concentrated activity on the farm all hands in the family were mustered and schooling often took second place, for even the young child could assist by looking after the toddlers while the mother and elder children were employed in gainful labour. With increasing mechanization, the demand for child labour has diminished, but the attitude of complacency towards absenteeism from school persists. (It should be mentioned here that this indifference is prevalent among all the races and is not confined to the Indian by any means.)
22. The factors enumerated above have left their mark on the people, have

shaped the system and inspired the content of education. Education has never been prized for its refining and cultural value, as an end in itself; education has been a means to an end, a means to climb out of the humble stigmatized ranks of plantation labour into the socially more acceptable ranks of the civil service and the free professions, a means to achieve position and wealth. The detestation for labour in the field is particularly intense in the African mind. The European planters had been educated; they were at the top of the social ladder; they did not indulge in manual labour; they were the masters. Education and religion appeared to be the chief criteria, then, to achieve the same heights and way of living; social mobility depended on this. Those who were educated possessed the lucrative posts and moved in the envied exalted circles. Consequently the religion must be accepted, the children must be educated at all costs. Since success seemed to follow upon acquisition of certificates, examination success became the be-all and end-all of education; examinations multiplied, certificates proliferated; the pressure forced the school curricula to narrow down to examination subjects only and cramming techniques to become the order of the day. So deep-rooted is this attitude of "examinitis", of the identification of education with examination success, that not only parents are affected by it but also those who should be the pioneers in eradicating this attitude. It has left its mark even on trained teachers. Many have failed to see that a broad general education in which pupils learn to think and to study, learn skills, become resourceful, accept opportunities to show initiative, widen their horizons, their range of vocabulary, their comprehension and control of the spoken and written word, will facilitate and not militate against examination success. Few pupils were given the opportunity to realize their full potential, for those who did not appear to be amenable to the cramming game were neglected. This frame of mind is fast changing. The government's policy of equal educational opportunities to all is the beginning of an all-out effort to give to all a full understanding of the value of "education"; the establishment of many more secondary schools in the years to come will make the competition for places less fierce and in time obviate all necessity for examinations at the lower levels.

23. One consequence of the geographical distribution of the population, of transport difficulties and of the economics of the situation was that secondary schools served the Africans in the main and it was only within the last two decades that the Indian showed any great interest in secondary education. The children of rice farmers now seek new avenues of employment and many can afford secondary education. In consequence more and more compete for entry into the established secondary schools; others are catered for in the various secondary schools which have established themselves of late years in the rural areas. The Indian is now competing on an ever-increasing scale with the African for employment in the Civil Service, the Police Force, the teaching profession and in commerce. He, too, is no longer content with the land.

24. One weakness arising from the historical and political evolution of the country has been the divorce of the communities from participation in local affairs, particularly educational affairs. The two urban areas are administered as municipalities; there are a number of village or country district councils concerned with communal problems of irrigation in particular. The establishment and reorganization of a local government system to cover the whole country is now under active consideration. But the municipal and village

authorities, except in isolated instances, have never been involved in the management, control or financing of the schools within their areas of limited jurisdiction. Religious bodies and the state have established, built and equipped the schools; they control, administer and maintain the schools.(1) The schools did not grow up out of the soil and were not the expression of the community corporate life, effort and pride. The people on the whole did not look upon them as their own or feel that they owed any loyalty or responsibility to them. They were church schools, government schools; the churches and the government should provide all. At this time of financial restrictions and with the government's attempt to educate communities in local government, it has been realized that the communities must be "involved" in school construction, management and maintenance. The "Dual Control System" complicates the issue but there are signs that people's participation can be enlisted: parent-teachers' associations are setting the example and taking an active interest in school affairs and provisions; various communities have demonstrated in a practical way that labour, money and time can be made available for school building and equipment. The start has been made and the government should seriously consider in its plans for local government development the acceptance by local authorities of responsibility of some share, at least, of the costs of education in their areas. Incentives must be offered so that communities will accept responsibilities. Achievement of aims, satisfaction of common needs, must come from the people themselves if they are to face up to the challenge of Independence.

25. Of consequence to educational considerations and to the integration of the various races which make up the population is the fact that all use a common language, English. In the days of slavery and immediately afterwards the African languages disappeared. The Indians who came over in large and steady batches and formed their own communities maintained their language and became bilingual; but the younger generations have lost the Indian language to the extent that deliberate efforts are now being made by Indian cultural organizations to keep the Hindi language active.

26. The educational system and laws governing education make for the integration of the various ethnic groups. All children, irrespective of colour, creed and race can gain admittance to any primary school; consequently all have the same basic education, are exposed to the same cultural and social values and standards, play the same games, and grow up looking upon themselves as Guianese. In their working life these affinities are continued. It would be unfortunate if any movement which aims at "partition" of activities at any level were to be sponsored. The difference in religion has been respected; the 1961 Constitution makes the necessary safeguards (Article 7(2) and 7(B)). Religious differences in themselves do not bring disharmony or disunion. For the last few decades then the ethnic races have been united by an adopted but deep-rooted common heritage based principally and initially on the schools and a common language and history. These unifying factors must be strengthened so that the dynamic forces of energy released by independence can build on them a united nation capable of moulding its own destiny. We believe it would be unwise to destroy the foundations of this adopted superstructure of culture and traditions in order to recall the traditional cultures of the various races; the danger becomes greater because these traditional cultures are so fundamentally different in their roots. The

(1) The sugar estates and the mining companies have also built and some still manage schools.

building up of the nation and of the national consciousness cannot neglect to take into account that psychologically the people now look upon themselves essentially as one with European thought and as part of its civilization. They have made their own many of the cultural patterns of the European tradition and the great majority are strongly affected and motivated by values ingrained in these traditions.

27. An inherited weakness of the educational system is the lack of articulation of the primary and secondary levels of education since each grew up separately. This question will be elaborated when we are making our appraisal of the educational system.

28. In short, the educational system of British Guiana has evolved from imported patterns which have become accepted and taken root. Sociological and historical factors determine its content and structure; it reveals the inherited psychological traits and attitudes of its composite ethnic groups as affected by their aspirations and experiences, present and past. Perhaps the two most important characteristics which may determine the shape of things to come are: (a) the fact that the schooling system was largely church-sponsored and only lately state-sponsored, thus giving rise to a dual control system and the exclusion of local communities from participation in its establishment, and (b) the reverence towards traditional curricula and the belief that any other type of curriculum is inferior, even degrading. However, there is a complex of determining factors, each so inextricably interwoven into the others, that it would be most unwise to ascribe some fact of the present situation to any one determinant.

DEMOGRAPHIC AND ECONOMIC FACTORS

29. There are two sets of apparently contradictory demographic problems which are predominantly relevant to the pace of economic development in British Guiana and as such to progress in education:

- (a) The smallness of the population in relation to the size of the country and the rapid demographic increase in relation to British Guiana's limited economic absorptive capacity.
- (b) The surplus of labour potential with regard to available job opportunities and the deficit of economically active persons with regard to the high number of dependants.

When discussing demographic and economic consequences in relation to educational needs and desires, we often observed that differences in outlook were mainly due to different and isolated interpretation of these two sets of problems. Actually, however, these problems are mutually interrelated and each one insoluble without solution of the other.

30. Disregarding the possibilities of foreign assistance in the form of capital or of immigration of labour, more savings could be accumulated and converted into capital investment if the rate of population growth were

smaller, i.e. if fewer consumers had to be supplied by the average producer. This then would result in more jobs for those at present unemployed and under-employed, in rising incomes and savings and finally in a process of economic expansion able to carry a greater population. For education this would mean a wider scope for qualitative improvements economically justified by more diversified labour demand, better prospects of social mobility and greater and more elastic financial funds.

31. On investigation of the demographic structure in British Guiana in more detail, we find that it is the uneven population distribution rather than the smallness in number which causes concern. According to the census of April 1960 approximately 90% of the 550,400 inhabitants lived comparatively congested in the coastal belt comprising only 4% of the country's total land area. It is true, this coastal strip is particularly fertile and because of its well-developed agriculture and harbour facilities as basis for industrial and commercial activities is able to carry a larger population than the interior. On the other hand a high degree of chronic unemployment and under-employment just in these most active areas indicates that it is shortage of capital and not of population which hampers development.

32. British Guiana's population began to increase rapidly after 1945. A steady decline in the death rates following an effective campaign against malaria and rising birth rates placed the country among those with the most rapidly expanding populations in the world. Contrary to the historical pattern of population growth, which through heavy immigration of workers had particularly strengthened the middle groups of the age pyramid, present population increases in British Guiana are predominantly in favour of the younger age brackets. This rapid rise in the number of children resulted in ever-increasing financial demands for education which could never be met; the working force⁽¹⁾ has hardly grown during the last two decades, so that the average worker was burdened with an extra ordinary dependency load.

33. Changes in age composition characterized by increasing proportions of children and young persons are only one reason for the rapid rise in economic dependency.⁽²⁾ Induced by social and economic circumstances, working habits have also changed and retarded the growth of the working force.⁽³⁾ Because of the greater flexibility of women to enter or to withdraw from the labour market, stringent employment conditions associated with social habits tending towards longer school attendance and earlier retirement from work have particularly reduced the number of female workers.

(1) The working population or working force comprises every person who worked as employer, own account worker, paid employee, or unpaid family worker for any length of time during the 12 months preceding the census of 7 April 1960. It does consequently exclude persons unemployed for more than one year and persons looking for first job, but it may include a small number of persons who although working for some time during the preceding 12 months, had already retired when the census was taken.

(2) In 1960, every 100 persons in working force had to maintain 247 persons - mainly children - who were not working.

(3) The working force participation rate dropped from 40% in 1946 to 29% in 1960.

34. Deterioration in employment conditions affect young persons in the first instance because they lack work experience. With working possibilities in family enterprises tending to become scarcer in the course of technical progress, school-leavers more than ever before have to look for paid jobs. This kind of employment although somewhat more expanding than total employment has not by any means kept pace with the rapid rise in the number of aspirants. In April 1960 there were 11,315 young persons looking for their first job which meant in actual fact that shortly before a new group of school leavers was expected to enter the labour market the preceding group had not been placed. Although more boys than girls were looking for employment it was much harder for young women to find a paid job.

Table 1 - Persons looking for first job by sex and area, 1960

Area	Males		Females	
	number	%(a)	number	%(a)
Georgetown and environment	1,933	7.6	2,081	17.8
New Amsterdam	152	7.7	203	19.7
Urban Total	2,085	7.6	2,284	17.9
Demerara (rural)	2,397	8.0	688	12.1
Berbice (rural)	2,444	15.2	478	16.6
Essequibo	684	7.2	255	17.9
Rural Total	5,525	9.9	1,421	14.2
Grand Total	7,610	9.2	3,705	16.3

(a) As percentage of paid employees.

Source: Census of 1960

35. The difficulties young people encounter in establishing a foothold in the labour market are a reflection of the limited elasticity of the present economic structure. British Guiana's economy, similar to that of most of the other developing countries in the Caribbean area, is still heavily based upon a narrow selection of primary products and related tertiary activities, while secondary industry remains comparatively undeveloped. As the economy is limited because of the small population and of the moderate level of income, production and marketing are to a large extent monopolistic giving little inducement for greater diversification of the economic structure. Demands for most consumer goods have been met by imports rather than by intensification of local manufacturing and processing. All of the country's major industries, i.e. sugar, rice, forestry, and mining are export industries with prospects for expansion largely determined by world market conditions. The high degree of dependence on external trade underlines the fluctuating nature of the economy arising from its unilateral structure.

36. Although capital investment, from national as well as from foreign sources, has been considerable, overall economic development has not been such as to absorb an increasing number of workers. Capital requirements for economic overheads are extremely high in British Guiana. Part of the densely settled coastal belt which lies below sea level needs constant protection from floods by a costly system of dykes, canals and sluices. Road construction is excessively expensive in this swampy area. With large public investment concentrated on drainage and irrigation schemes and private investment predominantly attracted by the export sector changes in economic structure and in employment remain negligible.
37. It is true, there was a considerable rise in primary production but because of greater capital intensity, labour demand did not expand to the same extent. In the sugar industry, which is by far the largest single employer in British Guiana, job opportunities have absolutely declined since 1952. A similar development took place in rice milling. Only rice production was able to absorb more labour after a considerable and costly expansion of acreage. However, this gain neither reduced prevailing under-employment in rice agriculture nor did it offset losses of employment opportunities in other agricultural branches. In contrast to sugar cultivation rice cultivation is almost exclusively in the hands of small farmers, whose labour demand in general does not exceed family circles. Mechanization in agriculture did not so much result in spontaneous dismissals as in the renouncing of normal replacements and in restriction of casual labour. Demand for skilled workers has increased, but this demand has mostly been satisfied by retraining suitable candidates selected from own personnel. Opportunities for school-leavers to establish a skilled or unskilled position in agriculture have dropped in particular, thus reinforcing the socially-motivated aversion to manual work.
38. Apart from mining, most non-agricultural activities are heavily concentrated in urban areas, i.e. Georgetown and its environments. New Amsterdam, the second area in British Guiana classified as "urban", is much too small to offer a significant outlet for the heavily growing agricultural labour surplus even of its immediate hinterland. Many school-leavers looking for paid employment are thus forced into Georgetown but there too job opportunities have not expanded to the same degree as labour supply. With comparatively little investment in manufacturing, labour demand has remained limited in both secondary industries and tertiary activities - in the latter, employment capacity is largely determined by the development in the immediately productive sectors of the economy. While employment for males in manufacturing improved slightly, possibilities for women have declined absolutely. In general there has been a distinct shift from agriculture into commerce and service industries.
39. The occupational composition of the working force, too, is characterized by marked concentrations in a few occupations. Outside agriculture, males for the most part hold positions as workers in transport and communications, in construction, in metal trades and in certain private services, while women are mainly engaged as service workers or employees in the commercial and professional fields. Again, all of these occupations are centred in urban districts.
40. In summary, pupils in British Guiana leaving school at present face the problem of general employment shortage and lack possibilities of social and economic advancement. Prospects for young people in rural areas have been

limited and the drive to urban centres and the search for white collar jobs intensified. Secondary industry has so far done little to change the traditionally and socially determined dislike for manual work. With insufficient wage differences between skilled and unskilled labour such as prevail in smaller enterprises, there is little stratification in the socio-economic structure at the lower level and consequently little incentive for technical proficiency. Insufficient graduation of skill, too, means inadequate utilization of human resources, excessive production costs (even at low wages), limited economic expansion and restricted employment opportunities at all levels.

41. In our talks with representatives of different industrial and commercial enterprises constantly we heard complaints of educational attainments in British Guiana not meeting the requirements of a modernizing economy. Standards of learning at school were stated to be low; again, too many young people were entering the labour market without a proper sense of social responsibility, accuracy and punctuality which is so important for the smooth functioning of the production process, for individual advancement and, in turn, for greater diversification of skills. It was accented that the relatively few persons who were successful in secondary school often showed more interest in careers requiring university training than in the more painful and uncertain chances for non-academics to climb the social ladder. We found a great deal of evidence to support these statements.

42. Rising standards at all levels of education are indispensable in British Guiana in order to promote economic advancement and to better the prospects for the young generation. In fact, the mission's purpose was to investigate ways to speed up educational improvements. At the same time, however, it feels that it must warn against the belief that educational improvements alone unaccompanied by adequate economic measures can widen the rigid occupational structure and open up new opportunities. In a complex society impulses which education can offer to the economy are largely the result of impulses it receives. Formal standards may be raised and skills be diversified in anticipation of future needs, but any educational system, no matter how comprehensive will find it very difficult to turn attitudes and aspirations towards greater technical efficiency as long as economic inflexibility and restricted job opportunities do not offer encouragement. That does not mean that educational improvements have to wait for higher economic attainments, but it means that the economy must respond quickly, if better results in education are not to be frittered away.

43. The need for a balanced educational and economic development will become even more urgent in future. In the course of accelerating population growth demand not only for education but also for employment will speedily rise. Taking the data in the census of 1960 and recent trends in fertility and mortality in British Guiana, the mission has estimated probable population increases up to 1975.(1) Such estimates can, of course, not predict actual

(1) Assumptions of the projection:

- (a) Fertility: decline of the gross reproduction rate from 3.1 in 1958 to 2.5 in 1975.
- (b) Mortality: decline of the life table death rate from 16.5 o/oo in 1958 to 15.4 o/oo in 1975 equalling a rise in life expectancy at birth from 60.7 years in 1958 to 65 years in 1975.

It would have been more conservative to base the assumptions upon the average of more than one year. However, since 1958 appeared to be a quite normal year fitting well into the foregoing trend, we considered it adequate for our purposes.

changes. It is, in particular, not possible to anticipate the future volume of external migration and its effects on population growth, nor is it possible to foretell actual variations in natural increase. However, with mortality already relatively low, changes in population size to be expected within a limited period of time ahead are largely prescribed by present sex age structure. Increases resulting from fertility only affect the younger age groups. The estimates allow for a fall in fertility to set in immediately; this is by no means certain. Nevertheless, because of the relatively high number of women in the reproductive ages resulting from preceding high fertility, the number of new-born children will for some time continue to be high. With the given assumptions, which we feel are rather conservative, the effects of decreasing fertility and decreasing mortality will simply offset each other thus keeping the rate of natural growth at the present level of 3% per annum. (1)

44. In the course of the next 10 to 15 years large numerical increases are to be expected not only among children of school age but also among persons of early working age. In 1975 there will possibly be about 340,000 or 60% more people in British Guiana than there were in 1960. More than one-fourth of this increase will add to the age groups between 5 to under 16 years, but more than one-third to those between 16 to under 30 years. If our projections are in approximate agreement with future reality, this would mean that the present economically unfavourable relation between the number of children and the population of working age will soon tend to improve again. However, the advantages of such a change will only materialize to the extent that training and employment conditions improve as well, i.e. to the extent that the numerically strong groups of young people who will be entering the labour market find adequate opportunities to develop and utilize their potential skills. Table 2 indicates the enormous expansion which those groups who are in greatest need of post-primary education and vocational training will probably experience. (2)

(1) Our estimates produced the following rates of natural increase:

	1960/65	1965/70	1970/75
Crude birth rate	40.8 o/oo	39.1 o/oo	38.3 o/oo
Crude death rate	8.6 o/oo	7.9 o/oo	7.2 o/oo
Rate of natural growth	32.2 o/oo	31.2 o/oo	31.1 o/oo

(2) Our cost estimates in Chapter 7 and Appendix N are based upon projections made by the United Nations in 1955 (see: United Nations, Population Studies No. 21, Future Population Estimates by Sex and Age, Report II: The Population of South America 1950-1980, New York 1955, page 88 - Medium Assumptions for British Guiana). These projections, which had to be used because the returns of the census of 1960 were not available when we were working on the cost estimates, are generally smaller in numbers than ours. They assume an earlier decrease in fertility and a slower fall in mortality than actually occurred between 1955 and 1960. For this reason, the number of persons in the age group of 5 to under 20 years estimated for 1960 is about 12,000 smaller than the census returns upon which our projections have been based. The differences between the two sets of projections became more pronounced over time suggesting that our cost estimates are probably not exaggerating future financial requirements, especially not in respect of primary education. The census returns and our projections for the main age groups under consideration exceed the United Nations estimates by the following totals:

	1960	1975
5 to under 12 years	9,098	23,451
12 to under 16 years	1,568	8,054
16 to under 20 years	1,505	1,115
5 to under 20 years	12,171	32,620

Table 2 - Projected population of British Guiana of the ages 5 to under 30 years, 1965, 1970 and 1975 compared with 1960

Age groups (years)	1960	1965	1970	1975	1965	Percentage increase over 1960	
						1970	1975
5 to under 6	19,441	19,960	24,555	27,339	2.7	26.3	40.6
6 to under 12	102,202	113,641	129,760	149,916	11.2	27.0	46.7
12 to under 14	27,052	36,367	37,334	45,182	34.4	38.0	67.0
14 to under 16	24,012	32,532	37,249	41,527	35.5	55.1	72.9
12 to under 16	51,064	68,899	74,583	86,709	34.9	46.1	69.8
5 to under 16	172,707	202,500	228,898	263,964	17.3	32.5	52.8
16 to under 20	40,264	53,961	71,486	74,956	34.0	77.5	86.2
20 to under 25	42,158	51,410	69,120	89,371	21.9	64.0	112.0
25 to under 30	35,962	41,661	50,846	68,419	15.8	41.4	90.3
16 to under 30	118,384	147,032	191,452	232,746	24.2	61.7	96.6

45. Realization of future demands for education resulting from both demographic increases and rising qualitative requirements will thus greatly depend upon better employment conditions. By this we do not mean that jobs should be provided at all costs, i.e. without regard to the needs for technical change and mechanization. On the contrary, we know that emphasis must be placed upon improvements in labour productivity if economic stagnation is to be avoided. In general, projects promising maximum income rather than maximum employment will demand preference, for only out of rising income can there be more savings and investments which, in turn, will generate more employment and income. However, with present high levels of unemployment and under-employment provision of jobs in British Guiana has become an important social issue which makes it impossible to take into consideration only economic necessities.

46. Economic prospects in British Guiana are difficult to foresee, inasmuch as political uncertainty tends to hamper the inflow of foreign capital which is so important for future development. Government economic policy as implied by the development programmes has especially concentrated on providing basic services such as drainage, irrigation, and marketing facilities for private industries and for labour intensive agricultural activities. It is obvious that such a policy in order to become successful needs to be immediately supplemented by private investments in industries utilizing these services. So far, private response has been limited. Foreign capital has continued to move predominantly into established channels, while local savings rather than opening up new lines of advance, have shown preference for investments overseas.

47. Projections of future economic development based upon the past and present pattern of production do not present a bright picture, either in terms of employment or in per capita income. Only two such projections were available for us to study. One has been prepared by the Ministry of Finance, but it covers only the period 1962 to 1968. The other which extends as far as 1975

was made in the Institute of Social and Economic Research of the University of the West Indies, Jamaica⁽¹⁾. The National Planning Unit considers the outlook of these two projections as gloomy. The experts told us that a higher per capita income could be expected in view of the high rate of previous investments, especially in agriculture. However, we were not able to receive sufficiently detailed information to substantiate the optimistic view.

48. This being the case we saw no other way than to take Kundu's projections of gross domestic product as the starting point for our own estimates of future employment opportunities. Kundu's projections based upon past trends and certain firm indications of future changes lead to the conclusion that while gross domestic product in real terms will be 58% higher in 1975 than in 1960⁽²⁾, the increase will be hardly sufficient to keep per capita income stable unless there is a slow-down in population growth. In estimating future employment opportunities we had to make some rather arbitrary assumptions as to prospective trends in labour productivity. Statistical data, from which a rough idea of recent levels in productivity can be derived, are available only for a few industries, i.e. rice, sugar (both for field and factory), bauxite and timber. These industries, although employing roughly one-fourth of the working force, are nevertheless not a representative selection; all of them, except rice cultivation, are highly mechanized and not labour intensive. The combined rate of productivity increase for the period 1951 to 1960 was around 2.8%⁽³⁾, which can certainly not be applied to the economy as a whole. The service sector especially and most agricultural activities not covered by the above sample have much smaller gains in productivity. We also allowed for rather moderate increases in the cases of manufacturing and construction, assuming a relatively high absorption of labour in the processing of agricultural products (except for rice, sugar and dairy products) and in the manufacturing of consumer goods. As a result of separate assumptions total gain in labour productivity to be expected over the period under consideration turned out to be around 1.4% per year.

49. If future development followed a course as projected by Kundu, a rise in gross domestic product of 58% in the period 1960 to 1975 would, at an annual increase in labour productivity of 1.4%, allow employment to expand by 28%. This would not be sufficient to provide jobs for all members of the working

(1) A. Kundu, *The economy of British Guiana, 1960-1975 (A long-term projection)*, Institute of Social and Economic Research, University of the West Indies, Kingston, Jamaica, September 1962 (mimeographed).

(2) 19.5% in 1965 and 37.7% in 1970.

(3) We used the same method to calculate rates of productivity increase as did Kundu, but our results vary somewhat because of differences in the statistical series used. Our returns are:

Rice cultivation	0.3%)
milling	6.9%	(0.54%)
Sugar cultivation	7.0%)
milling	8.3%	(7.84%)
Timber	3.2%	(7.02%)
Bauxite	5.5%	(2.46%)

Kundu's rates are given in brackets

potential which is expected to grow by 68% in the same period⁽¹⁾. Table 3 shows to what extent labour demand and labour supply would differ under given assumptions.

Table 3 - Projected demand and supply of labour in British Guiana, 1960-1975

	1960 (actual)		1965		1970		1975	
	number	%	number	%	number	%	number	%
Primary industry ^a	65,850	40.8	73,200	41.0	77,750	40.0	81,420	39.4
Secondary industry ^b	39,165	24.3	41,000	22.9	43,550	22.6	46,720	22.6
Tertiary industry ^c	56,392	34.9	64,300	36.1	71,300	37.0	78,260	38.0
Total labour demand ^d	161,407	100.0	178,500	100.0	192,600	100.0	206,400	100.0
Total labour supply ^e	161,407	100.0	189,100	117.2	227,500	140.9	270,600	167.6
Deficit ^f	-	0.0	10,600	5.6	34,900	15.3	64,200	23.7

^aAgriculture, forestry, fishing, and mining. ^bProcessing, manufacturing, and construction. ^cCommerce, transport, communication, and services. ^dCalculated for average annual increases in gross national product of 3.1% and in labour productivity of 1.4%. ^eIt has been assumed that the age-specific working force participation rates of 1960 will remain constant over time, i.e. that only changes in population size and structure will affect the working force.

^fExcluding persons unemployed for more than one year and persons looking for first job.

50. Such a great difference between labour demand and labour supply may not necessarily develop, but we cannot deny a rather strong tendency towards increasing unemployment. This tendency arises to a large extent from demographic developments. The size of the working potential of the next 15 years is more or less fixed by the present sex and age composition of the population.

(1) Our projections of the working force have been made by applying sex-age specific working force participation rates to the projected sex-age groups of the population. In the absence of census data on the sex and age composition of the working force, we had to compile rates from data included in: ILO, Report to the Government of British Guiana on Employment, Unemployment and Under-employment in the Colony 1956, Geneva 1957. Allowance has been made for differences in concepts by subtracting persons unemployed for more than one year and persons looking for first job from labour force data in the ILO Report. Since the rates which we estimated for 1960 turned out to be already relatively low for those age groups whose working force participation tends to decline in the course of economic development, no further reductions have been assumed to occur during the period 1960-1975. This appeared to be the more justified as the working force concept which has been taken as a basis excludes long-term unemployed and first-job seekers and thus does not cover total labour supply.

The only ways to reduce it would be by emigration or by decreasing working force participation, but neither way would present a desirable solution. In both cases there would be a sharp rise in the burden of economic dependency. In respect of education this would mean a depreciation of returns in the sense that many school-leavers would not have the chance to utilize their abilities and skills in British Guiana.

51. Fortunately the course of economic development and of labour demand is less determinate than labour supply. Indeed, in a small country like British Guiana a sufficient but relatively small amount of foreign capital directed into well selected projects could alter the whole picture. However, without more investment than is at present foreseeable especially in secondary industries and in the construction of roads and other economic overheads, it will be difficult to raise existing income and employment levels. It would of course be possible - at least in theory - to reduce labour productivity in order to keep employment high. Such a policy would be retrograde, especially for a country like British Guiana whose economic standards are largely determined by the world market. On the other hand, to retain an increase in labour productivity of 1.4% per year and to absorb, at the same time, 68% more workers would require gross domestic product to rise by 5% per year and to reach the volume of 551 million dollars in 1975 (in prices of 1960). This would not yet mean an ideal employment situation(1), nor a large expansion of per capita income, but it would incorporate greater stability in employment since relatively more jobs would have to be created in manufacturing, transport and commerce and fewer in agriculture. More skills at all levels would also be needed and better opportunities for training and social upgrading would accrue.
52. Such a modest improvement would nevertheless demand tremendous efforts in terms of capital and reorganization to create sufficient new jobs to offset the labour saving effects of rising mechanization. We have based our estimates and suggestions for educational improvement upon such a development, because we consider that only in an economy actively oriented towards growth will there be scope for education to become economically effective and a motor for further development.

PROBLEMS OF FINANCE

53. We shall not repeat the principles which have already been enunciated under the "Economics of Education" and which are manifestly valid in problems of financing education, but shall add a few remarks on the utilization of private funds.
54. There is a tendency for government control in education to become more and more comprehensive in response to social demands and thus to restrict the scope for private contributions, which in the course of economic development and rising per capita income have often proved to be more elastic than

(1) The working force participation rate would remain at the relatively low level of 29 to 30% and an unemployment rate of approximately 8% would still persist.

public funds. The financial value of such contributions is often underestimated, be it in respect of school fees, provision of textbooks and education materials or of private scholarships or privately organized schools. True, originally all kinds of funds, except for foreign grants, come out of the same source, i.e. national income, but we must remember that more centralization of expenditure inevitably involves higher taxation. Private earners of income - individuals as well as corporate bodies - having the choice, will probably be more inclined to contribute directly to educational purposes where they can observe the results than to the anonymous fund of the exchequer. Under conditions of rapidly rising school population, in which realization of qualitative improvements is easily subjected to the more obvious needs arising from greater quantities, changes in educational policy aiming at reducing the direct financial contribution of the private sector should consider all possible consequences and repercussions.

55. In British Guiana, education is financed out of three main sources: the current national budget, the development budget and various forms of private funds. Local authorities and communities in their capacity as public authorities do not share in the control and finance of education. It is very difficult to get an overall picture of the proportions spent from the different funds, partly because the responsibility on the public side is not fully centralized and partly because the private sector cannot be properly assessed in all its different kinds of contribution for lack of statistical information. We have attempted in our analysis to include all educational and para-educational expenditure, since only in this way will it be possible to evaluate adequately past and present achievements and future possibilities to realize changing needs.

56. In the case of the private sector which comprises all kinds of payments made by parents, private firms, churches, labour and welfare organizations as well as payments from international and foreign national funds our estimates cover only one year, 1960. This is not a typical year, especially as regards capital expenditure, but there was no alternative choice. The assessment of private contribution is by no means complete, but it can serve to give some approximate idea of the quantities involved and permit us to appreciate the total educational effort of the population of British Guiana.

57. Table 4 which is the summary of more detailed tables included in Appendix C shows what percentage of total expenditure in the various fields of education was derived from public and private sources. For the purpose of this comparison, school fees and examination fees paid by private individuals to the Exchequer have been deducted from recurrent public expenditure. Likewise, capital expenditure met from the Colonial Development & Welfare Fund has been separated from other educational expenditure in the Development Budget. Government's contribution to education amounted to roughly 67% of recurrent and 38% of non-recurrent expenditure. There were, however, differences in the degree of participation in and towards the several fields.

58. In absolute terms, recurrent expenditure from all sources amounted, in 1960, to 12.1 million W.I. \$ of which 10.9 million \$ were derived from different kinds of national funds. Non-recurrent expenditure for the same year totalled 0.6 million W.I. \$ with a national share of 0.28 million \$. On

eliminating foreign contributions, the remaining national share of 11.2 million W.I.\$ equals 5.2% of national income which has officially been estimated at 214 million \$ in 1960. This is a remarkable proportion. It may indicate that the main prospects for greater funds for education accrue from growing national income and not from a greater share in national income.

59. We could not include the private sector in the analysis of historical changes in educational expenditure, the details of which are given in a number of tables in Appendix C. They show the comparatively fixed structure of government expenditure and the limited possibilities for one sector to expand at the expense of others, and thus explain why the rise in the proportion of educational expenditure over the last 13 years has been relatively small. However, this rise involves no unremarkable achievement in view of the steep increase of debt charges, because of big loans on development projects, obligations which should not be neglected even for other urgent requirements. The structure of government revenue underlines the relative rigidity in the allocation of funds. More than 80% of the revenue is derived from taxation, mainly from customs and excise - apart from income tax - reflecting a high degree of dependency in spending capacity on external developments.

Table 4 - Estimate of recurrent and non-recurrent expenditure on education net by governmental and other sources, 1960(a) (percentages)

Item	Recurrent		Non-recurrent	
	government expenditure	expenditure from other sources	government expenditure	expenditure from other sources
Primary schools	84.6	15.4	26.6	73.4
Practical Instruction Centres	92.7	7.3	10.0	90.0
Teacher Training	100.0	-	-	-
Total primary education	85.1	14.9	22.7	77.3
Government secondary grammar schools	67.5	32.5	100.0	-
Grant-aided secondary schools	34.8	65.2	64.3	35.7
Private secondary schools	-	100.0	-	-
Total secondary education	37.3	62.7	66.0	34.0
Government Technical Institute	70.6	29.4	-	-
Demba Trade School	-	100.0	-	-
Port Mourant Trade School	-	100.0	-	-
Carnegie School of Home Economics	96.3	3.7	100.0	-
Frederic School of Home Economics	54.7	45.3	-	-
Evening courses	22.9	77.1	-	-
Vocational training schemes	100.0	-	47.1	52.9
Total vocational education	71.3	28.7	48.8	51.2
Special and reformatory education	77.4	22.6	-	-
Other educational expenditure(b)	99.2	0.8	10.0	90.0
Total expenditure on education (excluding higher education)	77.0	23.0	32.5	67.5
Higher education	25.3	74.7	71.1	28.9
Total expenditure on education (including higher education)	67.1	32.9	38.1	61.9

(a)For detailed explanation and source see tables IXa and b of Appendix C.

(b) Including Education Department and Amerindian education.

60. Fortunately, conditions in foreign trade have been comparatively favourable during the last decade and gains in national income correspondingly good, Government was able to spend increasing sums on education. In current prices, the amount of money annually devoted to educational ends more than doubled over the period 1952 to 1961 and budgetary estimates for 1962 and 1963 have allowed for further increases. It is not possible to eliminate the influence of changing prices, but we can assume that there have been gains in real terms as well, since educational expenditure grew much more quickly than national income.

61. More than 70% of public educational expenditure has been regularly devoted to primary schools reflecting in particular the expanding needs of the rapidly growing numbers of pupils. In the period 1952 to 1961 while expenditure on primary schools per capita of population rose by 70%, expenditure per capita of pupil enrolled increased by only 34%.⁽¹⁾ In the context of recurrent expenditure, the greatest sums have been spent on teachers' salaries which normally claimed between 90 and 95% of all public money that flowed into primary education (i.e. more than 65% of all public educational expenditure). This is an irremovable complex of financial obligations which swelled tremendously under the impact of rising numbers of teachers without raising quality of staff. The possibilities for teachers to improve their salaries in relation to other salaries were limited.

62. The share of primary education in non-current expenditure⁽²⁾ was even higher than in current expenditure. It amounted to 85% on an average during the period 1954 to 1961. However, total funds drawn for educational purposes from the development budget have been generally low compared to the rising demands. As can be seen from Table 5, the percentage of non-recurrent education expenditure has been fluctuating very much from year to year reflecting a fringe position for education in the development budget rather than a recognition of its economic importance. If education is expected to pay economic returns then it must be given a share which allows it to respond to economic requirements. The share should at least be in line with the increase in the number of students, and, in addition, make existing backlogs gradually disappear. Outlays on new school building and on extension of old ones for primary education amounted to more than 2 million W.I.\$ for the whole period. This sum of money was hardly sufficient to provide places equal to the number of new entrants, and it did not alleviate existing overcrowding in schools nor did it allow for replacement of old and defective buildings. Secondary and vocational education have only been considered sporadically and with minor allocations in the development budget, but never with regard to their long-term needs and to the fact that these are the fields which supply the bulk of qualified manpower needed to carry out the development projects. We would suggest that training requirements directly and indirectly attributable to development projects be assessed as accurately as possible over a sufficiently long period and be financed as part of the economic programmes.

- (1) If we take the cost of living index as basis for price adjustments - which is in respect of educational expenditure not a satisfactory yardstick - real increase in expenditure on primary schools per pupil is some 18% over the whole period 1952 to 1961.
- (2) Non-recurrent expenditure is not fully identical with capital expenditure as it comprises also outlays on training purposes such as grants to individual students and on research projects. The major part, however, consists of expenditure on physical capital, especially school buildings and equipment.

Table 5 - Expenditure on education (a) met from development budgets 1954-1963
(at current prices)

Year	Development budget		Expenditure on education (a)			
	total 1,000	C.D. & W.F. W.I. \$	1,000 W.L.\$	percent of total budget	1,000 W.I.\$	Percent of C.D. & W.F. budget
1954	8,522	3,169	262	2.1	204	6.4
1955	17,522	3,885	288	1.6	281	7.2
1956	20,559	6,124	246	1.2	141	2.3
1957	18,310	5,801	323	1.8	228	3.9
1958	19,881	2,759	306	1.5	117	4.2
1959	18,998	4,594	357	1.9	38	0.8
1960	15,801	4,792	398	2.5	275	5.7
1961	21,660	5,570	723	3.3	459	8.2
1962	18,802(b)	6,407(c)	1,532(b)	8.2(b)	992(c)	15.5(c)
1963(c)	25,339	4,500	886	3.5	120	2.7

(a) Expenditure under the responsibility of the Ministry of Education and Social Development only. (b) Revised estimate. (c) Estimate.

Sources: British Guiana, Report of the Treasurer, 1952 ff. Development Estimates as passed by the Legislative Council 1962 and 1963.

CHAPTER 3

THE EDUCATIONAL SYSTEM

63. The mission arrived in British Guiana at the beginning of the 1962-1963 session when the educational system was in the process of reorganization following upon new educational policy declarations. If we are to make clear the aims and structure of this new system, and to suggest possible lines of advance in achieving the aims set, we must first outline the system before reorganization, explain the policy decisions and consider what these have entailed and will entail.

A. Organization and Administration of Education - Pre-1962

64. The organization and administration of education in British Guiana was in 1961-1962 generally speaking that which obtained in 1876 when the Education Ordinance was passed making "elementary" education compulsory between the ages of 6 and 14. Amendments to this law were few and far between and the operational regulations were contained in a "Code", details of which were from time to time modified, but the substance of which remained much as it was in 1876. The Ordinance and Code allowed for elementary education; the word "secondary" is nowhere mentioned, although secondary education was provided at the time and continued to be so provided and expanded by government and by voluntary bodies and private individuals. In consequence, secondary education grew up as a thing apart and even the two old established government secondary schools were not under the immediate or direct control of the Department (later the Ministry) of Education. When the government in 1957 came to the financial aid of some of the private secondary schools it assumed limited responsibility and a measure of control by special legislation. The non-aided private school remained outside the system proper and were under no obligation to maintain any standards or comply with any requirements of any kind.

65. The educational system provided in 1961 for an "elementary" education for children of 6-14 years of age on a compulsory basis. It was free - at least no tuition fees were paid although children had to buy their own textbooks, stationery, etc. The efforts of the churches had made it possible for the system to spread over the whole country, even the remote interior, so that in 1961-1962 it was calculated that over 90% of school-age children were enrolled in the so-called primary schools. A few attended private schools, that is schools not aided by the government. The primary schools established by the churches were by 1960 almost completely financed by the State in the form of grants to pay full salaries of teachers and grants for the maintenance, furnishing and repair of school buildings, etc. The government in the meantime had begun to establish some schools itself and in 1961 took over from the church bodies 51 schools which the government considered its own property. The teachers in the aided schools were not employed by the government; they were appointed by and subject to the denominational boards of management, the government retaining the final authority in their appointment if it wished to exercise this authority. Similarly the government had final authority in matters of certification, transfer, promotion and dismissal of teachers and exercised an

function in matters of discipline. This "Dual Control" system of administration could function smoothly as long as the aims and purposes of the church bodies and the State were at one and the State was not thinking in terms of a unified system of education.

66. There has always been a certain amount of State intervention but mainly in fields where church bodies were prepared to accept the professional advice and technical requirements of the Department of Education in so far as their own religious purposes and observances in the school were not thereby affected. The law and the regulations laid down a certain standard of curriculum, of administration, structure and physical conditions, conditions of employment of teachers, staff-pupil ratio, admission and enrolment of pupils, etc. in schools which were aided. The department through its inspectorate and by administrative measures by and large saw that these conditions were adhered to. The most effective measure, however, to obtain a certain uniformity of standards and practices in the teaching programmes was the examination system; the syllabuses of the various examinations set the targets and informed the staging of school syllabuses. Ultimately, however, school curriculum, textbook choice, subject allocation and time-tabling were in the hands of the school staff as appointed by the church bodies.

67. The primary schools catered, then, for the mass of children; the secondary school system was for the few select who distinguished themselves at the 11-plus examination or who could afford to go to fee-paying institutions. The distribution of secondary schools was such that it was often not only fees that had to be found by the harassed parent but also funds for the board and lodging of the child away from his home. This added burden left many of the intellectually-able children out of the secondary schools to continue their education in the primary schools. After the scholarship, later called the Common Entrance Examination, at 11 or 12, the children who remained in the primary schools until they were 14 appear to have marked time unless they were considered capable of attempting the next examination step - the Primary School Certificate. Those who were successful in this could then carry on at the school, even if they were over 14, to be given intensive instruction for the Pupil Teachers' Appointment Examination which could give them a foothold on the first rung of a long and arduous ladder to trained or qualified teacher status. The system was unsatisfactory but at least the teachers in the primary schools saw to it that some of the children had new job opportunities opened up to them. In fact, the country owes a great debt to the teaching profession for ensuring that some of the excellent material missed by the 11-plus scholarship dragnet was not lost to the country. The teaching profession itself received vitally necessary reinforcements from this source, and from the teaching profession the Civil Service drew many of its finest recruits. Many of the senior posts in the government are headed today by personnel of the highest calibre who never went through a secondary school, but whose education was first continued in a primary school and then in the laborious studies required of the teaching novices. True, it did mean that the teaching profession was often considered as nothing but a stepping-stone by ambitious, inquiring youths whose eyes were on other professions, but it did keep ambition and love of learning alive and did guide and stimulate the studies of many whose intellectual and leadership qualities would otherwise have been lost to the country.

68. Another small, pitifully small, number of primary school leavers could win their way into the government Technical Institute or the Carnegie School of Home Economics or the trade schools. (The trade schools are conducted by two of the big firms). A handful of these might hope to be helped on to the technician level and one or two might reach the heights of technological studies which were the preserve of able secondary school-leavers who could more easily attain the academic requirements of entry into higher institutions. Pre-vocational education or vocational training in the skilled trades was almost completely lacking for the adolescent and the young adult.

69. The secondary schools had, as we have seen, confined themselves to an "academic" one track education for their pupils. The only break with tradition had been that some schools have given ever increasing priority to science teaching. The majority of aided schools and all the private secondary schools had, in fact, in their bid for examination success, narrowed down the curriculum so that even the traditional curriculum seemed comprehensive and liberal in comparison. The success of pupils from these latter schools when they assumed positions as employees depended to a very large extent on their own initiative and resourcefulness - qualities which had not been given a great deal of encouragement in their schools - to continue their studies in specific fields connected with their employment or in the direction their ambitions and hopes drove them. We found that correspondence courses were popular and that some young employees made use of the minimal facilities of evening courses provided by government and other bodies. Some of the better secondary schools provided sixth form facilities for those pupils who aimed at higher studies overseas. The professional levels, the top echelons, were catered for in this way.

70. The only type of formal higher education within the educational system was that provided by the government training college. The rapid growth of schools in the Nineteenth century at a time when teacher training was virtually unknown in the British system, resulted in the schools being staffed by untrained teachers. Continued expansion of the school population has meant that the schools are still largely so staffed. The government's efforts to remedy the situation were for many years vacillating and half-hearted. It was not until 1928 that a training college was firmly established but its output was so limited that it made little impression on the staffing quality. Teacher-training has been almost exclusively confined to training of those already in the service, i.e.: of those who had entered the pupil-teacher ranks, had survived the interminable hurdles and reached the grade of unqualified teacher, or, after even stiffer deterrents, reached the ranks of qualified teachers. The movement from secondary schools into the teaching profession was a limited one.

71. The organization of the educational system, then, up to 1961-1962 was such as to favour the few and those particularly in the areas of or adjoining the heavy concentrations of population. The primary school system - a misnomer, since it overlapped with the secondary school system - was an end in itself for the vast majority of children. After the 11-plus examination which could interest only a very small minority the primary school seemed to have no objective, no purpose, except for the few preparing for recruitment into the teaching profession. A few children might

find their way into the aided and private secondary schools if they could meet the costs. The wastage and loss of human effort and potential at every level was heart-breaking. The secondary school system had little relation to the primary school system; there was no system of transfer for late developers from primary school into secondary schools to ensure that all the human resources of the country were given a chance to add their abilities to the common pool.

72. We do not propose at this stage to go into details as regards school buildings, staffing, types and distribution of schools, curriculum, etc. We would refer to Chart I, and to Tables XIV to XVIII of Appendix F with their self-explanatory notes.

B. Recent Developments in Educational Policy

73. To understand developments and stands taken in the educational field over the last few years it is necessary to give a brief summary of political events. In 1953 a new constitution permitted the election of a bicameral legislature with, for the first time, universal suffrage, and the ministerial system was introduced. Within a few months, however, the constitution was suspended by the metropolitan government and the country was ruled by an interim government wholly composed of ex-officio and nominated members. In 1957 under a revised constitution there was a return to a mixed Legislative Council of elected, of nominated and of ex-officio members; the Executive Council was similarly composed and included five elected members of the Legislative Council nominated by the Governor who were styled Ministers. In 1961 further constitutional advances resulted in a fully elected Legislative Assembly and a nominated Senate. The executive is formed by the Council of Ministers drawn from both houses and presided over by the Premier who is the leader of the majority party in the Legislative Assembly. Defence and external affairs remain the responsibility of the United Kingdom Government. The 1961 elections were contested by three parties one of which won an outright majority of seats although not of the actual votes cast and was called upon to form a government. Unfortunately the acerbities of racism had begun to make themselves felt in the contest for power, and alignment behind the parties was in the main, not entirely, on racial grounds (and consequently, even if indirectly, on religious grounds) rather than on the basis of ideological and political convictions. This inextricable mingling of race, ideology and religion at the political level makes it difficult for the outside observer to gauge the force of each of these factors and to determine in the confused hesitant situation of today which will prove the strongest motivators of decision or action when major educational issues are at stake. The talks held in London in 1962 to work out details of a constitution granting British Guiana full independence failed.

74. It would appear that the government of 1957-1961 had no clear-cut educational policy except that it increased the tempo of school building. It also came to the assistance of private secondary schools controlled by church and voluntary agencies following the lines laid down by the interim government; dual control was given new life at the secondary level. The government showed little interest in establishing secondary schools and never appeared to have looked critically or constructively at its educational system.

75. Full internal self-government brought an entirely new attitude towards education. The Ministry of Community Development and Education, now renamed the Ministry of Education and Social Development, at once showed that it was dissatisfied with the structure and nature and quality of education in the country. The newly formed government had a political philosophy which fundamentally inspired social and education development policies. It sped to make known its aims in this field in ministerial statements and called for immediate implementation of plans sketchily prepared to attain the objectives. As the statements on which operations were based were afterwards contained in White Papers recently put before the House of Assembly, we shall explain policy through an analysis of the Papers.

76. The final draft of "The White Paper on Educational Policy" incorporated suggestions made by the mission working within the limits of the general lines laid down in the original draft. The recommendations of the mission were directed at easing, whenever possible, the initial strain on the country's resources and at making for an articulated system which does not overlook the necessity for pre-vocational and vocational education. The opening paragraph sets the theme of the paper and is the key to the educational philosophy of the government. "The government aims at promoting a national system of education which will provide all Guianese with the opportunity of developing their educational and personal potential and of sharing in all the educational facilities available regardless of race, religion or economic circumstances." The government then goes on to declare its faith in the vital role of education in the economic and social advancement of the country. The encompassing socialist philosophy of the government is given as the main argument for equal educational opportunities which produce a more fluid social structure and prevent class stratification. To promote its aims the government proposes to establish secondary comprehensive schools throughout the country as and when resources permit. At 12 years of age children would be directed to these free schools without examination. All children would be given a three-year common basic course of secondary education, and then further two-year courses in one of a number of slanted fields - academic, commercial, technical, agricultural according to the child's interests and aptitudes.

77. The government would require government and government-aided secondary schools in the meantime to admit pupils only on a strict order of merit as ascertained at the Common Entrance Examination. (This measure struck the church-sponsored government-aided schools as a deliberate policy of interference in parents' choice of school, and as an attempt to direct away from them such pupils as they would wish to admit on religious grounds).

78. The White Paper explains briefly why the dual control system must go. "In translating this philosophy into practical terms our educational institutions should not perpetuate divisions in our society and it is imperative that we develop a national instead of a denominational system of education. The system of dual control of schools will eventually be abolished." The government proposes to set up an Independent Teachers' Service Commission to take over the functions of the denominations and of the ministry in matters relating to the teaching body.

79. The paper embodies the suggestions of the mission for the participation of informed public opinion in educational matters by the setting up of

a National Council for education and of Advisory Committees at a regional level.

80. The White Paper then goes on to outline the system which would be national, comprehensive and fully articulated. The proposed structure would embrace from nursery to adult community education. The government makes it clear that at present the initiative for setting up nursery schools must come from the communities themselves. The next stage of education would be that of the primary school, a six-year course beginning when the child is between 5 and 6 years of age. Primary education would be followed by secondary education for all ultimately at secondary comprehensive schools, which are defended on social grounds as being the type of school which alone can effectively provide common educational environment and experiences to all children "and prevent the development of a rigid class system in our society since this is the very antithesis of a socialist society". It has been appreciated that equality of educational opportunity is not synonymous with identity of educational courses. It came to be realized, too, that neither time nor money was available for immediate large-scale reorganization with all its financial implications. The established secondary grammar schools would be required to continue to function and the pre-1962 primary schools would be renamed all-age schools offering a primary education to the age of 12 and a secondary education in a new division to be called the secondary department.

81. The need for craftsmen, technicians and technologists is recognized.

General education and training in such skills as typing, shorthand, home economics, agriculture, plumbing, wood work, masonry, metal work, etc. would be given through appropriate courses at the comprehensive schools and/or centres throughout the country. "The courses would be run in close conjunction with industry and commerce and would aim at meeting their special needs and the needs of the community". Technicians would be trained at the technical institute where the lower level courses now conducted would be allowed to fade out to facilitate the introduction of a higher level of education and training in technology. Similarly the Carnegie School of Home Economics is to have a pre-nursing course and be gradually upgraded to include courses of a higher level in nutrition, dietetics, institutional catering, etc.

82. Mention is made of agricultural education (but so sketchily that it is evident that a great deal more thinking and detailed planning is essential).

83. The White Paper refers to the "Curriculum Guide" which had been sent in June 1962 to schools in draft form for testing and evaluation. It calls upon teachers to make intelligent use of this guide which "aims at widening and deepening the general educational basis" and is devised "to help children to be knowledgeable, critical, industrious and practical, to have a sense of direction and to be fully aware of their responsibility to their community and to the nation. Towards this end more and more emphasis must be given to social and environmental studies, to arts and crafts, to home economics, agriculture and elementary science". (We shall see later what impact these pleas for a revitalized curriculum to make secondary education purposeful and meaningful could make on the teaching profession and on parents).

84. At the top of the educational ladder would come the University of Guyana which would make it possible for higher education to be secured locally.

85. It is proposed that the government training college come under the umbrella of the University of Guyana as the Faculty of Education. The teacher force has to be considerably strengthened qualitatively as well as quantitatively, and all aspects and branches of teacher training are to be integrated to conform to the principle of common certification based on parity of professional standards.
86. The need to strengthen and widen the administrative services to cope with the new organizational situation and the new educational programme is admitted. Furthermore, the government proposes to set up new ancillary services or reinforce existing ones to promote its policies. A textbooks unit will encourage the preparation and publication of textbooks more closely related to the needs of the schools and the curriculum; the examination system will be overhauled and local examinations will replace overseas examinations while retaining comparable standards, loans would be granted to assist able students to pursue higher studies abroad in fields which cannot be catered for by the University of Guyana provided that the courses of study are such as help meet the immediate and projected needs of the country; schools' medical and dental services would be expanded; greater use would be made of the broadcast services for educational purposes; a cultural department would promote the study of local history, art, literature, and folklore. The government proposes to tackle the problem of the estimated 50,000 places required in the next four years by building - subject to the availability of funds - and by encouraging self-help efforts by communities and by local authorities.
87. The government gives a clear assurance that schools will retain the right to offer religious instruction; a conscience clause is inserted.
88. The government emphasizes that its ultimate goals are to develop to the full the "potentiality of every child so that he can come to full self-realization and be prepared and in a position to make his maximum contribution to the development of this society, to prevent the development of rigid class barriers in our society, to see that the socialist philosophy of equality of opportunity is put into practice in the field of education;.... and to increase social and national solidarity".
89. The policy is bold and imaginative and very largely in keeping with modern trends in educational practices and theory. Four points of caution we would venture to express. It can be a costly programme in all respects and one which has to be carefully worked out in all its detail, phased, costed, financed, timed and operated so that the country does not overstretch itself and the plan crash before it has got off the ground. Secondly, tactical approaches to the aims and implementation of schemes and projects need to be carefully prepared if misunderstandings are not to arise. Thirdly, the White Paper (fortunately) makes no mention of a change in the compulsory school attendance and leaving ages. This is fortunate in that it gives the government breathing space to consider all the implications of the policy if carried to its logical conclusion at once and would permit it to approach its educational goals by practicable stages. Fourthly, arising from the above, we must strongly urge that precipitancy be not mistaken for urgency.
90. Adult education is not mentioned in the "White Paper" but is the subject of an address by the Minister of Education and Social Development delivered

on 11 September 1962. The Minister stressed the importance of providing educational facilities and opportunities for adults since, "if social and economic development is to progress rapidly, there would be need for having an adult population, which understands and can participate in the activities designed to bring about these changes". A full programme of adult education is thus seen as another instrument in the achievement of the government's overall political, social and economic aims. The Minister indicated without amplification that there were three main lines of government policy: community education, social and cultural education and education in civic responsibilities. He stressed that adult education must be built largely around the special needs of the local community, and much would depend on the continuing activity of voluntary organizations which it was the government's policy to encourage. The Ministry would aim at achieving a co-ordinated programme for the whole country in such a way that adult education would become an integral part of the total national education programme.

91. On the question of educational and vocational provisions for handicapped or maladjusted children the "White Paper" is strangely silent. We would have expected that in a socialist philosophy the human rights of the blind, the deaf, the spastic, the mentally-retarded, the delinquency-prone child, would have claimed some attention.

92. Before we turn to an analysis of the "White Paper on Higher Education" it is necessary to throw some light on the background. In July 1962 the Ministry of Education had announced the intention of the Government of British Guiana to withdraw from the University of the West Indies and to establish an independent College of Liberal Arts and Sciences to which the first students would be admitted in September 1963. The reasons given for this decision were the high and increasing cost of membership coupled with the great wastage caused by the failure of many graduates to return to British Guiana (56 out of 97 since the opening of the University College in 1947); the failure of the university to provide an adequate number of places to meet the needs of the country; and the undesirable social inequality created by a high-cost university catering only for the "privileged" few. The advantages accruing from the establishment of a local university were that it would serve as an important symbol both of the country's educational progress and of its national independence, meet more rapidly the increasing demands of the people for a university education at a cost which the Guianese could afford, contribute both directly and indirectly to the economic advancement of the country and provide a stimulus to social progress and stop the drain on the country's resources of skilled manpower.

93. On its arrival in Georgetown, the mission was asked to concern itself only with the implementation of the plan. Its members therefore joined in the discussions of a small working party which, after a number of meetings, advised that the decision to withdraw be suspended to allow time for further study of the project. Eventually the government decided to proceed with the original plan. The proposals of the government are embodied in the "White Paper on Higher Education", to which we turn.

94. It consists of two separate memoranda, the first on the establishment of the University of Guyana and the second on its place in the system of higher education in the Caribbean. On national needs the White Paper concludes

that the expansion of the economy will create ever-increasing demands for trained personnel at all levels. It mentions in particular the special need for training facilities for teachers and for personnel in the administrative and technical branches of the Civil Service. The proposal is made that the diffuse efforts at local training should be co-ordinated under the aegis of the university which would offer general degree courses in addition and ultimately opportunities for training in pedagogy, agriculture, engineering and medicine.

95. The paper quotes an eminent authority as saying that British Guiana should require between 100 and 150 general degree graduates per year of the "Liberal Arts Type". The government, therefore, proposes that the college should provide diploma and certificate courses of one or two years' duration and four-year degree courses in three faculties - the humanities, the natural and social sciences. All these courses should have certain elements in common. The diploma and certificate courses would be designed to meet the "specific specialist" needs of the Civil Service. The minimum entry requirement is to be a pass at "O" level in five or more subjects at the General Certificate of Education examination. The university is to start functioning in October 1963 as an evening college using the laboratories and lecture rooms of Queen's College. It is assumed that, even if it should prove impossible to recruit staff from overseas by that time, a sufficient number of qualified persons will be found in British Guiana to undertake the teaching of a limited number of subjects in the three faculties. The memorandum states that the government has applied for sponsorship by an established university and concludes with a section on standards, reiterating the determination of the government to ensure, by making use of the services of external examiners, that its degrees and diplomas shall be of the same standard as those of comparable institutions elsewhere.

96. The second and very important memorandum on higher education in the West Indies and Guyana discusses the higher educational needs of the Caribbean area as a whole. It contrasts the need of each territory for specific institutions suited to its own society and social philosophy with the need for specialists which no country on its own could afford to train. It suggests, in effect, that each territory should establish and be wholly responsible for its own College of Arts and Sciences but that each should contribute towards an exclusively specialist central university which should provide courses in medicine, agriculture and engineering and honours courses in the arts and in natural and social sciences together with research facilities and institutions which should be at the service of all contributing territories. There should also be a regional extra-mural department serving the whole Caribbean area.

97. This latter memorandum, with its evidence of the government's positive re-thinking seems to hold out very real hopes of fruitful participation by British Guiana in a reintegrated pattern of higher education within the Caribbean area.

98. The policy papers and statements, in brief, adumbrate a policy of mass education at the primary and secondary levels with the usually accepted "pyramid of education" being opened up to become a rectangle on which is imposed a narrow column of tertiary level education. The policy envisages changes in the aims and content of education and in the range of educational facilities. It touches on the importance of community "involvement" and of adult education. The papers, however, pay little attention to the implications of this policy when translated into action in terms of finance, resources and public acceptance.

C. Dual Control(1)

99. We have from time to time referred to dual control; we have outlined how this system developed as a result of the sociological and historical factors which determined the evolution of educational practice in British Guiana (as in fact throughout the West Indies). The government has propounded an educational policy based upon its social philosophy. This policy is seen to strike at the very roots of the educational system as it has evolved; it conflicts, it is believed, with the vital aims and purposes of the Christian churches and with the freedom of the individual within a democracy. The emotive potency of the church and of the individual in what it believes to be a state of persecution by the amorphous, depersonalized state machine is not one to be lightly brushed aside. Feelings of gratitude or reverence, traditional attitudes, suspicion born of political differences, fear of extinction, perplexity at presumed ingratitude and consternation at the misinterpretation of motives, all form a complex of distrust which can easily turn to positive forms of defence.

100. On the other hand the government has concluded that dual control is inconsistent with and in antithesis to a national integrated system of education, and that efficient and therefore economical administration and organization is precluded when there are two authorities controlling the same system. It assumes that they are not partners working to the same purpose but two separate authorities with divergent opposing aims. The mission wishes to state categorically that in the discussions it held with the church bodies and separately with government officers it came to one conclusion: both parties, erstwhile partners, are motivated by the same anxious concern for the development of the people of British Guiana and are desperately sincere in this. Emotionalism, traditionalism, mutual suspicion have been allowed to cloud the real issue and all that is seen, and consequently exaggerated, is the difference of opinion as to the best means to attain the aim. This may be an over-simplification of a problem which has caused so much tension; we may be accused that it does not take into account the fact that the difference of views lies in deep differences in the encompassing educational philosophies. The churches may give greater emphasis to the moral and spiritual development of the individual, the State to the material well-being of the people as a whole. We cannot see that these aims are mutually exclusive; we believe that they are parallel aims. Neither can we concede that a "secular" education in itself is incompatible with the moral and spiritual development of the individual; nor, on the other hand, that the religious tone and atmosphere of a school is of itself alien to attitudes of social responsibility and loyalty to the State. We may be considered naive in believing that the moral and spiritual, the emotional and social, the intellectual and physical development of the child and consequently of society at large and the material prosperity of the economy, ultimately depend not on the authority controlling the school but on the quality of the school and the wholesomeness of the comprehensive educational experiences it provides. One thing is certain, moods and times of bitterness and distrust, of tension and instability, are not conducive to harmonious maturation of individual or communal potentialities.

(1) In 1962, after the government had taken over 51 schools from denominational control, the government still controlled only 84 of the 336 primary schools in operation with a pupil population of 38,950 out of a total of 135,355. Three schools with 1906 pupils were managed by non-denominational bodies and three with 1304 pupils by Hindu organizations. The remaining 246 with over 93,000 pupils were controlled by the Christian churches.

101. The church authorities must come to see that an educational system which is still but superficially modernized and still fundamentally "Victorian" and "Colonial" is inadequate and anachronistic in the 1960s for a country moving rapidly to nationhood. In a country of the size of British Guiana with its various ethnic groups, with a people still largely "plantation-economy-minded", with critical necessity to diversify its economy, with imperative need to mobilize in the most speedy yet economical manner all its resources, it is but natural that education centrally-directed will be seen by the government as a major means of making the State viable, of integrating the various races and of changing attitudes. This change should be placed high among the aims; the people must be drawn away from their attitudes of dependence upon others, whether it be the church or the State - the benevolent parents of the past - and learn to extend themselves, to accept responsibilities and to make their own decisions. It is acceptance by the government of these facts which has basically shaped its educational policy. The government has seen that the dual control system as it is at present can delay fulfilment of its plans, and in this it is right. It is wrong if it believes that the other "partner" may deliberately sabotage those plans. The church authorities are wrong in thinking that reorganization can be as smoothly and as efficiently effected under the dual control system; and justified in resenting the bald statement of a policy of abolition of dual control with no recognition of the vital part they have played in the development of education or of the part they might still be prepared to play if called upon in the new situation even under new conditions of co-operation.

102. The gap between the church and State is, in fact, a narrow one, and can be bridged. The government needs to reassure the churches that its ultimate objective is not the suppression of religion, and to convince them that the urgent needs of the times call for greater control of education by the State and for the "involvement" of communities in education. It is possible that the churches with this reassurance may accept that the only difference of any significance between them and the government - the control of teachers - can be resolved. At present the governing bodies of schools are responsible for the appointment, transfer and promotion of teachers; the government has the final word. The machinery for staffing schools is slow and tortuous and can break down to the detriment of innocent pupils. The churches will promote or seek to promote teachers of their faith and sect; they will choose the best from among those eligible by this token but it is possible that better candidates may be passed over because they are not of the faith. The churches are seriously concerned that the posts of responsibility in their schools and as many of the teachers as possible are of the "right" religious persuasion. The government is concerned to see that able teachers are not depressed and frustrated through lack of promotion prospects. In particular, non-Christian teachers who are increasing in number may find their ambitions thwarted.

103. In a memorandum submitted to the mission by the Christian Social Council, the denominations expressed their preparedness to accept in principle an Independent Teachers' Service Commission to deal with all matters relating to the appointment, transfer, promotion and discipline of teachers. "The Christian Social Council", the document reads, "desires to emphasize the fact that its member denominations have no objections to a Teachers' Service Commission per se, but on the contrary, see some definite advantages in the scheme". The council then go on to stipulate their reservations. "They feel bound, however, to safeguard the Christian character of their schools and the purposes for which they

are built, and for this reason must claim the maintenance of some effective control over the appointments of those who are to teach in them. To this end the denominational governing bodies (a) would be willing to continue to accept a certain number of non-Christian teachers among the junior staff of a school though they would wish to have a voice in their selection, but (b) would feel bound to insist upon restricting all senior staff appointments ... to Christians". The memorandum makes a number of tentative alternative proposals, and asserts that in matters of discipline of teachers the council would be happy to be relieved of all responsibilities, but point out that they cannot "divest themselves of this responsibility so long as they continue, in law, to be the actual employers of the teachers".

104. This document is a positive step towards bridging the gap. The government has taken a positive step also in announcing that the commission would be headed by a professional educationist, soon to retire from the service, whose integrity and wisdom cannot be questioned and who has the confidence and respect, we believe, of the churches and of the ministry. We advise that the government should further indicate its genuine intention of making the commission a truly independent commission by announcing that the other members of the commission would be appointed in a way and its terms of office and functions and responsibilities as defined by a relevant law such as would make this point indisputable. In particular, we would advise that the commission should be required when making an appointment to a senior post in a school of a particular denomination to co-opt as a member a representative of that denominational governing body who would have a vote. It is possible that in such circumstances the fears of the denominations would be allayed and they would be prepared to withdraw the stipulations they have made to acceptance of a commission, stipulations which we have cause to believe are somewhat exaggerated and would only lead to continuation of delays and frustrations. Agreement could be reached if the churches were assured that the headmaster and deputy post would be filled by teachers of the appropriate religious faith.

105. Opportunities for promotion will multiply now and in the course of the next few years as reorganization progresses and as the government builds more and more schools. In fact, immediate steps could be taken to provide more openings by splitting those of the very large schools which are housed in more than one building thus creating more headmaster posts - we need not dwell on the educational advantages of this. At the same time the government should continue or initiate negotiations with such church bodies as are prepared to hand over their school buildings to the government against fair compensation. There has been evidence of such intentions by some church bodies whose requests have been reasonable and just in all ways. Possibly the government may find some difficulty in making funds immediately available for such purposes, but we strongly recommend that every effort should be made to raise the necessary funds; we are of the opinion that the church bodies would be prepared to accept compensation for their lands and buildings on an instalment plan. Conciliatory and realistic negotiating machinery and enlightened public relations are essential.

106. To return to the Independent Teachers' Service Commission, we consider this to be the best compromise solution provided that the emphasis is placed on the word "independent", and provided that the commission is so constituted that in making its decision it takes and is competent to take all relevant factors into account and give due weight to each. In promotion, for

example, merit is the most important criterion; seniority is important, etc. But merit in what? In teaching competency? Does that in itself ensure good leadership and efficient administration? Potentiality as a leader? But what if the leader does not fit into the environment he enters? Administrative and organizational ability? But what if for some reason there is constant friction between the Head and his governing body and/or teachers or groups of teachers? We could go on. The fact is that the commission must not only know the man and his qualities but also the school and all that makes up the school - its milieu, its staff, its atmosphere, its corporate life, the attitudes and convictions of the governing body, the attitudes and aspirations of the parents. The commission must know the strengths and weaknesses of the school and appoint so that the strengths are reinforced and the weaknesses eradicated.

107. The safeguard for the denominations lies in this, that an independent competent commission cannot ignore these facts and factors. We advise in this way in the light of the prevailing situation despite our own convictions that the professional officers of the ministry would be in a much better position to make the right choice for any particular post and to work more speedily. They know the teachers and schools not from files and hearsay alone, but from personal experience at a professional and social level. They know the traditions of a school and its real wants. They are professionals of a high calibre with professional integrity. We would have recommended that the administration of the teaching body should be undertaken by the ministry staff; decisions on promotions after processing by the personnel branch would be taken by a committee composed of the Permanent Secretary, the Chief Education Officer or his deputy, the appropriate Senior Education Officer, the Personnel Officer and a member of the relevant governing body or Board of Governors; appointments, postings and transfers would be in the hands of the Assistant Chief Education Officer (administration) in collaboration with the Personnel Officer, and be subject to control and ratification by the Deputy Chief Education Officer.

108. We have accepted the appointment of an Independent Teachers' Service Commission for two reasons: (a) we consider that it is a compromise which properly negotiated can bring harmony into education; (b) we have confidence that the commission will do its work competently under the leadership of the particular professional named as its Chairman.

109. Other points of difference between the churches and the government have been cleared. One stumbling block to reorganization of schools was the apparent objection of the government to admitting clergy into government schools for religious instruction to pupils of their faith. The government has now declared its willingness to permit such an entry. In their efforts to help in reorganization the church bodies have agreed, with certain reasonable safeguards, that where one of a group of schools each controlled by a different authority has to be selected as a central secondary school, the school building most suitable for secondary school work, or most easily convertible for this purpose, shall be so used and the older children of the other schools shall be directed to the selected school. This is a significant concession particularly in view of the fact that many of the government schools have this advantage and new school buildings will necessarily be so constructed.

110. In view of the necessity we have explained to "involve" communities the government should require church bodies to appoint Boards of Governors to

each of their schools. The denominations would be free to appoint the present manager as Chairman and as members whomsoever they wished provided that the members were of the community within the catchment area of the school and the Chairman of the local authority was made member also.

111. In fact, we are convinced that the church bodies are sincere in their desire to co-operate with the government. We quote again from the memorandum submitted to the mission: "The denominations ... would welcome any opportunity for solving outstanding problems and removing present misunderstandings so that they can again work in harmonious and useful partnership with the ministry, and with their rights and liberties secure, contribute all they have to offer for the benefit of the country... They are not indissolubly wedded to any particular system of dual control, and in matters of administration, and indeed in anything that does not violate what they hold to be matters of unchangeable principle, they are ever ready to negotiate with the government a fair and workable scheme of management and control ... It is the opinion of the council that the educational problems ... are of such nature and magnitude as to need the co-operation and maximum effort of all sections of the community".

112. The mission's principal reason for recommending the government to hold its hand in the question of dual control and to arrive at a more satisfactory arrangement with the denominations is to be found in the last two sentences quoted above from the realistic document submitted by the Christian Social Council. The magnitude of the educational needs which have to be satisfied is alarming; the government does need assistance and contributions from wherever they may be genuinely forthcoming. The churches can do and are prepared to do more than they are doing now; they will accept to come to an agreement satisfactory from the government's point of view on the major issues provided, we believe, that their confidence in the government's ultimate intentions vis-a-vis religion itself is restored. In principle we believe that dual control is an anachronism - it was considered such even in the Nineteenth century; it is an obstacle to educational progress, to administrative efficiency, to effective organization, to ready and economic mobilization of the teaching force. We, too, as almost every other inquirer or group of inquirers into the educational system of British Guiana has done in the last 100 years, would have condemned it were it not that stark reality calls for a compromise. We cannot on the one hand call upon the government to mobilize all the resources available and on the other hand advise it to jettison an important source of assistance, and in so doing risk antagonizing a large section of the community. Dual control has outlived its day, but historical, psychological and political factors do suggest that, provided its present form is changed now to fit into the evolving educational system, the churches should continue to have local management of their school affairs in the same way as we suggest communities should have in government schools. In addition, church bodies should be free to maintain the character of their school in accordance with their religious principles. We have recognized the change in the system necessitated by the educational policies but we have recognized also the limits imposed upon such changes by historical, political and financial factors.

113. In this discussion on dual control, we have not touched on the position of the grant-aided secondary schools whether controlled by the denominations or by other voluntary bodies. We shall do so elsewhere.

114. Our recommendations for the resolution of the problem of dual control are based on our conviction that it is possible to evolve an integrated national system of education and at the same time permit a positive contribution to be made by the churches and other voluntary agencies. On the resolution of the problem depends the ultimate integration of the ethnic groups making up the population and the efficient and economical satisfaction of educational needs for achievement of social and economic targets.

D. The Curriculum Guide(1)

115. The draft "Curriculum Guide" has been mentioned in this report and is referred to in the "White Paper". As it is consistent with our own thinking even though we may disagree with some of the details in it - we shall briefly bring out its theme.

116. It quotes from a report of 1925 to justify the necessity for action: "The syllabuses of all schools are very narrow and restricted in outlook and in some respects ludicrously grotesque". The secondary school curriculum was no better: "The course of prescribed studies is severely and exclusively academic". It refers in appreciation to a document by one Kay Shuttleworth sent in 1847 by the Colonial Office - "Brief practical suggestions on the mode of organizing day schools of industry, model farm schools and normal schools, as part of a system of education for the coloured races of the British Colonies" (our italics) - which stated that the aims of education will be achieved through arithmetic, composition, reading, nature study, geography and hygiene. Arithmetic would include book-keeping and the keeping of accounts related to matters connected with individual garden plots as well as the school garden, and with the carpentry work for the boys and laundering, needlework and cooking for the girls. Special emphasis was to be laid on hygiene, not as an academic subject, but as part of the business of life. And in order that all subjects might be taught in relation to the environment it was recommended that local textbooks be prepared (our italics). We feel there is little we can add. What should be said on the curriculum was said 100 years ago.

117. The committee which prepared the guide then goes on to make its own contribution. The school should "transmit the accepted core of culture which Guianese have developed ... Though we are supposed to be six races we have, over the years, developed certain universal habits of thoughts, speech, action and aspirations. Most of us, thanks to our British heritage, speak the same language, share the same history". The guide gives a great deal of useful and practical advice to teachers on the organization of the school, the enrichment of the physical environment, the importance of making allowances for individual differences of group work and of individual study. It takes each subject or subject area in turn suggesting aims, scope and guiding principles in syllabus construction. It makes particularly opposite points when it deals with the practical and cultural subjects: "In a country where the labouring masses once set their faces very sternly against all efforts to introduce home economics and craft work in schools, the wise head teacher would take the precaution of discussing the importance of these subjects at meetings of the "Parent-Teacher Association".

(1) "Curriculum Guide", Ministry of Education and Social Development, British Guiana, 1962.

118. The guide urges teachers to introduce a great deal of practical work in the secondary departments of the all-age schools and points to ways of making a start on these activities even though the practical facilities may be lacking. It insists upon the building up of a curriculum broadly based on "learning experiences" rather than one subject centred. It asks the head teacher to define the aims of his school and always to relate them to the milieu of the school: "A head teacher should study his district and find out what are the educational shortages. If it is an agricultural district and the people know nothing about scientific agriculture, then it is his duty to fulfil this educational shortage by including agriculture in the curriculum".

119. Throughout, the guide reiterates that the scope and content of the work of the school should have a distinct bearing on the kind of environment which the school serves, that it should draw its sustenance from it, that the aim should be the all-round development of the child, and that the approach should be such as to contribute to "self-realization, good human relationships, and civic responsibility".

120. The guide contains many fascinating sections on education in remote areas, thus proving that the drafting committee was well aware of the special and specific problems of the Interior.

E. Educational Provisions, 1962 - 1963

121. The situation in 1962-1963 does not differ on the surface at least from that existing in the previous years. The old primary schools are now called all-age schools, the secondary grammar schools - government and aided - carry on exactly as before; no new secondary schools have been established by the government; the private secondary schools continue to be, to all intents and purposes, non-existent as far as the government is concerned. But in fact the statements on reorganization and general policy have made a significant impact,

All-Age Schools

122. In many all-age schools reorganization meant simply a change of nomenclature for classes; the lack of facilities and resources made effective reorganization virtually impossible. It could hardly be expected that untrained teachers of limited academic background working in appalling conditions could turn easily to the teaching of French or physics; nor could they be expected without guidance to comprehend the educational philosophy which informs the draft curriculum guide. Even trained teachers and headmasters often misinterpreted both the statements of policy on reorganization and the draft curriculum guide. Many assumed that the government's intention was to establish a secondary grammar school within the primary school building and they set to with a will to imitate the curriculum of such schools. Forgotten were the exhortations to make the curriculum vital and realistic by introducing local flavour and content and by taking into account the needs of the community; agriculture and technical subjects were virtually unknown in the grammar schools, why, therefore, should the secondary departments devote any time to these humble subjects? The fault does not lie solely with the teachers. The new divisions had been set, in accordance with standing practice, an overseas examination target with syllabuses drawn up for United Kingdom candidates. How was this examination

target to be reconciled with the draft curriculum guide? Few teachers knew the answer and there was little time to prepare them for the changes and new demands. Reorganization, thus misinterpreted and misunderstood, was undertaken by several headmasters without due consideration of pertinent implications on such matters as teacher-schedules, syllabus construction, deployment of human and physical assets of the school, textbooks, time-tabling etc. But, and we repeat this, a great deal of good came out of this haste to implement a policy. The forgotten children of the past were no longer forgotten. The schools had a purpose even though the teaching was not always meaningful. There was renewed interest and enthusiasm both by teachers and by the older pupils: a new pride and new ambitions were born. Particularly praiseworthy are the heads who gave a great deal of thought to the new problems presented, who sought advice from enlightened colleagues and from ministry officers, who proceeded with caution but with firmness and conviction, and whose schools within a few months are beginning to show how excellent the ultimate achievements in all respects would be if the limiting factors to qualitative progress were eliminated.

123. We shall enumerate these limiting factors and comment briefly on each. The interaction of one upon the other must always be borne in mind; their cumulative effect is gravely damaging to the individual pupils and to the country.

- (a) **Staffing inadequacies:** Now more than ever is it essential that schools have teachers competent to deal with the requirements of the newly-orientated curriculum of a higher level than hitherto. But even at the lower stages, in the primary division, weaknesses in the staff will lead to poor material moving into the secondary departments. Of a total teaching force of 3,356 in October 1962, only 774 were trained, i.e. 23% (Table 6). This situation is by no means improved by administrative weaknesses and budgetary restrictions which cause considerable delays in filling vacancies in schools, nor by the high rate of "non-attendance" at school by teachers.
- (b) **Overcrowding** has reached alarming proportions. The position will get steadily worse, if that is possible to conceive, as more and more children of over 14 years of age stay on at school at the same time as the number of new admissions increases from year to year. We have found children perched on window ledges or sitting on the staircase outside the school for lack of space. One school built in 1959 and designed for 350 pupils now holds 767 - this is not the worst case we met.

Table 6 - Number of teachers in all-age schools by status and grade,
October 1962

Head Teachers Grade I	223	Qual. Asst. Grade I	468
Head Teachers Grade II	24	Qual. Asst. Grade II	387
Head Teachers Unqualified	64	Unq. Asst.	790
Deputy H.T. Grade I	94	Pupil teachers	642
Deputy H.T. Grade II	4	Junior Teachers	38
Sen. Asst. Grade I	205	Interims	412
Sen. Asst. Grade II	5		3356

- Note:** (1) Of the total of 3,356 (excluding 27 part-time sewing teachers), only 23% were trained.
- (2) More than half are unqualified assistant teachers, pupil teachers or interims (i.e. temporary unqualified teachers).
- (3) The teaching strength for the year 1961-1962 was 3,181, although 4,085 names appear at one time or another on the salary registers for that session giving an indication of the wastage and turnover in any one year.
- (4) The fact that a teacher is "qualified" does not necessarily mean that he is trained. It may mean that he has passed certain qualifying examinations for a certificate of competency while he has been serving in the schools.
- (5) Unqualified assistants are in the main those who have successfully passed the 4th year examinations of the pupil teachers' grade.
- (6) Junior teachers are young boys and girls who are taken on to fill vacancies in schools even though they have not passed the pupil teachers' appointment examination.
- (c) **Oversized classes:** Although the overall teacher-pupil ratio works out at 1:40 in actual fact there are many many huge classes: classes of 60, 80 and even one of 119 children were found - in cases such as the latter there were two or three teachers in charge of the class but at any one time only one teacher would be teaching the class because of overcrowding in
- (d) **Hall-type buildings:** Almost all the buildings are of hall-type construction. Sometimes as many as 10 classes and 10 teachers would be operating in one hall with blackboards as the only partitions: because of lack of space more substantial partitioning is impossible and it is often difficult to distinguish the dividing line between one class and another. Group work in such circumstances becomes well-nigh impossible; where there is more than one teacher to a big class, the class cannot be divided for teaching purposes, particularly as the
- (e) **Inadequacy and discomfort of the furniture** does not permit easy movement of children or access to children by the teacher. Four-seater benches packed as closely together as possible often have to seat six to eight children each. The introduction of modern school furniture would lead to impossible congestion in the limited space available.
- (f) **Absenteeism and unpunctuality:** Very few schools can boast of an average attendance of children enrolled of over 85%. Chronic absenteeism has come to be accepted as normal (and in some cases as a necessary evil). We could not accept the various pseudo-socio-economic reasons that were often advanced to us to explain this state of affairs. We found too many instances which belied these justifications. If, for example, absenteeism and unpunctuality result from the necessity for children to work in the field why should schools serving a landless mining community have attendance figures of less than 80% and why should so many children in these areas be wandering into the schools half

an hour or an hour late? Our own sample surveys into these problems suggested that the answer lies mainly in the general attitude built up over the years towards questions of time, in the unattractiveness of school conditions, and in ignorance on the part of parents of the importance of regular attendance to the educational career of their children. Poor attendance in the secondary departments of all-age schools is particularly disquieting.

- (g) **Visual and aural aids** are sadly lacking or grossly inadequate; the question arises how could aural aids be used in a hall-type building without further disturbing the whole school? Where does one display visual aids in such a building? Full credit must be given to those teachers and heads who have applied themselves to so arranging furniture in the school as to make space for temporary partitions on which it is then possible to display visual material and children's work.
 - (h) **Storage space** too is inadequate and the possibility of building up stocks of books and aids over time limited in consequence.
 - (i) **Play space** is often so restricted that children do not take advantage of the break period. Facilities (in a tropical climate) and equipment for games and physical education are such that teachers and pupils in many schools simply go through the motions of compliance with time-table allocation. A more determined effort to give physical education its proper place, despite the handicaps, in the curriculum has just been started. Washroom and toilet facilities are not all that they should be.
 - (j) **Shortage of practical work facilities:** Very few schools have workshop or home economics laboratory facilities. There has been considerable improvement in this direction over the last few years, but science laboratories are still non-existent! There are 42 home economic centres and departments in the country, of which 35 are in operation catering for the girls of 70 schools on a 1-day basis. For handicraft there are 4 centres and 25 departments catering for an estimated 3,000 pupils of the 12-16 age group.
 - (k) **The shortage and inappropriateness of textbooks** is a major problem. In the primary division the children are required to have readers and arithmetic books only – when they can afford to buy them. With reorganization the secondary division children are required to buy expensive books which are in many cases quite inappropriate.
 - (l) **Lack of libraries:** Very few schools have school libraries or class libraries. In consequence children have little opportunity to read widely, or to learn to search for material.
124. The net result of these shortages, inadequacies and limitations is failure to bring out the best and the full potential of either the teacher or the pupil. Effective teaching-learning processes, imaginative teaching and active learning, practical and creative work are well-nigh impossible. (To an outsider they appear to be utterly impossible and yet we have found instances where some progress has been made.) The teaching becomes abstract and remote and sets a premium on fact-memorization; teachers and pupils alike become exhausted and frustrated. These adverse factors, too, often force headmasters to work a very narrow curriculum. The waste of talent must be enormous; only the exceptional

early-developer of determined character can come to the top and that only because of the tendency of teachers in key classes to give such children special treatment at the expense of the development of other children. The quality of education provided in the schools is generally speaking poor, standards much too low to allow for complacency in permitting continuation of conditions which force standards down and will force them down further.(1) A striking example of the futility of the situation as it has developed was offered by the result of tests set by one big industrial concern to a large number of youths who had left school within the last four years, having passed the preliminary school certificate examination; a considerable number of the candidates had almost entirely lost their ability to read and write. What the British Guiana pupil is capable of is evidenced by the high standards attained in a few schools where the staff has been able to work for some time under less intolerable conditions under a progressive headmaster - and there are many such headmasters, many more than there are schools where conditions will permit them to make their mark. Danger lies in the fact that many - teachers, heads, parents, supervisors, administrators - are coming to look upon these conditions as normal and consequently tend to set their sights ever lower and lower. The money and effort spent on education will be largely dissipated if these obstacles to qualitative improvement are not quickly removed.

125. The buildings put up in the last six or seven years - the "Greenwich Park" and the more recent "Annandale" type - have separate classrooms, staff-rooms, excellent sanitary facilities and adequate central storage and play space; but lack classroom storage space, shelving and display boards; the chalkboards are inadequate. No provision has been made in either of these two types of construction for practical-subject workshops or laboratories. On the whole they are well built and well designed. At the commencement of the session 18 of the new buildings were still unfurnished and vacant, or in the last stages of construction. In the course of the session five have been opened and furnished with the barest necessities; enterprising headmasters are making good headway and are equipping the schools with the help of Parent-Teachers Associations and other friendly organizations.

Nursery Schools

126. Of kindergarten or nursery schools there appear to be quite a number in the country, but how many is not known as no records are kept since the ministry has no control or supervision over these schools. We understand that there are one or two in the capital which are conducted on acceptable lines. Those (in rural areas) which the mission was fortunate to be invited to visit could by no stretch of the imagination be called nursery schools - a room in a house with a large number of young children cramped in, sitting huddled together on uncomfortable bench desks; suitable equipment and apparatus virtually non-existent; untrained ladies and young girls who see their task as one of looking after children and teaching the alphabet and numbers - where the house yard is big enough the children will spend some time in the open at play and organized games. One such school was established in a hall above a restaurant;

(1) The results of the Pupil Teachers' Appointment Examination, 1961, speak for themselves. Of 1,153 candidates, only 91 passed, i.e. 92% failure. In the simple primary school-leaving certificate of 7,590 candidates, 1,165 passed, i.e. 85% failure.

it held 137 children of whom some were over 6 years of age having stayed on at the nursery school because the local primary school was too overcrowded to accept them. The head had attended a short training course organized by the British Council; she was assisted by three young girls who had all taken up this job while waiting to go abroad. And yet we found the atmosphere invariably cheerful and friendly in these schools, and the teachers keen and anxious to obtain advice.

Established Secondary Schools

127. Table 7 shows known provisions, outside the secondary departments of all-age schools, for secondary education in British Guiana in the 1962-1963 session. The figures are incomplete because the government has no check on private secondary schools. The teacher-pupil ratio appears to be reasonable at 1:27 but as we shall see it gives an entirely false picture of the situation.

Table 7 - Secondary Schools' Provisions, 1962-1963^(a)

	No. of schools	Pupils	Teachers
Government schools	3	1386	66
Government-aided schools	14	7744	295
Private schools	25(b)	4670	149
All schools	42	13800	510

(a)Excluding the government technical institute and Carnegie School of Home Economics. (b)At least 21 more schools known to exist.

128.. If we accept the 21 known private secondary schools for which no figures were obtained as having a pupil-population of 1,700 (a fair estimate we believe), the pupil population in secondary schools comes to 15,500 out of an estimated total pupil population in primary and secondary schools of approximately 156,000. That is, 10% of the children in schools are in the secondary schools; of children of the age range 12-18, 18% are catered for. Government secondary schools contain less than 10% of the children in secondary schools, the grant-aided schools over 55%. The large number in the uncontrolled private schools is especially significant as the education provided in the majority of these is of the poorest quality; the government's efforts to provide alternative facilities is more than warranted.

129. Let us examine the geographical distribution of these secondary schools as shown in Table 8. It will be observed that the interior of the country is not served at all; this is hardly surprising when one considers the vast area and its thin scattered population. Greater Georgetown with more than one-fourth of the population has two-thirds of the total pupil population. The densely-populated area of the east and Corentyne coast is the only rural area which has attracted the attention of voluntary organizations to build secondary schools. The government's efforts which had been confined to

Georgetown have now turned to Essequibo where a third government school is building up year by year. When we consider the total pupil population in the Georgetown and Greater Georgetown all-age schools in relation to the secondary school population, a ratio of 2.7:1, and compare this with the similar figures for the rest of the country, a ratio of 27:1, we see what appears to be the distinct advantage the Georgetown children have in comparison. In fact quite a sizeable proportion of the children in the Georgetown secondary schools travel by train, by road, by ferry, or on foot from the environs and the outlying districts. The fact that rural British Guiana is badly served causes concentration in and upon Georgetown at great expense for parents and considerable fatigue for children. We find here one of the explanations for the sudden and recent blossoming of private secondary schools in the rural areas. The government's reorganization scheme has not deterred enterprising amateurs from opening up new private schools in the rural areas. It would appear that the government's declaration, after the initial enthusiasm of people, has been followed by disillusionment as parents have come to believe that secondary education in the overcrowded all-age schools is nothing more than the old "dead-end" education dressed up under another name. They still pin their faith to the older established secondary schools and the new ones with resounding titles of "Polytechnic" or "Educational Institute".

Private Secondary Schools

130. We shall deal only with the 25 schools which supplied us with information and in some cases invited us to visit them. The majority are makeshift affairs in makeshift buildings with stop-gap teachers; twelve of them have been established in the last two years in the rural areas. Almost all have hall-type building: most of those which have classrooms have them only because they are using dwelling houses as schools. All that has been said about furniture, equipment, sanitary facilities, etc. with regard to all-age schools is applicable here except that conditions are in many instances much worse. One school has 5 sq. ft. of accommodation per pupil! The teachers are untrained, unqualified academically and on the whole inexperienced and birds of passage. The staff-pupil ratio of 1:31 is deceptive in that there is only 1 graduate amongst the whole body of teachers in these schools, and perhaps some 9 trained teachers. The schools have no difficulty in engaging staff at pitifully low wages, but most are youths straight out of secondary school, who themselves have not reached even G.C.E. "O" level standards. The better ones use the private schools while waiting for other jobs or while carrying on their own studies.

131. The curriculum in all cases is "academic". The aims are without apology examination centred. Some schools attempt to reach G.C.E. "O" level or equivalent standards; many of the newer schools are aiming no higher than the College of Preceptors. The subjects offered are the usual grammar school subjects but the subjects are limited in number to the barest minimum. In no case reported are any of the practical sciences taught to G.C.E. "O" level standard. Pupils in most of the schools are permitted to drop any subject at any stage. Most of the pupils enter these schools at 13 or 14 years of age and there is a great deal of wastage at every level principally on economic grounds; attendance varies and is nowhere as good as at any of the grant-aided schools. The teaching is dull, unimaginative, verbal - we could not expect otherwise. The examination results, and this is the criterion by which they

Table 8 - Geographical Distribution of Secondary Schools, 1961-1962

Area	Government		Govt-aided		Private		Total	
	No. of Schools	No. of Pupils						
<u>DEMERARA COUNTY</u>								
Greater Georgetown	2	1216	8	5297	8(a)	2526	18	9039
<i>Rural Demerara:</i>								
East Coast	-	-	-	-	3(b)	248	3	248
East Bank	-	-	-	-	-	-	-	-
West Bank	-	-	-	-	1(c)	100	1	100
River	-	-	1	164	2	156	3	320
West Coast	-	-	-	-	2	180	2	180
Total DEMERARA	2	1216	9	5461	16	3210	27	9887
<u>BERBICE COUNTY</u>								
New Amsterdam	-	-	2	981	-(d)	-	2	981
<i>Rural Berbice:</i>								
Canje and Canje Creek	-	-	-	-	1	119	1	119
East and Corentyne Coast	-	-	3	1302	5(e)	1062	8	2364
Berbice River	-	-	-	-	-	-	-	-
East Bank	-	-	-	-	-	-	-	-
West Bank	-	-	-	-	-	-	-	-
West Coast	-	-	-	-	1(f)	30	1	30
Total BERBICE	Nil	Nil	5	2283	7	1211	12	3494
<u>ESSEQUIBO COUNTY</u>								
Islands, Rivers.	-	-	-	-	-(g)	-	-	-
North and South Coasts	1	170	-	-	1	103	2	273
East Bank	-	-	-	-	1	146	1	146
Pomeroon	-	-	-	-	-	-	-	-
N.W. District	-	-	-	-	-	-	-	-
Rupununi (Savannahs)	-	-	-	-	-	-	-	-
Total ESSEQUIBO	1	170	Nil	Nil	2	249	3	419
GRAND TOTALS	3	1386	14	7744	25	4670	42	13800

(a) Has at least another 8 not accounted for in the above.

(b) Has at least another 1 not accounted for in the above.

(c) Has at least another 2 not accounted for in the above.

(d) Has at least another 2 not accounted for in the above.

(e) Has at least another 4 not accounted for in the above.

(f) Has at least another 1 not accounted for in the above.

(g) Has at least another 2 not accounted for in the above.

wish to be judged, are lamentable at G.C.E. level and hardly promising even at C.P. level. It is not surprising since many of the schools despite all the handicaps attempt to force the pace and complete what are normally 5-year courses in 4 or even 3 years.

132. This has been a gloomy picture. We should say that four or five of the older established schools in the capital and its environs are doing much better academic work, at least as good as that done by some of the grant-aided secondary schools. They have managed to retain older, experienced staff who have made up their academic shortcomings. The heads of these schools are making sincere efforts through an association they have formed to raise the standards and status of the private schools.

Grant-Aided Secondary Schools

133. Grant-aided secondary schools are the 14 schools which are partially subsidized by the government in accordance with the resolutions of the Sessional Paper of September 1957 following upon prolonged deliberations between the Department of Education and private secondary school authorities. Before this time only two schools, both denominational, one in Georgetown and one in New Amsterdam, were receiving government aid. The government then agreed to pay a part of the salaries of the staff, to give annual grants towards running costs of well-equipped science laboratories, home economics and craft rooms and commercial subject rooms. A minimum salary scale for teachers was drawn up and the government's maximum contribution fixed. The government would have the right of inspection and would set certain minimum standards in physical and technical matters, teacher qualifications and teacher-pupil ratio. Governing bodies, with one government nominee on the Board, would continue to have full liberty in staffing matters. Nine schools of which five were denominational managed in 1958 to qualify for grants-in-aid by satisfying or near-satisfying the requirements laid down by the relevant law. It was unfortunate that one or two of the good private schools were excluded on the grounds that they could not meet some of the less important technical requirements. Within the last four years five more schools have become grant-aided; we formed the opinion based on both the inspection reports made on the schools prior to assistance being granted and from our own investigations that one or two of these schools were and still are below the standard which under the law should have been accepted. It would appear then that by 1957 the government had realized that the secondary schools and their resources were vital to the educational system as a whole, that their educational standards needed to be raised, and that they needed supplementary funds to do this, the only source for such further funds being the government itself.

134. The government's hopes of raised standards consequent upon subsidization have not been fulfilled to any great extent. Physical conditions in many of the schools have been considerably improved, for in the first flush of renewed faith in their future some governing bodies raised or borrowed funds to build well-designed and well-appointed schools. The calibre of the staff, however, was only partially improved; the new salary structure was not attractive enough, and in any case to find competent qualified teachers of English, mathematics, chemistry and physics was not a question of salary alone;

salary revisions in the last four years have applied to government school teachers only and the gap between their scales and those of the teachers in the grant-aided secondary schools has widened considerably, making it difficult for the latter schools to obtain or retain good teachers. Furthermore the conditions of service of the grant-aided secondary schoolmasters compared very unfavourably with those of the government schools. Some misunderstanding seems to have arisen between the government and governing bodies. The government has made it clear that it has no objection to governing bodies paying higher salaries to bring them into line or closer to the government teachers' salaries; the government has fixed the *minimum* salaries to be paid in accordance with certain qualification criteria, and has fixed the maximum amount it will pay itself; anything over and above that must be met out of the schools' own funds; it is for the school authorities to make the conditions of service more attractive. On their part the governing bodies consider that the government has a moral duty to increase salary grants and thereby salary scales. They refer to the 1957 "Memorandum on Secondary Education"⁽¹⁾ which specifically states that this partial aid should be only the first step towards full aid. They overlook the fact that the Sessional Paper⁽²⁾ also specifically states that the grants will be made subject to the government's ability to find the funds. The governing bodies contend that they cannot increase their contribution (some in fact do and one pays government rates) since the fees are to all intents and purposes pegged - and this is their main source of income - despite the rise in cost of living. This would have been a valid argument if we had not been informed by some governing bodies that it had not crossed their minds in the last four years to seek government permission to raise fees. The fact is that all the schools have given priority since receiving aid to improving physical conditions out of whatever surpluses they have at any time had rather than to improving the quality of their staff. Again they fall back on the memorandum: "If the government subsidized the salaries of staff, the *whole* or in part (our italics), the monies received in fees and any bequests or endowments would be available for new buildings or improvements and for essential operating expenses of a school.. It may be necessary to approve a rise in school fees to cover increases in operating costs. *It is recommended that the government policy should be, as soon as possible, ultimately to pay 100% grant towards the costs of the teachers' salaries in the aided schools*" (our italics). The misunderstanding arises from the fact that the grant-aided secondary schools appeal to the "Memorandum" and have based their policy and derive their attitudes from this since they were consulted in its composition, and overlook the fact that the "Sessional Paper" and amendments to it accepted by the Legislative Assembly did not include some of the points made in the "Memorandum".

135. The outcome of the 1957 agreement has been that there has been an overall expansion of secondary education, a very necessary one, but quality has not kept pace; new buildings have gone up, extensions to buildings have been made, some laboratories have been built, but the teaching staff on paper is certainly no better. (In 1959-1960 the teacher-pupil ratio was 1:26; in 1962-1963 it is the same; in 1959-1960 the percentage of graduate and/or trained teachers to unqualified was 30%; in 1962-1963 it is only 22%.)

(1) "Memorandum on Secondary Education". Department of Education, British Guiana, 1957.

(2) "Sessional Paper September 1957" British Guiana. 1957.

Table 9 - Government and Government-Aided Grammar/High Schools, 1962-1963
Pupil Population, Teacher Strength, Teacher-pupil ratio

	PUPILS									TEACHERS			Teacher Pupil Ratio	Grad. /or Trained Teacher- Pupil Ratio
	No. of Schools	Boys	Girls	Total	Graduate Trained	Graduate	Non-grad Trained	Non-grad. untrained	Total					
Government Schools	3	760	626	1386	22	28	5	10(2)	(a) 65	(a)	1:22	1:24		
Government Aided Schools	14	4231	3513	7744	13	49(2)	10(2)	219(4)	291 (8)	(a)	1:26	1:104		
	17	4991	4139	9130	35	77(2)	15(2)	229(6)	356 (10)	1:25	1:70			

(a) 3 teachers on leave. () indicates part-time teachers: 2 part-time counted as 1.

136. Only three of the schools, the three denominational schools in Georgetown, have 6th form provisions. The remainder take pupils up to G.C.E."O" level standard and in the course of so doing put their pupils through the College of Preceptors Examination. A few boys for the last few years have managed to gain entry from the 5th forms of the grant-aided secondary schools (and from the best two private secondary schools) into Queen's College where they are given a three or four-year course for advanced work up to university entrance requirements. Despite the extra year or two their results have not been entirely satisfactory, revealing the weaknesses of the boys' earlier education. At the same time it must be mentioned that two such boys were awarded the Guiana scholarship, the highest scholastic award the country has to offer, at the end of their higher course.

137. Because of the pressure for examination results in the shortest possible time several of the schools fall into the same mistake as the private secondary schools. They force the pace and try to shorten a normal five-year course. One school in 1961 presented 111 candidates for the Cambridge certificate; only 29 obtained the certificate, and of these only one was awarded a first division certificate and 7 a second class. The staff of another school dissatisfied with their result lengthened the school year for the examination class by two weeks in addition to giving the pupils extra tuition after school hours and on Saturdays, all without charge.

138. To return to the staffing question. We find the same difficulties as encountered by the private secondary schools except that the unqualified staff in transit do have somewhat higher academic qualifications, that is

they have gone further in their academic studies at the secondary schools they have recently left. One school with a total staff of 16 had had 18 changes in the last 18 months: ten of the staff who had left had gone to the United Kingdom mostly for higher studies, while the other 8 had taken up posts in the Civil Service since they could command a better salary there than in the schools following upon a recent salary revision for Civil Servants. A school with a staff of 44 had lost 28 of its staff in the course of 1961-1962. Half of these had proceeded on higher studies, seven had left for better-paid jobs. Even the older denominational schools which have a stable nucleus of members of their respective religious orders have a high turnover of lay staff. One denominational school has started most commendably a scholarship scheme of its own to send promising unqualified teachers for higher academic studies abroad. It is now considering stopping the scheme on finding that the returning graduates soon leave for the government secondary schools.

139. A limiting factor of moment is the quality and range of education provided by these schools; even where laboratories are available there remains the difficulty of recruiting qualified teachers. These key subjects are more often than not in the hands of the youngest, inexperienced teachers among whom the rate of wastage is the highest. Consequently, many schools limit their classroom work to the examination subjects which most readily lend themselves to theoretical teaching and memorization learning - even chemistry and physics are learnt out of textbooks. Home economics education is provided in the same two schools which offer commercial subjects; wood work and metal work and agriculture or sciences with an agricultural bias in none. The very schools which should provide alternative courses to meet the needs of the wide spread of ability of their pupils are working strait-jacketed curricula on out-moded lines.

140. These schools in general differ from the private secondary schools in that several of them do provide a better education, even though it still be insufficiently diversified and hardly relevant to British Guiana realities. On the whole these schools have a purpose and an aim which is not exclusively limited to examination successes. Many do offer opportunities for the fuller development of the child with their active games' clubs, literary and debating societies, historical societies, science clubs, philatelic clubs, dramatic societies, United Nations clubs, magazine committees, old students' associations, etc. The prefect system and the house system afford further opportunities for healthy development and growth of the children's total personality. We would have liked to have seen such activities in all the schools. The mission is convinced that the majority of these schools could rapidly be transformed into exceedingly good schools if they could be assured above all of a stable, balanced and competent staff and have confidence in their future.

Government Secondary Schools

141. Queen's College has won for itself the enviable position of the premier school of British Guiana - there is a great deal of evidence to support the claim for it as the premier school of the Caribbean. The whole tone of the school is permeated by the tradition and reputation built up over the years. For many years a law unto itself it is feeling some strain attempting to bed down into a national integrated system. It is housed in a badly-designed,

sprawling building; the general appearance of classrooms, halls, corridors, etc. is one of austerity verging on shabbiness and dullness. It has a large auditorium and stage facilities which have made it a centre in British Guiana of cultural activities. It has spacious games grounds, adequate but not lavish laboratories which need modernizing, and even a workshop for wood work. It is not very generously equipped for the application of modern teaching techniques. The large library which should be playing a vital part in the general school curriculum is kept locked up; the volumes it contains could be supplemented and enriched to make a greater appeal to adolescents. The staff is adequate, competent and on the whole well-balanced though again there is some difficulty in attracting science teachers.

142. The school offers a wide curriculum including music, art, physical education and other non-examination subjects. In the middle school pupils are streamed into classes where the emphasis is on the science subjects, or into classes where the emphasis is on the arts subjects. In both cases the school offers a sound all-round education. Another stream carries on with general subjects and the majority of this stream leave at the end of the 5th year to take up jobs. Of the 138 fifth formers in 1961-1962, 75(54.3%) moved into the 6th form. Of interest is Table 10 which shows what happened to the 1961-1962 leavers:

Table 10 - Queen's College Leavers, 1962

To Universities	27	To Civil Service	
		(a) Technical	1
To other studies abroad	36	(b) Clerical	11
To teaching	28	To private employment	0
To commerce and industry:		Unaccounted for	14
(a) Technical	4		
(b) Clerical	8	Total	129

We realize the extent to which the academic, professional and cultural life of the country must have relied on the Queen's College leavers for revitalization. Over 50% went on immediately to further studies; over 20% went straight into teaching - in fact the main source of recruitment of the secondary schools is the Queen's College "graduate"; particularly important in this field, in view of the paucity of graduates, is the Queen's College science sixth form. In recent years a commendable well-organized effort has been made to widen the curriculum still further by making use of the technical institute facilities for introducing interested pupils to technical subjects.

143. The school offers a full range of extra-curricular activities and sets high store on games.

144. The school has a great past and should be assured of a great future. It needs to modernize and make somewhat more realistic its curriculum, particularly in the junior forms, and diversify the curriculum to a greater extent in the upper forms. A great deal depends on this as the pattern it sets will be followed by other schools as in the past - we hope in the future with

rather more imagination and a fuller appreciation of their own potentialities and local and national needs.

145. Much of what has been said with reference to Queen's College is applicable to Bishops' High School. The school aims principally at providing a liberal education and in so doing obtains very good examination results. It offers a fairly wide range of subjects and does not neglect the non-examination cultural subjects. The 6th form specializes to a greater extent. A healthy corporate life is established through extra-curricular activities of all kinds and by means of a prefect and house system. The girls are given some instruction in home economics and a commercial stream has been recently started. This admirable effort should be more actively stimulated and more firmly established.

146. The Anna Regina School was opened two years ago with junior forms only and is now building up. Under a progressive headmaster the school is making rapid strides forward despite the makeshift building and other handicaps. We urge that this school should be given parity of treatment with the other government schools in such matters as qualified staff, buildings, laboratories, workshops, and equipment. This is especially important as classes move through to more advanced work. The school is beginning to satisfy a felt need.

Vocational Education

147. Apart from two trade schools run respectively by Bookers Sugar Estates and the Demerara Bauxite Company for the training of their own personnel, the only institution providing technical education is the Government Technical Institute on which "falls the exceedingly important task of training Guianese youth in the skills of which the country is so greatly in need and which will become increasingly more important as the development programme develops momentum".⁽¹⁾

148. The institute offers:

- (i) Trade courses in the building, electrical and motor vehicle trades, fitting and machinery, steel fabrication, plumbing and welding. These are conducted in the main for apprentices coming under the control of the Board of Industrial Training. The students follow a five-year part-time day release or Block release course;
- (ii) A preliminary craft course to enable candidates to meet the requirements of the trade courses. The course is also held at four extra-mural centres for a total, in 1961, of 66 students;
- (iii) Technician courses, sandwich or part-time, spread over three years, in preparation for the City & Guilds of London Ordinary Certificates in Mechanical and Electrical Engineering and in Building;
- (iv) A one-year full-time course in surveying;
- (v) A one-year full-time course in handicrafts for teachers in the all-age schools;

(1) "Report of the Commission to review wages, salaries and conditions of service in the public service". (The Quillebaud Report). British Guiana 1961. p. 7.

- (vi) A two-year full-time course in commercial practice. (This course was originally intended for teachers of commercial subjects);
 - (vii) A handicrafts course organized for students of a number of secondary schools in Georgetown.
149. The demand for places at these courses far exceeds the places available, except for the technician courses which demand basic qualifications of a G.C.E. "O" level standard. There is accommodation at the technical institute for 600 students at a time, but the present staff can handle only 400. With the normal growth of existing classes it is estimated that the institute will be filled to its maximum capacity in 1965. The institute in the face of difficulties is making a positive contribution to the economy of the country. It must be given fuller scope to reach its potential.
150. Four Georgetown grammar high schools send pupils to the technical institute for tuition in handicrafts and geometrical and mechanical drawing. The two private trade schools train the limited number of craftsmen required by the industrial enterprises sponsoring them. One, in the coastal belt, is able to select its students from a wider field of applicants and with well-planned courses and good teaching raises its students to a reasonably high degree of competence in the skills taught. The second, in the riverain area, cannot be so selective nor can it always attract and retain suitable staff; consequently it is able to achieve less satisfactory standards with the bulk of its pupils.
151. Government policy aims at the provision of handicraft centres for wood and metal work at every secondary comprehensive and all-age school and raising standards by encouraging pupils to offer craft at the College of Preceptors' Examination. There is a risk here that, as this examination includes no practical test, pupils will concentrate on theory and do little actual practical work - this has been seen to be happening already. However implementation of government policy for the secondary comprehensive schools will obviate the necessity for the preliminary craft courses at the technical institute and, at the same time, improve the quality in terms, above all, of general education, of the candidates applying for admission to the trade and technician courses.
152. The apprenticeship system, which is excellent in principle, is not, we are told, proving as satisfactory in practice as it should do, because of a shortage of the trained staff needed to provide adequate supervision. The older middle grade technical staff, recruited in the main before the establishment of the Board of Industrial Training, suffer from a lack of general education and not infrequently find themselves promoted, in view of their seniority, to posts for which they are not intellectually equipped.
153. The Carnegie School of Home Economics has a basic course of three years' duration, for girls of a minimum age of fourteen and a half. There are about 375 applicants of whom 50% come from the rural areas for the 75 annual vacancies. In addition to cooking and nutrition, needlework, laundry work, child care and housewifery, it gives instruction in English, arithmetic, geography, history, art, civics and singing. Some students are entered for the examinations of the College of Preceptors. The college provides instruction in needlework for those students at the Teachers' Training College who elect to

offer this as an optional subject and also provides a one-year full-time course for teachers wishing to qualify as specialist teachers in home economics. In addition to these daytime courses, the school offers an extensive and popular programme of evening non-vocational classes for adults in such subjects as cooking - including cooking for men - dressmaking, home improvement and home and family living. Within the limits of its aims, scope and resources the school is making a real contribution in the field of social development.

154. There is at present in the public educational system little training in commercial subjects. There are however a number of private establishments claiming to teach commercial subjects; the training they provide is, generally speaking, limited in range and mediocre in quality. It is recognized that the general level of secretarial and clerical competence is very low and that there is a clear need for a supply of well educated, adequately trained girls and boys to fill the lower ranks of commerce and the Civil Service.

155. In a predominantly agricultural community the need for an agricultural bias in sections of the educational system would seem to be indisputable - yet it is lamentably lacking. The Department of Agriculture, through its extension division is concerned with all aspects of agricultural education, even with the little that is done - school gardens - in the all-age schools.

156. It works in large measure through voluntary organizations, starting with the 4H Clubs, designed to foster in boys and girls of the age of 12 and upwards an interest in agriculture and rural activities. These clubs, scattered thinly and unevenly over the country, depend for their membership on the schools; girls and consequently home economics projects predominate and there are comparatively few purely agricultural activities. Though children are encouraged to continue their membership after leaving school, few do so.

157. Young farmers' clubs, whose distribution is similar to that of the 4H Clubs, enrol men and women between the ages of 18 and 35 who are engaged in agriculture. They are in general more active and more stable and constitute perhaps the most fruitful field for the development of informal education in agriculture. They too suffer, though to a lesser degree than the 4H Clubs, from a lack of leadership and technical guidance which the depleted and overburdened extension staff of the Department of Agriculture is unable to provide in sufficient measure.

158. There has hitherto been no provision in the country for training in agriculture at the professional or sub-professional level but the government is now establishing a school - at Mon Repos - which, it is intended, shall undertake the training of agricultural field officers and also conduct courses of varying types and duration, for farmers and others engaged in agricultural pursuits.

Examination Standards

159. We believe that it is necessary to look more closely at the examination standards at the secondary level. We do so for three main reasons: (1) the quality and range of higher education will depend ultimately on the academic achievements of the secondary schools; (2) we must see to what extent

the secondary schools as they are at present can support a third level of education; (3) by pin-pointing particular deficiencies we may stimulate action at secondary and tertiary levels to eliminate the weaknesses.

160. The two government secondary schools and the three Catholic schools in Georgetown present candidates exclusively at the Oxford and Cambridge G.C.E. examinations. The other grant-aided secondary schools and the private secondary schools prefer the Cambridge Certificate and/or London G.C.E. examinations. Private candidates take the London examination. (A credit mark in the Cambridge Certificate is equivalent to a London or Oxford and Cambridge "O" level standard). The results of the 1961 examinations are shown in Table II.

Table 11 - Examination Results, 1961

	Candidates	Pass 5 or more subjects	Pass 4 subjects
Oxford & Cambridge G.C.E.	679(a)	209	68
London G.C.E.	2981	28	31
Cambridge School Certificate	1026	10 (i.e. Div.I)	61 (Div.II)
TOTAL	4686	247	160

(a) Includes 150 pupils of the 4th form who take 1 or 2 subjects only.

161. The considerably better showing at the Oxford and Cambridge examination, the examination taken by the 5 older schools, is proof of their marked academic superiority. The London and Cambridge certificate figures make dismal reading. Thirty of the private and grant-aided secondary schools account for 25% of the candidates and 50% of the successes of the London examination, and point to the failures of these schools at this level. The remaining candidates include many pupil teachers and unqualified teachers and others who are seeking to make up the deficiencies of their formal education by private study. The Cambridge school certificate candidates are from private and grant-aided secondary schools and the results require no comment. The significant fact is that the school system in 1961 provided at the most 247 candidates with the minimum qualifications for entry to the University of Guyana. If we add those with passes in 4 subjects, then we have a total pool of 507 for the university, for pre-service teacher-training, for the 6th forms, and for commerce, industry and the public service.

162. All candidates at the advanced level take the London University G.C.E. "A" level examination. Table 12a and Table 12b give successes at this higher level by schools. The poverty of facilities for advanced level work (i.e. United Kingdom university entrance requirement) is made clear. Only 4 schools (again the two government and two Catholic) make any serious contribution and with any real success. The number of private candidates is particularly significant and their failure equally so; the need for an institution or

institutions of higher studies is evident; the need for guided and informed study at this level, as at the lower level, even more evident.

Table 12a - Advanced Level - 1961 - by Schools

	Total Candidates	Total Subjects Offered	Subjects Passed	Subject-Pass (percentage)
Queen's College	99	241	184	76.3
Bishop's High School	48	126	96	76.2
St. Stanislaus	23	55	41	74.5
St. Joseph's	12	19	12	63.2
St. Rose's	3	7	2	28.0
Indian Educational Trust	2	2	0	0.
Private Candidates	328	716	117	16.3
TOTAL	515	1166	452	

Table 12b - Advanced Level, 1961

	Candidates Offering				No. of Candidates passing in			
	4 Subjects	3 Subjects	2 Subjects	1 Subject	4 Subjects	3 Subjects	2 Subjects	1 Subject
Queen's College	13	41	21	24	5	27	22	39
Bishop's High School	3	29	11	5	1	14	7	36
St. Stanislaus	-	12	8	3	-	7	7	6
St. Joseph's	-	1	5	6	-	-	3	6
St. Rose's	-	2	-	1	-	-	1	-
Indian Educational Trust	-	-	-	2	-	-	-	-
Private Candidates	4	53	139	132	-	4	23	79
TOTALS	20	138	184	173	6	52	63	166

NOTE: The majority of school candidates offering one subject only are doing so one year after taking "O" level and will remain at school for a further year to attempt more subjects.

163. We shall confine ourselves on Table 13 to a few general comments only. The results in the science subjects have a great deal to tell us of the standards and of the spread of science teaching in the schools. In mathematics the results of the schools presenting candidates are particularly satisfactory; they are good in physics, chemistry and botany, although not of the same high standard. They compare very favourably with United Kingdom results. The small numbers taking geography and history present a problem. The large mass of private candidates understandably opt mainly for the arts subjects, but do not fare well.

Table 13 - Science Examination Results (of the Schools), 1961

	Oxford & Cambridge		London		Cambridge	
	Candidates	Passes	Candidates	Passes	Candidates	Passes
"O" Level						
Physics	136	76	Not known	27	Not known	
Chemistry	137	86	"	31	"	
Physics with Chemistry	53	19	"	3	"	
Botany	5	5	"	17(a)	"	
Zoology	-	-				
Biology	212	132	"	53	"	
Maths.	312	169	"	209	"	
Advanced Level						
Applied maths.	-	-	36	32		
Pure maths.	-	-	43	37		
Pure and Applied maths.	-	-	19	15		
Chemistry	-	-	60	45		
Physics	-	-	44	31		
Botany	-	-	29	13		
Zoology	-	-	48	29		

(a) 14 from 1 school.

164. If we assume that student potential for the University of Guyana, etc. is determined by some such figures of examination successes as shown in the Tables of 1961, it is clear that the university will have to depend for some time on the back-log of successful candidates who are now in employment - the decision to start the College of Arts and Sciences as an evening establishment was a wise one. It is hard to envisage a flourishing science faculty, unless more schools prepare pupils for the "O" level examinations in the practical science subjects. We repeat, all-round qualitative improvement and widening of curricula in the secondary schools can be rapidly effected.

Teacher Training

165. We take it as axiomatic that as the concept of education and its aims widens and deepens, so the need for better equipped teachers becomes more urgent. The teacher of today, unlike his Victorian colleague, is no longer merely a purveyor of the rudiments. The school system has a crucial part to play in the all-round development of the child and in the wider sphere of the national life. The teacher within that system has to be competent to fit into the changing patterns, the new orientations and the fresh demands. We must consider whether the teachers of British Guiana are equal to their responsibilities. Zeal and cheerfulness and mighty striving are not enough in themselves; the teachers must have the academic background, the professional training and the tools to be effective; some have and we have seen how well they use the wherewithals at their disposal.

166. It was not until 1928, at a time when 95% of teachers were untrained, that a Teachers' Training Centre, later called the Government Training College, was opened with an intake of 30 students every two years. This was quite inadequate to meet the need, but at least the principle had been established that teachers should be trained if the schools were to make a greater and more positive contribution and the funds expended on them not wasted. The intake was increased in 1938 and again in 1953 so that each year 30 additional trained teachers became available for the schools. It was not until 1959, when the percentage of trained teachers was 17, that the government began to take the danger signals seriously. It then instituted a one-year so-called emergency course for training 150 teachers a year, the number being increased to 223 in 1962. The replacement of the two-year course by a one-year course was not as serious a blow to education as it might have been in so far as the emergency course continued the practice of in-service training of teachers, i.e., the students were drawn from the ranks of unqualified or untrained teachers already serving in the schools, many of mature age with many years' experience and responsibility behind them. A point of interest is the fact that so many of the trainees had had some years of secondary education. As a result of the expansion the percentage of trained teachers in the schools was raised to 25.6 by 1962.

167. The suspension of the two-year course compelled a great deal of re-appraisal of the curriculum. Emphasis was laid on the professional aspect of the work, and the academic background of the trainee except for the tool subject of English was left very largely to fend for itself. This to our minds was a mistake as it did not recognize the validity of the statement made by many eminent educationists that tools without materials are of little value to the craftsman, theoretical knowledge of educational principles and technical skill in the classroom cannot compensate for lack of range and depth in content knowledge and understanding. The urgency for fresh reappraisal in the 1962-1963 session became apparent when reorganization of the schooling system called for teachers for subject teaching at secondary level. The training college switched groups of trainees to training for this more advanced work and quickly drew up an appropriate curriculum. But the training college can do no more than is made possible by the facilities it possesses and the competencies of its staff. It has no laboratories and no teachers of science except for one part-time expatriate. It has no ground for farming or gardening. Up to 1958 students, male and female, were given some grounding in agriculture, but the course was abandoned when the tutor was sent on study leave. The loss

of a tutor specifically trained for visual and aural aids instruction handicapped the college work in this essential field of studies.

168. We do not propose to examine the curriculum and scheme of work in detail.

Each of the syllabuses has been drawn up with care and ability, and is clear evidence of the zeal and competence of each of the members of the staff within his own field of studies. Our one point of criticism has already been mentioned - the curriculum as a whole pays insufficient attention to the academic training of the students, and does not always take into account the actual conditions under which the teachers will have to work. The approach must be made more practical and realistic. A very good start has been made in this direction in the course of this session. The over-burdened staff under an energetic and far-seeing principal is fully conscious of its responsibilities. All have had considerable experience in primary schools and some have had experience in secondary schools. All are capable of handling the professional training of students with success, but there is a shortage of lecturers who can deal with the content of the level and range now required for the training of teachers for the new secondary schools.

169. The training of the students is conducted through lectures, tutorials, group discussions, seminars, projects, individual work, criticism lessons and teaching practice. Students are assessed on both their work during the session and by formal examination at the end of the course. The course is a strenuous one but time is found after normal working hours for meetings of the clubs and societies through which it is hoped to foster the social development of the students and arouse their interest in community affairs and leisure-time activities. Students are given a great deal of responsibility in their own government and welfare. An excellent professional library has been built up for the use of students; it cannot offer all that would be expected of it because the college has no librarian.

170. From time to time during vacations and during the school session, the ministry has organized in-service training courses. Our own observations of such courses lead us to advocate that they should be discontinued in their present form. In the first place conditions are such in the schools today that we believe more is lost by taking teachers out of the schools for one day a week over a number of weeks or for two or three consecutive days than is gained from the courses or conferences or seminars which we saw being conducted. Secondly, we found that too much was being attempted in too short a time. We applaud the well-meaning efforts of the education officers who organize and conduct these courses and give much of their own time to them, but we would urge:

- (a) that the real needs of teachers or groups of teachers be carefully considered (e.g. music, P.E., art, for trained teachers);
- (b) that only one such need, one topic, be dealt with at any one series of talks or discussions or demonstrations, with a homogenous group;
- (c) that the length of the course be such as to allow for this topic to be dealt with thoroughly and for full discussion and ample practical work;
- (d) that the courses in any one area be a progressive series;

- (e) that courses be so organized as to cause the least possible disruption of the schools, i.e. they be held during vacations or on Saturdays and school holidays;
- (f) that principles enunciated should be made relevant and appropriate to the teaching situations obtaining in the schools;
- (g) that there should be follow-up action and evaluation by education officers in the schools after the courses.

171. We would urge, too, that the long summer vacations be used for long courses for pupil teachers and prospective interim teachers, until recruitment through these sources is eliminated. In the former case content work should take up a good deal of the time.

172. The training college has attempted to help teachers in schools by opening and stocking professional libraries in 36 centres housed in schools in various parts of the country. We would suggest that greater publicity be given to this venture so that the centres be used to a greater extent than at present by teachers of schools in the neighbourhood. The machinery for loaning out these books needs to be overhauled and follow-up action instituted.

173. The government training college has trained the "general practitioners", the government technical institute has been responsible for training of teachers for handicraft subjects (mainly wood work) and the Carnegie School of Home Economics for teachers of home economics (Table 14). These specialist teachers will be very much in demand in the future; many of them are not teaching their special subject, either because their schools do not have the facilities for the practical work or because they have come to believe that specialization has been a hindrance to promotion to top posts.

Table 14 -Teacher Training, 1960-1961 to 1961-1962

Description of Course	Institution	1960-1961			1961-1962		
		M.	F.	Total	M.	F.	Total
General professional	Government Training College	75	75	150	78	72	150
Handicraft and wood work	(Government Technical Institute)	Nil	Nil	Nil	12	x	12
Home Economics	(Carnegie School of Home Economics)	-	20	20	-	15	15

174. It will have been observed that in fact there has been no provision in British Guiana for the training of teachers of and for the established secondary schools. This has been a fundamental weakness of the system arising from the historical fact of the evolution separately of primary education and of secondary education. Now that the two are to be articulated, the untrained staff of the secondary schools can no longer be neglected. Occasional conferences

or seminars sponsored by the Association of Masters and Mistresses or by the Science Teachers' Association have but scratched at the surface of the problem.

Higher Education

175. There are no facilities for higher education apart from those provided for the training of teachers and of technicians. A substantial number of people study privately for external examinations of the University of London as well as those of a wide range of professional bodies, the examinations being taken locally under the general control of the Ministry of Education. The normal method of preparation is by correspondence course, though semi-private tuition is available for some of the professional examinations. The examinations of some twenty-four bodies based in the United Kingdom are conducted locally as candidates present themselves. (Table 15).

Table 15 - External examinations (a) taken in British Guiana, 1961

	Number of candidates		
	entered	present	passed
M.Sc. Economics	1	1	1
B.A. Honours History	1	1	1
B.A. General	7	7	3
LL.B. (Part I)	8	6	3
LL.B. (Part II)	5	4	1
B.Sc. Economics (Part I)	3	2	0
B.Sc. Estate Management (Part I)	1	0	0
Intermediate Law	13	8	0
" " Referred subject	3	3	2
Diploma in Theology	2	1	0
Cert. of Proficiency in Religious Knowledge	1	1	0
TOTAL	45	34	11

(a) Figures refer to University of London Examination's Board only. There are some 24 other examining bodies.

176. All those who wish to pursue higher studies and who can afford to do so, or who can obtain a scholarship, go abroad. Table 16 indicates the number and spread of students commencing higher studies overseas in 1961.

Table 16 - Students Overseas, 1960

	University College of the West Indies	U.S.A.	Canada	U.K.	Total
Arts	12(12)	18	2	6(1)	38
Science	6(6)	14	3	15(4)	38
Econ. & Soc.Sci.	8(8)	6	1	28	43
Engineering	9(9)	2	1	55(5)	67
Machine &	3(3)	6(1)	1	21(1)	31
Agriculture &	3(3)	1	4	2(1)	10
Vet. Medicine	-	1	1(1)	-	2
Education	2(2)	5	-	16(6)	23
Other fields	-	4	-	241(5)(a)	245
TOTAL	43(43)	57	13	384(23)	497(b)

(a) Including nursing 164; law 30; pre-university and pre-medical 26. Figures in brackets indicate those in receipt of a scholarship or a government loan.

(b) Does not include students going to other countries - no precise figures available.

177. The U.W.I. has acted as a focus for the academic aspirations of the whole Caribbean area. It has provided a great stimulus to research into local problems in all fields and has assembled on its staff a substantial body of experts who because of their special interests and specialized knowledge have made substantial contributions towards the better understanding of these problems. Though originally situated only in Jamaica, it has now established in Trinidad its faculties of agriculture and engineering and will shortly be establishing liberal arts colleges in both Trinidad and Barbados. Its extra-mural department has branches, with a resident tutor, in many territories. The U.W.I. is financed primarily by means of contributions from the member countries.

Education of handicapped children

178. There was until this year no provision for the education of handicapped children. As the result of a survey carried out in 1960 the British Guiana branch of the British Red Cross Society decided to build and run a school for the crippled, deaf, dumb, blind and mentally retarded. The government provided a site and the Red Cross launched an appeal for \$300,000. However, before building could commence it was found that the land was unsuitable and the plan was abandoned; temporary arrangements were made to take over a large house to be used for deaf children only. The school opened in February of this year with the help of an expert sent out by the Commonwealth Society for the Deaf,

who would train two Guianese teachers already selected. Another Guianese teacher is at the moment in training in England as a teacher of the blind who will return to initiate classes at the proposed Blind Institute. The Red Cross project is to use four separate houses and establish an administrative block. It is to be hoped that this project will continue to enjoy the support of the government and that from this small beginning a full provision will be made in the course of time. Meanwhile steps should be taken to train a sufficient number of Guianese as specialist teachers.

Adult Education

179. The principal bodies concerned with adult education in the country as a whole are mentioned below and their activities briefly described:

(i) The extra-mural department of the University of the West Indies maintains a resident tutor in Georgetown. Proposals to establish a centre for extra-mural activities were abandoned when the government announced its intention to withdraw its support from the university; it is expected that the resident tutor will soon be withdrawn and the branch closed. The activities of the extra-mural department during the year 1961-1962 included evening classes in Georgetown for in all some 400 students, and special courses for senior Civil Servants, police officers and nursery school teachers. In addition public lectures were given mainly in the urban areas. The department maintains a panel of volunteers with experience or specialized knowledge who are prepared to act as lecturers or discussion group leaders at the community or local authority level.

(ii) The Adult Education Association was founded in 1958 with the prime purpose of providing a means of liaison and co-ordination between organizations concerned with adult education, including both government departments and voluntary organizations and of helping to stimulate all forms of adult education and to meet expressed needs. Membership is open to any organization concerned with adult education. The association conducts occasional study conferences in adult education to assist organizers in the field, but its main activity is to assist members in finding teachers and in organizing courses.

(iii) The Social Development Division of the Ministry of Education was re-organized in the summer of 1962; the major change being to allocate duties on a regional rather than a functional basis. Each of the twenty-five district social development officers is now responsible for all aspects of the work of the division within his area. It is proposed that there should be fifty village workers, acting under the guidance of the district S.D.O., concerning themselves with all forms of extension work and assisting generally to stimulate the growth of active community life. There is also at headquarters a newly appointed adult education officer whose function it is to co-ordinate the activities of voluntary organizations, to give guidance to their officers and to assist in the training of welfare workers. She is also responsible for the scheme of rural education for women. The total enrolment was 1200 in 1961 and 700 in 1962. In 1960 fifty-five courses were held in 48 women's institutes throughout the country. The small vote for the scheme, \$5,000 per annum, is administered by the Carnegie School of Home Economics.

(iv) The contribution of the Department of Agriculture to adult education is considered elsewhere.

Table 17 - Rural Education Classes, 1962
 (1961 classes in brackets)

	Berbice	Demerara	Essequibo	Total
Classes requested	(48) 10	(47) 21	(23) 16	(118) 47
Classes held	(16) 8	(28) 19	(23) 14	(67) 38
Classes not held	(32) 1	(19) 2	(-) 2	(51) 5

(v) The British Council describes its activities as taking "the form of services to Guianese institutions and individuals rather than council programmes in council centres". It maintains a library in Georgetown of more than 5,000 volumes. The activities in 1961 comprised seminars, study groups, a course for teachers of illiterates, courses on local government, radio programmes on "Science for Schools", and numerous film shows. The council has now been asked to provide a current affairs radio course for schools. Its staff of two take a major part in the educational activities of the country and were responsible for the establishment both of the Adult Education Association and of the British Guiana Music Festival, both now independent. In addition to the activities enumerated, the council provides bursaries and scholarships, and gives help to students and others visiting the United Kingdom.

(vi) The Sugar Producers' Association provides on each estate a community centre with usually a staff of two welfare officers, one man and one woman. Membership of the centre is restricted to employees and their families, but as a rule each centre has its own Adult Education Council, with co-opted members from outside the estate, which attempts to cater for the whole community. While basically each centre offers the same facilities, there are wide variations in what each achieves. The Education Council of one community centre for instance has organized courses on how to conduct meetings and keep records for the benefit of the 40 different organizations in the estate area, and a course on local government in addition to frequent lectures held in the village in the open air. In addition to the main hall, often with a stage, each centre has a library, and a majority have rooms for handicrafts and a wood work shop.

(vii) The 39 village community centres differ from those on the estates mainly in that they have no official organizers and depend for funds solely on the resources of the village or the local authority. In the absence of an active organizer the centres tend to become merely rooms that are opened up for specific meetings unless they are brought into daytime use to take the overflow from the school.

180. We do not claim to have made a close study of the adult education provisions; our observations lead us to the conclusion that there is no central driving force, no organizing or integrating authority to co-ordinate the diffuse activities of the many organizations which are interested in this important sphere of social development. The stated aims cannot be realized if more concerted efforts, direction and leadership are not forthcoming.

Para-educational activities

181. There is a wide range of para-educational activities in the country, which are, in the main, associated with religious bodies often through a denominational school, but each sugar estate community centre has its own group of clubs. Youth clubs and sports clubs proliferate and there are Girl Guides and Boy Scout troops, St. John's Ambulance Brigade and Red Cross Units in many parts of the country. These organizations, or most of them, are somewhat loosely linked in a national association.

182. The volume of participation varies considerably from place to place and from time to time according to the strength of the local leadership. In spite of the apparently substantial activity there is an urgent need for a very much greater drive to make some provision in particular for the mass of children between the ages of 15 and 18 who have just left school and are still in many cases without immediate hope of employment. With adequate guidance, local authorities would, we think, be prepared to take a much more positive part. Some teachers already give the lead, more might with encouragement do so.

PART II**THE NEEDS AND THE RECOMMENDATIONS****CHAPTER 4****DEMOGRAPHIC AND ECONOMIC FACTORS AFFECTING NEEDS**

183. Earlier in the report we discussed in broad lines prevailing demographic and economic conditions and prospects in order to indicate the general possibilities and limits of quantitative and qualitative improvements in education. We shall now try to delineate more specifically the needs in different fields of education and training as they arise from growing population and changing economic demands and potentials. Actually, this is a very complex task. To carry it out effectively, we would have needed much more detailed information. Of necessity we took the available data and made certain alternative hypothetical assumptions to substitute for existing gaps in more specific knowledge. We nevertheless hope that some basic consequences of prospective demographic and economic development will become clear.
184. There are two questions which we wanted to answer: (1) What proportions of a cohort of school leavers can be expected to find employment in, or possibilities to be trained for, different occupational groups given the sex-age structure of the population and assuming some fixed rates of increase in national income and labour productivity? (2) How many university graduates and other highly qualified personnel will the economy require year by year given the course of economic growth when measured by increase in National income?
185. For the purpose of question 1 we have divided the working force into five groups in order to indicate the main requirements for pre-vocational education and training. The first group of white collar workers comprises all professional, managerial, administrative, clerical, commercial and financial jobs. The second group refers to farmers, fishermen, forest workers and related occupations; the third one to craftsmen of different fields, the fourth to manual workers in mining, manufacturing, construction and transport, and the fifth to all kinds of service workers. In all these groups the capacity to absorb labour will follow different trends, because of their different economic functions and the different possibilities of mechanization and rationalization. Under conditions of rapid economic development, we can expect that labour demand will rise fastest among white collar workers and service workers in response to the greater diversification of production in secondary industries, rising per capita income and changing consumption habits. The need for trained technicians will also grow relatively quickly as a result of more complicated production methods and more expensive machinery. In respect of manual workers employment chances will expand as well but as more activities will be performed by technical apparatus, the relative demand will be smaller. In agriculture finally we may expect comparatively small gains in employment opportunities because of rising mechanization. We have carried out two sets of calculation. One is based upon the assumption that national income will increase by 5% and labour productivity by 1.4% per year, while the other allows only for a 3% rise in national income at the same rate of labour productivity. Assumption "A" describes a course of development which we

consider to be adequate to prevent heavy unemployment among the rapidly rising number of young workers, in contrast to Assumption "B" which indicates the impact of demographic expansion under conditions of moderate economic growth.

Table 18 - Percentage of school leavers expected to be employed in or trained for various occupational groups assuming alternative rates of national income (a)

Occupational group	Assumption A (5% rise in national income)			Assumption B (3% rise in national income)		
	total	male	female	total	male	female
White collar workers	21.2	20.8	21.6	11.8	15.5	8.2
Farmers, etc.	17.1	26.1	8.4	17.1	28.9	5.6
Craftsmen	6.2	12.5	0.0	3.3	6.6	0.0
Labourers	21.5	36.7	6.6	11.6	21.1	2.3
Service workers	11.7	3.9	19.4	6.2	5.2	7.2
No chances to be employed	22.3	0.0	44.0	50.0	22.7	76.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

(a) For detailed explanation see Appendix D.

186. The results of our calculations which can of course only be taken as examples out of a great variety of possibilities do nevertheless indicate the extent to which young people can be expected to move into white collar positions, to become trained craftsmen, or to find employment in secondary industries whichever of the two lines of development the economy follows. Under Assumption "A" not only the boys could be fully absorbed by the labour market, but also the girls who want to be trained or employed. Because of increasing production, especially in secondary industry, more jobs requiring technical skills would be open for boys, while girls would find improving employment chances in the tertiary sector of the economy. In the case of Assumption "B", however, the openings for school leavers would remain limited. The greater preference which boys generally enjoy in the competition for jobs will tend to restrict girls not only from technical occupations but also from clerical and administrative positions which in the course of rapid economic development and quickly expanding labour demand usually become more and more a domain of females.

187. With regard to general education, our examples can give an approximate idea as to what kind of pre-vocational training at school would, under prospective conditions of economic growth be best suited for future employment purposes. By this we do not mean that certain fixed percentages of school-

children corresponding to the results of our calculations should follow special courses in preparation for specific jobs or groups of occupations. This would neither be in line with educational goals, nor would it be economically advantageous. Labour requirements and techniques of production in general change so quickly, that it is impossible for school curricula and facilities to keep pace. The curriculum should be geared to the general demands of working life by preparing the children to understand basic technical processes and economic necessities, by encouraging them to develop their potential skills, and by giving them the basic knowledge indispensable to more specific training. Such qualities and skills can best be developed by way of practical demonstration and experience. It is clear, therefore, where the emphasis in training should be placed and to what extent and under what conditions commercial, technical, or agricultural courses form part of a general education.

188. The census returns were not sufficiently detailed to indicate the range and levels of skills among the present labour force, and the supply of academically trained personnel. To establish a starting point for the treatment of our second question, i.e. the probable future demand of university graduates, we addressed specific questionnaires to 150 private firms and to all government departments and the municipality of Georgetown (see Appendix E). Unfortunately we had to fix a very tight deadline for the questionnaires to be returned. The response, therefore, was not very satisfactory. The returns were in general not consistent enough to permit definite conclusions as to the numerical relations between the professional, technical, administrative and executive ranks in the hierarchy of jobs and skills, but with regard to university graduates the answers appeared to be quite comparable and accurate enough to allow some generalization. The important fact is that the present demand for graduates appears to be much higher than the number actually employed. The government alone reported 81 vacancies and the private firms which answered our questionnaires reported 28 vacancies in addition to 62 positions normally requiring academic qualifications which are at present filled by non-graduates. Table 19 summarizes some of the results and shows how we have tried to allow for gaps in our information.

189. The survey produced also information on the different fields of academic training and qualification, and indicated the most important sources of demand. The results are shown by Table 20.

190. Two problems could not be sufficiently clarified: How many of the graduates at present employed are actually carrying out functions which bear no or only little relation to their field of professional training? How many of the vacancies reported have actually to be filled by university graduates? The first question was included in the questionnaire to government departments. Only twelve out of a total of 155 graduates were reported as working outside the field of their special qualifications, and yet on many occasions we observed graduates were burdened with technical and administrative details partly because the sphere of their duties has never been properly defined, partly because of shortage of qualified subordinates. With better training facilities for the sub-professional ranks and more qualified leavers from secondary schools prepared to undergo such training, the demand for university graduates may in many fields turn out to be much lower. The second question leads to similar conclusions. Returns from private industry indicate that out of 232 posts regarded as requiring academic training 62 are filled by non-graduates of whom 42 could through experience attain adequate standards. There is no doubt that the demand

Table 19 - Supply and demand in the employment of university graduates beginning of 1963

Source of information	Total number of professional, managerial, technical commercial & administrative personnel	University graduates			total demand(b) no. %
		employed no.	additionally required(a) no.		
Government	6,374	389	95(c)	484	7.6
Teachers in grant-aided & private secondary schools	460	61	99(d)	160	34.8
Free professions(e)	100	44	25	69	69.0
Private industry	3,066	144	99(f)	243	7.6
Total investigated	10,000	638	318	956	9.6
Total in the economy(g)	16,970	1,008	438	1,446	8.5
Not investigated	9,970	370	120	490	7.0(h)

(a) Partly vacant, partly referring to jobs designed for graduates but filled by non-graduates. (b) The effective demand is smaller since some of the places are filled by non-academically trained personnel. (c) Seventy-six places described as vacant by government departments and ministries other than the Ministry of Finance, Ministry of Education and Social Development, and Ministry of Labour, Health and Housing. (d) Estimated by taking into consideration present absorptive capacity. (e) Estimated from income tax statistics and from information supplied by telephone directory. (f) Includes 28 vacancies. (g) Estimated from census returns. (h) Rough estimate.

Table 20 - The structure of demand and supply of university graduates, beginning of 1963 (percentages)

Field of Training	Employed graduates	Additionally required graduates	Total demand for graduates
Arts, social and political science	22.8	19.6	21.9
Natural science	9.7	8.5	9.3
Agriculture	6.5	11.6	8.1
Engineering	29.1	34.3	30.6
Education	15.7	22.6	17.8
Medicine	16.2	3.4	12.3
Total	100.0	100.0	100.0

for professional skills will rise in the course of economic development, as also the demand for other skills; there will be greater diversification and also greater graduation of skills. For this reason, the demand for training at one particular level has always to be checked against the supply at other levels. In respect of higher education this means that the returns of expensive academic training will very much depend upon concomitant efforts in other fields of education and training which produce personnel able to free the highly qualified experts for duties at the top levels. Our projections of future demands for academically educated personnel refer not only to the highest levels of academic attainment but to different grades and shades of qualifications.

191. Our estimates are based upon the assumption that the demand for highly qualified personnel will tend to increase somewhat faster than the national income. We have allowed for certain differences in the demand for different categories of university graduates depending on whether the demand is predominantly determined by changes in production and techniques as in the case of engineers or by growing population and rising per capita income as in the case of teachers and doctors. Our first set of estimates is in line with assumption "A" of our employment hypothesis for school leavers. It assumes that total requirements for university graduates and personnel of similar standards will increase by 8% per year, as a result of a 2% normal wastage and a 6% increase in demand. Such a development - we must emphasize again - would presume a very favourable course of economic growth, and it would also require that salaries for graduates do not rise disproportionately to other incomes. The number of graduates that can be absorbed is a direct function of how much the economy and the individual employers are able to pay for their services.

Table 21 - Annual requirements of graduates assuming a six per cent increase in demand for highly qualified personnel and a two per cent annual wastage, 1965 to 1975

Year	Arts & Science incl.education	Agriculture engineering, medicine	All graduates
1965	50	65	115
1966	54	68	122
1967	60	72	132
1968	66	77	143
1969	72	82	154
1970	78	87	165
1971	84	92	176
1972	92	97	189
1973	97	102	199
1974	105	107	212
1975	112	113	223
Total	870^(a)	890	1,760

(a) The high increases in this group towards the end of the period are mainly due to the high demand for graduate teachers which must be met in order to raise the quality of secondary education.

192. Assuming that up to 1967 half of the "normal" demand could be satisfied from graduates in training, the average number of graduates that would be required every year between 1968 and 1975 would amount to roughly 290 taking into account the existing backlog. The number of young persons to be trained annually in institutions of higher education must be greater than 290 to allow for drop out and for flexibility in the employment of graduates.

Table 22 - Estimates of demand for university graduates, 1968-1975
and of resulting needs of training, 1963-1971

	Arts & Science incl.education	Agriculture, engineering medicine	All faculties
50% of "normal" demand in 1963-1967	106	133	239
"normal" demand 1968-1975	812	817	1,629
Existing backlog	210	228	438
Total demand 1968-1975	1,128	1,178	2,306
Average annual demand 1968-1975	141	147	288
Average annual number to be trained 1963-1971(a)	188	196	384
Training needs per year as % of age cohort 17 to 18 years	1.1	1.2	2.3

(a) Allowance has been made for 20% wastage and 5% for flexibility in supply.

We have made alternative estimates assuming a slower course of economic growth.

Table 23 - Alternative estimates of demand for university graduates,
1968-1975 and of resulting needs of training at different
rates of increase in national income

Assumed rate of increase in NI	Estimated rate of increase in demand for graduates	Total demand 1964-1975	Existing backlog	Employment of new graduates 1963-1967	Effective demand 1968-1975	Annual demand 1968-1975	Training requirements 1963-1971	
							(a)	(b)
0.02	0.024	883	438	239	1,082	135	180	1.1
0.03	0.036	1,292	438	239	1,491	186	248	1.5
0.04	0.048	1,698	438	239	1,897	237	316	1.9
0.05	0.006	2,107	438	239	2,306	288	384	2.3

(a) Average number per year. (b) As per cent of age cohort 17 to 18 years.

193. The estimates are, of course, hypothetical. They do not for instance take into consideration that under conditions of slow economic growth the existing backlog may in the course of time become smaller or disappear. They further ignore the possibility that under different conditions of economic development different numbers of graduates who are now in training abroad may be inclined to return. Nevertheless, the estimates demonstrate to what extent different rates of increase in national income may alter the demand for graduates if other factors are considered to be constant. In any event, planning in the field of higher education must be linked much more closely to the possible course of economic development than is the case in general education. Higher education is directly connected with labour requirements; it is also extraordinarily expensive and therefore extremely liable to cause economic waste if the graduates cannot be adequately absorbed by the economy. On the other hand, shortage in the supply of graduates in general as well as in respect of individual fields of qualification affects the efficiency of the whole economy and in turn the employment chances of the other strata of the labour force. For this reason, and because the quality of higher education as well as all kinds of vocational training depends very much upon the quality of primary and secondary education, all fields of education have to be treated and planned as a co-ordinated system.

CHAPTER 5**EDUCATIONAL NEEDS AND RECOMMENDATIONS**

194. We believe it appropriate to summarize here the salient points which arise from our survey of the educational system in order to indicate the particular bottlenecks and weaknesses which must be eliminated if the quality of education is to be improved and the range of educational activities to be widened. *Essentially the problem is, we believe, one of quality and consolidation rather than of quantity.* In the main, apart from additional provisions for higher education and vocational training, the need is for a raising of educational standards, for a diversification and strengthening of activities within the reorganized system and for the wherewithals to improve the quality and permit diversification of curriculum.

195. The deterrents to progress are:

- (i) Laws and regulations pertaining to education which are anachronistic and inappropriate to present political institutions and modern concepts of educational and social philosophy. Despite some modernization, the organizational and administrative machinery at all levels is defective and inadequate;
- (ii) A "dual control" machine embraced by these laws which makes integration of the system difficult to effect, and is one cause of the duplication of effort, delay and frustration in the conduct of school affairs;
- (iii) The shortcomings of the teaching force;
- (iv) The limitations imposed by the gross inadequacy of physical provisions and equipment and aids (buildings, workshops, laboratories, books etc.);
- (v) The narrow based curriculum of secondary education which ignores the manifold interests, aptitudes and range of abilities of its pupils and the vital needs of the economy;
- (vi) The lack of post-secondary education opportunities in British Guiana itself.

196. We shall deal with the major needs and incorporate concrete recommendations for their satisfaction. We have made some detailed suggestions on the approach to, programming and implementations of some of the recommendations in appendices attached to this report.

The laws and regulations

197. The laws pertaining to education need to be completely redrafted in the light of:

- (a) The educational policy "White Papers" and statements;

- (b) The reorganized structure and system of education;
- (c) The present and projected administrative practices and organs.

The laws or law should harmonize with the political and constitutional developments, current educational theory and practice in general and Guyanese educational philosophy in particular. It should cover the whole range of educational provisions and processes and not be confined to only one sector of what is intended to be a fully articulated system. Before drafting can and should begin, however, many top level decisions will have to be taken; there are involved too many political overtones, financial implications, and social repercussions to permit hasty translations of general policy statements into detailed operational directions and practices. To ensure proper interpretation at the same time as careful drafting we suggest that an educationist fully conversant with the intended lines of development work with the legal draughtsmen at all points. We recommend that Unesco make available to the Government of British Guiana an expert on educational law for a period of three months (Recommendation 1). (Concrete suggestions have already been made to the Ministry.)

Dual control

198. A solution to the question of dual control is a prerequisite to the drafting of a new law. We have already submitted in detail our recommendations on this point. (Recommendation 2).

The teaching force

199. We shall not labour the point that there can be little advance unless and until the schools are competently, regularly and adequately staffed. This involves questions of academic sufficiency, professional skill and desirable attitudes, on the part of the body of teachers, efficient administration on the part of the employing authority to mobilize and utilize this body to the best advantage, and terms and conditions of service which will make for a contented, stable and competent staff. The urgency for action to achieve these desiderata is acute.

200. The country must train its teachers. But train them for what? For whom? What is their rôle in an emergent country? What demands will be made on them by the schools and by the communities? In these questions lies the basis of our thinking. Geographical, social and historical, financial and economic factors demand that the teacher should be competent to handle his particular school assignments as an integral part of the general curriculum of the school, and that he fulfil also a definite rôle in the community in which he is serving for the ultimate benefit of the community and the nation. The content and range of the curriculum of teacher training must be such, therefore, as to encompass the full rôle the teacher will be expected to play in the educational, economic and social advancement of a country. (Recommendation 3).

201. British Guiana needs better educated and better trained teachers for all levels of education - this is not to imply that there are none such at the moment; on the contrary it has a number of gifted teachers, but not enough.

The need is therefore the education and training of teachers for:

- (a) The expanded and expanding school system.
- (b) The more specialized work required at some levels of the system, and
- (c) The skilled and specialized work required by certain types of educational courses. (Recommendation 4)

202. The main burden will fall for some time to come on the Government Training College. We have drawn up a "Programme for Teacher Training"(1) which deals in detail with the number of teachers required to be trained over the period 1963-1975, the phasing of the programme, and the financial and other implications. It draws clear distinctions between the training of personnel drawn from the existing body of teachers and the training of recruits straight from completion of secondary school studies. The peculiar needs of the junior forms of the secondary departments of all-age schools are allowed for; teachers for commercial education, wood and metal and for home economics, for example, will be trained at the Technical Institute and the Carnegie School of Home Economics. Attention is drawn to the necessity for some trainees to go further in agricultural subjects and for some to specialize in the practical science subjects.

203. The programme calls for, without going into detail, a review of the curriculum in view of the teacher's potential rôle in a rural community. It is unnecessary, we believe, to supplement by giving details of the curriculum of the training college and its supporting centres. We shall confine ourselves to a few fundamental points. The college must have varied courses, each carefully planned for and suited to the all-round development of a specific group of teachers who have a specific common background of education and/or experience; each course should be weighted to prepare the teachers for the specific assignments that will be allocated to them. The trainees must become familiar with all types of audio-visual aids and should become competent to prepare their own and to improvise when necessary. Woodwork, metal work, and gardening should form part of the course of all male students, home economics of all female students. All students should be trained in rural extension and youth work and also be introduced to the techniques and approaches to adult and fundamental education; extra-curricular activities should include first aid groups, scouting, road safety, etc. The teacher has to become a dedicated man of wide interests and many skills if he is to make his contribution to the social and economic uplift of the community as well as to the educational advancement of the pupils.

204. The suggested "programme" quickly disposes of the backlog of untrained teachers; it doubles the percentage of trained teachers by 1966, the in-service course fades out by 1970 and the teachers will all be trained by 1975. The "programme" envisages the fading out of the wasteful pupil teacher system. The emphasis is on pre-service training and consequently the success of the "programme" will depend on the quality and quantity of output from the secondary schools. Much will depend also on the availability of qualified teacher trainers particularly as academically highly qualified teachers must be sought to take over the content teaching. It would be unwise at this moment to withdraw from the understaffed (qualitatively) secondary schools the 19 new teacher trainers required for September 1963; it may be difficult (financially) for the Government to recruit this number from overseas. We believe that

(1) This programme is now in the process of implementation by the Ministry, and only the relevant tables are included in Appendix G.

international aid should be sought in this field and also for the provision of libraries and essential equipment. Given assistance for the first two years at least the Government would have time to make arrangements to recruit, and have trained if necessary, its own teacher trainers. We recommend, therefore, that the United Nations makes available to British Guiana:

- (a) Six teacher trainers (for mathematics, English, chemistry, physics, agriculture, and French/Spanish), and
- (b) Six fellowships for the training of Guyanese prospective teacher trainers. (Recommendation 5)

Aid from other quarters, e.g. USAID, we understand, may be available both for staff and supply of equipment and books.

205. We have mentioned that some teachers will have to be trained to teach science in the secondary comprehensive schools. We recommend that the new laboratories now being erected for the College of Liberal Arts and Sciences be made available in the mornings to the training College (Recommendation 6). It would be far more worth while if the sciences courses were given an agricultural bias.

206. The training, academic and professional, of teachers more specifically for teaching the upper forms of the secondary departments must become the concern of the University of Guyana as also the training of teachers of the grammar/high schools. The university through the training college or with its own staff should institute teacher training courses for the untrained teachers (both graduate and non-graduate) of the secondary schools (Recommendation 7). This course should be professionally slanted since the academic courses of the university would be open to the non-graduates. Outside Georgetown it may be possible to admit the untrained secondary school teachers to the training centres. Teachers from grant-aided secondary schools and private schools would be expected, of course, to pay fees for the tuition.

207. If the overall quality of the teachers is to be steadily improved then the conditions of service must be such as to attract the best possible material into the profession and to ensure that this body is a stable one. To a certain extent just and efficient administration can help, but in addition the conditions of service must be such as to offer prospects of a worthwhile career. We are of the opinion that the present salary structures are not conducive to the achievement of the aims we have put forward. We recommend that there be one salary scale for all teachers (paid directly or indirectly out of government funds) irrespective of the level of education they are connected with. (Recommendation 8) It is only in this way that a unified manoeuvrable body of teachers can be built up. We make positive recommendations on the details of the scale in Appendix H. (Recommendation 9). Costing of the teacher-training programme has taken this scale as a basis. The unqualified teacher and the trained graduate enter the same scale but at different points within the scale in accordance with their qualifications and proceed to different points. There is no distinction between teachers in primary schools and teachers in secondary schools. Allowances are made for holders of posts of responsibility. We are aware that the proposed scale is still inadequate for the trained non-graduate teachers but we are equally

aware of the inability of the exchequer to meet the just expectations of the teaching profession. We have been able to do little more than raise the maximum of the salary scale for the trained non-graduate. We strongly recommend that the Government should move upwards both the entry and maximum points of the trained non-graduate as a priority when funds are easier. (Recommendation 10). It is totally unjust that the trained non-graduate of 20 years' experience should reach no higher point than the entry point of a non-trained graduate. It may, of course, be argued that the salary scale of the graduate is too high, but we must remember that this is the established scale in all government services for equivalent qualifications and furthermore it is a scale which in some ways is less attractive than that enjoyed by graduates in neighbouring countries. All new entrants to the profession should be brought into this scale as also the present teachers, except such teachers in government secondary schools as would lose under the new scale - their conditions of service would be safeguarded until they moved out of the service.

208. The uniform salary scale we propose should be an inducement to teachers to obtain better professional or academic qualifications - particularly now that the university and the training centres will offer facilities and trained and qualified teachers are not as prone to flit into other occupations as are underpaid, untrained teachers. It would ensure, too, that the all-age schools and the secondary comprehensive schools are adequately, competently and relevantly staffed.

209. We recommend that the grading system of schools be revised, so that there be three grades only in place of the present five, and that grading be on the basis of average annual enrolment and not on substituted average annual attendance. (Recommendation 11). Apart from the fact that this would improve prospects for senior staff, it would ensure that schools are more realistically staffed at the beginning of the session. We must insist, however, that annual enrolment figures be based on actual enrolment at the beginning of the session, that is, the school register should be made up at that time and not in the previous July. We recommend, too, a small increase in the allowances made to holders of posts of responsibility in the primary and all-age schools. (Recommendation 12).

210. We have emphasized the importance of improvements in the grant-aided secondary schools. We recommend that the Government subsidize the non-profit making secondary schools to the extent necessary to enable them, financially at least, to attract and retain competent graduates. (Recommendation 13). We propose in fact that the Government should meet the full salary of all graduates and of all trained teachers in grant-aided schools under the uniform salary scale, provided that all teachers in grant-aided schools who were employed by such schools in the session 1962-1963 or were on leave authorized by their governing bodies with or without pay who might suffer financial loss as a result of the application of the scales shall at their option remain on the scales obtaining in 1962-1963 until such time as they vacate their posts; in such case the government contribution would remain the same as at present. Unqualified teachers (i.e. for non-graduate untrained teachers) irrespective of post held, already serving in schools would be placed at the appropriate point in the unified salary scale, and the Government would meet its present share of the cost of such salaries under the present system of contribution; the Government would make no contribution towards the salary of

new appointees who are non-graduate and untrained. In the case of the unqualified teacher the governing body would be responsible for paying any allowances for posts of responsibility or for salary over and above that laid down by the salary scale. The governing bodies, too, would be required to draw up and apply rules and regulations governing leave, sick leave, and a pension or provident fund scheme. No recommendation is made here on "vacation leave" (overseas leave) as the mission considers this benefit unrealistic to British Guiana conditions and resources.

211. We must stress, however, that years of service in any government or government-aided educational institution or in any recognized school outside the country (i.e. recognized for such purposes within the country in which it is established) or any service in government service must be recognized for incremental purposes on a one to one basis. (In the case of teachers in primary, all-age and government secondary schools it would be recognized for pension purposes as well.)

212. It follows from all we have said that the salaries of non-graduate teachers must be uniform in whatever level of schools they may be teaching. It would be unjust to the teaching profession as a whole and educationally harmful at this time of reorganization if non-graduate trained teachers were treated on a different basis according to whether they were teaching in all-age schools or grammar/high schools. Transfer and promotion within the system would become difficult, complaints of anomalies would increase and there would be a voluntary movement of trained teachers away from the primary and all-age schools.

213. If these salary proposals are accepted and implemented graduates and trained personnel would be more easily drawn into the service, governing bodies would make greater efforts to locate and appoint qualified staff, governing bodies would be encouraged to appoint qualified staff to posts of special responsibility, and untrained staff would be encouraged to seek academic and professional qualifications - all to the advancement of educational standards in the schools.

214. The financial outlay involved in the recommendations on the Government's part in meeting the salaries of staff of government-aided secondary schools is not high; we cannot see any possibility of all such schools filling all posts with graduates overnight - there are not the graduates available. A few more would be added each year and this we have had in mind in working out the financial implications. The governing bodies, again, need not fear that they will be crippled: the salaries of their present staff are safeguarded, and it will be advantageous to them to engage graduates rather than unqualified teachers in the future. At the same time steady job opportunities are opened up for the graduates of the College of Arts and Sciences as they come on to the market.

215. If equal educational opportunities are to be provided for all children, then there must be a fairer distribution of trained staff. At the moment, it is possible to find a school in which 7 out of the 8 teachers are trained, and another in which 3 out of 17 are trained. We recommend that all new entrants to the profession after training be posted in the first place in such a way as to even out the discrepancies; transfers should be effected in the same way. (Recommendation 14). Furthermore to ensure that the schools in the remote areas

are given equal consideration, we recommend that as vacancies occur in these schools they be filled by trained new entrants who will be required to do a spell of two years in such schools. (Recommendation 15). As an inducement, each year of service in a "hard post" should be recognized as two years of service for seniority purposes, and new entrants will not, when the time comes, be considered for posts of responsibility in Grade A or Grade B schools unless they have served at some time previously for two years in the interior.

216. The need for better educated and trained teachers is acute in the remote area schools which have a pupil population of some 8,000. A particular difficulty in the education of these children is experienced because most are non-English speakers on first coming to school. The standard of education provided by the majority of the schools is low principally because of the very low standard of teaching. Real progress will only be made when trained teachers will stay in these areas. As things are the only teachers who are likely to stay are those born in the area. Every effort must be made therefore to train more and more locally born personnel. We recommend that the most able children of these schools at the age of 12 be gathered at secondary departments at Lethem, Mabaruma or Sand Creek where competent teachers will have been posted. (Recommendation 16). After a three-year course the children should be sent to a secondary school which can offer them further studies for entry to the training college. The Government should meet all expenses - travel, board, books, etc. (Recommendation 17). The immediate problem, however, is not solved by this long-term plan. Consequently we recommend that the Government should conduct special long summer courses in the remote area centres for locally born untrained teachers. (Recommendation 18). These courses should be essentially content courses. The course for the full training of permanent teachers for the remote areas should stress health education, agriculture, handicrafts, woodwork, music, art and English as well as the teaching of English as a second language

217. Improvement of conditions of service will entail the building of many more houses for teachers in the rural areas and particularly in the interior. The mission was unable to make a study of this question but the need was self-evident. We recommend that 50 houses be built between 1964 and 1975 when the position might be reviewed. (Recommendation 19). In many cases it will be sufficient to erect one building to house two or more teachers, a married couple or bachelors or women.

218. It would appear that the present overseas leave privileges of teachers are to be curtailed. We recommend that in consequence study leave facilities on full pay be increased for potential headmasters. (Recommendation 20). Such study leave of one year's duration should, we believe, be devoted to practical studies, e.g. to working in good schools abroad and observing school administration methods, or to attendance at a comprehensive course of practical value in the schools of British Guiana, e.g. rural studies or visual and aural aids. We see little value, in comparison, in the repetition in institutes of education of a course of theoretical studies which the trained Guyanese teacher has already competently done at his own training college.

219. We recommend that the salaries of the principal and deputy principal of the Government Training College be revised to bring them into line at least with the salaries paid to the principal and deputy principal of Queen's College. (Recommendation 21). We find it hard to understand why the responsi-

bilities of the principal of the training college should be considered less onerous than those of the principal of a secondary school.

220. We recommend that the staff at the training college be styled lecturers and assistant lecturers (Recommendation 22); the lecturer grade to be filled by graduates and the assistant lecturer grade by non-graduates. We recommend that the assistant lecturers enter the scale at \$3,984 with appropriate increments to ensure no loss of salary if they had been holding posts of responsibility in all-age schools and proceed to \$6,240 within the scale. (Recommendation 23).

Buildings, equipment, etc.

221. We have insisted that trained teachers must be provided with the facilities and equipment and tools to make their work effective. We have in Appendix J dealt with the need and made our recommendations in some detail, consequently we shall bring out now only a few of the salient points and repeat or bring in recommendations which involve finance or requests for external aid. The country will need some 59,000 new places by 1965 and a further 36,000 by 1975. The figures for secondary school places are 48,000 and 14,000 respectively. The need is clearly an immediate one and principally for secondary school places. The bill will be an enormous one for British Guiana and becomes heavier when the costs of providing the laboratories, workshops, home economics laboratories, and the equipment for such practical workrooms are added.

222. The main recommendations we have made to ease substantially the strain on the country's resources by effecting economies and affording more time for the final satisfaction of the need are:

- (a) That a Buildings Research Bureau be set up; (Recommendation 24)
- (b) That communities be encouraged to participate actively in the solution of the problem; (Recommendation 25)
- (c) That buildings and workshops be used twice a day by the application of a double session system; (1) (Recommendation 26)

223. The establishment of a Buildings Research Bureau calls for the appointment of a schools architect, a civil engineer and 5 draughtsmen-work supervisors. (Recommendation 27). We recommend also that the school architect undertake a course of training in the appropriate Unesco Buildings Research Centre. (Recommendation 28).

224. We now proceed to make the following further recommendations:

- (a) That the Government reconsider, for the time being, its intention of admitting 5-year old children to the schools; (Recommendation 29)
(They can be squeezed in only at the expense of the quality of education provided to all the children.)
- (1) This question has been raised before and met with a stormy reception. Before it is condemned out of hand we request readers to study the relevant section (Appendix J, paragraphs 36-54).

(b) That the present admission age requirements of the law be most strictly adhered to and that intake be permitted only at the beginning of the session; (Recommendation 30)

(c) That the Government reconsider, for the time being, its decision to provide education for all up to GCE "O" level standard; (Recommendation 31)

(We suggest that children be allowed to stay on after their 14th birthday until they have passed the College of Preceptors examination or to the end of the session in which they become sixteen, whichever is the earlier. After the College of Preceptors examination only such number of children will be kept on as there are places in the secondary comprehensive or grammar schools or other government institutions which are or may be established.)

(d) That external aid be sought for the erection and equipping of the laboratories and workshops of the secondary comprehensive and grammar/high schools; (Recommendation 32)

(e) That United Nations aid be sought for the assignment to the British Guiana Government of an expert in technical education, one in agricultural education and one in the teaching of science with particular competency to set up a workshop for the manufacture of inexpensive apparatus and improvised apparatus.

(Recommendation 33)

Established secondary schools (i.e. grammar/high schools)

225. Our further recommendations on the established secondary schools are:

(a) The schools should be encouraged to broaden their curricula by offering a wider range of courses. (Recommendation 34) In particular more attention should be given to the teaching of the sciences in a practical manner, to the establishment of sound commercial education and the introduction of wood craft, art and home economics where these are not being offered at the moment.

(b) Government pass legislation to permit the Ministry of Education and Social Development to have some measure of control and supervision over the private institutions. (Recommendation 35)

(c) Machinery be set up for the transfer of able children into the grammar/high schools from the secondary departments of the all-age schools where the latter are unable to meet the needs of such children. (Recommendation 36)

Reorganization, school administration and curriculum

226. In view of the need for various reasons of reorganization and diversification of secondary school curriculum, the secondary comprehensive school must lead the way. The problems which have to be faced in establishing such a school and recommendations for this solution are contained in a paper -

"The East Ruimveldt School Pilot Project" - already submitted to the Ministry of Education and Social Development. Since the paper brings up other principles, too, the first part of it is appended to this report (Appendix M). It makes recommendations on zoning, curriculum selection, phasing, etc. It shows in particular how the comprehensive school will fill voids in technical, craft and commercial education. (Recommendation 37).

227. Other principles involved and recommendations made are contained in another paper - "Establishment of Secondary Comprehensive Schools and Centralization of Secondary School Provisions"⁽¹⁾ - which has again been put before the Ministry after on-the-spot investigations. Recommendations on priority, agricultural education, and on education in the interior of the country are made in the paper, relevant parts of which are appended (Appendix K). (Recommendation 38).

228. As such recommendations and priority questions contained in these papers as have financial implications are included within other recommendations made we shall not enumerate them: similarly, we do not propose to discuss school administration, curriculum, teaching methods and techniques; recommendations have already been made to the Ministry or, on major questions, have been made implicit in this report.

Organization and administration of education

229. A national, integrated comprehensive educational system has to be conceived in its entirety, carefully planned in its detail, effectively organized and efficiently administered. Competent, informed personnel are required at all levels; the machinery for administration must be set up. An expanded, reoriented educational system, different in structure, nature and function from that which it supersedes, cannot be expected to reach its goals if it has to work with and be operated by the outmoded and inadequate machinery of the past. In British Guiana radical changes in outlook have brought on rapid changes of educational policy; calls for immediate implementation need to be accompanied by, or better still, be preceded by, appropriate organizational developments and appropriate administrative services. The new educational system demands prior appraisal to determine the most efficacious machinery for administrative purposes, and as redeployment, a reinforcement, and a redefinition of duties and functions of personnel.

230. The mission has submitted in detail its recommendations on this problem in a paper, part of which is contained in this report as Appendix L.⁽²⁾ We propose, therefore, not to go over the same ground but to present only the major recommendations made therein. The mission has recommended:

- (i) That Unesco be asked to assist the Ministry by seconding to it an expert in educational administration for a short period, in particular to overhaul the internal machinery of the Ministry.

(Recommendation 39)

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- (1) This paper was prepared in the closest collaboration with an officer of the Ministry, whose contribution, in fact, is of major significance.
 - (2) This paper deals at length, for instance with the aims, the structure, the functions and the composition of each of the new bodies or departments we propose should be established. It emphasizes the importance of co-ordination of all their activities, and sets great store on the contribution of a planning unit integrated into the system as a whole.

- (ii) That the administration of education as a whole be reorganized so that the machine may be able to deal with the new situation (Chart 3)
(Recommendation 40)
- (iii) That a national council for education, county education, advisory committees and district education advisory committees be set up.
(Recommendation 41)
- (iv) That the functions of the senior officers be clearly defined and clear lines of authority and communication be laid down.
(Recommendation 42)
- (v) That a certain degree of decentralization to permit delegation of powers at regional level be authorized, such decentralization to be intensified as responsible local government develops.
(Recommendation 43)
- (vi) The expansion of the central and regional machinery especially by the establishment of adequate supervisory services.
(Recommendation 44)
- (vii) The reinforcement of the planning unit so as to include a statistical, an educational research, a buildings research and a textbooks research bureau and also a documentation and archives wing.
(Recommendation 45)
- (viii) The Government request the United Nations and Unesco
 - (a) To provide the services of an expert in textbook production;
 - (b) To provide the machinery and equipment for the Ministry to set up its own printing unit;
 - (c) To train the planning officer at the Paris Educational Planning Centre, and
 - (d) To train the economist in statistical work and demography at the Santiago Centre.
(Recommendation 46)

231. We find the salaries of the senior officers and supervisory staff of the Ministry not commensurate with the responsibilities they have to undertake. We must remember that the professional officers are required by the normal nature of their work to work many evenings and week-ends in the field. We recommend, therefore, that the salaries of the professional officers be upgraded. (Recommendation 47). We would suggest the following upgrading:

CEO F 6 to F 5

DCEO - F10 to F 9

ACEO and SEO (4 posts instead of 2) - from F13 to F11

County Education Officers (2 new posts) - F13

Education Officers (graduate or equivalent qualifications) as at present, A4, but on completion of 4 years at maximum of salary scale to move to F13.

Education Officers (non-graduates) - A4.

University of Guyana

232. The Government having determined its policy with regard to the College of Arts and Science and passed legislation, our terms of reference restrict us to the consideration of questions of implementation and of lines of future development. As, however, the mission came quite early to the conclusion that the Government's desired long-term aims could be better realized by means other than those proposed, the mission submitted to the Minister of Education, at a time when implementation policy was still somewhat fluid, a memorandum which sets out its views.
233. Our recommendations aim at setting standards and, consequently, at enabling the university to find for itself an established place within the English-speaking academic community.
234. An established university has, it is understood, been requested to act as "sponsor". If this request should not yet have been agreed to we recommend that this university be invited, as a prelude to full sponsorship, to participate in the selection of all teaching and senior administrative staff and to nominate one of its members to the Board of Governors. (Recommendation 48).
235. Pending the establishment of selection committees with full academic representation, we recommend that all appointments to the teaching staff be on a temporary short-term basis and that they be reviewed by a selection committee before the end of the first academic year. (Recommendation 50).
236. The White Paper rightly stresses the importance of external examiners and defines their function. We recommend that the statutes require the appointment of external examiners, giving them controlling powers. (Recommendation 51). Under a system of sponsorship the sponsoring university would without doubt wish to be associated with the appointment of all external examiners.
237. Assistance and advice will be needed in establishing the administrative system and structure of the university. We recommend that the university, whose sponsorship is being sought be asked to provide an experienced administrator to act in conjunction with the Registrar of the university. If this application cannot be granted, we recommend that Unesco send an expert on request. (Recommendation 52).
238. We consider that there are great advantages in a university's having a titular head, standing outside day-to-day affairs and we recommend either that a visitor be appointed (e.g. the Head of State) or that the office of chancellor be redefined so that it fills an equivalent rôle. (Recommendation 53). In this latter case it would be necessary to appoint a Chairman of the Board of Governors who should, for preference, not be a member of the university.
239. The statutes constitute the bedrock on which the university stands: they should not be easily alterable. We recommend that the statutes be established by legislation and made alterable only by the Council of Ministers on the recommendation of the Board of Governors, and furthermore that the sponsoring university be invited to assist in the drafting of the statutes. (Recommendation 54).
240. We recommend that discussions be vigorously pursued with the University of

the West Indies on the Government's project (1) for the establishment of territorial colleges of arts and sciences and of a central University of the West Indies. (Recommendation 55).

241. In the initial year (1963-1964) we recommend that the intake of degree students be kept to the minimum necessary for a pilot scheme and that priority be given to intensive in-service courses for the Civil Service. (Recommendation 56).

242. We recommend further that the Government approach without delay the Inter-Universities Council for Higher Education Overseas to discuss possibilities of assistance. (Recommendation 57).

Examinations

243. We recommend that a local examinations board to replace the present Ministry of Education Board be set up. (Recommendation 58). It should work in close association with the university and the Teachers' Training College and should be made responsible, under the general policy direction only of the Ministry of Education, for the conduct of all local examinations and for the administration of external examinations held locally. The nucleus of the new board's staff should be the staff of the present Examinations Branch of the Ministry of Education. We recommend that the Examinations Officer and at least one of his senior assistants be seconded for a period of 3-6 months to study administrative procedures in the U.K. (Recommendation 59).

Agricultural education

244. The expansion and strengthening of agricultural education is of prime importance; it cannot, we think, be achieved without a strong force of agricultural officers and field assistants who are not burdened by a heavy load of clerical work. Provision must be made now for the local training of field assistants; this, we think, can most economically be achieved by collaboration between the University of Guyana and the Agricultural School at Mon Repos. The possibilities should be explored of the provision of farm schools in connexion with each land resettlement scheme; this, we think, would be of benefit to the country and would provide an opportunity and an encouragement for rural youths.

245. We recommend therefore

- (i) That the Extension Division of the Department of Agriculture be as soon as possible brought up to full strength and that each agricultural officer in the field be given adequate clerical assistance. (Recommendation 60)
- (ii) That courses for agricultural field assistants be conducted jointly by the University of Guyana and the Agricultural School at Mon Repos. (Recommendation 61)

(1) Contained in the "White Paper on Higher Education"

PART III**COSTING AND FINANCING****CHAPTER 6****PRIORITIES**

246. The problem of priorities presents special difficulties; not only must decisions be taken in priority between one sector of education and another, but also between the competing urgent claims within any one sector or level. Clearly all the sectors and stages within sectors are interrelated, and any development or retrogression in any one will have its repercussions on all the others. Nevertheless, inadequacy of resources for general advance compels selection, always provided there is full appreciation of the impacts on sectors given lower priority.(1)

247. We have applied certain principles in making our decisions. In the first and last resort priorities should be determined by the social and physical needs of the society and by its material and human resources; the particular strengths and weaknesses of and lacunae in the existing system are decisive factors to be considered; in an articulated system of education the one level draws sustenance from the other levels and in turn sustains them – qualitative deterioration in the one will retard the normal growth of the other parts of the body corporate.

248. Implicit in all that the mission has submitted in this report is our firm conviction that the urgent need in British Guiana is for qualitative advance and diversification of curriculum rather than for quantitative expansion. Hence we recommend priority of allocation of funds in the following order:

1. The teacher training programme.
2. Adjustment of teacher salaries.
3. Review of salaries of teachers in grant-aided schools.
4. Strengthening of the administrative and supervisory services.
5. Provision of full facilities for technical, craft agricultural, commercial and home economics education and for more science teaching in the secondary schools.
6. School building (secondary education).
7. School building and reconditioning (primary education).
8. Provision of equipment, aids and school libraries.
9. University education.
10. Expansion of technical facilities at technician level.
11. Teachers' houses.
12. Adult education.

(1) Priorities within each of the sectors and stages have been indicated also in the main body of the report, in the supporting papers included as appendices, and can be deduced, too, from the costing tables.

249. We emphasize that we are not suggesting that one of these needs in turn be completely satisfied before a start is made on the next, we are simply indicating the relative weight of the demand of each upon the available and potential resources. In fact, in the details of the costing which follow it will be observed that moneys are made available each year for all so that balanced, healthy progress is made by all parts with the weak points given special attention.

CHAPTER 7

COSTING AND FINANCING

250. Educational planning is only of practical value if its financial implications are accurately assessed in terms of expenditure and with regard to available funds. A further necessity is that the time period covered is long enough to comprise the successive duration of all forms of education in the system, and that the financial requirements of every individual item, especially those given priority, are determined in the context of all resulting changes in educational demand within this period. Lack of time and information did not allow us to follow these rules to the necessary extent. We could particularly not include post-secondary education..

251. Our cost estimates cover the period 1963-1975 and are based on 1962 prices. They pursue two different purposes. In a first approach we have tried to assess total costs of future demands disregarding the prospects of realization. This was meant as a basis to determine possible savings and to delineate the scope for improvements. The second approach comprises all expenditure which we consider unavoidable to absorb the growing number of pupils and to raise standards. It excludes, in comparison to the first approach, pupils below the age of 5 years and 9 months and assumes lower capital expenditure by the introduction on a temporary basis of the double session system and, to a lesser extent, by provision of cheap multipurpose buildings. Recurrent and capital expenditure have been assessed separately.

252. Tables showing the details of our cost estimates are included in Appendix N. Here we need to discuss only the main items and the global results. The highest increases in recurrent expenditure arise from realization of the teacher-training programme. The programme itself is inexpensive, but the higher salaries demanded by trained teachers and the lengthening of the salary scale will result in a material rise in total expenditure especially towards the end of the period when graduate teachers are expected to join the teaching force in greater numbers. According to our detailed estimates, salary costs for teachers in all-age schools will almost treble in the period 1963-1975. However, the greater part of this increase must be ascribed to factors such as reorganization of the school system and natural growth; less than one-half (3.7 million dollars over the whole period) will result from employment of more and better trained teachers. This is, in fact, a moderate price for the far-reaching advantages that will accrue. In order to secure the necessary funds without draining the sources for other urgent purposes we have suggested that the Government reconsider its intention to admit pupils below the age of 5 years and 9 months and to retain all pupils of over 16 years, since the savings from both sources are sufficient to finance the annual increases in salary resulting from the expanded and accelerated training programme.

Salary costs for teachers in all-age schools (1,000 W.I. \$)	(Recommendation 9)		
	1965	1970	1975
Total salary costs	6,294	9,572	13,258
Costs resulting from training programme	65	1,860	3,666

253. Compared with salaries, other recurrent expenditure on all-age schools is small. We assumed most of them to rise proportionately with school population. Only in respect of libraries for teachers have we made higher allowances to meet the most urgent demands of the newly established secondary departments and future comprehensive schools. The school feeding system which has recently been reduced should in our opinion continue in the areas with predominantly Amerindian population. Although we hold the view that with rising living standards free school meals will become less important, we do not believe that standards will rise quickly enough among the Amerindians. This item as well as books for teachers' libraries will qualify, as we hope, for assistance from international funds. We suggest, in particular, that Unicef be requested to raise its contribution in favour of school meals for Amerindian children.

	<u>Books for teachers' libraries</u> (1,000 W.I. \$)	<u>School Feeding Programme</u> (1,000 W.I.\$)
1965	18	113
1970	19	130
1975	20	150

254. Recurrent expenditure in respect of practical instruction centres and departments will especially rise with the building of new schools and the training of teachers for practical subjects. We have assumed in our cost estimates a more intensive use of facilities to the effect that the number of pupils would be doubled immediately. With the increase in centres as suggested in our revised building plan (Appendix N, Table XXXVI), the number of pupils to benefit from practical training could successively be raised to about 30,000 in 1975.

	<u>Practical instruction centres and departments</u> (1,000 W.I. \$)		
	1965	1970	1975
Total recurrent expenditure	236	434	831

255. As regards teacher training, an immediate rise in salaries is unavoidable because of the greater number of lecturers needed to carry out the training programme. Allowance has also been made for adjustment in salary of the principal of the training college and for the employment of two deputies. We do, however, not recommend general payment towards maintenance of students. As far as in-service courses are concerned, trainees will receive their normal salaries as teachers. Scholarships and loans should be reserved for needy students in the two-year course. We have not separately financed for such funds but have made some moderate allowances in the general item "scholarships". Because of the key position which teacher training holds in respect of rising educational standards and resulting economic advantages, it qualifies, in our opinion, for support from various sources, especially from Unesco and/or USAID. Financial assistance for needy students should be sought from communities, private associations and especially from firms which should be directly interested in pupils better trained and better prepared for working life.

Teacher training programme (1,000 W.I. \$)	(Recommendations 4,23)		
	1965	1970	1975
Salaries of lecturers	199	188	167
Other charges	42	38	37

256. Salary payments for teachers of grammar/high schools are again the major item which will increase particularly after 1968 when a greater number of graduate teachers from the College of Arts and Sciences will have to be employed. We have taken into consideration that the Government pays all salaries for graduate and for trained teachers in grant-aided schools. More income from fees will then be free for maintenance, equipment and extension of buildings as required for the raising of standards.

Salary costs for teachers in grant-aided grammar/high schools (1,000 W.I.\$)	(Recommendation 13)		
	1965	1970	1975
Total salary	859	1,294	1,797
To be paid by the Government	643	1,154	1,797

257. Increasing expenditure in respect of the Carnegie School of Home Economics and the Government Technical Institute reflects in particular the expansion of functions in connexion with teacher training. No allowance has been made for other developments in the Technical Institute as this aspect of technical and technological studies needs to be more carefully considered by competent advisers.

Total recurrent expenditure of	Carnegie School (1,000 W.I.\$)	G.T.I. (1,000 W.I.\$)
1965	110	276
1970	118	292
1975	122	300

258. Priority has been given to adequate staffing of the Ministry of Education and adequate payment of its officers in accordance with expanding functions and responsibilities. By more efficient administration more economic use can be made of the funds and more savings be freed for purposes which we did not give top priority.

Education Division (1,000 W.I.\$)	(Recommendations 44, 45, 47)		
	1965	1970	1975
Personal emoluments	277	352	390

259. Total recurrent expenditure as assessed in our second approach will increase by almost \$10 million during the period 1965-1975. This is a tremendous expansion, but if standards are to be raised under circumstances of rapid growth in school population, there are in our opinion hardly any material possibilities for direct savings apart from those for which we have accounted. Unfortunately no estimates of future government revenue have been made which would allow us to make detailed suggestions as to how to finance the envisaged increase in educational expenditure. The only year for which such estimate is available is 1968. (1) Assuming that foreign assistance can be attracted to the amount of 360,000 W.I.\$ in respect of teacher training, school feeding and teachers' libraries, \$12.4 million will be left in 1968 to be financed out of the national budget which is expected to reach a volume of \$76 million. Educational expenditure would then comprise about 16% of total public recurrent expenditure which is in any respect a reasonable share. However, we have to consider that the highest increases in educational expenditure will occur after 1968. Government revenue for the purpose of recurrent expenditure must rise to \$120 million in 1975 or by 5.4% per year to prevent educational expenditure from expanding unduly in relation to competing needs.

260. Apart from teacher training, capital expenditure on school buildings, practical subject centres and equipment is most urgent, but because of shortage of funds and of skilled labour only part of the existing needs can be satisfied within the period under consideration. We have given preference to a selection of 24 secondary comprehensive schools as outlined in the building plan. Our estimates are based on building costs as calculated by the Department of Public Works. They must be considered as minimum estimates, since building costs have been rising rapidly during the last years and will tend to rise in future. Total costs for building and equipment of secondary comprehensive schools including practical subject centres will cover approximately 80% of total capital expenditure for which we have accounted in our revised cost estimates (second approach).

**Building and equipment of secondary comprehensive schools
(1,000 W.I.\$)**

(Recommendations of Appendix J)
1963-1964 1965-1969 1970-1975

New schools(a)		1,530	3,670
Extensions of existing schools(b)	323	318	95

(a) Including work centres. (b) Mainly work centres.

261. In respect of primary schools we suggest the promotion of self-help schemes by communities and managing bodies. We have, therefore, in our plans only allowed for 11 new primary schools to be completely financed by the Government in order to satisfy most urgent needs. Thirty more schools as well as reconditioning of old schools and the erection of multipurpose shelters should attract adequate contribution in the form of money and labour by the communities. The

(1) Ministry of Finance: Table on Past Trends and Future Projections of Government Revenue and Expenditure 1954 to 1968.

same would apply to teachers' houses, provisions of which, in our opinion, should eventually become the sole responsibility of the communities.

Table 24 - Estimate of recurrent and non-recurrent expenditure on education^(a)
1965-1975 in comparison with actual expenditure in 1960 and 1961
1,000 W.I.\$ (of 1962 prices)

Year	1. Approach(b)			2. Approach(c)			Difference between 1. and 2. approaches
	recurrent	non- recurrent (d)	Total	recurrent	non- recurrent (d)	Total	
1960	7,478	398	7,876	7,478	398	7,876	-
1961	7,909	723	8,632	7,909	723	8,632	-
1965	12,259	1,075	13,334	10,248	420	10,668	2,666
1966	13,258	1,200	14,458	11,036	480	11,516	2,942
1967	14,273	1,340	15,613	11,884	540	12,424	3,189
1968	15,307	1,490	16,797	12,784	610	13,394	3,403
1969	16,359	1,665	18,024	13,727	700	14,427	3,597
1970	17,431	1,860	19,291	14,706	730	15,436	3,855
1971	18,524	2,075	20,599	15,713	760	16,473	4,126
1972	19,640	2,315	21,955	16,740	810	17,550	4,405
1973	20,778	2,585	23,363	17,780	830	18,610	4,753
1974	21,941	2,885	24,826	18,823	850	19,673	5,153
1975	23,129	3,220	26,349	19,863	875	20,738	5,611

(a) Excluding higher education, training in agriculture, and vocational training other than by Carnegie School and Government Technical Institute.

(b) Provision of total requirements accruing from existing shortages of schools and teaching facilities, from demographic expansion of school population, extension of school attending age to 5 to 16 years, gradual replacement of untrained teachers in all-age schools and grammar schools by trained teachers and graduates, and from consequent changes in other institutions.

(c) Realization of the revised building programmes, exclusion of children below 5 years 9 months of age, no further provision for textbooks and stationery. (d) Building costs do not include site costs.

Building and equipment of primary schools and teachers' houses
(1,000 W.I.\$)

1963-1964 1965-1969 1970-1975

New schools	108	282	423
Reconditioning of schools and multipurpose shelters	100	230	160
Equipment	50	125	125
Teachers' houses	50	200	250

262. Realization of our building programme would in the course of 13 years provide 33,000 new places in primary and secondary schools. This would not be enough to meet total requirements. It would still leave a deficit of 57,000 places in 1975 (73,000 if children under 5 years 9 months were to be admitted), but together with other measures suggested would reduce materially the present degree of overcrowdedness.

263. Capital expenditure on education qualifies for finance out of the development budget. We have stated elsewhere the significance of educational projects within the overall economic development of the country. There are no official estimates of the future volume of development funds to enable us to evaluate the financial capacity to realize our suggestions. However, we have phased expenditure in our estimates so that they will not exceed the financial possibilities following upon a course of economic development which we have outlined as necessary to support rapid improvements in education. We have not allowed for expenditure on vocational training, such as separate training centres to relieve the Government Technical Institute from preliminary craft courses, or a nursing school affiliated to the Carnegie School of Home Economics. We suggest that for these purposes, after accurate plans have been produced, assistance from the United Nations Special Fund be requested. We further recommend that the Government carry on negotiations with industrial and commercial firms, which, according to our information, would against tax concessions be willing to contribute financially to educational projects designed to raise the efficiency of the future labour force.

CONCLUSION

We consider that the appendices to this report are an integral part of the report itself; not only do they contain the bases of our thinking, conclusions and recommendations, but also may prove of value to the Government of British Guiana in its own detailed approach to these and consequent problems.

The mission has at all times attempted to work within the limits of the situation as it exists and the limits of possible developments in all spheres of activity in British Guiana. We have tried to open the way to changes of nomenclature becoming changes in fact, to point to the urgency of the need for all resources to be utilized more effectively and for idle resources to be mobilized; we have tried to demonstrate both in the field and in this report possible approaches to educational and relative problems; we have insisted that policy without practical application and implementation - preceded by full consideration of all implications at all stages - is as irrelevant as the disregard of principles through preoccupation with detail. There is in British Guiana a ferment of new ideas and a significant consciousness of new goals and challenges; these have to contend with the realities of economics, of geography, of explosive population growth, of inherited psychological traits against a background of political uncertainty. We would earnestly plead that education be kept out of the political arena so that the challenge in the field of education be accepted as a challenge to the community as a whole working for the common good.

Chart 1. Education system of British Guiana, 1961

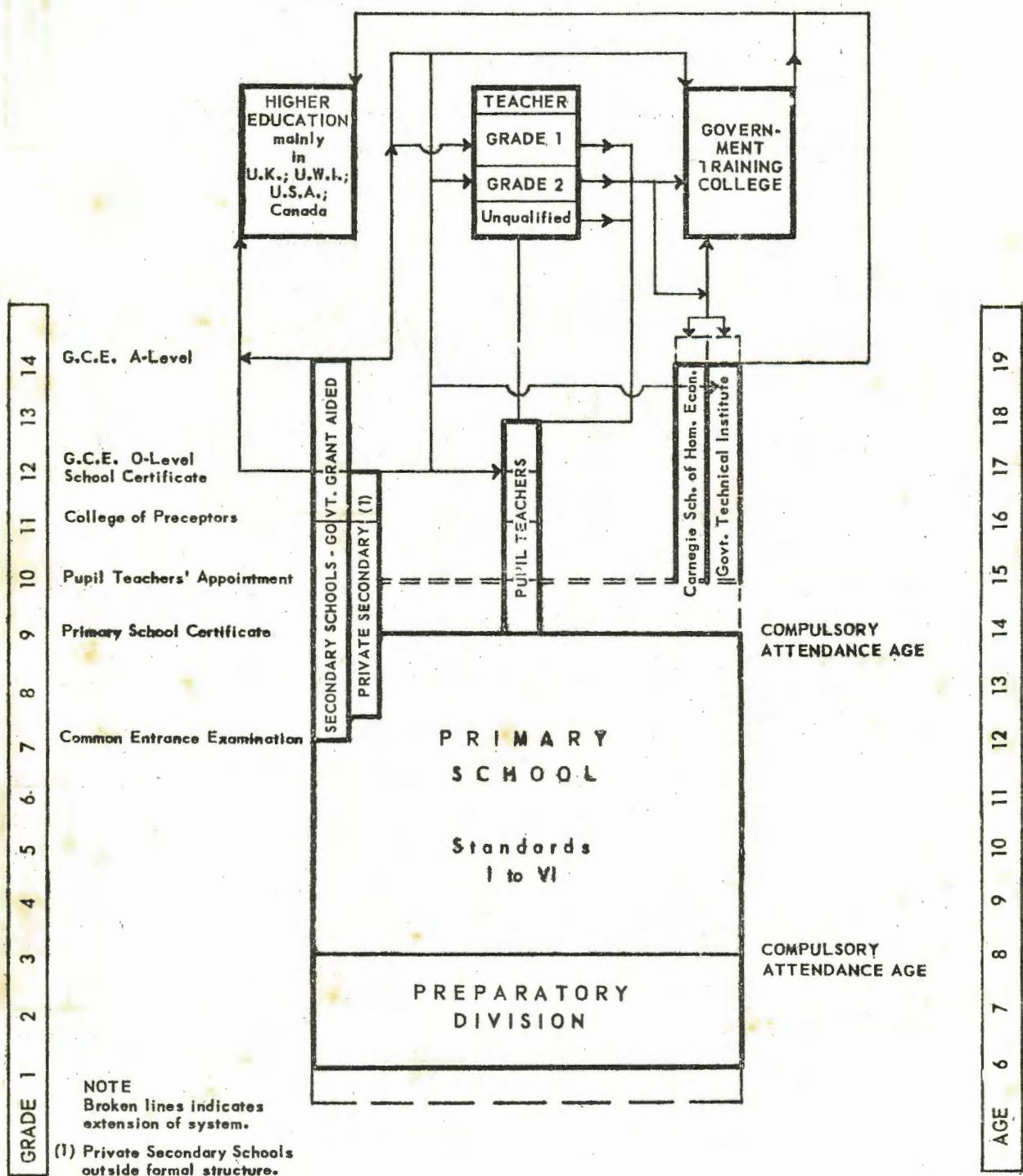


Chart II - Proposed Organization of the Education Division of the Ministry of Education and Social Development

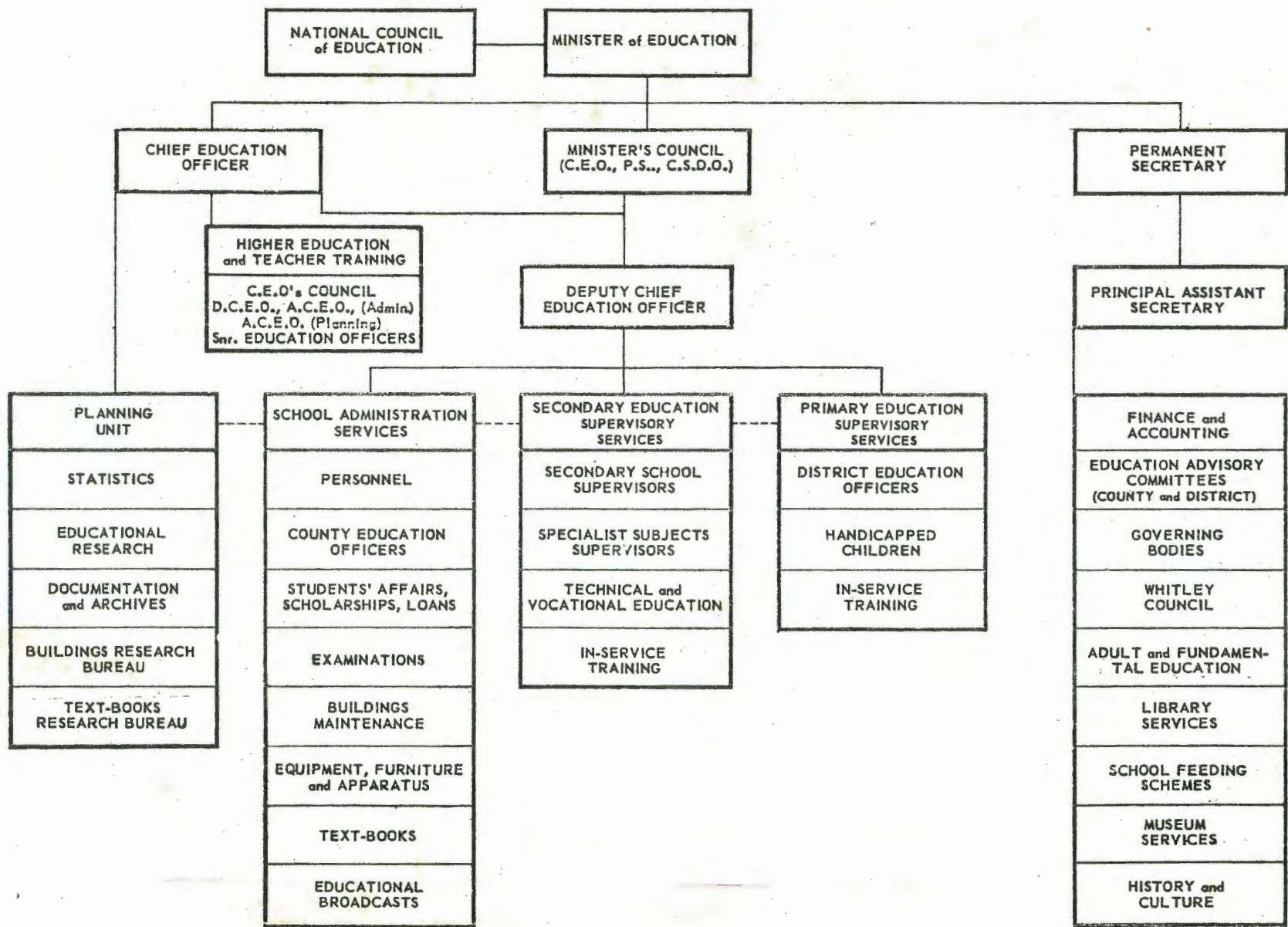
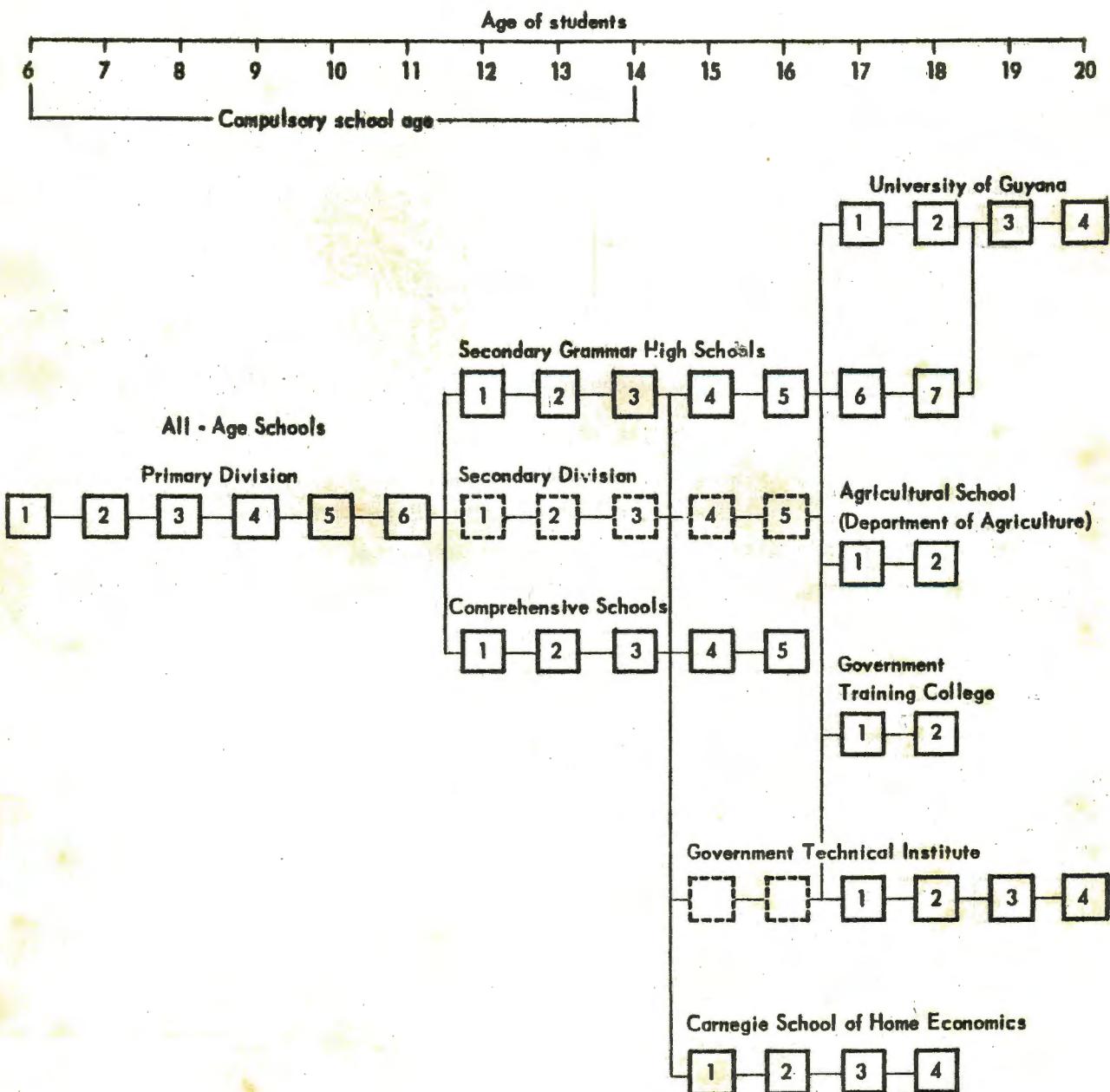


Chart III - Proposed Educational System



Indicates department which will
fade out as Secondary
Comprehensive Schools are built

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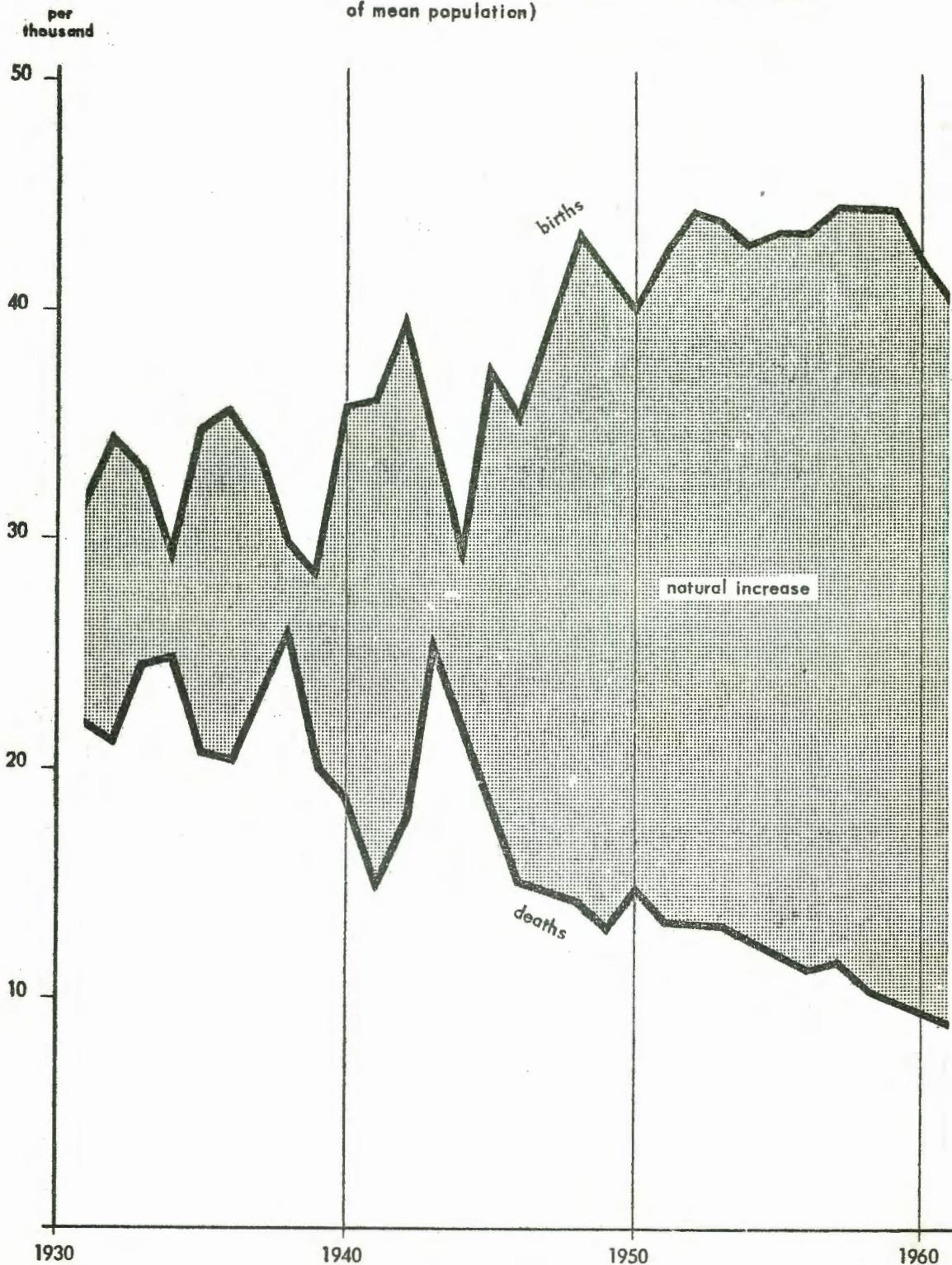
- App. A:** Revised terms of reference
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APPENDIX A**REVISED TERMS OF REFERENCE**

Within the limits of the decisions taken and plans prepared, and within the context of the immediate and the projected needs and targets, the aims of the Mission working in close co-operation with the competent authorities will be:

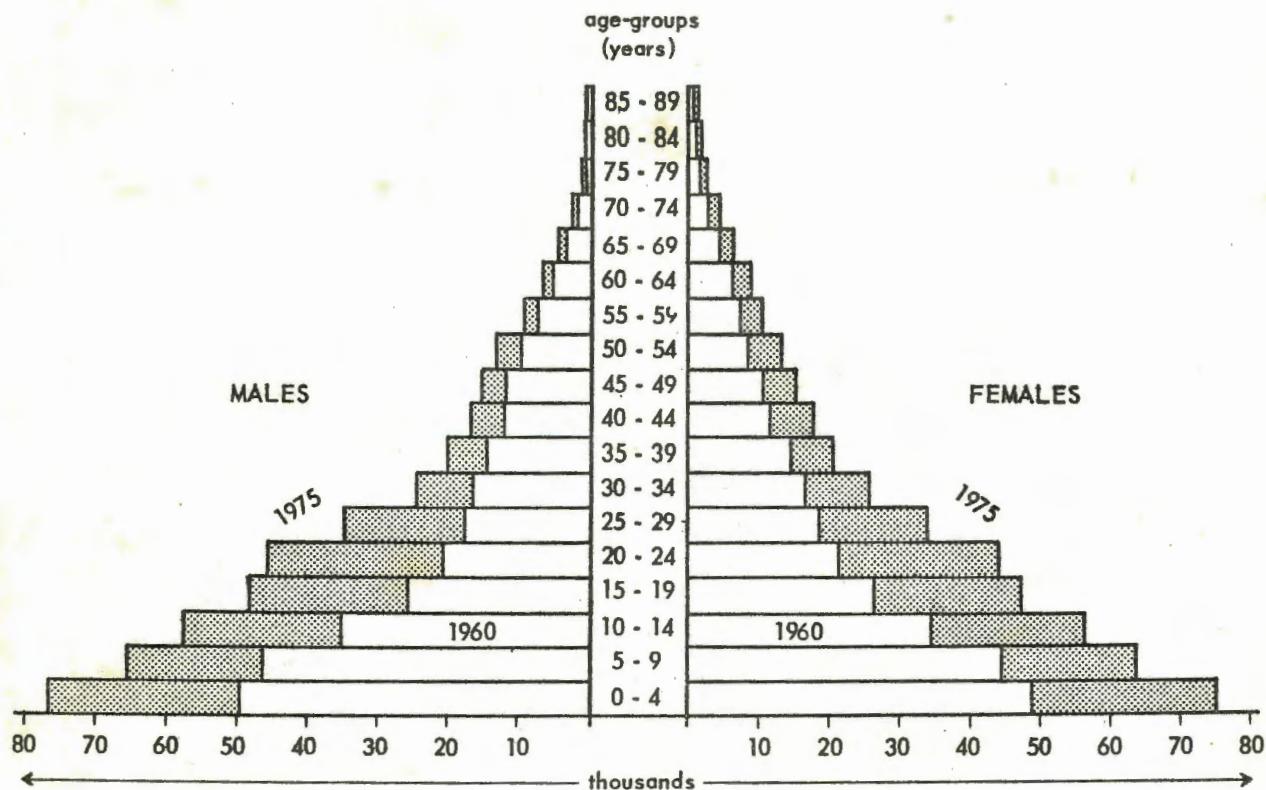
1. To study the prepared plans of the administrative, planning and supervisory machinery set up, and to make such suggestions as will lead to the most effective implementation of the plans without distorting the broad lines of development laid down.
2. To advise on appropriate educational provisions and activities and appropriate priorities for the balanced progress, qualitative and quantitative, of education within the limits of the present and potential human and financial resources of British Guiana.
3. To advise on the best use of available financial resources - both internal and external - in the development of the education programme.
4. To suggest stages for the development of the educational plans in the light of needs and resources.
5. To ensure integration of the educational planning operation in the national development planning machinery.

**Diagram I - Components of natural increase of the population
of British Guiana, 1931 - 1961**
(number of births and number of deaths per 1,000
of mean population)



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Diagram II - Projected age-composition of the population of British Guiana for the year 1975 compared with the age-composition in April 1960



ASSUMPTIONS OF THE PROJECTION

- (a) **Fertility:** decline of the gross reproduction rate from 3.1 in 1958 to 2.5 in 1975.
- (b) **Mortality:** decline of the life table death rate from 16.5 o/o in 1958 to 15.4 o/o in 1975, equalling a rise in life expectancy at birth from 60.7 years in 1958 to 65 years in 1975.

APPENDIX B
DEMOGRAPHIC DATA

Table I - Population in urban and rural areas by broad age-groups 1946 and 1960 (percentages)

Area	1946				1960				Total population
	0-14 years	15-64 years	65 years and over	Total population	0-14 years	15-64 years	65 years and over	Total population	
Georgetown and Environments	32.5	62.5	5.0	100.0	41.2	54.4	4.4	100.0	
New Amsterdam	31.8	63.6	4.6	100.0	39.2	56.1	4.7	100.0	
Urban total	32.4	62.6	5.0	100.0	41.1	54.5	4.4	100.0	
Demerara (rural)	38.7	57.4	3.9	100.0	48.8	48.0	3.2	100.0	
Berbice (rural)	42.2	54.5	3.3	100.0	48.7	48.7	2.6	100.0	
Essequibo ^a	38.4	58.2	3.5	100.0	47.1	50.2	2.7	100.0	
Rural total ^a	39.8	56.6	3.6	100.0	48.4	48.7	2.9	100.0	
Grand total ^a	37.7	58.3	4.0	100.0	46.3	50.4	3.3	100.0	

^aAdjustments have been made for Amerindians not individually counted in 1946.

Source: Census of 1946 and of 1960.

**Table II - Total population, adult population, working population,
and population not working, 1960**

(1946 = 100)

Area	Total population	Adult population ^a	Working population ^b	Population not working
Georgetown and Environments	158	137	124	181
New Amsterdam	147	131	105	176
Urban total	157	137	122	181
Demerara (rural)	150	125	100	183
Berbice (rural)	147	131	103	173
Essequibo	137	118	112	155
Rural total	146	125	103	174
Grand total	149	129	109	176

^aPopulation 15 years of age and over - ^bSee note a on Table VI.

Table III - Working force participation^a and rates of dependency^b;
1946 and 1960

Area	Working population as percentage of		Population not working per 100 persons in working force
	Total population	Adult population ^c	
<u>1946</u>			
Georgetown and environments	40.7	60.2	146
New Amsterdam	41.1	60.2	143
Urban total	40.7	60.2	146
Demerara (rural)	40.2	65.5	149
Berbice (rural)	36.6	63.3	174
Essequibo	40.7	66.0	146
Rural total	39.1	65.0	156
Grand total	39.6	63.5	153
<u>1960</u>			
Georgetown and environments	31.9	54.2	214
New Amsterdam	29.4	48.3	240
Urban total	31.7	53.7	216
Demerara (rural)	26.8	52.2	274
Berbice (rural)	25.6	49.8	291
Essequibo	33.0	62.4	203
Rural total	27.6	53.6	262
Grand total	28.8	53.6	247

^aWorking population as percentage of total population. - ^bRelation between working population and non-working population. - ^cPopulation 15 years and over.

**Table IV – Working population by sex and number of months worked during the
12 months preceding the census of 1960 (percentages)**

Area	Persons working				Average number of months worked per person
	less than 3 months	3-6 months	6-9 months	9-12 months	
<u>Males</u>					
Georgetown and environments	1.8	3.0	5.8	89.5	10.8
New Amsterdam	2.3	4.2	7.8	85.6	10.6
Urban total	1.8	3.1	5.9	89.2	10.8
Demerara (rural)	1.4	3.3	9.0	86.3	10.7
Berbice (rural)	1.4	5.4	17.4	75.7	10.2
Essequibo	1.0	4.0	13.2	81.8	10.5
Rural total	1.3	4.1	12.5	82.0	10.5
Grand total	1.4	3.9	10.7	84.0	10.6
<u>Females</u>					
Georgetown and environments	2.5	5.2	6.7	85.6	10.5
New Amsterdam	3.1	5.7	8.5	82.7	10.3
Urban total	2.6	5.3	6.8	85.3	10.5
Demerara (rural)	2.7	7.1	10.9	79.3	10.2
Berbice (rural)	3.0	10.3	14.1	72.6	9.8
Essequibo	2.2	12.0	27.7	58.1	9.1
Rural total	2.7	9.2	15.9	72.2	9.8
Grand total	2.6	7.4	11.7	78.3	10.2

Source: Census of 1960

Table V – Working population by sex and type of worker, 1960
(percentages)

Area	Employers	Own account workers	Unpaid family workers	Unpaid apprentices	Paid employees	Total working force
Males						
Georgetown and environments	4.0	15.3	0.5	0.6	79.5	100.0
New Amsterdam	5.2	18.0	1.3	0.4	75.1	100.0
Urban total	4.1	15.5	0.6	0.6	79.2	100.0
Demerara (rural)	1.6	22.2	3.0	0.4	72.8	100.0
Berbice (rural)	2.1	33.6	4.9	0.6	58.8	100.0
Essequibo	1.5	45.7	7.5	0.3	43.9	100.0
Rural total	1.7	31.3	4.6	0.4	61.6	100.0
Grand total	2.4	26.9	3.5	0.5	66.5	100.0
Females						
Georgetown and environments	0.9	20.9	2.2	0.4	75.6	100.0
New Amsterdam	0.9	27.3	3.1	0.1	68.5	100.0
Urban total	0.9	21.5	2.3	0.4	75.0	100.0
Demerara (rural)	0.4	29.0	9.0	0.7	60.8	100.0
Berbice (rural)	0.7	32.1	12.6	1.5	53.1	100.0
Essequibo	0.7	27.6	41.4	1.0	29.2	100.0
Rural total	0.6	29.5	18.0	1.0	50.8	100.0
Grand total	0.7	25.8	10.7	0.7	62.0	100.0

Source: Census of 1960.

Table VI - Working population^a by sex and major industrial groups.
1946 and 1960

Industrial group	1946 ^b			1960		
	Male	Female	Total	Male	Female	Total
Agriculture ^c	51,402	16,052	67,454	50,330	9,457	59,787
Mining & quarrying	4,108	31	4,139	5,983	80	6,063
Manufacturing	16,961	6,255	23,216	21,274	5,033	26,307
Construction	7,074	173	7,247	12,753	105	12,858
Commerce & transport ^d	13,954	4,279	18,233	19,957	6,054	26,011
Services ^e	11,043	13,697	24,740	14,113	15,915	30,028
Ill-defined	1,042	93	1,135	327	26	353
Grand total	105,584	40,580	146,164	124,737	36,670	161,407

Percentages

Agriculture ^c	48.7	39.6	46.1	40.3	25.8	37.0
Mining & quarrying	3.9	0.1	2.8	4.8	0.2	3.8
Manufacturing	16.1	15.4	15.9	17.1	13.7	16.3
Construction	6.7	0.4	5.0	10.2	0.3	8.0
Commerce & transport ^d	13.2	10.5	12.5	16.0	16.5	16.1
Services ^e	10.4	33.8	16.9	11.3	43.4	18.6
Grand total ^f	100.0	100.0	100.0	100.0	100.0	100.0

^aThe "Working Population" includes every person who has been working for any length of time during 12 months preceding the census. It differs from the "Labour Force" in that it excludes persons looking for their first job and persons unemployed for more than a year at the day of the census while on the other hand it may include persons who, at the day of the census, had already retired but who had been working for some length of time during the preceding year. The concept of "gainfully employed" which was used in 1946 is almost the same as the working population concept. Errors due to differences in definition do not effect comparison in any material way. - ^bAmerindians not individually counted are omitted. - ^cIncluding forestry, fishing and hunting. - ^dIncluding finance, communication and storage. - ^eIncluding electricity, gas, water and sanitary services. - ^fIncluding ill-defined.

Table VII - Working population by sex, areas, and major groups of industry, 1960

Industrial group	Total working force		Percentage of working force working			
	number	per cent	in urban areas	Demerara	Berbice	Essequibo
Males						
Agriculture ^a	50,330	40.4	3.4	39.8	32.4	24.4
Mining & quarrying	5,983	4.8	5.6	37.0	4.6	52.8
Manufacturing	21,274	17.1	34.4	35.4	21.5	8.7
Construction	12,753	10.2	34.9	35.4	18.9	10.8
Public utility ^b	902	0.7	68.0	21.6	5.9	4.5
Commerce	12,538	10.1	62.7	20.3	10.2	6.8
Transport ^c	7,419	5.9	61.9	22.9	8.3	6.9
Services	13,211	10.6	56.9	19.5	13.2	10.4
Total ^d	124,737	100.0	27.6	33.1	21.9	17.4
Females						
Agriculture ^a	9,457	25.8	1.9	37.8	27.9	32.4
Mining & quarrying	80	0.2	20.0	68.8	3.7	7.5
Manufacturing	5,033	13.7	52.9	28.0	13.4	5.7
Construction	105	0.3	43.8	33.3	16.2	6.7
Public utility ^b	20	0.1	85.0	10.0	5.0	-
Commerce	5,765	15.7	60.5	22.6	11.5	5.4
Transport ^c	289	0.8	87.2	7.9	1.4	3.5
Services	15,895	43.3	64.8	18.7	8.9	7.5
Total ^d	36,670	100.0	46.3	25.6	14.8	13.3

^aIncluding forestry, fishing and hunting. - ^bI.e. electricity, gas, water and sanitary services. - ^cIncluding storage and communication. - ^dIncluding ill-defined.

Table VIIIa - Working population by sex, areas, and major groups of occupation, 1960

Occupational group	Total	Urban areas	Rural areas		
			Demerara	Berbice	Essequibo
<u>Males</u>					
Professional & technical workers	6,029	2,886	1,616	1,015	512
Administrative, executive and managerial workers	3,986	1,856	999	729	402
Clerical workers	6,016	3,651	1,392	621	352
Commercial, financial & insurance workers	5,513	3,121	1,326	625	441
Farmers, fishermen, hunters, loggers & forest workers	47,238	1,356	18,396	15,322	12,164
Workers in:					
Mining, quarrying & refining of these products	4,023	226	779	244	2,774
Transport & communication	13,659	6,358	3,889	2,151	1,270
Textile & leather	2,181	875	669	471	166
Metal (incl. mechanics & electricians)	8,125	3,574	2,724	1,215	612
Paper, bookbinding & printing	525	499	21	5	-
Pottery, clay & glass	61	42	7	6	6
Wood, paper board, cane & cork	4,613	1,540	1,537	734	802
Food, drink & tobacco	3,189	825	1,419	689	256
Chemicals	74	33	40	1	-
Construction	8,034	2,504	2,979	1,597	954
Painters & decorators	1,231	570	417	164	80
Stationary engine drivers, excavator & lifting operators	1,847	384	767	491	205
Craftsmen not elsewhere classified	68	53	3	4	8
Service workers	7,950	3,988	2,252	1,141	569
Workers not elsewhere classified	375	110	123	62	80
Total	124,737	34,451	41,346	27,287	21,653

Table VIIIb - Working population by sex, areas, and major groups of occupation, 1960

Occupational group	Total	Urban areas	Rural areas		
			Demerara	Berbice	Essequibo
Females					
Professional & technical workers	4,146	2,290	921	541	394
Administrative, executive and managerial workers	745	324	192	143	86
Clerical workers	2,515	2,123	274	79	40
Commercial, financial & insurance workers	4,169	2,289	1,108	531	241
Farmers, fishermen, hunters, loggers & forest workers	9,315	167	3,531	2,563	3,054
Workers in:					
Mining, quarrying & refining of these products	20	3	10	6	1
Transport & communication	378	233	80	57	8
Textile & leather	3,072	1,670	712	444	246
Metal (incl. mechanics & electricians)	17	12	1	4	-
Paper, bookbinding & printing	156	153	-	3	-
Pottery, clay & glass	3	3	-	-	-
Wood, paper board, cane & cork	321	184	126	7	4
Food, drink & tobacco	508	238	185	52	33
Chemicals	79	36	43	-	-
Construction	59	14	10	33	2
Painters & decorators	12	7	4	1	-
Stationary engine drivers, excavator & lifting operators	6	5	-	-	1
Craftsmen not elsewhere classified	-	-	-	-	-
Service workers	11,013	7,184	2,173	960	696
Workers not elsewhere classified	135	36	14	3	86
Total	36,670	16,971	9,384	5,427	4,888

Source: Census of 1960

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Table VIIIIC – Working population by sex, areas and major groups of occupation, 1960

(percentages)

Occupational group	Total	Urban areas ^a	Rural areas ^a		
			Demerara	Berbice	Essequibo
Males					
Professional & technical workers	4.8	47.9	26.8	16.8	8.5
Administrative, executive & managerial workers	3.2	46.6	25.0	18.3	10.1
Clerical workers	4.8	60.7	23.1	10.3	5.9
Commercial, financial & insurance workers	4.4	56.6	24.1	11.3	8.0
Farmers, fishermen, hunters, loggers & forest workers	37.9	2.9	38.9	32.4	25.8
Workers in:					
Mining, quarrying & refining of these products	3.2	5.6	19.4	6.1	68.9
Transport & communication	11.0	46.5	28.5	15.7	9.3
Textile & leather	1.7	40.1	30.7	21.6	7.6
Metal (incl. mechanics & electricians)	6.5	44.0	33.5	15.0	7.5
Paper, bookbinding & printing	0.4	95.0	4.0	1.0	-
Pottery, clay & glass	0.0	68.9	11.5	9.8	9.8
Wood, paper board, cane & cork	3.7	33.4	33.3	15.9	17.4
Food, drink & tobacco	2.6	25.9	44.5	21.6	8.0
Chemicals	0.1	44.6	54.0	1.3	-
Construction	6.4	31.2	37.1	19.9	11.9
Painters & decorators	1.0	46.3	33.9	13.3	6.5
Stationary engine drivers, excavator & lifting operators	1.5	20.8	41.5	26.6	11.1
Craftsmen not elsewhere classified	0.1	77.9	4.4	5.9	11.8
Service workers	6.4	50.2	28.3	14.8	7.2
Workers not elsewhere classified	0.3	29.3	32.8	16.5	21.3
Total	100.0	27.6	33.1	21.9	17.4

^aAs percentage of total workers in occupational group.

Source: Census of 1960

Table VIIId - Working population by sex, areas, and major groups of occupation, 1960

(percentages)

Occupational group	Total	Urban areas	Rural areas ^a		
			Demerara	Berbice	Essequibo
Females					
Professional & technical workers	11.3	55.2	22.2	13.0	9.5
Administrative, executive & managerial workers	2.0	43.5	25.8	19.2	11.5
Clerical workers	6.9	84.4	10.9	3.1	1.6
Commerical, financial & insurance workers	11.4	54.9	26.6	12.7	5.8
Farmers, fishermen, hunters, loggers & forest workers	25.4	1.8	37.9	27.5	32.8
Workers in:					
Mining, quarrying & refining of these products	0.1	15.0	50.0	30.0	5.0
Transport & communication	1.0	61.6	21.2	15.1	2.1
Textile & leather	8.4	54.4	23.2	14.4	8.0
Metal (inc. mechanics & electricians)	0.0	70.6	5.9	23.5	-
Paper, bookbinding & printing	0.4	98.1	-	1.9	-
Pottery, clay & glass	0.0	100.0	-	-	-
Wood, paper board, cane & cork	0.9	57.3	39.3	2.2	1.2
Food, drink & tobacco	1.4	46.9	36.4	10.2	6.5
Chemicals	0.2	45.6	54.4	-	-
Construction	0.2	23.7	16.9	55.9	3.4
Painters & decorators	0.0	58.3	33.3	8.3	-
Stationary engine drivers, excavator and lifting operators	0.0	83.3	-	-	16.7
Craftsmen not elsewhere classified	-	-	-	-	-
Service workers	30.0	65.2	19.7	8.7	6.3
Workers not elsewhere classified	0.4	26.7	10.4	2.2	60.7
Total	100.0	46.3	25.6	14.8	13.3

^aAs percentage of total workers in occupational group

Source: Census of 1960

FINANCE TABLES

Table IXa - Estimate of total re-current expenditure on education, 1960
(W.I.S.)

Item	Government expenditure	Private expenditure	Total expenditure
Primary education^a			
Salaries of teachers	5,058,426	-	5,058,426
Other salaries	14,092	-	14,092
Travelling expenses of teachers	7,084	-	7,084
Total personal emoluments	5,079,602	-	5,079,602
Materials, equipment, maintenance	212,987	965,180 ^b	1,178,167
Examinations	27,793	-	27,793
Miscellaneous	439	-	439
School feeding scheme	85,241	21,000 ^c	106,241
Total	5,406,062	986,180	6,392,242
Practical Instruction Centres			
Salaries of teachers	54,854	-	54,854
Part-time teaching staff	8,166	-	8,166
Total personal emoluments	63,020	-	63,020
Materials, equipment, maintenance	27,925	8,225 ^d	36,150
Agricultural education	13,459	-	13,459
Total	104,404	8,225	112,629
Teacher training			
Government Training College			
Salaries of teachers, fixed establishment	38,127	-	38,127
Allowances to teachers, non-fixed establishment	8,031	-	8,031
Other salaries and wages	17,247	-	17,247
Total personal emoluments	63,405	-	63,405
Furniture, equipment, materials	5,527	-	5,527
Books and educational supplies	1,127	-	1,127
Maintenance of students	75,306	-	75,306
Library	487	-	487
Bicycle allowance	144	-	144
Total G.T.C.	145,996	-	145,996
Courses for teachers	5,379	-	5,379
Conditional scholarships and training courses	32,288	-	32,288
Total	183,663	-	183,663
Government Secondary Grammar Schools			
Salaries of teachers, fixed establishment	304,666	-	304,666
Salaries of teachers, non-fixed establishment	6,972	-	6,972
Other salaries and wages	43,542	-	43,542
Total personal emoluments	355,180	-	355,180
Materials, equipment, maintenance	21,762	59,740 ^e	81,502
Prices	553	-	553
Scholarships, free places	937	84,106 ^f	85,043
Cadet company	3,833	-	3,833
Total	298,416 ^g	143,846 ^h	442,262 ^g

(cont.)

Item	Government expenditure	Private expenditure	Total expenditure
Grant-aided Secondary Schools			
Salaries of teachers	243,927	276,858	520,785
Other salaries and wages	-	41,635	41,635
Total personal emoluments	243,927	318,493	562,420
Books and stationery bought by parents	-	124,632	124,632
Other charges	12,541	130,709	143,250
Scholarships, free places	55,280	10,500	65,780
Total	311,748	584,334 ^h	896,082
Private Secondary Schoolsⁱ			
Salaries of teachers	-	208,900	208,900
Books and stationery bought by parents	-	66,500	66,500
Other charges	-	23,000	23,000
Total	-	298,400 ^h	298,400
Government Technical Institute			
Salaries of teachers, fixed establishment	90,142	-	90,142
Salaries of teachers, non-fixed establishment	19,473	1,140 ^j	20,613
Other salaries and wages	25,589	-	25,589
Travelling expenses	1,056	-	1,056
Total personal emoluments	136,260	1,140	137,400
Materials, equipment, maintenance	27,549	49,695 ^k	77,244
Technical library	902	-	902
Scholarships, fees, etc.	1,249	13,178	14,427
Miscellaneous	700	-	700
Total	153,482 ^l	64,013 ^h	217,495 ^l
Bemba Trade School	-	35,000 ^m	35,000 ^m
Port Mourant Trade School	-	80,000 ^m	80,000 ^m
Carnegie School of Home Economics			
Salaries of teachers	49,627	-	49,627
Other salaries and wages	7,370	-	7,370
Total personal emoluments	56,997	-	56,997
Materials, equipment, maintenance	16,258	1,800	18,058
Prices	210	-	210
Scholarships, fees, etc.	966	1,080	2,046
Miscellaneous	1,349	-	1,349
Total	74,700 ⁿ	2,880	77,580 ⁿ
Frederic School of Home Economics			
Total personal emoluments	1,400	1,132	2,532
Materials, maintenance and other charges	1,000	857	1,857
Total	2,400	1,989	4,389
Evening courses (at Queen's College and Carnegie School)	4,559 ^o	15,334 ^p	19,893 ^o

(cont.)

Item	Government expenditure	Private expenditure	Total expenditure
Vocational Training Schemes of various Government Departments			
Training of nurses and dispensers	34,557	-	34,557
Training of farm youth and apprentices	32,020	-	32,020
Land surveyor examinations	994	-	994
Apprenticeship scheme of the Shipping Service	9,243	-	9,243
Conditional scholarships and training courses	182,123	-	182,123
Total	258,937	-	258,937
Special and Reformatory Education			
Education of blind children in Trinidad	2,731	-	2,731
<i>Essequibo Boy School</i>			
Personal emoluments	58,186	-	58,186
Other charges	28,354	-	28,354
Total	86,540	-	86,540
<i>Belfield Girl School (Salvation Army)</i>			
Personal emoluments	-	20,000 ^d	20,000
Maintenance	9,550	-	9,550
Total	9,550	20,000 ^d	29,550
<i>Remand Home for boys (Salvation Army)</i>			
Personal emoluments	-	10,000 ^d	10,000
Maintenance	4,186	-	4,186
Total	4,186	10,000 ^d	14,186
Education Department			
Personal emoluments	186,557	-	186,557
Quarters for education officers	3,865	-	3,865
Other charges	36,002	5,416 ^r	41,418
Total	221,008 ^s	5,416 ^r	226,424 ^s
Other educational expenditure			
Maintenance of government buildings under control of Education Department	31,124	-	31,124
School medical officers and staff	6,500 ^t	-	6,500 ^t
School dental service	29,500 ^t	-	29,500 ^t
Broadcast to schools	15,267	-	15,267
Teachers' pension and gratuities	214,175	-	214,175
Grants to churches for services among Amerindians	24,400	-	24,400
Grant to Public Free Library	100,000	-	100,000
Training of domestic servants for employment in Canada	657	-	657
Total	421,623	-	421,623
Total re-current expenditure on education (excluding higher education)	7,544,009	2,255,617	9,799,626

(cont.)

Item	Government expenditure	Private expenditure	Total expenditure
Higher education			
Contribution to University College of the West Indies	501,042	-	501,042
Contribution to Exhibition Fund U.C.W.I.	27,305	-	27,305
British Guiana Scholarships	16,501	-	16,501
Colonial Students Contingency Fund	3,000	-	3,000
Students' Liaison Officer in the United States	4,700	-	4,700
West Indian Students' Centre in the U.K.	6,452	-	6,452
Passages and expenses of engineering trainees	3,330	-	3,330
Allowances to students at I.C.T.A.	1,583	-	1,583
Annual grant to I.C.T.A.	16,228	-	16,228
Grant to Latin American Forest Research and Training Institute	855	-	855
Grant to Institution of Tropical Medicine	1,440	-	1,440
Other expenditure	-	1,723,322 ^u	1,723,322 ^u
Total	582,436	1,723,322	2,305,758
Total re-current expenditure on education	8,126,445	3,978,939	12,105,384

^aExcluding private primary schools. - ^bBooks and stationery supplied by parents, calculated at average annual costs of \$7.70 per pupil. - ^cEstimated costs of Unicef milk. - ^dStationery, materials, and fees paid by parents, calculated at average annual costs of \$2.00 per girl and \$0.25 per boy. - ^eBooks and stationery fees paid by parents. - ^fFees and private scholarships. - ^gNet-expenditure, i.e. minus \$83,849 school-fees paid by parents to the Exchequer. - ^hNo allowance has been made for travelling expenses and for extra maintenance costs for students attending schools outside their place of residence. - ⁱEstimate based on information received from a sample of private schools. - ^jOne expatriate teacher arriving in October 1960 paid by AID. - ^kBooks, stationery, working clothes, etc. paid by parents or private firms. - ^lNet-expenditure, i.e. minus \$13,178 fees paid by parents or private firms to the Exchequer. - ^mEstimate at the basis of \$2,000 per student. - ⁿNet-expenditure, i.e. minus fees paid to the Exchequer. - ^oNet-expenditure, i.e. minus fees paid to the Exchequer. - ^pFees. - ^qRough estimate. - ^rExamination fees paid to Exchequer. - ^sNet-expenditure, i.e. minus examination fees paid to Exchequer. - ^tCover only part of actual medical service for school children. - ^uEstimates have been made on the basis of total operational costs in different faculties of different universities and of different charges for tuition, maintenance, lodging, books, etc. They do, however, not allow for travelling expenses. Apart from approximately \$537,500 estimated as paid by students or private national firms and associations, the bulk of this sum comprises foreign contributions (private or governmental).

Table IXb - Estimate of total recurrent and non-recurrent expenditure on education, 1960 (W.I.\$)

Item	Government expenditure			Other expenditure		Total expenditure
	Ministry of Education and Social Development	other Ministries	Government expenditure total	private national funds	foreign funds	
Primary education	5,680,670	94,097	5,774,767	973,405	296,100	7,044,272
Recurrent						
Primary schools	5,406,062	-	5,406,062	965,180	21,000	6,392,242
Practical Instruction	90,945	13,459	104,404	8,225	-	112,629
Teacher training	183,663	-	183,663	-	-	183,663
Total recurrent	5,680,670	13,459	5,694,129	973,405	21,000	6,688,534
Non-recurrent						
Primary schools	-	72,247	72,247	-	199,580	271,827
Practical instruction	-	8,391	8,391	-	75,520	83,911
Total non-recurrent	-	80,638	80,638	-	275,100	355,738
Secondary education	612,808	42,647	655,455	1,049,880	-	1,705,335
Recurrent						
Government schools	298,416	-	298,416	143,846	-	442,262
Grant-aided schools	311,748	-	311,748	584,334	-	896,082
Private schools	-	-	-	298,400	-	298,400
Total recurrent	610,164	-	610,164	1,026,580	-	1,636,744
Non-recurrent						
Government schools	2,644	647	3,291	-	-	3,291
Grant-aided schools	-	42,000	42,000	23,300 ^a	-	65,300
Total non-recurrent	2,644	42,647	45,291	23,300	-	68,591
Vocational education^b	236,835	297,769	534,534	198,076	43,514	776,124
Recurrent						
Government Technical Institute	152,399	1,083	153,482	62,873	1,140	217,495
Demba Trade School	-	-	-	35,000	-	35,000
Port Mourant Trade School	-	-	-	80,000	-	80,000
Carnegie School of Home Economics	74,700	-	74,700	2,880	-	77,580
Frederic School of Home Economics	2,400	-	2,400	1,989	-	4,389
Evening classes	4,559	-	4,559	15,334	-	19,893
Vocational training schemes	-	258,937	258,937	-	-	258,937
Total recurrent	234,058	260,020	494,078	198,076	1,140	693,294
Non-recurrent^c						
Carnegie School	2,777	-	2,777	-	-	2,777
Vocational training schemes	-	37,679	37,679	-	42,374	80,053
Total non-recurrent	2,777	37,679	40,456	-	42,374	82,830

(cont.)

Item	Government expenditure			Other expenditure		Total expenditure
	Ministry of Education and Social Development	other Ministries	Government expenditure total	private national funds	foreign funds	
Special and reformatory education	-	103,007	103,007	30,000	.	133,007
Recurrent	-	103,007	103,007	30,000	.	133,007
Non-recurrent	-	-	-	.	.	.
Amerindian education ^d	-	25,157	25,157	.	6,816	31,973
Recurrent	-	24,400	24,400	.	-	24,400
Non-recurrent	-	757	757	.	6,816	7,573
Other education expenditure ^e	317,143	301,088	618,231	5,416 ^f	-	623,647
Recurrent						
Total expenditure on education (excluding Higher education)	6,847,456	863,695	7,711,151	2,256,777	346,430	10,314,358
Recurrent	6,842,035	701,974	7,544,009	2,233,477	22,140	9,799,626
Non-recurrent	5,421	161,721	167,142	23,300	324,290	514,732
Higher education	559,000	85,871	644,871	562,908	1,185,850	2,393,629
Recurrent	559,000	23,436	582,436	537,472	1,185,850	2,305,758
Non-recurrent ^g	-	62,435	62,435	25,436	-	87,871
Total expenditure on education	7,406,456	949,566	8,356,022	2,819,685	1,532,280	12,707,987
Recurrent	7,401,035	725,410	8,126,445	2,770,949	1,207,990	12,105,384
Non-recurrent	5,421	224,156	229,577	48,736	324,290	602,603

^aCapital expenditure from budget only; total non-recurrent expenditure from non-governmental funds (such as churches) has been much higher. -^bNo allowance has been made for private commercial schools and training schemes of private companies apart from the two trade schools included. Evening classes, other than at Queen's College and Carnegie School are also excluded in this calculation. -^cNo information has been available of private capital expenditure made in respect of Demba and Port Mourant Trade Schools. -^dNo information has been available concerning the amount of financial contribution made by churches and private associations towards education of Amerindians. -^eIncluding Education Department. -^fExamination fees paid to the Exchequer. -^gLoans and loan repayments.

General note: A dash (-) in the table means "does not apply"; a dot (.) means "no information available" while indicating a probably material omission. For more detailed data on recurrent expenditure see Table IXa, the footnotes of which also apply to respective data in this table.

The estimates of non-governmental expenditure and consequently total expenditure must be considered as minimum estimates. Private national sources mainly comprise expenditure on books and stationery supplied by parents and scholarships granted by firms and associations. No allowance has been made for travelling expenses and extra maintenance costs of students attending schools outside their place of residence nor have been taken into account wages and salaries paid by firms to employees actually attending technical schools. Non-recurrent expenditure from foreign sources mainly comprise expenditure met by the Colonial Development and Welfare Fund. Non-recurrent expenditure made by government comprise extraordinary budget expenditure and expenditure financed from budget surplus.

Table Xa - Analysis of government expenditure, 1951-1963
(percentages)

Item	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962 ^a	1963 ^b
Debt charges	5.09	6.39	5.96	5.50	4.98	6.46	8.41	8.94	9.64	11.74	11.89	12.93	15.39
Administration	26.38	27.41	28.67	24.67	22.45	22.68	24.57	24.38	22.37	24.41	23.72	20.38	19.46
Economic development	9.93	9.24	11.69	10.28	9.33	9.61	9.61	10.50	10.86	10.41	10.04	11.05	10.83
Social services	28.54	27.00	25.95	28.52	30.78	34.18	32.86	31.12	33.92	30.88	30.84	31.28	32.32
Medical	10.99	10.92	10.12	11.32	11.52	12.15	12.83	11.71	12.67	12.02	11.56	10.68	10.63
Education	11.37	11.08	11.16	12.18	13.03	15.47	14.34	14.08	14.83	14.91	14.19	13.95	15.01
Others	6.18	5.00	4.67	5.02	6.23	6.86	5.69	5.33	6.42	3.95	5.09	6.65	6.68
Public works	11.78	11.21	10.47	9.54	12.25	11.25	10.36	11.49	10.44	9.74	10.30	9.09	9.44
Pestal and telecommunications	5.03	5.05	4.60	4.89	4.84	4.79	4.82	4.46	4.81	4.74	4.84	4.46	4.36
Defence	0.45	0.41	0.33	0.48	0.31	0.27	0.25	0.24	0.24	0.21	0.20	0.14	0.74
Pensions	3.81	4.06	3.60	3.47	3.79	5.05	4.52	4.44	4.39	4.62	4.40	4.22	4.48
Transport and harbour (net)	5.76	4.79	4.49	4.83	4.84	4.05	3.73	3.81	3.75	3.61	4.09	3.29	3.25
Emergency measures	3.59	5.09	4.83	5.59	6.83	1.81	1.30	1.02	-	-	-	-	-
Flood relief and rehabilitation measures	0.38	0.01	-	-	-	-	-	-	-	-	-	-	-
Salary revision (unallocated)	-	-	-	2.77	0.06	-	-	-	-	-	-	3.45	-
Deduct charges included in debt charges set off against revenue of transport and harbour	0.74	0.66	0.59	0.54	0.46	0.46	0.43	0.40	0.42	0.36	0.32	0.29	0.27
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

^aRevised estimate. - ^bEstimate.

Source: British Guiana, Report of the Treasurer, 1952 ff.; 1963 Estimates as presented to the Legislature.

Table Xb - Analysis of government revenue, 1951-1963
(percentages)

Item	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962 ^a	1963 ^b
Income tax	26.50	27.28	35.64	33.92	28.51	31.14	34.84	38.68	34.34	30.95	31.63	32.20	31.85
Customs and excise	42.61	41.33	46.24	46.74	46.67	48.31	46.93	43.96	47.18	50.00	49.30	46.50	45.81
Licenses	13.20	12.17	1.96	1.94	1.85	2.09	2.02	1.95	2.07	1.89	1.86	2.06	1.81
Internal revenue	2.32	3.12	1.84	3.12	7.18	2.91	1.98	1.68	1.46	2.28	2.27	1.79	4.65
Total revenue from taxation	84.63	83.90	85.68	85.72	84.21	84.45	85.77	86.27	85.05	85.12	85.06	82.55	84.12
Fees of court or office, etc.	4.01	4.03	4.20	4.15	3.94	4.95	4.70	4.69	5.07	4.79	4.22	4.73	4.75
Post office	3.79	3.55	3.37	3.29	2.95	3.12	3.10	2.88	2.84	3.11	3.63	4.03	3.67
Rents and other income from lands, forests and mines	2.12	1.94	1.90	2.13	1.98	2.34	2.15	1.76	2.03	2.16	2.55	2.56	2.30
Interest and refunds	2.03	2.12	2.44	1.98	2.00	2.61	2.66	2.42	2.76	2.50	1.96	1.97	1.76
Miscellaneous	3.39	2.53	2.32	2.69	2.07	2.49	1.60	1.98	2.25	2.32	2.39	3.62	2.87
Extraordinary receipts	0.03	1.93	0.09	0.04	2.85	0.04	0.02	0.00	0.00	0.00	0.19	0.54	0.53
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

^aRevised estimate. - ^bEstimate

Source: British Guiana, Report of the Treasurer, 1952 ff.; 1963 Estimates as presented to the Legislature.

Table XIa - National income, total government expenditure and
expenditure on education, 1952-1963
(at current prices)

Year	National income		Government expenditure				Expenditure on education ^a			
	A	B	1,000 \$	as percentage of national income		1,000\$	as percentage of		total government expenditure	
	1,000 \$	1,000 \$		A	B		national income	B		
1952	145,335	143,157	28,459	19.6	20.0	3,153	2.2	2.2	11.1	
1953	160,146	157,912	31,398	19.6	19.7	3,504	2.2	2.2	11.2	
1954	176,238	173,971	34,543	19.6	19.9	4,206	2.4	2.4	12.2	
1955	175,571	173,249	40,016	22.8	23.1	5,214	3.0	3.0	13.0	
1956	190,056	187,361	40,247	21.2	21.5	6,226	3.3	3.3	15.5	
1957	198,800	201,500	43,073	21.7	21.4	6,177	3.1	3.1	14.3	
1958	191,500	207,522	46,580	24.3	22.4	6,548	3.4	3.2	14.1	
1959	195,700	212,410	45,507	23.3	21.4	6,748	3.4	3.2	14.8	
1960	214,000	238,297	50,691	23.7	21.3	7,555	3.5	3.2	14.9	
1961	227,000	.	57,013	25.1	.	8,092	3.6	.	14.2	
1962	210,000	.	63,800 ^a	30.4	.	8,906 ^b	4.2	.	14.0	
1963	236,000	.	67,700 ^c	28.7	.	10,163 ^c	4.3	.	15.0	

A = Official estimates.

B = Estimates by A. Kundu.

^aExpenditure on education made by the Ministry of Education and Social Development only. - ^bRevised Estimate. - ^cEstimate.

Source: British Guiana, "Quarterly Statistical Digest", The Statistical Bureau, Ministry of Development and Planning, Georgetown, March 1962: - Estimates made by the Ministry of Finance. - A. Kundu, The Economy of British Guiana: 1960-1975 (a long-term projection). Institute of Social and Economic Research, University of the West Indies, Kingston, Jamaica, September 1, 1962, page 3. - British Guiana, Report of the Treasurer, 1952 ff. - British Guiana, 1963 Estimates as passed by the Legislature, Georgetown, 1963.

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**Table XIb - National income and expenditure on education per capita
of population and expenditure on primary schools per
capita of pupils enrolled, 1952 - 1963
(at current prices)**

Year	Population ^a 1,000	National income per capita ^b \$	Expenditure on education per capita ^c \$	Pupils in primary schools ^d 1,000	Expenditure on primary schools ^c	
					1,000	\$
1952	446.2	326	7.07	78.7	2,557	32.49
1953	459.0	349	7.63	84.1	2,466	29.33
1954	472.2	373	8.91	89.0	2,978	33.46
1955	486.0	361	10.73	94.5	3,622	38.31
1956	500.0	380	12.45	102.1	4,632	45.37
1957	515.1	386	11.99	105.9	4,502	42.51
1958	531.9	360	12.31	111.7	4,743	42.44
1959	549.9	356	12.27	118.4	5,105	43.13
1960	567.0	377	13.32	125.3	5,411	43.17
1961	582.2	390	13.90	130.2	5,669	43.54
1962	598.4	351	14.88	135.3	6,312 ^f	46.64
1963	616.4	383	16.49	139.4 ^e	7,353 ^g	52.75

^aMid-year estimates inclusive Amerindians. - ^bCalculated from official estimates of National Income (series A in Table XIa). - ^cExpenditure on education from general budget made by the Ministry of Education and Social Development. - ^dNumber of pupils enrolled as on 31st of August. - ^eAn increase of 3 percent over preceding year assumed. - ^fRevised estimate. - ^gEstimate.

Source: British Guiana, Quarterly Statistical Digest, June 1962; Estimates made by the Ministry of Finance. - British Guiana, Report of the Treasurer, 1952 ff. - 1963 Estimates as presented to the Legislature. - Annual Report of the Registrar General, Annual Summary for the year 1957.

Table XIc - National income and expenditure on education per capita of population and expenditure on primary schools per capita of pupils enrolled, 1952-1963 (1952=100)
(at current prices)

Year	National income per capita of population	Education expenditure per capita of population	Expenditure on primary schools per capita of	
			population	pupils enrolled
1952	100.0	100.0	100.0	100.0
1953	107.1	107.9	93.7	90.3
1954	114.4	126.0	110.1	103.0
1955	110.7	151.8	130.0	117.9
1956	116.6	176.1	161.6	139.6
1957	118.4	169.6	152.5	130.8
1958	110.4	174.1	155.7	130.6
1959	109.2	173.6	162.0	132.7
1960	115.6	188.4	166.5	132.9
1961	119.6	196.6	170.0	134.0
1962	107.7	210.5	184.1	143.6
1963	117.5	233.2	208.2	162.4

For explanation see footnotes on Table XIb.

Source: See Table XIa and Table XIb.

Table XII - Expenditure on education from public funds, 1952-1963
1,000 W.I.\$ at current prices

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962 ^a	1963 ^b
Primary schools ^c	2,853	2,843	3,273	3,953	4,917	4,867	5,081	5,437	5,858	6,430	7,923	7,675
general budget	2,577	2,489	3,013	3,665	4,671	4,562	4,813	5,179	5,502	5,751	6,407	7,475
development budget	76	154	260	288	246	305	268	258	356	679	1,516	200
Government Training College	34	33	55	63	115	99	97	116	146	153	154	143
general budget	34	33	55	63	115	99	97	116	146	153	154	143
Secondary schools ^d	193	233	298	367	398	437	621	751	747	787	819	917
general budget	193	233	298	367	398	437	581	661	705	754	802	917
development budget	-	-	-	-	-	-	40	90	42	33	17	-
Vocational schools ^e	148	161	207	229	242	255	237	258	253	273	323	354
general budget	148	144	181	222	242	255	234	247	253	273	323	354
development budget	-	17	26	7	-	-	23	11	-	-	-	-
Special and reformatory education ^f	78	78	89	95	103	107	106	107	104	109	124	138
general budget	76	78	89	95	103	107	106	107	104	109	124	138
Higher education ^g	183	362	300	393	401	456	523	180	689	836	871	1,060
general budget	183	362	300	393	401	405	522	180	689	836	871	1,060
Miscellaneous expenditure:												
Ministry of Education ^h	137	129	141	185	199	245	261	244	280	377	366	1,096
general budget	137	129	141	185	199	227	261	244	280	366	366	410
development budget	-	-	-	-	-	18	-	-	-	11	-	686
other Ministries ⁱ	289	309	448	717	735	906	1,038	997	1,126	1,111	1,149	1,461
general budget	289	309	441	687	680	869	1,006	951	1,060	1,031	1,084	1,255
development budget	-	-	7	30	55	37	32	46	64	80	65	206
Total expenditure	3,713	3,948	1,811	6,002	7,110	7,372	7,984	8,090	9,201	10,076	11,729	12,844
general budget	3,637	3,777	4,518	5,677	6,809	6,961	7,620	7,685	8,739	9,273	10,131	11,752
development budget	76	171	293	325	301	411	364	405	462	803	1,598	1,092
Ministry of Education total	3,229	3,675	4,492	5,509	6,472	6,551	6,880	7,107	7,953	8,815	10,439	11,049
general budget	3,153	3,504	4,206	5,214	6,226	6,177	6,548	6,748	7,555	8,092	8,906	10,163
development budget	76	171	286	295	246	374	332	359	398	723	1,533	886
Other Ministries total	484	273	319	493	638	821	1,104	983	1,248	1,261	1,290	1,795
general budget	484	273	312	463	583	784	1,072	937	1,184	1,181	1,225	1,589
development budget	-	-	7	30	55	37	32	46	64	80	65	206

^aRevised estimate. - ^bEstimate. - ^cIncluding practical instruction centres. - ^dIncluding government payments to grant-aided schools.

- ^eGovernment Technical Institute and Carnegie School for Home Economics. - ^fEssequibo Boys' School and government contribution to Remand Home for boys, Belfield Girls' School, and towards education of blind children in Trinidad. - ^gContributions to the University of the West Indies, subsidies for student welfare abroad, students' loans and contributions various international education agencies. - ^hIncluding administration, i.e. Department of Education. - ⁱIncludes school medical and dental services, teachers' pensions and gratuities, maintenance of government schools, broadcast to schools, grants to public library, different vocational training schemes, Amerindian education, contribution for cultural development and expenditure on research.

Source: British Guiana, Report of the Accountant General, 1952 ff.; 1963 Estimates as presented to the Legislature; 1963 Development Estimates as presented to the Legislative Assembly.

APPENDIX D

NOTES ON ESTIMATES OF EMPLOYMENT PROSPECTS FOR SCHOOL LEAVERS

The estimates have been based upon the assumption that total labour demand would be met only by school leavers, i.e. that working habits of all other population groups remain unchanged. The percentage of school leavers (x) that could enter or could be trained for different occupational groups year by year has been calculated from the formula

$$x = \frac{1 \cdot m(a+b+c)}{n}$$

in which denote:

l = Number of persons in working force expressed as percentage of adult population (here represented by the age groups of 15 years and over);

m = Number of persons working in different occupational groups expressed as percentage of total working force;

n = Cohort of school leavers (here represented by the age cohort 15 to under 16 years) expressed as percentage of adult population;

o = Percentage of females in different occupational groups. Multiplication of " x^a " by " o " gives the percentage of girls (x_f) who may be expected to be absorbed by the various occupational groups; $x - x_f$ denotes the prospects for boys (x_m) to be employed or trained;

a = Percentage of annual wastage due to death and retirement;

b = Percentage of expatriates in labour force gradually to be replaced by local labour;

c = percentage of annual increase in labour force due to rising national income and rising labour productivity.

1. m , n , o represent data which have been deduced from the census of 1960; data denoted by a , b , and c had to be estimated. "A" could be more accurately determined from working life-tables, but without the necessary census returns we had to make a very rough approach. The value of "b" has been estimated from a special survey which we made to investigate the employment situation of graduates. From this survey it appeared that the percentage of expatriates among white collar workers is around 3.5. Assuming local labour could move into these jobs in the course of the next 15 years, the rate to be applied in our calculation turned out to 0.23 per cent. It has only been applied to white collar workers, since the number of expatriates in other occupational groups is nil or negligible.

2. Two sets of calculations have been carried out. "A" is based upon the assumption that national income will increase by 5 per cent and labour productivity will rise by 1.4 per cent per annum. "B" assumes the same rate of increase in labour productivity but a rise in national income of 3 per cent per year.

3. The individual rates applied and the results of the calculation are shown in the following table.

**Table XIII - Estimate of prospects for school leavers to be trained
for or employed in various occupational groups assuming
alternative rates of increase in national income**

a) Rates applied

Occupational group	l	m	n	a	b	A	C	B
						A	C	B
White collar workers	0.536	0.205	0.0386	0.02	0.0023	0.0522		0.0191
Farmers, etc.	0.536	0.350	0.0386	0.02	.	0.0150		0.0150
Craftsmen	0.536	0.062	0.0386	0.02	.	0.0518		0.0182
Labourers	0.536	0.266	0.0386	0.02	.	0.0383		0.0113
Service workers	0.536	0.117	0.0386	0.02	.	0.0520		0.0182
Total	0.536	1.000	0.0386	0.02	.	0.0360		0.0160

b) Results

Occupational group	o	x	xm	xf	as percentage of cohort		
					total	males	females
<u>Assumptions A</u>							
White collar workers	0.5146	0.2122	0.1030	0.1092	21.2	20.8	21.6
Farmers, etc.	0.2469	0.1713	0.1290	0.0423	17.1	26.1	8.4
Craftsmen	0.0030	0.0618	0.0617	0.0002	6.2	12.5	0.0
Labourers	0.1552	0.2152	0.1818	0.0333	21.5	36.7	6.6
Service workers	0.8367	0.1170	0.0191	0.0979	11.7	3.9	19.4
No chances					22.3	0.0	44.0
Total	0.3638	0.7775	0.4946	0.2329	100.0	100.0	100.0
<u>Assumption B</u>							
White collar workers	0.3495	0.1180	0.0768	0.0412	11.8	15.5	8.2
Farmers, etc.	0.1647	0.1713	0.1431	0.0282	17.1	28.9	5.6
Craftsmen	0.0023	0.0329	0.0328	0.0001	3.3	6.6	0.0
Labourers	0.1092	0.1157	0.1042	0.0115	11.6	21.1	2.3
Service workers	0.5879	0.0621	0.0256	0.0365	6.2	5.2	7.2
No chances					50.0	22.7	76.7
Total	0.2272	5.0000	0.3825	0.1175	100.0	100.0	100.0

APPENDIX E

QUESTIONNAIRE (P)

1. Name and address of employer: _____

2. Type of business: _____

(e.g. sugar factory, department store, insurance company)

3. Number of persons employed:

total: _____ males: _____ females: _____

4. How many of the total working force (as described under 3) are engaged in the production process? (This should include all employees from unskilled workers to professionally qualified staff such as draughtsmen, designers, engineers, but not personnel wholly or mainly engaged in administrative work. In the case of agriculture, persons employed in both field and factory should be included.)

(a) Manual workers:

total: _____ males: _____ females: _____

(b) Supervisory and managerial personnel (foremen and higher ranks)

total: _____ males: _____ females: _____

5. How many of the total working force (as described under 3) are wholly or mainly employed in administrative, commercial, financial, or other activities not directly connected with production?

(a) Lower and lower middle-grades (e.g. messengers, typists, clerks, book-keepers, sales personnel in stores):

total: _____ males: _____ females: _____

(b) Supervisory and managerial personnel (section heads or similar ranks and higher ranks):

total: _____ males: _____ females: _____

6. How many of the supervisory and managerial staff (as described under 4b and 5b) hold a university degree or a diploma of equivalent standard to a degree?:

total: _____ males: _____ females: _____

7. How many of the professionally qualified personnel (as described under 6) have a degree or diploma pertaining to: (1)

(a) Arts (e.g. languages, history, geography) _____

(b) Social or political science (e.g. economics, law, sociology) _____

(1) (Where a person holds more than one degree or its equivalent, he should be entered only against his main field of study.)

- (c) Natural science (e.g. mathematics, physics, biology, chemistry) _____
- (d) Agriculture _____
- (e) Engineering _____
- (f) Education _____
- (g) Medicine _____
8. How many of the professionally qualified staff (as described under 6) graduated 1957 or later? _____
9. How many of the professionally qualified staff (as described under 6) are expatriates? _____
10. How many posts do you consider require an academic or professional training of degree or its equivalent standard?
- (a) Total: _____
 - (b) How many such posts are vacant? _____
 - (c) How many are filled by persons not holding such academic or professional certificates? _____
 - (d) How many persons under 10c do you consider through experience have reached the standard of degree or its equivalent? _____
11. How many of the supervisory and managerial personnel (as described under 4b and 5b) NOT holding a university degree or its equivalent are expatriates? _____
12. How many supervisory and managerial posts which you consider do not require an academic or professional training of degree or its equivalent standard are vacant? _____

General remarks: concerning demand and supply of highly qualified manpower; requirements for education and professional training, advantages and disadvantages of in-service training; future requirements of qualified personnel, etc.

QUESTIONNAIRE (G)

1. Ministry: _____

2. Total number of permanent staff (including contract staff):

total: _____ males: _____ females: _____

3. How many of the permanent or contract staff are:

(a) Of the lower grade (e.g. messengers, watchmen)?

total: _____ males: _____ females: _____

(b) Clerical staff?

total: _____ males: _____ females: _____

(c) Administrative staff?

total: _____ males: _____ females: _____

(d) Professional staff?

total: _____ males: _____ females: _____

4. How many of the administrative staff (3c) hold a university degree or a diploma of equivalent standard? _____

5. How many of the professional staff (3d) hold a university degree or a diploma of equivalent standard? _____

6. How many of the graduates (as described under 4 and 5) have a degree or diploma pertaining to: (1)

(a) Arts (e.g. languages, history, geography) _____

(b) Social and political science (e.g. economics, sociology, law) _____

(c) Natural science (e.g. mathematics, physics) _____

(d) Agriculture _____

(e) Engineering _____

(f) Education _____

(g) Medicine _____

7. How many of the graduates (as described under 4 and 5) graduated 1957 or later? _____

8. How many of the graduates (as described under 4 and 5) are expatriates? _____

(1) (Where a person holds more than one degree or its equivalent, he should be entered once only against his main field of study).

9. How many posts designed for graduates are at present:

- (a) Vacant?
- (b) Filled by non-graduates?

10. How many of the graduates (as described under 4 and 5) carry out functions as whole or main part of their duties which bear no or little relation to their field of professional training? _____

11. Please, give details of each such graduate (as described under 10) in the following two columns:

Main field of study
(e.g. history)

Present duties
(e.g. administration)

12. Have policy decisions or plans of the Ministry given any indication as to the number of graduates required to implement plans?

- (a) By 1965: _____
- (b) By 1970: _____
- (c) By 1975: _____

13. How many of the non-graduates among the administrative and professional staff are expatriates? _____

14. How many administrative and professional posts designed for non-graduates are at present vacant? _____

General remarks: concerning demand and supply of graduates; requirements for education and professional training; future demand for highly qualified personnel etc.

APPENDIX F

SCHOOLS AND PUPILS

Table XIV – Growth of primary education
1876-1962

Year	Total population ^a	Percentage of total population enrolled in schools	Number of schools	Average annual enrolment ^b	Average attendance (percentage)	Number of teachers ^b
1876	220,000	7.8%	168	17,238	59.3%	280
1901	287,200	9.6	212	27,512	59.6	N.A.
1920	245,900	12.0	224	35,490	56.0	931
1939	336,300	16.4	242	55,296	74.6	1,299
1946	384,750	16.4	248	63,046	75.7	N.A.
1951	433,400	18.0	279	77,988	81.8	1,839
1954	472,200	18.8	293	88,999	82.0	2,107
1955	486,000	19.4	295	94,536	81.8	2,424
1956	500,000	20.4	302	102,083	82.9	2,548
1957	515,000	20.6	309	105,911	N.A.	2,682
1958	531,900	21.0	311	111,746	80.6	2,757
1959	549,900	21.5	327	118,358	82.0	2,920
1960	567,000	22.1	326	125,348	81.8	3,171
1961	582,200	22.4	337	130,202	84.3	3,181
1962	598,500	22.6	336	135,335	83.0	3,356

(a) Estimated population at middle of the year.

(b) These figures do not include the pupils or teachers in private i.e. non-aided schools or non-aided primary departments of secondary schools e.g. In December 1962 one group of schools, under Church of England control, in remote areas had an enrolment of 220 primary school children. There are a number of non-aided primary schools or departments in Georgetown for which no returns are made.

Note

(1) The introduction of compulsory education in 1876 made little impact on the percentage of total population enrolled in schools or on average attendance; there was a marked improvement only just prior to the Second World War.

- (2) Between 1946-1960 the school population doubled.
- (3) In the ten years 1951 to 1960 over 1,300 teachers were added to the teaching strength. (In the same period the Training College has trained only 300.)
- (4) New school building has lagged far behind increase in school population. (Extensions to existing buildings are not shown here.)

Table XV - Pupil population and accomodation in primary schools,
1961 - 1962

Area	Number of schools	Number of places available in August 1962	Average number on enrolment 1961-1962	Notes
TOTAL DEMERARA COUNTY	146(f)	61,316(f)	78,908	(f) Excludes 10 vacant schools with 7,700 places
TOTAL BERBICE COUNTY	73(k)	30,976(k)	35,953	(k) Excludes 7 vacant schools with 6,100 places
TOTAL ESEQUIBO	117(m)	18,613(m)	20,474	(m) Excludes 1 vacant school with 100 places
GRAND TOTALS	336(n)	110,805(n)	135,335	(n) Excludes 18 vacant schools with 13,900 places

DEMERARA COUNTY				
(a) Georgetown	25	16,895	19,279	
(b) Rural Demerara				
Greater Georgetown	11(a)	5,898(a)	7,711	(a) Excludes 1 school vacant with 800 places
East Coast	46(b)	14,728(b)	21,185	(b) Excludes 5 schools vacant with 4,600 places
East Bank	16(c)	6,832(c)	9,390	(c) Excludes 1 school vacant with 800 places
West Bank	12(d)	5,179(d)	7,136	(d) Excludes 1 school vacant with 600 places
River	18	4,780	4,992	
West Coast	18(e)	7,104(e)	9,215	(e) Excludes 2 schools vacant with 900 places
TOTAL RURAL DEMERARA	121	52,221	59,629	

Table XV (continued)

Area	Number of schools	Number of places available in August 1962	Average number on enrolment 1961-1962	Notes
COUNTY OF BERBICE				
(a) New Amsterdam	5	2,951	2,884	
(b) Rural Berbice	68(g)	28,229(g)	33,069	(g) Excludes 6 vacant schools with 5,700 places
Canje	9	3,817	4,012	
Canje Creek	2	165	91	
East & Corentyne Coast	26(h)	15,430(h)	19,335	(h) Excludes 6 vacant schools with 5,100 places
Corentyne River	2	353	211	
Berbice River	11	1,171	824	
East Bank	5	958	1,388	
West Bank	4	1,780	2,158	
West Coast	9(j)	4,351(j)	5,050	(j) Excludes 1 school vacant with 600 places
ESSEQUIEO				
Leguan Island	5	1,351	2,120	
Wakenaam Island	5	1,762	2,100	
River	13(1)	1,759(1)	1,750	(1) Excludes 1 vacant school with 100 places
Potaro	4	480	185	
Mazaruni River	7	931	590	
North & South Coasts	14	4,628	6,015	
Lakes	3	194	120	
Pomeroon	12	1,857	2,335	
N.W. District	4	750	889	
Barima	4	305	256	
Aruka	8	872	963	
Koriabo	4	206	168	
Kaituma	3	175	115	
Waini	3	172	148	
Barama	2	98	62	
RUPUNINI				
N. Pakaraimas	8	881	639	
North Savannahs	8	791	802	
South Savannahs	10	1,356	1,217	

Table XV (continued)

Notes

1. The figures for "available" accomodation are based on returns supplied by headmasters on a 10 sq. ft. per pupil basis. No proper survey has been carried out by competent persons. It has been confirmed that headmasters in making the measurements included in their calculations space used as headmasters/staff accomodation, toilets, woodwork shops, home economics centres, store-rooms, verandahs, etc.
2. When this table was prepared enrolment returns were not available on 53 schools in Essequibo area. Estimates were made and inserted which indicated later, when returns for 50 of the 53 schools were made available, that the total enrolment for Essequibo is 20,151. The Grand Total should read 135,012, that is 323 less than actually shown.

Table XVI - Enrolment of pupils in primary education by age and grade^a, 1961-1962

Age groups (years)	1st year		2nd year		3rd year		4th year		5th year		6th year		7th year		8th year		Total		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Under 6	2,706	1,688	31	52	-	3	-	-	-	-	-	-	-	-	-	-	2,737	1,743	4,480
6 and under 7	5,216	5,030	1,548	1,757	59	76	3	3	-	-	-	-	-	-	-	-	6,826	6,866	13,692
7 and under 8	4,756	3,537	2,752	2,831	857	1,081	55	73	4	2	-	-	-	-	-	-	8,424	7,544	15,968
8 and under 9 ^b	2,811	2,668	2,994	2,155	3,401	2,340	1,015	915	66	109	4	12	1	-	-	-	10,292	8,199	18,491
9 and under 10	466	330	1,816	627	2,498	2,245	2,866	2,067	2,553	844	623	194	10	7	-	-	10,832	6,314	17,146
10 and under 11	144	254	398	438	2,172	911	2,161	2,053	1,936	1,864	1,394	1,625	144	151	30	13	8,379	7,309	15,688
11 and under 12	62	49	107	136	801	2,270	3,127	2,783	1,847	1,946	1,578	1,552	400	419	203	196	8,125	9,351	17,476
12 and under 13	42	24	15	47	284	89	460	266	1,243	1,027	1,514	1,626	1,230	1,351	383	490	5,171	4,920	10,091
13 and under 14	23	15	10	11	88	69	435	291	530	808	1,316	2,941	1,274	1,228	1,866	1,486	5,-82	6,849	12,331
Over 14	10	-	21	11	45	28	149	233	408	306	428	386	1,184	2,878	2,358	2,090	4,603	5,932	10,535
Total	16,236	13,595	9,692	8,065	10,145	9,112	9,271	8,684	8,587	6,906	6,857	8,336	4,243	6,034	4,780	4,275	69,811	65,007	134,818 ^a

^aThe Table was prepared in March 1963, when all figures for 1961-1962 were available. There is a significant discrepancy of 577 between the Total here and the Total arrived at by the Mission.

^bThere are over 5,000 children between the ages of eight and nine years in their first grade at school.

Table XVII - Secondary school provisions by county and by rural and urban area,
 1959-1960 to 1962-1963^a
 (Excluding G.T.I. and Carnegie School)

County	1959-1960				1960-1961				1961-1962				1962-1963			
	No. of Schools		No. of Pupils	No. of Teachers	No. of Schools		No. of Pupils	No. of Teachers	No. of Schools		No. of Pupils	No. of Teachers	No. of schools		No. of Pupils	No. of Teachers
	Govt.	Govt. Aided			Govt.	Govt. Aided			Govt.	Govt. Aided			Govt.	Govt. Aided		
DEMERARA																
Georgetown (Urban)	2	6	4,890	208	2	7	5,683	246	2	8	6,309	268	2	8	6,513	263
Rural Demerara	-	-	-	-	-	1	144	8	-	1	148	8	-	1	164	9
TOTAL	2	6	4,890	208	2	8	5,827	254	2	9	6,457	276	2	9	6,677	272
BERBICE																
New Amsterdam (Urban)	-	1	476	18	-	2	777	25	-	2	867	31	-	2	981	32
Rural Berbice	-	2	702	26	-	3	1,161	39	-	3	1,289	41	-	3	1,302	46
TOTAL	-	3	1,178	44	0	5	1,938	64	0	5	2,156	72	0	5	2,283	78
ESSEQUIBO																
Rural	-	-	-	-	-	-	-	-	1	-	146	4	1	-	170	6
TOTAL	0	0	0	0	0	0	0	0	1	0	146	4	1	0	170	6
GRAND TOTAL	2	9	6,068	252	2	13	7,765	318	3	14	8,759	352	3	14	9,130	356

^aDoes not include Private Secondary Schools. These are concentrated in Georgetown with smaller ones dotted in New Amsterdam and rural areas in the three counties.

Table XVIII - Government Secondary Grammar/High Schools, 1962-1963

Pupil population, teacher qualifications, and teacher-pupil ratio

	Established	PUPILS			TEACHERS (includes Head)					Teacher-Pupil Ratio	Graduate trained Teacher-Pupil Ratio	Remarks
		Boys	Girls	Total	Graduate trained	Graduate	Non-graduate trained	Non-graduate un-trained	Total			
1. Queen's College, Georgetown.	1846	656	-	656	12	15	-	4	31	1:21	1:24	
2. Bishops' High School, Georgetown.	1870	-	560	560	7	13	4	4(2)	28 (2)	1:22	1:23	3 Teachers on leave; effective strength - 26 teachers; 2 part-time counted as one.
3. Anna Regina, Essequibo	1961	104	66	170	3	-	1	2	6	1:28	1:42	
		760	626	1386	22	28	5	10(2)	65 (2)	1:22	1:24	

APPENDIX G

TEACHER-TRAINING PROGRAMME TABLES

Table XIX - Training programme

A.

Teaching Strength as at 31.8.61.

Trained Teachers

Qualified Teachers

Unqualified Teachers

Pupil Teachers

	Male	Female	Total
Trained Teachers	430	331	761
Qualified Teachers	350	446	796
Unqualified Teachers	363	624	987
Pupil Teachers	310	327	637
	1453	1728	3181

Note 1. 150 Teachers were trained in 1961-1962, and 225 are undergoing training in 1962-1963.

B.

Wastage (Trained Teachers)

(a) Normal Retirement

(b) Resignations, Deaths, etc., 5% up to 1965, gradually decreasing to 1.5%

1961-1965	1961-1970	1961-1975
54	164	280
120	220	320
174	384	600

Note 2. It is assumed that no teacher will opt to retire at 55 years of age.

C.

Training Programme as on 1.9.63

For Primary & Secondary Modern

Wastage (round figures)

	Immediate requirements	Additional by 1970	Additional by 1975	Total
	2400	1600	500	4500
		380	220	600
	2400	1980	720	5100

Table XX - Overall trained teacher strength requirements**A.****For Primary and for Secondary Modern Schools (5 years 9 months - 16 year age group)**

	1965	By 1970	By 1975
1. Primary Schools	2720	2950	3420
2. Secondary Modern Forms	1260	1490	1630
	3980	4440	4870
Heads	300	400	450
TOTAL STRENGTH	4280	4840	5320

B.**For Primary and for Secondary Modern Schools (5-16 year age group)****i.e. on admission of all children reaching the 5th birthday on or before the first day of the first term of the school session.**

	1965	By 1970	By 1975
1. Primary Schools	3060	3320	3650
2. Secondary Modern Forms	1260	1490	1630
	4320	4810	5280
Heads	300	400	450
TOTAL STRENGTH	4520	5210	5730

- Note:**
1. Calculations in 'A' and 'B' based on pupil population figures given in Table 2 of the main report and footnote 4 to same.
 2. Calculations based on teacher-pupil proportion of 1:40 (excluding Heads) for both Primary Schools and Secondary Modern Schools.
 3. No calculations made for upper school forms of Comprehensive School i.e. for pupils over 16 years of age in these schools.
 4. Headmaster strength takes into account that there should be a rapid increase in numbers of heads required as more and more separate secondary modern schools are provided.
 5. Specialist teachers for Technical Handicraft subjects, Agriculture and Home Economics not included.

Table XXI - Teacher-training programme, 1963-1975
(Government Training College and Branches)

	ONE-YEAR COURSE			TWO-YEAR COURSE			Total Output	Total Staff	
	Admit	Available	Staff	Admit	Available	Staff			
Sept							(a)	(b)	
1963	400		20	180		9		29	
1964	360	400	18	180		18	400	36	
1965	340	360	17	180	180	18	540	35	Output by 1965= 940
1966	340	340	17	180	180	18	520	35	
1967	300	340	15	240	180	21	520	36	
1968	240	300	12	240	180	24	480	36	
1969	180	240	9	240	240	24	480	33	
1970		180		300	240	30	420	30	Output by 1970= 3360
1971				300	240	30	240	30	
1972				300	300	30	300	30	
1973				300	300	30	300	30	
1974				240	300	27	300	27	
1975				240	300	24	300	24	
		2160			2640		4800		
1976					240				
1977					240				

(a) Does not include contribution to be made by the College of Education Faculty of the College of Arts and Sciences, which should give in the period at least the 300 trained teachers required to complete the Programme. Any number it can give over and above this after supplying the needs of Secondary High and Comprehensive Schools should be used to lower the teacher:pupil ratio.

(b) Does not include Principal and 2 Deputy Principals; nor part-time staff.

Note: 1. As from 1970 the two-year Course may be, if necessary, divided into a day and evening course.

2. Excludes contribution of G.T.I. and Carnegie.

Table XXII - Projected number of teachers in all-age-schools resulting from different programmes of teacher training and different assumptions of school population, 1963-1975

1st September

Year	Assumption A					Assumption B	
	Trained teachers	Qualified teachers	Unqualified teachers	Pupil teachers	Total	Additional ^a requirements	Total
Suggested training programme							
1963	1,036	730	1,185	690	3,641	66	3,707
1964	1,398	625	1,282	645	3,950	145	4,095
1965	1,902	472	1,321	585	4,280	240	4,520
1966	2,384	330	1,123	550	4,387	263	4,650
1967	2,895	208	999	395	4,497	287	4,784
1968	3,371	125	863	250	4,609	313	4,922
1969	3,835	50	719	120	4,724	340	5,064
1970	4,235	36	569	-	4,840	370	5,210
1971	4,454	27	451	-	4,932	378	5,310
1972	4,731	19	276	-	5,026	386	5,412
1973	5,026	13	82	-	5,121	395	5,516
1974	5,211	7	-	-	5,218	404 ^b	5,622
1975	5,320	-	-	-	5,320	410 ^c	5,730
Current training programme							
1963	1,036	653	1,262	690	3,641	66	3,707
1964	1,226	611	1,403	710	3,950	145	4,095
1965	1,423	571	1,591	695	4,280	240	4,520
1966	1,622	529	1,551	685	4,387	263	4,650
1967	1,819	485	1,518	675	4,497	287	4,784
1968	2,020	447	1,477	665	4,609	313	4,922
1969	2,208	401	1,460	655	4,724	340	5,064
1970	2,391	365	1,439	645	4,840	370	5,210
1971	2,572	335	1,390	635	4,932	378	5,310
1972	2,752	307	1,342	625	5,026	386	5,412
1973	2,942	281	1,283	615	5,121	395	5,516
1974	3,141	255	1,217	605	5,218	404	5,622
1975	3,347	228	1,150	595	5,320	410	5,730

^aAdditionally required teachers for the pupils 5 to 5 years 9 months have been added to the group of unqualified teachers, except for 1974 and 1975 in the suggested programme. The other groups under Assumption B are of the same number as under Assumption A. - ^b287 still unqualified. - ^c94 still unqualified.

**Table XXIII - Trained teachers as percentage of all teachers
in all-age-schools, 1963-1975**
(1st September of each year)

Year	Suggested programme ^a		Current programme	
	A	B	A	B
1963	28.5	27.9	28.5	27.9
1964	35.4	34.1	31.0	29.9
1965	44.4	42.1	33.2	31.5
1966	54.3	51.3	37.0	34.9
1967	64.4	60.5	40.4	38.0
1968	73.1	68.5	43.8	41.0
1969	81.2	75.7	46.7	43.6
1970	87.5	81.3	49.4	45.9
1971	90.3	83.9	52.1	48.4
1972	94.1	87.4	54.8	50.8
1973	98.1	91.1	57.4	53.3
1974	99.9	94.8	60.2	55.9
1975	100.0	98.4	62.9	58.4

^aAccount is not taken of the specialist 'technical' teachers who will be trained out of the teacher-training departments of the Government Technical Institute and the Carnegie School of Home Economics.

FINANCIAL IMPLICATIONS OF TEACHER-TRAINING PROGRAMME AND COSTS

General

It cannot be too strongly stressed that the estimates and calculations in the following Tables would have to be kept under constant review and necessary adjustments made from time to time if the suggested Teacher-Training programme is accepted in principle for implementation.

2. Assumptions and bases

- (i) Certain assumptions had to be made about the number of qualified, of unqualified and of pupil teachers entering the Training programme year by year: these assumptions are based broadly on the proportions of the intake for training in the sessions 1960-1961 and 1961-1962.
- (ii) Programme "A" in the Tables shows the working based on the estimated need of teachers for the schools if admittance age remains at five years nine months. Assumption A, therefore, refers to this lower age limit.
- (iii) Programme "B" shows the working based on the estimated need if the admittance age is lowered to five years. Assumption B, therefore, refers to this lower age limit.
- (iv) Current programme refers to the present programme of 225 intake for a one-year in-service course of training.
- (v) Interim teachers are for the purposes of these Tables classed under "unqualified teachers".
- (vi) Sewing teachers are not included; neither are additional specialist teachers for "technical" teaching.
- (vii) In computing salaries, the calculations have been based on the average salaries of each specific grade of teachers as a whole in the estimates for 1963; allowance has been made (a) for the flow from one category to a higher category at appropriate points in the salary scale, (b) for accruing incremental costs and (c) for the appropriate entry into the salary scale of new entrants.
- (viii) All salary costs are based on the proposed salary scale.
- (ix) Salary costs are calculated for the calendar year with allowance made for the new intake into the trained ranks in September of each year.

3. Observations

- (i) The last intake of pupil teachers would be admitted in 1965 and would complete their three or four years as pupil teachers by 1969. It has been felt that social, economic and tactical reasons require that this be so.

- (ii) There will be some 900 in respect of programme B and 570 under programme A, unqualified teachers in the service in 1970 when the in-service course comes to an end. These should be almost entirely comparatively new entrants into the teaching profession, as the more experienced unqualified teachers will have been trained in the in-service course by this time. The unqualified teachers from 1970 onwards will have to attain the minimum academic qualifications requisite for entry to the two-year training course; if they wish to remain in teaching.
- (iii) The figures for trained teachers do not include the 40-60 qualified teachers, Class 1, who it has been recommended should undergo a summer course and pass into the trained category. No salary commitments are involved.
- (iv) Attention is drawn to Table (a) which shows the estimated increase in expenditure on Teachers' salaries over the period 1963-1975. Between 1963-1965 the actual increase resulting from the expansion of training facilities (i.e. 760 trained teachers as against 450 from the current programme) would be negligible. The real increase (salary-wise) is due to the natural growth of pupil population substantially augmented by reorganization which will keep pupils in school to the age of 16 plus (\$819,000); the extra cost of lowering the school age to five would be \$191,000. The accelerated and expanding proposed Teacher-Training programme would begin to make heavier and heavier demands on the budget from 1965 on, and would make an even greater impact as and when the "graduates" of the College of Arts and Sciences came into the profession at, for our present purposes, graduate rates. But still the greatest part of the additional salary costs would result from natural pupil-population growth and expanded school facilities and not from the proposed Teacher-Training programme.
- (v) Table XXVII shows the actual costs of the suggested Teacher-Training programme itself will be a little over \$3 million from 1963-1975, i.e. approximately the same amount as the extra expenditure on teachers' salaries for the manning of classes of the five year old children.

Table XXIV - Comparative calculation of salaries of teachers in all-age-schools, 1963-1975

(1,000 W.I.\$ at 1962 prices)

Year	Suggested programme			Old programme		
	A	B	Additional costs of B	A	B	Additional costs of B
1963	5,496	5,569	72	5,430	5,502	72
1964	5,884	6,042	159	5,905	6,064	159
1965	6,294	6,557	263	6,249	6,512	263
1966	6,758	7,046	288	6,529	6,817	288
1967	7,357	7,672	314	6,797	7,111	314
1968	8,066	8,409	343	7,098	7,441	343
1969	8,751	9,117	366	7,396	7,768	372
1970	9,572	9,972	400	7,712	8,117	405
1971	10,368	10,756	388	8,050	8,464	414
1972	10,986	11,385	400	8,364	8,787	423
1973	11,701	12,114	413	8,752	9,185	433
1974	12,501	12,939	438	9,160	9,602	442
1975	13,258	13,790	531	9,592	10,041	449

Table XXV - Changes in expenditure on teachers' salaries for all-age-schools, 1963-1975

(Increase (+) or decrease (-) in expenditure over 1963 calculated for the suggested programme B)

(1,000 W.I.\$ at 1962 prices)

Year	Trained teachers ^a	Qualified teachers	Unqualified teachers	Pupil teachers	Total staff	Changes in total expenditure due to		
						natural growth, reorganisation, and a volume of 225 newly trained teachers per year	admittance of pupils between the age of 5 and 5 years 9 months	suggested training programme B
1964	+ 452	- 139	+ 193	- 32	+ 474	+ 475	+ 87	- 88 ^b
1965	+ 1,019	- 300	+ 339	- 70	+ 989	+ 819	+ 191	- 21 ^b
1966	+ 1,963	- 542	+ 148	- 91	+ 1,477	+ 1,099	+ 216	+ 163
1967	+ 2,969	- 758	+ 38	- 146	+ 2,103	+ 1,367	+ 242	+ 494
1968	+ 4,089	- 906	- 82	- 260	+ 2,841	+ 1,668	+ 270	+ 902
1969	+ 5,169	- 1,040	- 210	- 370	+ 3,549	+ 1,966	+ 300	+ 1,283
1970	+ 6,288	- 1,065	- 342	- 478	+ 4,404	+ 2,282	+ 333	+ 1,789
1971	+ 7,208	- 1,081	- 462	- 478	+ 5,187	+ 2,620	+ 342	+ 2,225
1972	+ 8,027	- 1,094	- 639	- 478	+ 5,817	+ 2,934	+ 350	+ 2,532
1973	+ 8,982	- 1,104	- 855	- 478	+ 6,545	+ 3,322	+ 360	+ 2,862
1974	+ 9,990	- 1,116	- 1,025	- 478	+ 7,371	+ 3,730	+ 370	+ 3,271
1975	+11,082	- 1,130	- 1,253	- 478	+ 8,221	+ 4,162	+ 377	+ 3,683

^aIncluding headmasters. - ^bThe smaller expenditure due to the suggested programme in the beginning is due to the fact that trainees of the one year course have not to be replaced but stay in service.

Table XXVI – Extra Funds required for September, 1963 – December 1963,
to commence Teacher-Training Programme.

	W.I.\$
(a) Summer Course Expenses (Qualified Teachers)	
(i) Travelling expenses only i.e. initial move to and final move from Georgetown 50 (?) at \$5	250
(ii) Tutors' honorarium – say 300 hrs. at \$5	1,500
(b) Summer Courses for Interim Teachers: (at Georgetown, New Amsterdam, and Suddie)	
(i) Travelling expenses for initial move to and final move from Centre: 400 x \$3	1,200
(ii) Travelling expenses and subsistence for Tutors at New Amsterdam and Suddie	2,000
(iii) Tutors honorarium – say 3000 hrs. x \$5	15,000
(c) Correspondence by Radio Courses (April-September)	
(i) Stationery, etc.	500
(ii) Part-time tutors	3,000
(d) Teacher-Trainers	
(i) 2 Deputy Principals and 19 Lecturers at \$5,000 p.a.	35,000
(ii) Tutor-Travelling	2,000
(iii) Part-time tutors, say equivalent to 6 full tutors 30,000 + 3	10,000
(e) Equipment, stocking and furnishing libraries	10,000
	80,450

Note:

The extra funds required for September-December 1963 are approximately \$80,000.

External aid may assist in the form of teacher trainers; but the costs of evening classes for G.C.E. 'O' Level students are not included, as the scope and magnitude of such classes is as yet not known.

Table XVII - Estimated expenditure on teacher training based
on the suggested training programme, 1963-1975
(1,000 W.I.\$ at 1962 prices)

	Salaries of (a) Lecturers	Other salaries and wages	Total salaries and wages	Other charges	Correspond- ence courses	Total expenditure
1963	98,4	13,9	112,3	32,6	3,5	228,2 (b)
1964	171,8	15,9	187,7	21,0	5,0	213,7
1965	199,3	16,2	215,5	21,0	5,0	241,5
1966	204,3	16,5	220,8	21,0	5,0	246,8
1967	211,0	16,8	227,8	21,6	5,0	254,4
1968	212,8	17,1	229,9	20,0	5,0	254,9
1969	202,6	17,3	219,9	17,0	5,0	241,9
1970	187,6	15,4	203,0	17,0	5,0	225,0
1971	188,6	15,6	204,2	17,0	5,0	226,2
1972	191,5	15,8	207,3	17,0	5,0	229,3
1973	194,5	15,9	210,4	17,0	5,0	232,4
1974	181,2	16,1	197,3	16,0	5,0	218,3
1975	166,9	16,2	183,1	16,0	5,0	204,1

(a) Including Principal and 2 Deputy Principals - and assuming no external aid in the form of teacher trainers is made available.

(b) Including \$10,000 for teacher training courses and \$59,500 for maintenance of students provided for in the 1963 estimates but which have not been accounted for in the following years, the total includes further \$62,000 required for the period September to December, 1963 in addition to the official estimates for 1963.

APPENDIX H

**SALARY SCALES FOR TEACHERS IN GOVERNMENT AND GRANT-AIDED
SCHOOLS - PRIMARY, ALL-AGE AND SECONDARY**

I. Graduates

A4: \$3984 x 144 - 4848//5280 x 240 - 7680

1. Trained teachers with

- (a) Diploma in education (abroad) enter at - \$4272
- (b) Honours degree - 4416
- (c) M.A. or higher degree - 4560

2. Graduates (untrained) with

- (a) General degree enter at - 3984
- (b) Honours degree at - 4128
- (c) M.A. or higher degree at - 4272

Preceding teaching experience as qualified or unqualified teachers in recognized educational institutions should be recognized with one increment per year.

Senior masters and senior mistresses in government secondary schools should be placed at, and proceed further from, points which are two increments higher than those reached before their appointments to posts of responsibility.

All graduates including senior masters and senior mistresses proceed to the maximum of the scale, i.e. to \$7,680 p.a. Senior masters and mistresses on reaching the maximum are paid an allowance equivalent to two increments.

Conversion table

\$3984	4128	4272	4416	4560	4704	4848//
5280	5520	5760	6000	6240	6480	6720
6960	7200	7440	7680			

3. Headmasters (graduates) - fixed \$8160.**II. Trained teachers (non-graduates)**

\$1416 x 84 - 2088 / x 84 - 2340//2532 x 120 - 3012 // 3192 x 132 - 3984

All holders of a Training College Certificate and of a Certificate of Competency.

Class I enter the scale at	- \$1584 p.a.
Class II teachers enter the scale at	- 1500 p.a.
Class III teachers enter the scale at	- 1416 p.a.

Preceding teaching experience as unqualified or qualified teachers in recognized educational institutions should be recognized with one increment per year. Teachers additionally trained in a one year special course to teach crafts, home economics, or rural science, should be given one increment.

Conversion table

\$1416	1500	1584	1668	1752	1836	1920	2004
2088 //	2172	2256	2340 /	2532	2652	2772	2892
3012 //	3192	3324	3456	3588	3720	3852	3984

III. Untrained and unqualified teachers

$$\$864 \times 48 - 1248 \times 84 - 1416 //$$

Unqualified teachers can only cross the bar of \$1416 after 20 years satisfactory service, they will then proceed in qualified scale to \$2088 p.a.

Pupil teachers who at the end of their fourth year become unqualified assistants enter the scale at \$1008 p.a.

Conversion table

\$ 864	912	960	1008	1056	1104	1152	1200	1248/
1332	1416							

IV. Pupil teachers

First year	\$720 p.a.
Second year	780 p.a.
Third year	840 p.a.
Fourth year	900 p.a.
After fourth year	960 p.a.

V. Junior teachers

540 p.a.

VI. Interim teachers

With pupil teacher exam. end of second year	\$72 per month (\$ 864 p.a.)
" " " " third "	84 " " (1008 p.a.)
" " " " fourth "	92 " " (1104 p.a.)
Class III Assistants	118 " " (1416 p.a.)

Allowances

Grades	Head teachers	Senior teachers
A	144	(1) 60
B	96	(1) 36
C	48	-

Grade A = Schools with 500 and more pupils enrolled

Grade B = Schools with 100 to 499 pupils enrolled

Grade C = Schools with less than 100 pupils enrolled

APPENDIX J**OUTLINE OF A BUILDINGS PROGRAMME
BUILDINGS RESEARCH BUREAU**

The magnitude of the building and furnishing needs of the country makes imperative that the Ministry of Education and Social Development should not only initiate, but should itself undertake the control, operation and supervision of the building programme. It needs to set up and staff its own Building Research Bureau. This section should be part of the Planning Unit; in addition to preparing plans, specifications, inventories, calling for tenders and supervising construction, it should carry out research to ensure the greatest economy compatible with the greatest functional efficacy in school building. The Bureau should consist of a schools' architect, a civil engineer and at least five mobile draughtsmen - buildings officers capable of preparing drawings and with practical experience in supervising construction. One of these buildings officers should be stationed in Berbice and one in Essequibo. The economies which could be effected should alone be sufficient to obtain Government agreement to the scheme. In any case, the easing of this load from the Ministry of Works should obviate the necessity for the appointment of many new staff, or the purchase of a great deal of equipment.

2. The Bureau would undertake the following planning duties:
 - (a) the study, research and documentation of the building situation;
 - (b) interpretation of the educational policy and curriculum requirements in terms of building and equipment needs;
 - (c) the preparation of a building programme following upon this research;
 - (d) the drawing up of principles governing the technical and economic aspect of school buildings, furniture, etc.;
 - (e) the drawing up of building regulations;
 - (f) the preparation of standardized plans;
 - (g) costing of the programme with the Planning Officer;
 - (h) establishment of priorities with the Planning Officer;
 - (i) phasing the buildings programme;
 - (j) drawing up criteria for site selection;
 - (k) establishing principles and procedure for the award of contracts;
 - (l) establishment of procedures for submission and approval of the preliminary and final drawings and specifications;

- (m) analysis of labour - skilled and unskilled requirements - to avoid bottlenecks building up as a result of shortage of the right type of labour at a particular place at a particular time.
3. On the operational level the Buildings Research Bureau would be concerned with:
- (a) initiating action for acquisition of suitable sites in good time - the purchase of a site years before building is necessary may save a great deal of money, particularly in areas where land values are continually rising;
 - (b) preparation of drawings and specifications for specific projects;
 - (c) close supervision of work in progress;
 - (d) taking over of new buildings on completion.
4. Certain points may be considered further. The aim of the Bureau would be to ensure that schools of the right type and size are built in the right places at the right time, and that they are suitably equipped for the particular purpose for which they are intended. The Bureau has always to consider the question of costs: it will have failed to justify its existence if it does not achieve substantial savings by wise planning and judicious interpretation of research data while maintaining educational and health standards. Its motto should be maximum economy with maximum functional competence. The ultimate purpose of a school building is to serve educational needs and purposes. And it is for this reason that a school architect needs to be familiar with educational matters, principles and practices. If the school building is truly functional it will facilitate effective teaching and active learning and make the administrative and organizational work easier. The basic philosophy, the objectives of the school curriculum will in fact determine the character of the school building. Close co-operation between the Buildings Research Bureau and the administrators and the specialist subject officers of the Ministry is a prerequisite before any drawings and specifications are finalized.
5. The size of the buildings' bill in the next few years is such that the Buildings Unit must begin to work on and experiment with economy buildings immediately. The monumental school buildings recently put up cannot be repeated all over the country. Not only is this type expensive but it is not truly functional, flexible and adaptable enough. Admittedly these buildings were put up before the new policy was declared and consequently no provision was made for the programme of activities that the secondary schools of the future must include in their curriculum. In deciding extensions to these schools (and to others which may bear conversion) all the pertinent data and factors need to be deduced from the "Draft Curriculum Guide" and the "White Paper on Educational Policy". Buildings should be simple, modern and functional in design.
6. Economy, too, demands that the schools be planned primarily for the educational requirements of the school population but should also be suitable for community and adult educational and cultural projects and

activities. This is particularly important in the rural areas: there is little point in expending money on community centres when the school can provide similar facilities. An advantage which must not be overlooked - apart from the benefit of avoidance of duplication of costs - is that the school serving the community becomes integrated with the village life and fosters interest in the school and its activities. This is of particular importance at this time.

7. It is not only the school building that should be multi-purpose. The Building Research Bureau should go into the question of multi-purpose furniture, fixtures and fittings, multi-purpose rooms and workshops. In all its thinking it should call for the advice of experts or skilled persons in the various fields: This may be of particular importance in arriving at conclusions concerning the use of local materials and of local skilled labour to effect economies.

8. In the rural areas, and for primary education in particular, buildings must be cheap and easy to erect. At the same time allowance should be made in the plans for completion by stages as extension is required. In the urban areas the buildings should fit into their surroundings.

9. The "Santa" type of open building with certain modifications would appear to be cheap and easy to erect. Until such time as the local population acquires attitudes of greater civic pride and social responsibility, the upper part could be closed in with mesh. Louvred windows are a luxury and expensive to maintain. Such a building would require one lock-up room for equipment. Provided the overhang is big enough, problems of rain and glare will not arise. Light construction is possible in the rural areas. The building should be of the classroom type but the divisions need not be ceiling high. Chalkboards and low shelving should be included in the specifications as also built-in classroom cupboard space and school storage space.

10. As emergency measures the Mission would recommend:

- (a) the remodelling, modernization and repair of existing buildings. The country cannot afford to let buildings which can be saved for many more years fall into such a state of disrepair that they have to be demolished;
- (b) that the strain of overcrowding can be eased in many schools by the erection of simple multi-purpose shelters. All that is required is that a raised floor of beaten earth be laid down, and that a roof of aluminium or galvanized iron sheets or troulli grass be supported on uprights. This shaded multi-purpose shed would be used for physical education, could provide shade from the sun or shelter from the rain during the break, and offer space for open-air lessons for two classes. By judicious time-tabling the headmaster can rotate classes to this shelter and ease conditions in the main school building for many periods of the day. This out-door space can be, when circumstances warrant, easily and cheaply closed in to form classrooms or workshops.

11. In fact heads and education officers will have to give careful thought to this question of using shaded areas in the vicinity of the school for out-

door teaching by rotation. We commend the initiative of the headmaster, although we deplore the necessity for it, who procured the use of a "bottom house" for one of his classes. It may be that Government should for the time being consider the possibility of renting one or two houses in close proximity with suitable rooms for use by the Preparatory Division of the parent school. The advantages are obvious and the cost of rental small. When funds permit Government should build small schools (say two, three or four classrooms) to house only preparatory division classes at appropriate points between two large overcrowded schools which are one or two miles apart (e.g. as in some parts of the Berbice and Corentyne Coast). It cannot be too often repeated that it is absurd to talk of teaching on activity lines when children find it impossible to move out of their benches, and have no elbow room to write or do practical work.

12. Another most commendable effort by a headmaster to relieve the congestion in his school building is to be found at Perpetua Kawall Memorial C.M. School; the whole effort of the headmaster from the inception of the idea to its realization in the form of an airy, spacious, yet closed-in classroom has much to teach the responsible authorities. The classroom fits into the rural environment and cost very little indeed. It was easily and quickly erected by a few interested parents, teachers and by senior boys for whom it was part of their practical education.

13. Efforts should be made, too, to provide more of the existing schools of the hall-type with screens or partitions to afford some privacy to each class. These dividers would serve also as wall space for display of visual aid, children's work etc. This is something which could be undertaken by local interested groups or parent-teachers' associations.

14. The prerequisite for reduction in costs is sound planning and intelligent forecasting. This applies not only to buildings but also to furniture and equipment and other supplies. Costs can be lowered by placing bulk orders, and perhaps by placing the orders regionally wherever the materials and labour are available locally. Orders for teaching aids and for apparatus and equipment for science teaching and for workshop instruction can be kept within reasonable limits by supplying schools with lists and specifications of equipment, etc. which may be required. Further economy can be effected by encouraging the use of improvised apparatus and equipment. Teachers may be trained in the construction of improvised apparatus and kept informed by the responsible officers of work in this field done throughout the country.

15. The Mission may be permitted to direct the attention of the Planning Unit and Buildings Research Section to one or two details which may make for savings in building costs and in time and effort of all concerned.

- (i) Population mobility trends and population growth rates in specific areas need to be closely watched.
- (ii) The overall long-term economic development plans of the Government have to be analysed in terms of location, siting and size of a school.
- (iii) Plans and contracts should include all facilities a school or

classroom should have e.g. approach ways, levelling of school grounds, drainage system, chalkboards on walls, shelving, storage and cupboard space, display boarding or space, etc., etc.

- (iv) To avoid delays and mistakes all interested authorities and officers should co-ordinate their work. (Building regulations usually involve other Ministries administrative procedures must be streamlined.)
- (v) Avoid use of expensive materials and fittings.
- (vi) The headmaster's room - no need for a huge room should be at the nodal, control point of the school with the staff room next to it.
- (vii) False economy should not be practised; initial proper treatment of materials and regular maintenance may save considerable sums later.
- (viii) Local authorities, communities, parents' associations, individuals and organizations - all need to be tapped and involved. (Donation of land, clearing of land, interior, decoration, maintenance and repairs - in all these fields and others individuals and communities may be drawn in.)
- (ix) The whole question of relative costs when a job is carried out by labour and when given out by contract needs thorough investigation.
- (x) No building should be erected, no extension made, no alteration undertaken without the approval and guidance of the technical officers of the Buildings Research Section. This is particularly important in self-help or aided self-help projects. Such assistance should be promptly given, especially by way of speedy production of simple plans and intelligible specifications and work directions.

We advise that the British West Indies Development and Welfare Organization be requested to supply literature prepared by its Research Unit on School buildings in the West Indies. Pending the more detailed, authoritative study to be made by the Buildings Research Bureau the Mission ventures to put forward the outline of a Buildings Programme it has prepared, based on data available at the Ministry and data it has been able to assemble and process itself.

Aims and assumptions

16. This paper attempts:

- (a) to indicate what the present situation is as regards accommodation;
- (b) to assess building requirements for 1963-1975;
- (c) to break down the requirements for primary school places and for secondary school places separately;
- (d) to make recommendations for replacement of present buildings on the verge of collapse;

- (e) to indicate principles in deciding where new buildings should be located;
- (f) to recommend where auxiliary buildings e.g., workshops, laboratories will be required;
- (g) to indicate requirements of furniture, equipment, aids, etc.;
- (h) to cost the requirements;
- (i) to determine factors to be considered in arriving at priorities; and
- (j) to suggest the phasing of the building programme.

The findings and recommendations are based on the following policy declarations:

- (a) Admittance of all children into schools who have reached the age of five or before the first day of the first term of the Xmas session. (In this connexion the Mission wishes to make a strong recommendation that admission should be confined to the first fortnight of the first term except on authorized transfer. The present practice of admitting youngsters at any time during the year creates havoc with school programming and with teaching efficiency in the preparatory division. It is a matter of educating public opinion to the necessity of prompt enrolment of their children. Only in cases of serious obstacles having prevented enrolment - grave illness, inaccessibility - should enrolment be permitted and then only after investigation and authorization by the education officer. The decision should not rest with the head teacher.)
- (b) Provision of free secondary education for all up to 16+.
- (c) Secondary education shall give an education consonant with the abilities, interests and aptitudes of the pupils, and take cognizance of the needs of the economy of the country as a whole and of the region in particular.

18. Certain assumptions have of necessity been made:

- (i) that no child is admitted into a school unless he fulfils the strict requirements of the law or of regulations or of directives for admittance;
- (ii) that the number of 12-16 year olds in secondary grammar schools will be 10,000 each year up to 1975. This assumes that the ephemeral private secondary schools will cease to attract pupils;
- (iii) that 90% of the children in the 5-16 age range will enrol; (i.e. allowances made for handicapped children, non-enrolment for other reasons, and a small percentage of enrolment in private schools);
- (iv) that Government appreciates its responsibility to provide and make

accessible places for the full enrolment and not simply for average annual enrolment or worse still for average annual attendance;

- (v) that children are not allowed to stay on after the end of the session in which they reach their 16th birthday;
- (vi) that space allowance is 10 sq. ft. for the primary school and 12 sq. ft. for the secondary school (when separately housed);
- (vii) that the Building Programme will be appropriately adjusted from time to time as new data comes to hand or as circumstances make necessary.

The present situation

(Figures given are those obtaining at the end of the 1961-1962 session, the school population figures include only those children enrolled in the then Government and Government-aided primary schools, now called all-age schools.)

19. The alarming shortcomings and inadequacies have already been brought out. A few buildings put up in the last six or seven years, Greenwich Park and Annadale type, are well built, on the whole well designed, and well appointed but the Annadale type is too costly and contains unnecessarily lavish details. The Greenwich Park type is a more suitable building; economies could be effected here too, however, without detracting from its functional suitability. Provision has not been made in either of these two types of construction for practical subject workshops or centres. Eighteen schools of the Annadale type were still under construction or just completed and vacant in August 1962. Consequently they make available in the 1962-1963 session when furnished and equipped some 14,000 places and would help to relieve the congestion in their immediate vicinity.

20. The information available from annual returns submitted by headmasters estimates the number of places in all-age schools as 97,000 (excluding the vacant schools - see Table XV)(1). It is known that this figure is much too high as the computation was made on unrealistic bases. A fresh survey is being made with clear instructions to headmasters as to the manner of making their calculations. The calculations, consequently, of this paper would have to be revised when fresh data is processed. A sample survey, in the meantime, indicated that the headmasters' figures of accommodation are as much as 10% too high, and in some cases higher. We shall, therefore, deduct 7,000 places from the figures given in the annual returns. Consequently for the purposes of this paper we shall assume that the following places were available at the end of the 1961-1962 session.

90,000 in schools operating

14,000 in new schools not yet opened or still under construction

Total 104,000

Deduct 9,000 (for places to be renewed - see Part V)

- (1) The number of places available was afterwards found to be 110,000. The error of 13,000, however, is offset by the fact that the census returns now available show the number of children in the age group 5-16 as 10,600 greater than our figure. Consequently our figures of places necessary are 2,400 more than required for the 5-16 age range pupil-population.

21. The practical implications of the various policy decisions for planning purposes are:

- (i) The school age is extended both at the bottom and at the top i.e. from 6-14 to 5-16 or 17, with consequent substantial additions to the school population, and all that that implies in terms of classrooms, furniture equipment.
- (ii) More space is required for effective teaching of older children and more expensive aids for the new horizons to be aimed at.
- (iii) Teaching spaces alone are no longer sufficient; complementary workshop facilities are essential if the diversification of educational provisions is to be effected. Many more laboratories, craft and home economics centres, agricultural teaching facilities specialist teaching rooms will be required, fully equipped, furnished and tooled. Failing to provide these would lead to defeat of the objectives of the educational policy, neither would the education provided take into account the abilities, interests and aptitudes of the pupils, nor be oriented towards the fulfilment of the overall economic and social development plans of the country in general, nor be of value to the real needs of the area in which the school is situated in particular.

Rebuilding

22. In addition to the new places required account must be taken of places which have to be renewed because the present buildings are ready for demolition. Unfortunately this is a field which requires a detailed survey by a competent technical officer. Such a survey has not been carried out and urgent priority should be given to it if the Planning Unit is to make sound plans and prepare intelligent programming. The age composition of schools is given in Table XXXI but this in itself is of little value in that it has been observed that the condition of a school in this country is not primarily dependent on age. Initial building construction, adequacy and regularity of maintenance against climatic and termite depredations are equally important factors. Furthermore some of the structures which are shown as being comparatively new are small, simple buildings, put up in remote areas where a certain movement of the sparse population is to be found, sometimes necessitating the uprooting and re-erection of the school building, sometimes the erection of a new simple structure.

An attempt was made by non-technical personnel to determine the schools which needed to be totally replaced. For lack of better data this survey, inadequate and limited as it is, must be taken as the basis of replacement places. It is emphasized that the survey is incomplete, it did not cover the whole country (in particular Georgetown is not included). From the figures given in this partial survey (Table XXIX) there would appear to be some 8,500 places to be renewed, and for working purposes we shall put this number at 9,000 and assume that no more schools are condemned between 1963-1975(!)

23.

Table XXVIII – Overall requirements of additional places**A. Overall requirements of primary school places by 1965, 1970, 1975**

	1965	1970	1975
Pupil population 5-12	129,000	140,000	154,000
Deduct 10% for non-enrolment	12,900	14,000	15,400
Pupil population enrolled	116,000	126,000	138,600
Deduct places available 1962-1963	95,000	95,000	105,000
New places required	21,000	31,000	33,600

B. Requirements of secondary school places by 1965, 1970, 1975

	1965	1970	1975
Pupil population 12-16	63,000	73,000	79,000
Deduct 10,000 at grammar schools	10,000	10,000	10,000
Deduct 10% for non-enrolment	5,300	6,300	6,900
Pupils enrolled	47,700	56,700	62,100
Deduct places available 1962-1963	Nil	Nil	Nil
New places required	47,700	56,700	62,100

C. Additional classroom requirements by 1965, 1970, 1975

	1965	Additional	Additional	Total
		1966-1970	1971-1975	1963-1975
Primary school at 50 pupils to classroom	420	200	250	870
Secondary school at 40(!) to classroom	1,190	230	130	1,550
	1,610	430	380	2,420

24. In order to avoid complicating the issue at this stage, it will be observed that the new "Annandale" type of schools have been considered as providing primary school places. In fact most of these schools may well be used for second-

ary education; as and when they are so used the overall figures given above should be amended.

25. Certain observations need to be made on these tables and conclusions drawn:

- (a) By 1965 the total accomodation now available in all-age schools will be 21,000 places short for the children of the primary school age alone.
- (b) By 1970, even if all the present buildings were used as primary schools, we should have returned exactly to the present (1963) conditions in the schools, and there would be not a single place available for the 56,700 children of secondary school age.
- (c) It is clear, that even if the funds were forthcoming, it would be impractical to assume that the building of 1,610 classrooms (+ ancillary spaces and practical-subject spaces), could be attempted between 1963-1965; research, planning and administrative work entailed could not be done in time for the operational personnel to be able to mobilize materials and skilled and unskilled labour to complete erection in the given time. Consequently suggestions for programming will cover the period 1963-1975.

Ancillary spaces and practical subject teaching spaces

26. We have been concerned up to this moment with providing each child with classroom space, but a school contains a great deal more than classrooms. Staff accomodation, storage space, toilet and wash-room facilities are essential. As these, however, are included in the costing of the school building as a whole, this requirement need not detain us here.

27. But the secondary schools to be erected will need practical subject teaching spaces, craft shops, home-economics laboratories, natural science and rural science laboratories, technical drawing rooms, etc. Which of these and how many spaces of each kind any particular school will require will depend on the location of the school, the number of the school population it is to serve and its position relative to other secondary and secondary comprehensive schools in the area. It is difficult, therefore, with information now available to make any firm forecasts as to the total number of practical subject spaces that will be required. Although we may safely assume that there will be no wastage of pupil population between the ages of 12-15 (i.e. over the three-year basic common course), there is little evidence to guide us as to the extent of wastage to be expected in the upper school. This is one more reason for the careful decisions on where each comprehensive secondary school is to be located and on its size. In general a comprehensive school should be sited where it can best serve its feeder schools; at the same time it should be possible to make up the wastage in the upper forms by transfer of children, particularly into the fourth form, from smaller secondary schools outside the immediate catchment area of the comprehensive school. This would mean considerable saving in centralizing

at least the more advanced practical subject facilities. From the educational angle, too, a one-stream entry secondary school can hardly be viable as a comprehensive school. Consequently, we believe that thinking and planning must proceed along the lines of strategically situated comprehensive schools with at least a three-form entry, and a number of smaller tactically-situated secondary schools providing the first three-year course, and in this connexion it is recommended that, for economy and effectiveness of building, of equipment and of staffing, no separate secondary school should be erected for less than a two-stream entry i.e. the smallest separate secondary school should have six classrooms (for 240 pupils over a three-year common basic course). These latter would require only one multi-purpose craft shop, one multi-purpose home-economics laboratory, and one of the classrooms equipped for general science.

28. On the primary school side, it is strongly recommended that new buildings should in the main be of the small six-classroom type (i.e. one classroom per class) and sited in or near populated areas where the nearest schools are two or three miles apart. This obtains, in particular, along the coast; the overcrowding could be relieved immediately by the erection of a school to take off the children who walk long distances down the main road. There are other obvious advantages especially in the "involvement" of a community in its own school project.

Requirements

29. In calculating roughly the cost of the Secondary Schools Building Programme, we have to assume that a certain number will be equipped with the full practical room facilities and others with practical facilities for the first three years' work only. For lack of the necessary data certain assumptions will have to be made based on the incomplete and inadequately documented survey referred to earlier, on known population trends, and on personal investigations and observations along the coastal belt. (A deciding factor, too, is the problem of communications; as and when the communications are improved in the country, the question of transportation of pupils to centrally placed schools may be considered and necessitate re-thinking on the Buildings Programme. This in fact is one argument in favour of giving priority to the erection of the smaller secondary schools rather than to primary schools; the former can be easily adapted for primary school purposes, if they are intelligently sited, when transportation of pupils to the centrally located comprehensive schools becomes feasible.)

30. On this basis, it is assumed that between 1963-1975 the 1,550 teaching spaces required for secondary school work will be allocated as follows:

40 x 20 classroom school (four-stream entry)	=	800 classrooms
30 x 15 "	=	(three-stream entry) = 450 "
50 x 6 "	=	(two-stream entry) = 300 "
		Total 1,550 classrooms

It would seem reasonable to make allowances for wastage and this would have been done but for the fact that a recent policy decision has been taken for which allowance has not been made. Pupils will be allowed to stay on in school to the end of the school session in which they reach their 17th birthday. Consequently, we assume for the purposes of this paper that the wastage will be offset by the pupils staying on.

31. The requirements for practical workshops, etc., (equipment, tools apparatus, not considered here) will be built to house groups of 18-24:

(a) For the four-stream entry school:	3 laboratories	total of 120
	3 workshops	" " 120
	3 home-economics	" " 120

(one of the ordinary classrooms would be equipped for general science teaching of the younger pupils)

(b) For the three-stream entry school:	2 laboratories	total of 60
	2 workshops	" " 60
	2 home-economics	" " 60

(one of the ordinary classrooms would be equipped for general science teaching of the younger pupils)

(c) For the two-stream entry school:	1 workshop	total of 50
	1 home-economics	" " 50

(one of the ordinary classrooms would be equipped for general science teaching).

32. One item has not been considered, and that is sites. The building of over 200 schools, some big, some small, is envisaged in this programme and that means the acquisition of 200 sites some big, some smaller, some in the rural areas and some in the urban areas. Costs here would have to be worked out when decisions have been made by planners on location, approximate siting and appropriate area of site, and value of real estate in those areas estimated.

33. One or two points on sites come to mind; donation of sites must be actively stimulated; Government land all over the country should be plotted and representations made for reservation of suitable plots or parts of plots; possibly some government land could be exchanged for privately-owned parcels; a few schools have large enough play spaces for part to be used for the erection of the smaller type of school -if the location is also suitable. (A propos, we have been somewhat surprised to find schools with restricted play space using the larger part of it for a school garden. First things first.)

34. We have been particularly interested in the activities of some communities as proof of the Ministry's correct estimate of the fund of good will that is waiting to be tapped. We presume to take one example to illustrate a few points. The decision by one community to take down the old

disused school and to use the materials to erect practical subject rooms is an indication of savings that can be effected by looking at details, examining possibilities, collecting material and mobilizing community interest and skills. We hope that such an effort will not only be encouraged but also guided: The new building must be erected in accordance with plans prepared by technical experts, and the construction itself must be directed and supervised, if the materials are to be wisely and economically used and community enthusiasm and effort not frustrated.

35. Whatever the response of communities to the self-help and aided self-help campaign, the major part of the programme, the responsibility for the construction of the big schools, will remain with Government. Communities cannot undertake large-scale building without protracting inordinately the process of construction. The real savings in the main Buildings Programme will come primarily as a result of detailed research, intelligent planning and mobilization of the specialist resources and skills of the Ministry's officers advising at all stages. The Mission has been interested (and concerned) to find laboratories, for example, put up, furnished and equipped for just over half the price Government pays for similar buildings, admittedly more imposing but certainly not more efficient for the purpose.

Respite

36. The Mission believes this is the opportune moment to put forward a positive contribution to the question of solving the immediate building problem, a solution, too, which would make for immediate improvement in the quality of education provided by the increasingly hopelessly congested schools. The solution will permit Government to spread building capital costs over a greater number of years and consequently decrease substantially the vote required in any one year. We must remember that we have not in our costing included the substantial sums that will be required for sites. We must remember, too, that if the present situation continues almost all schools will by 1965 be overcrowded by 100%, some by 150% and more. No educationist can accept that education of any kind is possible in such circumstances.

37. We refer, of course, to the double-session system. We recommend in the strongest possible terms that it be applied as a **TEMPORARY** measure in the **LAST RESORT** where there is no alternative. And we do not hesitate to make this recommendation despite all the abuse and criticism levelled at a similar suggestion some years back. We do not hesitate because we believe that in a state of **EMERGENCY** unpalatable facts will be faced squarely; reason can and will prevail. The public will be prepared to accept some disruption of acquired habits and to put aside self-interest, when the children's future is at stake. What are the alternatives? higher taxation? or a complete breakdown of educational provision? We believe that the first is more unpalatable; the second will disillusion people even more when realization of the truth hits them. The Government has a responsibility to the country and to the people; it has a responsibility to itself to fulfil its own pledge to provide educational opportunities.

38. The Nicol's recommendation met with furious opposition for two reasons:
 (a) The situation was never explained to the people honestly and clearly.

- (b) The workings of the shift system were never explained; various sections of the public reacted with hostility on entirely false assumptions and conclusions as to how the system affected their sectional interests and convenience.

The opposition, of course, tried to find general educational considerations to support their arguments, and these would have been valid arguments if the premises had been valid.

39. It is a sobering thought to remember that the Nicol's Committee considered the accommodation situation so desperate ten years ago as to propose the shift as a solution. How much worse is the situation today, despite the brave efforts made by the extended building programme of the last decade.

40. The Mission will be permitted to make more explicit its views on the double session system. It starts with the premise that school plant must be used to the greatest possible extent to cope with the demand when time and money are in short supply. It is a simple economic principle that given shortage of capital and high demand, fuller utilization of capital investment must be made. Operational costs may be slightly increased thereby but the capital, plant in this case, serves double the output.

41. We are concerned with the application of economic principles, but we are equally concerned with measures to ensure qualitative improvement in the educational provisions of this country so that the full potential of its human talent and skills can be realized. This angle may have a greater impact and positive response when the case is presented to the public. It is a straightforward question: do we prefer our children to have a real chance to reach the limits of their potential? or do we choose to sacrifice the youth in order to avoid some discomfort to ourselves and our established ways of thinking?

42. The shift system in 1952 was attacked on the following scores:

- (a) It meant a curtailment of hours and therefore less education for the children.
- (b) Teachers could not possibly stand the strain of two shifts; it would mean less efficient teaching.
- (c) The teaching profession would be diluted by the admittance of a great number of unqualified teachers. (This contradicts (c); the mis-understanding seems to have arisen by the confusion of another of the Nicol's proposals with the "shift" proposal.)
- (d) The hours away from school would be fraught with danger for the children.

43. The attack was emotional and sometimes inspired by motives of self-interest. No attempt was made to clarify the issues at stake, allay misapprehensions or propose constructive methods of dealing with the problems involved.

44. Before dealing with these criticisms let us put forward our explanation of what is meant by the double session system, how it works and how some of the difficulties inherent in such a system can be met.

- (i) In the first place, the measure is, must be, and will be declared to be, a TEMPORARY measure. It will be applied only when every other possibility of solving over-congestion has been explored and found inadequate. Areas where it is applied as a last resort will be given due consideration for this sacrifice when priority for new building is being decided.
- (ii) Secondly: one school operates in the morning session (say 7.30 - 12 noon) and a separate school operates in the afternoon (say 12.30-5 p.m.). This means there are two sets of teachers and two separate headmasters: two schools using the same plant, facilities, play-space, furniture, equipment, etc., but with separate entities. If possible there should be a separate head's room or at least separate storage space. That and slight raising of overheads - cleaning, wear and tear - are the only extra costs, apart from the part-salary of the extra head. It would not be the full salary as the bloated school which has been divided would not require all the responsibility - post holding officers it had previously, one of whom may well be the new head. Allowance has been made for the additional heads in the salary implications of the Teacher-Training Programme. The original head's personal allowance would have to be safeguarded, although any new appointee would get the allowance obtaining for the size of the school as it is on or after division. No new staff would be required since the old staff would be coping with the same number of children but divided into two groups. Of course, there may be difficulties but not insuperable ones. Harmonious relationship between the staffs will depend very much on the personalities and efforts of the two headmasters. They must learn to collaborate and co-ordinate their work in the interests of the children. Wise appointment of people who can work together is a prerequisite.
- (iii) Thirdly: practical work centres, where there are such, would cater in the mornings for the pupils of the afternoon school and in the afternoons for the morning school. This means that if neighbouring schools co-ordinate their time-tables the practical facilities will be available to double the number of pupils that can be accommodated at present. Where there is no demand the practical work can be done on the present basis. Doubling the capacity does mean, doubling the practical subjects staff. It is a worthwhile expenditure and in the end will be a saving as it will obviate the immediate necessity for new centres in some areas.
- (iv) Fourthly: the school population can be divided either horizontally or vertically, i.e. the division may place all children above a certain class in one school and the remainder in the other school; the division is roughly by age groups. Alternatively each school takes approximately half the number of children in each class of the original school, say one of each group of two parallel

streams, and consequently remains an all-age school. For many reasons, we advise that the division should be a horizontal one, the children being separated at the end of the fourth class. The old school, then, breaks into a primary school proper, and a secondary school proper. This fits into the educational policy and simplifies and eases reorganization in terms of administrative efficiency and particularly of financial repercussions.

- (v) It is possible to alternate the morning school and afternoon school on a monthly or term basis. This alternation can be disconcerting not to say disruptive. Generally speaking it is advisable for the primary school to attend in the mornings and the secondary in the afternoons. (The implications of this on the In-Service Teacher-Training Programme would have to be considered. In most cases the double session would assist the teachers to undergo training with fewer inconveniences provided that trainees were always put on the staff of the morning session school during their period of training at least.)

45. Some of the criticisms brought against the Nicol's proposition have been answered, we hope, in the previous paragraph. There will be no strain on the teachers; in fact, they will work half-an-hour less a day if the times suggested are adopted. There is no question of dilution of the teaching body. In any case, this was a strange argument to raise when at that time the percentage of trained teachers in the teaching body was less than 20%. It could hardly have been diluted more.

46. The charge of curtailment of hours appears to the uninitiated to be well-founded, since the children would lose half-an-hour of retention at school a day (on our working day). The charge is unwarranted. It should not be a hard task to convince the simplest layman that 4½ hours of learning in comfort, in a comparatively noiseless, congestion free, happier atmosphere is of greater value educationally than five hours, nay eight hours, in cramped, noisy, frustrating surroundings. We are certain that teachers, who should be the best judges, will have no doubts about this, and can bring convincing arguments based on personal experience and on modern educational principles and practices to allay the fears of parents. And for the teachers' part, we cannot believe that any teacher would put his personal convenience and comfort before his professional integrity and national duty. To the teacher, the system can offer great personal satisfaction and reward. He can work more effectively, and exploit his professional skill; he can be assured of more opportunity of a successful end-product to his untiring efforts; it will mean less galling frustration, less desperate short-cuts, less nervous exhaustion. Where there are practical centres the children of the senior divisions would actually be working a longer week, as the practical work would be additional to the 4½ hour day. The younger children of the preparatory division would be in school for the same time as now. Only four classes, therefore, would on the surface of it be losing the half-hour. The charge of curtailment of education can be rebutted where there is goodwill without difficulty. In any case if it is felt that it would be advisable to make up for the apparently lost time, the school year could be lengthened. Two other suggestions may be made here. If parents are really anxious to see that no time is lost, they may be encouraged to ensure their children's punctuality and regularity of attendance at school. More

education is lost through unpunctuality and irregular attendance, with far more far-reaching ill effects, than through cutting down the school day by half-an-hour. Secondly, teachers may be encouraged to use more efficient and speedier methods of calling the roll, so that another ten minutes may be gained. We must remember, too, that the internal administration of a comfortably housed school eats up far less time than is required to get an overcrowded school into gear.

47. We come to the fear that children out of school for part of the day may fall into evil ways. We understand this fear, although we do not believe it fully justified. On first principles it must be pointed out that children are sent to school primarily and essentially to be educated. If teachers are meant to be nothing but guards and supervisors (put more politely – baby sitters) there is no reason why they should be trained as teachers; there is no reason why a child should not be kept in his guard house until twilight. The child is in school for five hours only; we suggest this be made 4½ hours so that the school can serve the community better by giving a better education, and a better education may mean less desire or inclination on the part of the child to go astray. It is possible that a happier atmosphere in the school with, for example, the application of better active teaching techniques in favourable surroundings, may lead to more regular attendance; it is a matter of conjecture, but maybe worth while the study of research workers, to ascertain to what extent truancy, or irregular attendance, particularly in the towns, is connected to delinquency or leanings towards delinquency.

48. It has been asserted that children will be at home or be going home to find mothers and fathers out at work. This will undoubtedly be the case in some instances. But in how many? The majority? Available 1960 census statistics show that the female working population is small and is, in fact, decreasing. On the whole, we may assume that the majority, by no means all, of the children will be going home or be at home with their mothers. In the rural areas, the mother may be in the fields with her husband for part of the year. In such cases, even today at such seasons the child goes home to find it empty. Furthermore, with the new arrangement, the child in the rural area would be able to join his parents, if that is what the parents want, for that part of the day in which he is not at school, or he would be able to help with the household affairs, if that is what the parents want.

49. We do, however, appreciate that there is some justice in the apprehensions of parents. That is one reason why we have proposed that the practical centres (home economics, handicraft, the gardens and later laboratories) should function alternately to the shifts. At least the older children would have more of the week occupied. We urge that every effort be made to have community centre facilities open to children during the day, even if only for study purposes. The community could find volunteers to supervise the centres during the day on a roster basis. In the case of the estate community centres, it may be possible for sympathetic estate management to make a more positive contribution through the services of their welfare officers. In the towns, and in the rural areas where there are premises, the youth club movement should be stimulated to greater and wider activities. The National Sports Council would have excellent scope to play its part. We are certain that many teachers would be happy to offer their services for part of their off session.

50. We would emphasize that we are fully aware of the disadvantages. It is not a solution we would have even hinted at if we could see any other way out. That is why we have insisted that this expediency should be applied **ONLY** where there is no other remedy, and not applied wholesale throughout the country. The choice is a choice between two evils and we must advise at consideration being given to the lesser of the two evils. Either we must be prepared to see education come to a standstill, or we must accept some temporary measure of inconvenience. In both cases there can be apprehensions as to the moral and spiritual growth of children, but we believe fewer where the double session system is applied. Of course there is a further alternative - heavy taxation; but even if this were possible, could education be given priority in a country where funds are so urgently required for other essential economic and social development projects? And if the funds were made available, could building progress at such a pace as to make up the leeway overnight, so to speak, to make unnecessary expediency measures?

51. It is of some interest and perhaps of some significance that the Nicol's recommendation brought out the suggestion from various quarters - local authorities, business men, municipalities - that there should be special taxation levied on a national or regional basis for school building purposes so as to avert "this disruptive step". And in this connexion we would recall what the Archbishop of Guiana wrote in 1950 when he recommended a special tax, "the entire proceeds to be levied in such a form that all sections of the community would have to contribute". His Grace suggested an educational rate on all immoveable property throughout the country, or a tax on special items to be given over to education. He goes on: "If we are responsible citizens we will accept", and concludes with a plea that school discipline should be tightened up and punctuality and regularity of attendance enforced.

52. One further point: discussions are proceeding on the advisability and practicability of changing the hours of work of public servants and of schools. If a change is made there seems to be little reason why the double session system should not be more acceptable. Moreover, if the change is made Government may well look into the question of having two secondary schools functioning in each of its buildings, (e.g. in Ruimveldt, Q.C. and B.H.S. etc.). Staffing problems and financial implications would have to be thoroughly investigated, and public opinion considered in some cases. But considerable savings could be effected and time gained. In the case of Q.C. little could be done while the university is housed there.

53. In the case of some schools it may be possible to gain breathing space by introducing another system rather than the double session system. For want of a better term we shall call it the "rotation" system. In this the school plant would function over a six day week, that is will operate on Saturdays as well. All classes and teachers will attend on five of these six days so that on any one day only 5/6 of the school population is in school, e.g. on Mondays Preparatory A which forms approximately 1/6 of the school population is away with its staff and makes up the time on Saturdays; on Tuesdays Forms 1 and 2 may be away and make up the time on Saturdays, etc. Considerable easing of the strain is possible. This system lends itself to many variations and permutations, and in particular the changes may be rung say monthly so that not always do the same group of pupils and teachers have

to lose the Saturday. For efficient operation it requires careful time-tabling and teacher allocation, especially now that the secondary forms are being handled by form teachers. The headmaster, too, would have to hand the school over to his deputy once a week, or two half-days a week. If this system is adopted by any school, we would advise that the district education officer should be apprised of the details of class and staff rotation and of headmaster's day off so that he may know what he will find in the school on the day he intends to visit it.

54. It may be advisable to ensure that overcrowding does not reach impossible proportions to inform all concerned that the five year old children will be enrolled only where strict compliance with the directive on their admission has been observed. That is, that they will be enrolled only if accommodation by strict observance of the law permits, and that district education officers have equally strict instructions to see that the terms of the directive are not abused. This does not in any way mean that the Ministry is retracting on its original circular; it simply emphasizes that the Ministry requires strict compliance with the directive. Similarly, children should be enrolled into the preparatory division, on the strict age requirements of the law, and then only in the first fortnight of the first term. The present practice of some headmasters of admitting the youngsters at any time during the year and even of having two or three admission periods - no matter how well-intentioned - does create educational and administrative difficulties as well as make it difficult for the post-primary division to develop with some degree of hope. Some sacrifice there must be. The law requires that children of six to 14 are given an efficient education; consequently if there is not room for both enrolment, of either the under six or the over 14, must be rationed. We are advising that the White Paper on Educational Policy gives priority to the children of over 14 years of age. The price parents may have to pay for admission of their five year old children is the earlier introduction of the double session system.

(For costing see Appendix N - Costing Tables.)

Table XXIX - Some schools to be rebuilt
(Grand total replacement places = 8,500)

Demerara County	Total of	1,925 places
Mahaicony (350)	Stanleyville Meth. (350)	
Catherinville Meth. (450)	La Harmonie (50)	
Potosi (175)	Clemwood (50)	
Hyde Park, Blake & St. Lawrence (500)		

Berbice County	Total of	3,800 places
Lachmansingh Memorial (600)	St. John's (250)	
St. Ambrose (150)	Auchlyne (850)	
Wellington Park (550)	Blairmont (750)	
Providence (650)		

(cont.)

Table XXIX (continued)

Essequibo County	Total of	2,775 places
Success (500)	Maria's Pleasure (450)	
St. Lawrence (650)	Johanna Cecelia (650)	

No schools in the following: Kabarupai (75), Aranaputa Basin (75)
 Kumaka Quebannah (200), Monkey Mountain (75), Thou Aruou (100).

Table XXX Suggested location, secondary comprehensive schools
 (*already built and require supplementary facilities)**A. Berbice County:**

- four (or five) stream entry:** Skeldon*, No.66, Alness - Auchlyne, Port Mourant, Rose-Hall, Belvedere*, Mibikuri*, Cumberland - Rose-Hall (Canje), Rampoer - Cotton tree, Bush Lot (West Coast)*, Vryman's Erven* New Amsterdam.
- three stream entry:** Leeds - No.48, Bush Lot, Fyrish - Gibalter (three year course), East Bank (Berbice), Fort Ordnance (three year course)
- (two stream entry schools at:** Rose-Hall - New Forest, Lichfield, Belladrum, Providence - Friends (three year course))

B. Essequibo:

- four stream entry:** Leguan, Anna Regina (with 6th Form)
- three stream entry:** Wakenaam, Suddie, Vergenoegen
- (two stream entry schools at:** Bartica, Queenstown, Dartmouth (three year course), Charity (three year course))

C. Demerara:

- four stream entry:** Mackenzie, Wismar, Vreed-en-hoop, Uitvlugt - Stewartville, Mahaica - Supply - Canegrove, Hope - Golden Grove, Enmore - Paradise - Non Pareil, Annandale*, Beterverwagting, Vryheid's Lust*, Campbellville - Redeemer, East Ruimveldt*, eight in Georgetown; Kitty; Ruimveldt (La Penitence side)
- three stream entry:** Goed-Fortuin - Malgre Tout, (three year course), Patentia*, Bagotville - L'aventure, Windsor Forest, Blankenburg - Leonora, Zeeburg*, Buxton, Unity-Lancaster - Ann's Grove, Cummings Lodge*, Kitty, Covent Garden*, Agricola - Houston, Providence - Peter's Hall, Mahaicony.
- (two stream entry at:** Christianburg (three year course), Stanleyville, Plaisance - St. Pauls))

Note: The above list is not complete particularly as regards the smaller secondary schools.

Table XXXI - Age-composition of school buildings as on 31 August 1962

County	Number of schools	Less than 10 years	10-20 years	21-30 years	31-40 years	41-50 years	51-60 years	Over 60 years	Not known
TOTAL DEMERARA COUNTY	156	53	40	12	6	7	8	14	16
TOTAL BERBICE COUNTY	80	34	21	12	2	2	2	4	4
TOTAL ESSEQUIBO COUNTY	118	57	36	7	3	2	2	1	10
GRAND TOTALS	354	144	97	31	11	11	12	19	30
1. DEMERARA Georgetown	25	3	5	1	1	1	5	5	4
Rural Demerara:									
Greater Georgetown	12	6	4	1	1				
East Coast	51	15	13	8	3	2	2	3	5
East Bank	17	9	4			1	1		2
West Bank	13	4	5			1		1	2
River	18	7	5	1		1		1	3
West Coast	20	9	4	1	1	1		4	
TOTAL RURAL DEMERARA	130	49	35	11	5	6	3	9	12
2. BERBICE New Amsterdam	5		1				3	1	
Rural Berbice:									
Canje	9	3	1	2	1	1	1		
Canje Creek	2			1					1
East & Corentyne Coast	31	17	9	5			1		
Corentyne River	2	1	1						
Berbice River	11	5	2	2		1			1
East Bank	5	1	1	1				1	1
West Bank	4	2	2						
West Coast	10	4	4	1	1				
TOTAL RURAL BERBICE	74	33	20	12	2	2	2	1	3

Table XXXI (continued)

County	Number of schools	Less than 10 years	10-20 years	21-30 years	31-40 years	41-50 years	51-60 years	Over 60 years	Not known
3. ESSEQUIBO									
Leguan Island	5	1	3						1
Wakenaam Island	5	2	1	1					1
River	14	5	4		1	1			3
Mazaruni River	7	4	2		1				
N. & S. Coasts	14		6	2		1	2	1	2
Lakes	3	1	1	1					
Potaro	4	2	2						
Pomeroon	12	4	5	3					
North West District	4	2	2						
Barima	4	2	1		1				
Aruka	8	7	1						
Koriabo	4	1	3						
Kaituma	3	3							
Waini	3	2	1						
(Rupununi): N. Pakaraimas	8	7	1						
N. Savannahs	8	5							3
S. Savannahs	10	7	3						-

APPENDIX K

ESTABLISHMENT OF SECONDARY COMPREHENSIVE SCHOOLS, AND CENTRALIZATION OF SECONDARY SCHOOL PROVISIONS (EXTRACTS)

Principles and problems

In looking at this question statements of policy were borne in mind which determined, directed and limited our thinking:

- (a) Equal opportunities must be provided for all; consequently, all areas should have at the earliest possible moment schools which can offer such opportunities.
 - (b) Government's anxiety over the private secondary schools; consequently priority should be given to the establishment of comprehensive schools in areas where students are now being mulcted for an inferior education.
 - (c) The establishment of a comprehensive school should assist in easing the congestion in neighbouring schools.
 - (d) Funds are limited; consequently, careful consideration must be given to priorities, and existing provisions incorporated into the plan wherever and whenever possible. In this connexion, two examples may be offered. Where a neighbouring established grammar/high school has laboratory facilities, negotiations may be undertaken to arrange for these laboratories to be used by the comprehensive school upper forms at convenient times even if these be after normal sessions or on Saturdays. Similarly, existing handicraft and home economics centres or branches should be utilized by the junior forms.
 - (e) The comprehensive schools should be comprehensive in the fullest sense of the word; and consequently, workshops, laboratories, etc., have to be provided. Opportunities for setting up temporary facilities should be seized.
 - (f) In view of Government's declared policy on the denominational question, public funds were not to be appropriated for provision of facilities in or to denominationally controlled buildings.
2. In most cases the buildings recently constructed are appropriately sited and should be set up and equipped as comprehensive schools. Certain problems arise:

- (a) Where the new building has already been opened as an all-age school, there will be difficulties with the parents if and when the younger children are asked to move out to make way for the senior children of other schools. If the difficulties encountered are considered unsurmountable, we suggest that the senior division of the school be turned into a comprehensive school, no new preparatory groups be taken in and the lower classes be allowed to work their way through. Thus

each year more accommodation will become available for 12 year olds from other neighbouring schools.

- (b) Where the empty school stands in a thickly populated area, public opinion will be exasperated at finding that the younger children of the preparatory division in particular, are to be excluded and be expected to walk to a school some distance away. The problem will be acute especially in those areas where parents have already come to believe that the school was established to serve them.
- (c) Some of the new buildings are not big enough to take the 12 year old population from the surrounding schools; the position will become even more delicate if some pupils from schools outside the obvious feeder group asked for admission. (The capacity of these schools was on construction based on a 50 pupils per classroom basis. This of course would not obtain in a comprehensive school. It would be educationally unsound to have more than 40 per class. In practical work this number will have to be halved. Moreover, if the number were raised to more than 40, Government would be open to criticism from the established secondary schools. One more classroom might, as a *last resort* be made available by using the staff room as a classroom. The head's room is very large and could be partitioned, if absolutely necessary, to accommodate the staff as well.)
- (d) Public opinion in the areas has to be educated. At the moment the belief is that these new schools will be opened as "grammar" schools. The fact that comprehensive schools would provide "grammar school" courses as well has not been fully appreciated; nor the fact that the provision of technical and/or commercial and/or agricultural courses from a certain level would give wider opportunities and greater hopes of success to children.
- (e) The fifth problem, and one which needs to be very seriously considered indeed, is this: community participation is essential; it must be stimulated, encouraged and carefully nurtured; it must not, however, be taken to mean that the community, or a group within the community shall control the school and decide its make-up. Uninformed plans urged by enthusiastic groups may run counter to the tenets of the policy of a national integrated system of education.
- (f) For educational and financial reasons it is proposed that with certain exceptions such secondary comprehensive schools as are opened in September 1963, limit their intake to pre-college of preceptors forms.

3. The provisional plan proposed does not preclude the establishment of additional comprehensive schools as and when conditions warrant it. Any such provisions should bear reference to the overall system and should not be decided on an *ad hoc* basis.

Berbice (Rural)

4. There are at present three secondary grammar schools in the area:

- (a) Skeldon Lutheran High School - a denominational school
- (b) Tagore Memorial High School - a "local community" school
- (c) Corentyne High School - a "local community" school.

These three schools have as main catchment area a thickly populated coastal area of some 40 miles. Not one has a 6th Form. Skeldon Lutheran and Corentyne have laboratories equipped for work up to G.C.E. "O" level in chemistry and biology, and part provisions in physics. Tagore Memorial High School is now building laboratories.

5. Recommendations:

(a) The empty Skeldon Government should be equipped and opened as a Secondary Comprehensive School in September 1963. Its capacity is 640 secondary school children. It has land available for building of home economics and handicraft centres, and two laboratories and preparation room. It should offer academic, commercial education, craft or technical courses. It would build up in time, with extra classroom accommodation, into a complete four stream entry school. It would be fed initially by Skeldon Anglican (300) and Skeldon Church of Scotland (300), and by transfers, if any, from the secondary high schools to fill up the first three forms only.

The numbers are such in the immediate vicinity that Crabwood Creek C.M. must develop its own secondary division in one of its two buildings. The older pupils could use workshop facilities at Skeldon Comprehensive School (two miles away) when these are made available.

(b) Establishment of No. 68 School and provisions for future comprehensive schools in the neighbouring areas.

Accommodation, distance and population factors would militate against the establishment of comprehensive schools between Massiah and Eversham for the present. In view of the fact that the new building at No. 68 can accommodate only 400, it is recommended that this school take just primary division children of the area. These children would leave free two classrooms which may be temporarily equipped as home economics and handicraft rooms for use by the senior pupils of Massiah, New Market and Tagore Memorial High Schools, since there are no other facilities in this neighbourhood. Later, as circumstances warrant, a comprehensive school should be built on the Rice Development Company land holding at No. 66, a site which should be secured by the Ministry now for that purpose. This school would be fed by schools ranging from No. 59 Government to Massiah C.M. Another such school will have to be built somewhere between No. 48 and Leeds to serve the area between Eversham and No. 56. Tagore Memorial High School should be maintained as a Grammar School in the meantime.

(c) A Comprehensive School at Bush Lot could be fed by Voliva C.C., Wellington Park C. of S. and Kildonan C. of S. Schools. Such a school should provide accommodation for about 600 pupils in the first place. At least 400 places will be filled in September 1963 from the schools named, and a considerable number of the 100 or more children who now travel seven or eight miles to schools in Rose-Hall is expected to attend as well.

The community at Bush Lot have been seeking assistance from Government to build a *secondary grammar school* there. Such a school we feel could cater only for an area extending two to three miles either way since parents from Alness westwards would prefer to send their children to Corentyne High School. It is important to consider that a grammar school as proposed by the community would be unsuited to the needs of the area and counter to Government's policy. Government should, therefore, take the initiative in the establishment of this school with the assistance of the community. It is recommended further that the school have three streams, i.e. general academic, craft and agriculture. In addition to the 15 classrooms that will be required, the school will need a handicraft centre (metalwork and woodwork), home economics centre, three laboratories and a farm plot with storehouses. It is not clear that the community are fully aware of the financial implications involved.

The site for the proposed "grammar" school is marshy, unconsolidated land, susceptible to inundation. It should be thoroughly examined by Government engineers before Government proceeds with any plans.

(d) Tain Government, St. Joseph's Anglican, Port Mourant R.C. and Rose-Hall C. of S. will have to continue as at present until such time as comprehensive schools are built, one to serve Tain Government and St. Joseph's Anglican, and the other Rose-Hall C. of S. and Port Mourant R.C. We recommend that priority be given to the erection of the latter school.

One of these two new schools should offer technical and an agricultural course at least, and the other science and commercial courses at least.

Some rethinking on the nature of the streams may be necessary if Corentyne High School should become more closely connected with Government educational administration; in such a case, it is recommended that a 6th Form be established at this school, with full laboratory facilities provided and competent graduate staff appointed. In other words, this school would function as the arts and science streams of the area, and afford pupils the opportunity of doing two years' 6th Form work to gain time credit on entry into the University of Guyana.

(e) The new building at Belvedere should be established as a five stream entry secondary comprehensive school in September 1963. It has accommodation for 960 pupils (40 per class) and is approximately one mile from Albion C.M., J.B. Cropper C.M. and Rose-Hall C. of S. The two Albion schools will provide between 600 and 650 post-primary pupils at the outset. A few children from private secondary schools who wish to enter the junior school may be placed in the form appropriate to their attainment level, provided that no year has more than six parallel classes. Pupils may be taken in the 4th Form only if they have passed the College of Preceptors. In view of the unavailability of facilities for post-College of Preceptors work in practical subjects it will, unfortunately, be necessary for pupils in the 4th to be restricted to theoretical subjects only, unless arrangements could be made to utilize laboratories in the neighbouring schools, even after normal school hours and on Saturdays. For pre-College of Preceptors science, handicraft and home economics, the three empty classrooms should be temporarily equipped.

Practical workshops facilities will have to be provided at Belvedere School by September 1964 at the latest.

(f) Black Bush Polder

It is recommended that the biggest of the four schools - Mibikuri (capacity as secondary school 960) - should be earmarked as a potential secondary comprehensive school (five stream entry). We further recommended that the post-College of Preceptors streams should be one science, one craft (motor maintenance), one commercial and two agricultural. When the population moves into the area, it will be necessary to consider the question of transportation of primary school age children to Lesbeholden or Joanna Schools in order to avoid pressure to open up Mibikuri as an all-age school.

Berbice (Urban)

6. Vryman's Erven, unfortunately, has already opened as an all-age school. It has a capacity, as a secondary school, of 800; the other four all-age schools are within easy walking distance. The district Education Officer appreciates that there may be some difficulties in requiring the younger children of Vryman's Erven Primary Division to move out to make way for the secondary tops of the possible feeder schools, but he feels that he can handle the situation. It should be borne in mind that the four other schools in New Amsterdam are already overcrowded and would in fact become much more so, if they were to take in the Vryman's Erven Primary Division and lose only their secondary departments. There is necessity, therefore, for another primary school to be built in New Amsterdam. We understand that the municipality has land available in the immediate vicinity of Vryman's Erven, part of which the Education Officer considers he may persuade the municipality to reserve for such a school. If it is not intended to raise this problem of transferring primary children from Vryman's Erven, then our alternative solution mentioned earlier should be applied. That is, no further preparatory children should be taken in next September and the present primary children be allowed to move through.

A second comprehensive school will be required whatever the outcome of possible negotiations in connexion with the future of Berbice High School and possibly of Berbice Educational Institute also. The New Amsterdam comprehensive schools will have to cater for the post-College of Preceptors pupils of the small secondary schools such as are proposed for Fort Ordnance and Berbice River. If the Berbice High School comes under the closer control of Government, we recommend that, as in the case of Corentyne High School, it should be given a 6th Form in order to provide New Amsterdam with facilities for more advanced work. Possibly too, the same could be applied to the Berbice Educational Institute in similar circumstances, in which case it would be advisable for one school to offer 6th Form arts and the other, 6th Form science. If there is no likelihood of such control, then New Amsterdam would require a second comprehensive school, capacity 800.

We suggest that the streams should be: one technical, one craft, one commercial education and one science or general academic.

Demerara (Rural)**7. Mackenzie-Wismar-Christianburg**

(a) The chronic overcrowding in these three schools will become worse as this area develops. *Two four stream entry secondary comprehensive schools are required, one on the Wismar side and one on the Mackenzie side.* Each of these schools should include technical and craft education facilities; at least one should have in addition a science stream and the other a commercial stream. In addition there should be a two stream entry school at Christianburg for a three year course with transfer after to the two comprehensive schools or Mackenzie High School.

These schools would also serve Coomacka and Ituni.

In considering the practical subject facilities, careful consideration should be given to:

- (a) fullest use (by conversion or re-equipping, if necessary) of the present centres at Mackenzie All-Age School, and
- (b) possible assistance by the Demba firm in building and equipping laboratories and machine shops.

The question of the size of the new schools and their composition may require rethinking if the Mackenzie High School is to expand or to be expanded.

We are convinced that top priority should be given to building one of the schools on the Wismar side.

Secondary education in the Rupununi

8. The unique conditions obtaining in the hinterland warrant special treatment. For this reason we have dealt with the Rupununi separately; and it is our hope that some of our recommendations for this area might be applicable to similar remote areas. Discussions with the Education Officer of the district revealed that while some of the main principles dealt with here can bear application to the North West District, geographical, social and other factors peculiar to the area dictate that certain modifications of detail will have to be made, and new approaches sought in other cases.

9. The physical environment has forced the Amerindian into a nomadic existence based on subsistence agriculture supplemented by hunting. He cannot contain the forces of nature and must perforce accommodate himself to them. This has restricted his experience and with this his intellectual development - for the latter is but a function of the former. But he has over the centuries evolved his special cultural pattern, primitive perhaps, but revealing in its primitive effectiveness an inherent ingenuity. Let us not mistake shyness for dumbness; or simplicity of adaptive response for intellectual incapacity. Can anyone who has observed the weaving skill of Amerindian women, or the craftsmanship of the men, or the organization of community life, doubt the ability of these people to advance towards their rightful place in the modern world community, given the opportunity to realize their full potential at a pace commensurate with their present level of development?

10. Our first task then is to influence the Amerindian child through a realistic curriculum, intelligently conceived syllabuses, and sympathetic teaching methods to develop the desirable elements of his cultural heritage - his language, his art and his skills, while guiding him gradually in the reorientation of attitudes towards the objective of stable, healthy and progressive community life. He must be enabled to perceive the need for adoption of modern agricultural methods, of sanitation measures, of money economy, and the various other concomitants of a modern civilization.
11. This is a heavy programme and requires the most careful selection of trained teachers who have the desire and the resource to stimulate and guide the pupils and adults towards the attainment of these objectives. Every effort should be made to select teachers from the communities themselves and to provide them with the specialized training required for this work. Above all, if success is to be achieved, frequent visits by professional officers of the Ministry must be made possible so that the necessary stimulation and guidance can be given, correlation of efforts in the different communities achieved, and research into and constant reappraisal of methods facilitated.
12. There is a basic difficulty in considering curriculum of language. For most of the Amerindians English is a foreign language. Apart from the obvious need then to concentrate on English teaching, every effort has to be made to get the children to attend school from an early age. Some measure of success has been achieved in this regard, though one still finds an appreciable number of quite old children in the junior divisions. An early start is a prerequisite for post-primary organization and will allow every child to obtain a minimum education before he is forced to leave to assist parents in their occupations. So important is this question of language that we recommend the admission of children where possible before the age of five not for the purpose of instruction, but to acquire the rudiments of English through play and to become acclimatized to the school atmosphere.
13. For the older children the practical subjects are essential, if the transformation of society envisaged in this programme is to be achieved. Home economics, woodwork, craft and gardening must occupy a prominent place in the curriculum; facilities must therefore be provided for the teaching of these subjects under the constant supervision of the specialist officers of the Ministry. It cannot be too strongly emphasized, however, that this work in the school must go hand in hand with community development if parents are to appreciate its significance and be expected to co-operate.

Recommendations for secondary school provisions

14. The small size of the schools militates against effective and economic provision of full secondary school facilities to each separately. The most profitable line of action would be to centralize secondary school provisions for the area. But many practical difficulties will have to be overcome to make this a reality. The distance involved would in most cases preclude daily travelling. The only solution lies in providing hostel accommodation for students who are selected for secondary school education. The implications of this are twofold.

(i) *Economic* – The suggestion that parents should pay (in cash or in kind) for such accommodation is unrealistic. They are unable to pay cash because they have not got it; payment in kind cannot guarantee the constant supply or quality of provisions. Exception can possibly be made in the case of ranchers, businessmen and higher-paid public servants. Government will therefore have to meet almost the entire cost of the project, by providing food and various amenities, as well as transport for children from remote settlements. Additional expense will also be incurred in staffing of the hostel – warden, cooks, maids, etc.; and living quarters for members of staff who may need them.

(ii) *Social* – One obstacle to the implementation of the hostel project was posed by some of the administrators, teachers and influential residents of the area, whom we interviewed. The view expressed by these persons was that the Amerindian parent would be unwilling to allow his children to live away from home, particularly in the case of girls. Other persons whom we saw were, however, optimistic; and it is significant that one chief assured us that his community would be willing to adopt the plan if financial obligations on their part were removed. It would of course be essential to satisfy parents that the welfare of their children is guaranteed.

15. It was to be expected that any regional provisions for secondary education would have been based at Lethem, the administrative centre of the district, where any expansion is most likely to occur. The siting of a hostel at St. Ignatius was therefore ill-conceived, and the absence of educational facilities at Lethem, no doubt the consequence of thinking in relation to the proposed rôle of St. Ignatius School, has led to the present need to transport approximately 90 children daily between Lethem and St. Ignatius.

16. From discussions with responsible officers and residents of the district, it would appear that the future development of the Rupununi is uncertain. If and when the area develops consideration might have to be given to the establishment of a secondary (bilateral?) school at Lethem to serve the needs of the whole area. Until such time we recommend that the main building of St. Ignatius School be established as a secondary school for those pupils of the district who may wish to avail themselves of secondary facilities. If the demand for places exceeds the available accommodation, and Government is not in a position to provide alternative accommodation at Lethem, admission may have to be made on a selective basis. This proposal envisages the equipping of home economics, woodwork and domestic science rooms. To curtail expenses we suggest that two of the rooms in the girls' wing and one room in the boys' wing of the hostel be equipped for the purpose. This recommendation is based on the expectation, already discussed, that relatively few girls will seek admission to the hostel initially.

17. An important consequence of the adoption of this plan is that separate provisions will have to be made for the primary children of St. Ignatius and Lethem, of course, irrespective of future developments with the St. Ignatius building, requires a primary school of its own at once. For this purpose one of the present Government buildings may be converted or a low cost

adobe structure erected in the vicinity of the Lethem playing fields. There appears to be ample and suitable space in and around Lethem for the establishment of this and any secondary school proposed for the future. Only the older (secondary) children of Lethem would then have to travel to St. Ignatius. For the primary children of St. Ignatius there are two alternatives:

- (a) The adobe shed adjoining the main St. Ignatius building could be reconditioned.
- (b) The old St. Ignatius R.C. school building could be reopened for this purpose through negotiations with the authorities concerned.

The latter alternative might prove advantageous if the present hostel accommodation is fully taken up. In this case the building referred to at (a) above could be converted to provide home economics, handicraft and science rooms for the secondary school.

Staff accommodation

18. Until such time as a sufficient number of suitably qualified staff from the area becomes available, the staff of the proposed secondary school will have to be drawn mainly from the coastal districts. The difficult housing situation in the area would justify the provision of staff houses on the premises. An additional advantage of this arrangement is that the staff would be available after normal school hours to supervise those who might wish to remain behind to do individual study, and to undertake the various extra-curricular activities which are an essential adjunct to the educational scheme. The latter practice should in fact be encouraged, as most Amerindian homes are not as yet adequately equipped for the children to undertake preparation work in the evening.

Suggested curriculum break-down

19. To give effect to the recommendations contained in this paper, we urge the adoption of the curriculum outlined below, subject, of course, to minor alterations such as in allocation of time and in the choice of subjects, which might be considered desirable after discussions with the head teacher and others. Since the school for many years to come will be a single stream entry, it has been necessary to provide for options in the senior school, which would entail separation into small groups for purposes of instruction. The financial implications of this in terms of additional staffing provisions must be clearly understood.

	Form I	Form II	Form III
English	4	4	4
English literature and library	6	6	4
Maths	8	6	6
Handicraft/home economics	6	6	6
History	2	2	3
Geography	2	2	2
Science	4	4	5
Agriculture	3	5	5
Music/art	2	2	2
Physical education	1	1	1
	38	38	38

Forms IV and V

	Boys	Girls
English	4	4
English literature	4	4
Maths	6	6
Craft/home economics	6	6
History/geography	3	3
Physics with chemistry	5	
Agricultural biology	4	
Commercial subjects/agriculture		9
Portuguese/art/agriculture for boys only	6	6
	38	38

Notes:

- (1) The time-table here proposes a basic 35 period week (40 minute periods), with three extra periods per week. Registration, assembly and breaks to be added. Religious instruction, games and extra-curricular activities outside time-table.

The extra periods have been suggested because this is current practice at St. Ignatius and other schools, and meets with the approval of parents. Other advantages of retaining the children in school up to 4.30 or 5 p.m. have been adumbrated in the first section of this paper.

- (2) The courses in agriculture should include, particularly for girls, bee-keeping, poultry rearing, processing of dairy products.

For the boys, the help of the Agriculture Department might be solicited to provide instruction in "use of agricultural equipment" etc. in the 2nd and 3rd forms.

The science taught must be correlated with the agricultural work.

- (3) C.P. could be taken at the end of the third year in English, English literature, maths, handicraft/home economics, history, geography, science.

- (4) For "O" level G.C.E. or equivalent, the following subjects could be offered - English, English literature, maths, history/geography, physics with chemistry, agricultural biology, modern language and practical subject/s.

- (5) Attention is drawn to the provision of library periods. It is intended that these periods be used fully to ensure the development of language appreciation. The reading will have to be supervised, and frequent assessment of the children's comprehension carried out.

APPENDIX L

THE ORGANIZATION AND ADMINISTRATION OF EDUCATION

The best laid policies and plans can be stultified by remaining unimplemented or by being implemented in a piecemeal fashion for lack of understanding of the policy bases, or for lack of personnel to co-ordinate, to programme, to phase, and to control or supervise the operation. A Minister cannot do all these things; a single officer cannot do all; a team is required and each member of the team colleagues. Co-ordination of effort becomes all-important; delay in one sector may well mean delay in the whole programme. In particular there must be the executive, of the administrator and of the operations field officer. And yet the functions must dovetail so that there is understanding and coherence and immediate takeover at the appropriate moment.

2. It has been observed that in many countries moving out of the "colonial" system of education to a ministerial exercise of control and supervision there is often a period of confusion, inaction at the operational level and misunderstanding; and this despite the energy, often dynamic, and enthusiasm with which the new challenge is met. Too often policies remain but statements of hopes and aspirations, and plans academic exercises. The causes are not far to seek and the remedy is therefore easy to apply where there is goodwill. Authority is no longer vested in a professional head but in a political head. The latter conceives and formulates policy; it is for the professional educationist to advise on the policy on the educational side and for the professional administrator to advise on the administrative aspects of the policy. Once a final decision has been taken and the policy defined the professionals work out the details and implement the policy. If this is clearly understood then there can be no justification of, or cause for, inaction resulting from misunderstanding at top levels as to who is responsible for the one or other stage of action. The political head, on the one hand, can best fulfil his own function of policy-making if he disengages himself of details and routine matters. The professional officers on their part will not hesitate to take upon themselves responsibilities which are part and parcel of their duties when they are not inhibited by the fear of arrogating to themselves responsibilities which may afterwards be considered the prerogative of the political head.
3. Another difficulty observed in many countries arises from the uncertainty as to the relationship between the administrators and their staff and the professional officers and their staff. This misunderstanding may lead to one group leaving action to the other, and neither taking any action.
4. Another weakness observed is that of the vacillation of officers who are uncertain of the extent to which powers have been or have not been assigned and/or delegated to them.
5. However, the most serious weakness in the "shaking-down" stage is the fact that an expanded system of education working at a much quickened tempo is left to be administered and supervised by essentially the same number of person-

nel as hitherto, personnel who cannot always attune themselves to the new tempo because all their energies are taken up with attempting to carry the additional burden.

6. Why should these difficulties arise? It is appreciated that the superimposition of a ministerial system, where a Minister responsible to his colleagues in the Council of Ministers, which in its turn collectively is responsible to the electorate, upon a colonial system of administration of education with its single fountain of policy-maker/controller/administrator is never an easy one to effect. All the participants have to learn their new rôles and shed their old habits of thoughts and attitudes. In British Guiana, to take an example, the Minister is expected to initiate and formulate policy along and within the lines of the economic and social policy and philosophy laid down by the executive council of the Government. Under the Constitution he is responsible for the control and supervision of education. In such cases a Minister is not expected to concern himself with the details of execution of plans or with the day-to-day recurring business of his Ministry. This a Minister would do only at the expense of his main function. He exercises broad control through his chief advisers and delegates powers to them to perform this function.

7. The senior officers, on the other hand, are expected to advise in the formulation of policy, and consider how this policy translates into terms of education, of teachers, of pupils, of parents, of finance, etc., into terms of feasibility and implementation. When the Minister confirms the policy, the senior professional officer should direct and control the implementation of that policy through his professional staff. From time to time, or as the Minister directs, he would keep the Minister informed of progress, and the senior administration officer would report on the impact of policy and plans on the wider front of the public and finance.

8. If these duties are clearly defined and powers delegated there would be less likelihood of the senior professional officer becoming less and less of an adviser or of an interpreter and executive and more and more simply a vehicle for transmittance of the Minister's ideas to the lower echelons. Not being involved himself, he may not guide the action himself nor take decisions thereon, but refer them back to the Minister who now finds himself involved in routine matters of the administration and implementation of policy. It is against such situations developing that new nations should be on their guard.

9. In some cases a new factor in the organizational machinery complicates the situation still further - the introduction of a Permanent Secretary who under the Ministerial system is the Minister's closest counsellor. His chief duty has been defined, for example in British Guiana, to be the processing of the information and advice received from the various branches of the Ministry and the submission of this to the Minister. In addition, the instructions and policy decisions of the Minister pass through him to the various agencies of the Ministry for action. Exactly where the senior professional officer fits into this pattern is not clear, since the functions now assumed by the Permanent Secretary, that is the senior administrative officer, were previously performed by the professional head. Furthermore, the Permanent Secretary can influence policy and the implementation of policy by the manner in which he allocates funds since he is in full control of the education vote.

Consequently once more the senior professional officers have to attune themselves to a new situation outside their previous experience; on their part, the administrators should appreciate that they complement and supplement the work and functions and purposes of their educational colleagues. It is through team-work that efficiency will come and a lightening of the burden - and we all know that team-work needs time to be perfected, and time can be gained in British Guiana if the framework of co-operation which all seek is examined with a view to drawing up:

- (a) the distinct duties of the administrative staff and separately those of the professional personnel;
- (b) a definition of duties and precise assignment of duties and delegation of powers at all levels;
- (c) modes and means of co-operation between the professional and administrative branches.

10. We are fully conscious that it is not always possible to define duties precisely as no educational matters or measures are either purely professional or purely administrative, or purely political for that matter. However, a broad but detailed definition of duties can and should be attempted at the top levels, (and a more precise and more detailed definition at the lower levels). Only thus can overlapping, duplication and misunderstandings be averted.

11. At the top levels, advice should be sought from those quarters most competent to give it, but in the first place it should be sought from or through the person whose function it is to advise on these matters. Broadly speaking, then, the senior professional officer should be the Minister's primary source of advice on matters affecting the content and quality of education, affecting the educational structure, the technical staff in the Ministry and in the educational institutions. The Permanent Secretary should control and supervise the administrative machinery and set it into action; advise the Minister on the competency of the administrative machinery to bear the load put on it; interpret the laws and regulations; advise on the availability of financial resources for implementation of policy and on the repercussions and impact of that policy on the public at large, and process and clear all papers to and from the Minister.

12. The implementation of policy and the total manpower and physical resources of the administrative and operational machinery are too onerous for any one or three men to handle with efficiency and speed, that is with economy of effort and of time, no matter how well intentioned, conscientious and energetic they may be. If the Minister and his two senior advisers attempt to tackle personally the mass of routine business which arrives daily they will be unable to give their full attention and clear thinking to the vital and major matters of education which should be their main concern, to questions of policy and principle, of general control and supervision, to seeing the whole and not the parts, to providing the guidance and driving power. Their efforts and time will be exhausted on details, and principles will tend to be overlooked; over-enthusiasm at top levels to grapple with small problems, may deaden the initiative and resourcefulness of other officers.

13. In particular the Minister's time and strength and concentration are required for decision making upon reflection after advice has been obtained. Pressure of routine business and audience must not be allowed to interfere even though the latter is an unavoidable adjunct to political expedience. It is the Minister who has to take the decisions on major policies and programmes; he can concern himself with the individual case only when a new problem of major application is involved. In the early stages it is understandable that a Minister should wish to be fully cognizant of all matters passing through his Ministry. In time, however, once he has declared his policies and appraised the ability of his staff, he should delegate duties and assign to each officer his respective sphere of competence. He can then turn his full attention to the real issues, the outstanding issues which he alone can resolve.

14. And one of the major issues he may have to decide upon is whether his staff is adequate in numbers to handle the ever-increasing flow of business, and whether their cumulative experience, training and skill cover the range of new activities that the new policies have introduced.

15. The Minister, therefore, and his senior advisers have to

- (a) consider the internal structure of the Ministry;
- (b) consider the function and structure of every unit or part within the organization and assess its efficiency and adequacy;
- (c) define precisely the lines of authority and responsibility;
- (d) root out cumbersome machinery and all areas of duplication and inefficiency;
- (e) draw up plans for a rational and sound scheme of administrative organization;
- (f) create the new services made necessary to mobilize to the fullest effect the educational resources and assets of the country;
- (g) indicate the decision-making processes;
- (h) lay down the network of communication;
- (i) reinforce the staff to deal with the expanded and new volume and range of work;
- (j) delegate powers in accordance with the competence and responsibility of the officers;
- (k) ensure that every member of the staff down to the newest messenger is fully aware of the general working of the organization and his part in it;
- (l) guide, stimulate, advise and direct this staff.

It is recommended that the Government of British Guiana seek Unesco assistance in this task by requesting the services for a short period (three months?) of an expert in educational administration.

Proposed organization

16. We have dealt above with general problems upon the speedy solution of which may depend the efficiency of the administrative machine to implement with competence and without time-lag the plans formulated to meet the needs and demands of a developing country's people and economy. Let us turn now to consider the administrative organization, the means by which the educational system is to be guided, controlled and supervised. In so doing we may illustrate and elaborate upon the points made above, and at the same time suggest the legal basis upon which the system must rest.
17. The organization chart (Chart 2) presents our suggestions as to the machinery which may be able to deal with the new situation, and indicates lines of authority and of communication. (We shall deal in greater detail with some of the component units of the Ministry later in this memorandum.)
18. We recommend that the Minister be enabled to seek advice from a National Council of Education at the national level and from Advisory Committees at the county and district level. To ensure co-ordination between the National Council and County Advisory Committees, the National Council will include among its membership at least one member of each of the County Committees, and in like manner and for the same reason each District Committee will be represented on the County Committee (see later sections for details).
19. Once monthly, except in cases of urgency, the Minister will deliberate with his senior advisers on matters of policy. It is recommended that the Chief Social Development Officer should be a member of this "inner cabinet" so that integration of the two divisions whose policy and aim should be fundamentally one and the same becomes a reality. (We would wish to see a great deal more co-ordination of work and functions between the two divisions; the social development officers can and should play an important part in the "involvement" of communities in the educational plans, in the same way as district Education Officers should be active in social development plans, which are, after all, only another form of education.) The Minister's Council may call in to the discussions any officer or officers whose particular knowledge or background or experience may help to clarify the problem in issue. In this connexion we would suggest that well before the conference, an officer or officers be requested to prepare and submit a paper or papers on the subject - defining and analysing the problem, identifying the principles involved, making clear recommendations, and outlining the implications. Where legal or financial repercussions may follow, the rapporteur(s) should consult the law officers or financial advisers as the case may be. When a decision has been taken an action sheet with time limits should be prepared and the Permanent Secretary be required to see that it is complied with.
20. The professional or "technical" side will be directly supervised and controlled by the Chief Education Officer who should embody the accumulated professional wisdom of his staff. All matters pertaining to higher education i.e. post-secondary level will be dealt with by him, unless necessity arises for submission of papers to the Minister for decision on matters of principle. The Chief Education Officer will hold meetings of his senior officers once fortnightly (in the week after and the week before the Minister's Council meeting), except in cases of urgency. The procedure should be the same

as that for the Minister's Council meeting. In particular, these conferences should be used in part by the Chief Education Officer to keep the senior officers fully advised on the deliberations of the Minister's Council meetings, of decisions there taken, and also to seek advice on the matters to be discussed at the following meeting of the Minister's Council. The minutes of the Chief Education Officer's Council meetings should be circulated to all Education Officers with the greatest expedition and certainly before schools are informed of decisions.

21. We believe that well-organized meetings of this kind at top levels will take off a great burden from the Minister's shoulders. The work done preceding the meetings and the time given for reflection upon the issues at stake will prove fruitful, and will expedite business at the meetings. The action sheet and follow-up on this will ensure implementation in the specified time.

22. The Planning Unit, it is suggested, will report direct to the Chief Education Officer, since its work directly concerns policy and should reach the Minister by the shortest route. It is understood, of course, that the Planning Unit may seek information and advice again and again from any other section of the Ministry or any individual or organization, but when it has prepared its final plans these will go to the Chief Education Officer for processing before submission to the Minister. The Planning Unit is not an operational unit. We deal with the rationale of the establishment and work of this vital unit in a later section.

23. The Deputy Chief Education Officer is responsible to the Chief Education Officer for nursery and primary education, for all forms of secondary education, and for short in-service training courses - that is of all the operational branches of the Ministry, the branches directly in contact with the schools and the teachers and dealing with the everyday business of management, control and supervision. The Deputy Chief Education Officer should have, we recommend, the following three branches under his immediate authority and should have powers to take decisions or delegate decision-making to the heads of these branches (routine or recurring decisions may be made at even lower levels):

School Administration Services,
Secondary Education Supervisory Services,
Primary (and Nursery) School Supervisory Services.

Each of the services should be in the charge of an officer of the Assistant Chief Education Officer grade, whatever the title given to him. (We deal at some length with the rôle, functions and responsibilities of these services later.)

24. The Permanent Secretary through his Principal Assistant Secretary is responsible for the general administration, the ancillary services, educational authorities at county, district and school level and for public relations. In addition, in his capacity of Permanent Secretary to the whole of the Ministry, he co-ordinates the activities of the two divisions. In gearing the machinery to the new tempo and to ease the burden he would:

(a) make thorough investigations into the working of each branch of the

Ministry to ensure that all dispatch is used;

- (b) establish a system of referral and clearance which would involve the least possible number of officers;
- (c) simplify the present procedural complexities and weed out the obsolete or outmoded forms and procedures which exhaust the energies of the most conscientious employees;
- (d) overhaul the machinery of the registry and the classification, filing, routing and storage of papers in the interests of expedition, simplification and security;
- (e) reorganize the typing pool under the immediate supervision and control of a responsible, experienced employee;
- (f) look into the functioning of the dispatch system; see to it that directives and circulars are kept up to date, are easily available, and are distributed to the right people without delay - including the professional officers who should be kept au fait with all developments;
- (g) lay down clear instructions as to the manner of drawing up minutes and action sheets thereon;
- (h) insist on distribution of minutes to all concerned (specified) within a fixed time after the meeting or conference (say two days);
- (i) examine whether the premises and equipment were being utilized to the best advantage;
- (j) consider what equipment would speed up the work and further lighten the burden.

Decentralization

25. To all intents and purposes the system of educational control is still highly centralized. Some efforts have been made recently to effect a certain amount of decentralization but in so far as the district Education Officers have had little specific authority delegated them and act mainly as post boxes, education is still very much administered from headquarters. Local or community interest in educational establishments has not been aroused. It has been a source of disappointment to find that even municipalities have contributed and do contribute little towards education. The schools belong to the Government - a nebulous taskmaster - or to the churches; let them look after the schools and let them make no demands upon the communities or the local authorities. This attitude is all too common but it can be changed and interest in the schools revived and demonstrated in welcome material fashion. Many instances can be cited of headmasters' efforts to "involve" communities, organizations and individuals meeting with success.

26. Government's efforts to build up responsible local authorities and the drive to get communities to engage in self-help schemes are two factors which may prove of immense value in improving conditions in the schools and

assisting Government in meeting its financial commitments in the educational field. But the communities and local authorities can only be won and their support retained if they come to understand and to see that the school in their midst is theirs and their responsibility. They will work for the school when they accept and share in this responsibility. Individual, unco-ordinated efforts by headmasters or Education Officers are admirable but of little lasting effect. What is required is a means of ensuring continued co-operation, support and interest. Such "involvement" we are convinced is best achieved through systematic and statutory decentralization of certain functions of administration to the communities, to county Education Officers and to Education Officers in the field. Consequently we recommend:

- (a) the setting up of County Education Advisory Committees;
- (b) the setting up of District Education Advisory Committees;
- (c) the appointment of county Education Officers who will have specific duties (mainly administrative) assigned to them and specified powers delegated; and the establishment of county education offices;
- (d) the assignment of specified duties (mainly supervisory) and powers to district Education Officers;
- (e) the appointment of governing bodies to schools who will be drawn from the community and the immediate vicinity of the school and the local authority (where such exists);
- (f) the delegation of certain functions, powers and responsibilities to these governing bodies and to local authorities.

27. If the recommendations for partial decentralization of educational administration are acceptable to the legislature, the appropriate legislation can then be included in the proposed new law, and what follows (here and in the relevant appendices) is intended to guide the law-makers in the drafting.

28. At present the country has been divided into 11 districts for purposes of education. It may be advisable to scrutinize this division both as to number and boundaries; in particular no district must overlap from one county into another. If, for geographical or other reasons, it is necessary to place a district under the administrative responsibility of the County Education Officer of a county other than that to which it is assigned for public administration purposes, the law must specify this. (E.g. the Rupununi may be better administered as a Demerara district.)

29. Each county will be administered by a County Education Officer. The office of the County Education Officer would in fact take over a great deal of the administrative work now performed at the Ministry. We need not expand on the advantages of this in terms of execution of business by officers who are or can be in close contact with the public and the situations they have to deal with. The expeditious handling of business can only lead to a more satisfied public, a more contented teaching body, and qualitative improvement in the schools as a result of less frustrating delays in the satisfaction of the needs of the schools and fewer absences from schools by teachers who have hitherto often found no redress for their personal problems other than by personal visits to Georgetown

headquarters. At the same time the Minister would through these personal representatives be kept fully and carefully informed on developments and on public opinion in the counties. He would, too, have an officer of high level to stand in for him at the various functions and conferences which distances now make it difficult for him to attend.

30. The Assistant Chief Education Officer (Administration) would perform the duties of County Education Officer, Demerara. Thus only two county Education officers would be required. It is recommended that the two county officers would have the same status as the Assistant Chief Education Officer (Administration). The County Education Officer has duties to perform related to both the administration and professional section, and even in this latter activity his duty is similar to that of the Assistant Chief Education Officer (Administration) but at county not national level. His office, in fact, is a miniature Ministry, and in consequence he answers to the Permanent Secretary. The County Education Officer would have his County Advisory Committee as the Minister has the National Council for Education. When circumstances permit, of course, the Minister would chair its meeting instead of his representative. But in practice it would be the County Education Officer's job to keep his thumb on the pulse of public opinion and aspiration through the Committee and transmit to the Minister such information and advice as is offered by it.

31. The district Education Officers would have principally supervisory duties, but they would be vitally connected with the "involvement" campaign and function under the county Education Officers for this purpose, but would be responsible to the Senior Education Officer (Primary Schools) in matters connected with their supervisory duties. They would submit their reports in duplicate to the County Education Officers who would take appropriate action on all matters contained therein pertaining to administration (e.g. repairs, maintenance, equipment, staffing, etc.) and forward the duplicate copy of the report to the Senior Education Officer, Primary Education. The District Education Officer, therefore, would be enabled to concentrate on his primary function of adviser to the teachers.

The lower echelons

32. This, in short, is the proposed organization. It is necessary to speak briefly of the lower echelons. No matter how efficiently or energetically work at the top and upper levels is performed, the machinery of action can be brought to a virtual standstill if the mechanics fail to keep pace, or are inefficient and slovenly. As with the administrators and professional personnel, the output and quality of the work of the lower echelons will not depend solely on their numbers, or on their qualifications and skills. The response must be spontaneous, the attitudes responsible ones, and furthermore the human material must be utilized wisely and the work co-ordinated. All must be brought and guided to the point where they are determined to play their part however humble it may appear to be. All must understand that procrastination and indifference will ultimately affect the quality of education provided in the schools. In this ostensibly lesser sector the need for avoidance of duplication of effort, of delay resulting from ignorance of duties or indolence, is paramount. It should be the Permanent Secretary's concern through his

immediate subordinates to train personnel and to control the flow of work to the lower echelons, and to develop a system of movement of papers which will keep the machine working at a regular and steady pace. This should be the target within every branch or section of the Ministry and between every section of the Ministry. There is no justification for a minute to reach an officer in a building one mile away 20 days after signature by the source; or for a file in the out-tray of an officer to take a fortnight to reach the in-tray of another officer in the next room to the source. There is no justification for the number of letters, forms and documents that are mislaid; none for the delay in answering straightforward queries by teachers. The source of these troubles must be sought out and the machinery overhauled. On the other hand, care must be taken that the machinery is not clogged by a great volume of work suddenly falling upon it or upon parts of it while others remain idle.

General

33. It is recommended that in defining and assigning duties of other officers and personnel, the recommendations made by Mr. W.H. Scaife of UNTAO in 1961 should be given some attention. The situation has changed considerably and the educational structure with it since this consultant submitted his report. Yet it contains a great deal of useful material and affords many pointers as to the manner in which the problem of definition and assignment of duties may be tackled. Lack of time has made it impossible for the Mission to deal with each officer's duties and responsibilities separately and in the detail we should have liked. We have perforce restricted ourselves to bringing out principles and making general remarks on which we hope the details may be based. In addition we have further gone into greater detail with respect to a few of the posts and activities as examples and bases for fuller treatment of these and other offices. (Some of these sections have been withdrawn from this Appendix.) We have, too, from time to time made oral suggestions as to ways and means of clearing bottlenecks and overhauling the machinery.

34. There are, however, four points which we would make in general terms. Firstly, much of the load the Assistant Chief Education Officer (Administration) now carries would be taken off him if our plea for the appointment of county Education Officers and senior Education Officers is heard. He would perform the functions of County Education Officer (Demerara), control and supervise the Personnel Branch and deal with general administration problems under the Deputy Chief Education Officer as required. Secondly, the Deputy Chief Education Officer and Assistant Chief Education Officer should have an administrator of the Assistant Secretary grade under their immediate control to assist them in routine matters, with interpretation and application of the relevant Laws and Regulations, preliminary drafting of Laws and Regulations, and in particular to work in close co-operation with the Personnel Branch as now constituted. Thirdly, the Mission has already submitted a Paper on the Examinations Section. We would point out again that this section could very well be controlled by an Administrative Secretary; the specialist field of the professional officer in charge at present is required in the supervisory services. And lastly, the recommendations we have made imply that offices and officers be redistributed in such a way as to make possible immediate contact between any one top and upper level officer and his subordinate professional and administrative staff.

National Council for Education

35. The need for a National Council for Education has been recognized by many countries. Its functions vary considerably between one country and the other. In some cases it is an advisory body, in others its proposals are binding upon the Ministry, in others it functions as a supreme appellate court in matters educational. Whatever shape it takes and whatever its responsibilities it should be a regularly constituted body with carefully prescribed powers and functions.

We believe that such a body would be of invaluable assistance to the Minister in his task of determining an educational policy which is to unite the many races of British Guiana, gear people to the necessary attitudes of an independent country, be flexible enough to dovetail into and to promote the economic and social changes as they come about and to stimulate and develop the individual to reach the highest point of his own potential.

We make tentative proposals as to

- (a) the status and functions of the Council;
- (b) its constitution;
- (c) its membership;
- (d) its relationship and co-ordination with the Ministry of Education.

36. (a) Status:

The National Council for Education should be a Statutory Body under the Constitution of the country which should define in general terms its functions and constitution, and allow for legislation to work out the details to be drawn up by the House of Assembly.

(b) Functions and duties:

The National Council for Education would be an Advisory Body to the Minister of Education and Social Development. It is suggested that it:

- (i) consider and advise the Minister upon proposals submitted to it by him for long term policy and plans of educational development supported by estimates of expenditure for an initial period of five years or more;
- (ii) examine the organization and establishment of the Ministry of Education from time to time in relation to the proposed policy and programme, and make recommendations with regard to staffing, organization and other means necessary to carry out the proposed policy and programme;
- (iii) recommend such legislation as may be necessary to give effect to its advice if this advice is followed;
- (iv) advise the Minister on any educational questions when the Minister seeks its advice;
- (v) deliberate upon the policy proposals prepared by the Ministry in consequence;

- (vi) function as an appellate court in such matters as may be specified in the law on education;
- (vii) perform all duties and exercise all powers which are vested in it by the law or any regulations.

(c) Constitution and composition:

- (i) The National Council for Education would be a regularly constituted body under the Constitution.
- (ii) It would consist of the Minister of Education as Chairman and 12 men and women of high standing in the community, with the requisite variety of experience to command public confidence. They should be men and women, having a knowledge of and an interest in educational matters, who represent a wide cross-section of the public and who are known to be motivated in matters educational by the national interest and not by any sectional or party interest.
- (iii) Each County Education Advisory Committee would be represented on the National Council.
- (iv) The body may include e.g. a member of the Academic Board of the University of Guyana, a member of the Trade Union Council, a member connected with industry, another with commerce, another with farming, a member representing all the teachers organizations, a member of the Union of Local Authorities, a member of the Guild of Graduates, etc.
- (v) The body would have at least three members of the female sex.
- (vi) No one should be appointed on political grounds.
- (vii) The members would be nominated by the Minister and the nomination would require the approval of 2/3 of the House of Assembly and of the Head of State. Alternatively the members would be appointed by the Head of State.
- (viii) Every member would hold office for three years from the date of his appointment and would be eligible for reappointment.
- (ix) The Permanent Secretary to the Ministry of Education and Social Development would act as non-voting Secretary to the Council.
- (x) No member could be removed from office except for repeated absences, incapacitating illness, committal of public offence leading to imprisonment, long absence from the country;
- (xi) A member may resign at his own pleasure.

(d) Meetings of the Council

- (i) The National Council would meet four times annually for a period not exceeding two days on each occasion.

(ii) The Minister would call all meetings of the Council.

(e) Powers of the Council

(i) The Council would be empowered to appoint sub-committees to consider specific questions. These sub-committees would be composed of not more than three members of the Council who would be authorized to co-opt not more than four recognized experts in the field under study. The sub-committees would submit their recommendations to the Council for consideration.

(ii) The Council would be enabled to make rules for the transaction of its business and the conduct of its proceedings.

37. The standing of the Council and its ability to bring harmony and confidence in educational matters for the national benefit will depend very much on the selection on a non-partisan basis of understanding men and women whose sole interest is the national good.

Part II - County Education Advisory Committees

The purpose of the County Education Advisory Committee as in the case of the District Education Advisory Committee is to make available to the Ministry the local knowledge, the experience, the thinking of discerning people of every walk of life, who see the impact of the educational provisions from different angles, who can advise realistically, who can point out how strengths can be further strengthened, gaps filled and weaknesses eradicated. The immediate concern of the County Committee would be:

- (i) to consider how educational policy and implementation of policy applies to and is applied to the actual needs of the county and its people, and to advise the Minister through the County Education Officer accordingly;
- (ii) to consider specific needs of the county in terms of educational provisions and advise the County Education Officer accordingly;
- (iii) to consider with the County Education Officer ways and means of, and co-operate with him in, enlisting public support in improving and strengthening educational provisions within the county;
- (iv) to consider with the County Education Officer ways and means of, and co-operate with him in, fostering, stimulating and organizing cultural and educational activities at post-schooling level within the county;
- (v) to deliberate upon and advise the County Education Officer upon such matters as the County Education Officer may put before them;
- (vi) to bring to the County Education Officer's attention such educational

problems and matters as the members consider need review or investigation by him;

- (vii) to appoint sub-committees to look into specific questions and to co-opt on to such sub-committee such experts as may make a positive contribution;
- (viii) the committee would be enabled to make rules for the transaction of its business and the conduct of its proceedings.

2. Status

The County Education Advisory Committee would be a statutory body. It would be represented on the National Council for Education by at least one of its members who will be nominated by the Minister for appointment as laid down by the relevant law.

3. Composition and Constitution

- (i) The County Education Advisory Committee would consist of not less than nine and not more than 12 members, including the Chairman who shall be the County Education Officer; provided that the Minister for Education and Social Development shall be an ex-officio member, outside the statutory number of 12.
- (ii) The members would be nominated by the Minister after consultation with the County Education Officer and District Commissioners and would be appointed by the National Council for Education, provided that the body includes at least one member of one of the District Education Advisory Committees (and in no case shall any one District Education Advisory Committee have more than one of its members appointed to the County Education Advisory Committee); and provided that the body includes at least one member of the County Union of Local Authorities; and provided that the body includes at least one member of the elected members of the Municipal Council of Georgetown, in the case of Demerara County, and of New Amsterdam in the case of Berbice County.
- (iii) Every member would hold office for two years from the date of his appointment and would be eligible for reappointment.
- (iv) No member shall be removed from office except for repeated absences, incapacitating illness, committal of offences leading to imprisonment, long absence from the country, except that any member who was appointed in virtue of his being a member of the County Union of Local Authorities, or District Education Advisory Committee or Municipal Council, shall cease to be a member of the Board on ceasing to be a member of the relevant body.
- (v) A member may resign at his own pleasure.

As in the case of the National Council, care should be taken to appoint members on a non-partisan basis who are sincerely interested in the welfare

and development of the people of the county and of the country, and who have an interest in an understanding of education.

4. Meetings of the Committee, etc.

The Committee would meet regularly four times a year.

The Assistant Secretary of the County Education Office would perform the duties of Secretary of the Committee.

The County Education Officer may through the members of the County Education Advisory Committee, collectively and individually, make clear the purposes, aims and objectives of educational policies and decisions and thus make for better understanding, greater harmony and closer co-operation and support.

Part III - District Education Advisory Committees

This body would advise the District Education Officer, and through him the County Education Officer, on educational matters at district level.

2. Functions

What has been said in respect of the functions of the County Education Advisory Committees applies here (but read "District" for "County" and "County Education Officer" for "Minister").

Status

It would be a statutory body.

Composition and Constitution:

- (i) The body would consist of not less than seven and not more than nine members, including the District Education Officer who shall be the Chairman.
- (ii) The members would be nominated by the County Education Officer after consultations with the District Education Officer and District Commissioner and shall be appointed by the Minister, provided that the body include at least one member of one of the local authorities of the district, who shall be Chairman of such local authority, (excluding members who are teachers) and provided that the body include at least one member of one of the Boards of Governors of one of the schools in the district (excluding members who are teachers), and provided that in the case of there being a municipality in the district the body include at least one member of the elected members of the Municipal Council.
- (iii), (iv) and (v) as for County Education Advisory Committee.

5. Meetings

The Committee would meet regularly four times a year.

The Assistant Secretary of the County Education Office would perform the functions of Secretary to the Committee.

The County Education Officer and the District Commissioner may attend any meeting in an advisory capacity.

Part IV – The Planning Unit

Throughout the world the realization of the fact that education is both a factor and an element in economic and social development has caused nations to scrutinize their educational systems anew. The questions asked are:

What are the determinants of this system?

What are its aims, its functions, its targets?

Is the system geared to the immediate needs of the economy? or is it a deterrent to progress?

Is it inspired by the social and cultural aspirations of the people? or is it alien to them?

Is it prepared to fit into the long-term social and economic development plans of the country?

Have its end-products the attitudes and qualities, the resourcefulness, the adaptability of mind and flexibility of skills to serve the needs of the nation, present and developing, as well as the needs of the individual?

Is it capable of expansion and reorientation if these be necessary to ensure integration between education and overall economic and social development plans? and if such expansion and reorientation be necessary, what are the implications of the changes on the financial, material and human resources of the country?

What will the impact of changes be on the society at large? on the country's economy? is public opinion attuned to accepting the changes? if not, how is this to be effected?

Are the votes made available to education adequate and are they wisely spent?

What funds can be made available to education? If inadequate for the changes contemplated, what educational programmes shall be given priority?

How shall the programme be best phased so that the proposed changes are effected over a certain period of time and no bottlenecks created?

2. These and many other similar questions, which are a gauge of the considera-

tion given to prevailing national, social, psychological and economic factors as determinants of educational assessment and planning, exercise the minds of those responsible for education. The answers, always difficult to find and certainly more difficult to apply, are arrived at with greater accuracy and ease where there has been a great deal of research done and data compiled, collated and processed. And it is the function of the Planning Unit to do this work methodically, comprehensively and scientifically and to put forward suggestions as to its intelligent utilization at the policy and operational levels. On the basis of the Unit's interpretation of data, of sifting of evidence and information, of carefully elaborated plans which have taken into consideration all the possible repercussions on all sectors the political head of the Ministry and his professional advisers can make decisions on matters of policy and map out an approach to the problems. For these reasons we strongly recommend that a Planning Unit under the Planning Officer be established; it is an investment even if only seen from the angle that sound educational planning leads:

- (a) to better education at reduced expenditure per unit of education, and
 - (b) ultimately to greater efficiency, hence economy, in the economic development of the country, by ensuring that the output of the educational system in quality and educational qualification is equal to and relevant to the demands that will be made on it.
3. The functions of the Planning Unit, as implied in the foregoing paragraphs, clearly require that the Unit be staffed by personnel who are competent to deal with the many facets of educational planning. One man cannot combine the professional and technical qualifications and necessary background and experience to deal with the fundamental economic, educational, sociological, demographic and statistical problems that will arise. On the other hand, the resources of British Guiana are limited and its educational system not of such a size as to warrant a large department. The Unit should consist of an educationist, an economist, and a schools' architect. Fortunately, the Planning Officer is both an educationist and a sociologist. The economist to be appointed should be given further training in demography and educational statistics. We recommend that Unesco be requested for aid in training the educationist in educational planning and the economist in demography and educational statistics at one of its Educational Planning Centres (Paris, New Delhi, Santiago, Beirut). The possibility of training the key personnel in situ by foreign experts should be explored.

4. Chart 3 shows the various sections of the Planning Unit. The Planning Officer would head the Unit, be responsible for general planning and co-ordination of the work within the Unit, and direct the work personally of the educational research, textbooks research and archives and documentation sections; in this way these sections would not require to have professional officers. In fact, the Planning Officer would draw upon the professional officers of the Ministry as and when necessary, singly or in committees, for advice; he would call upon the staff of institutions (the University, the Training College, the Technical Institute, the schools) for advice; he would deliberate with the other Ministries and their specialized branches; he would request the assistance of private individuals or extra-governmental bodies, agencies, organizations. He would make the greatest possible use to study specific problems of working committees and advisory committees. In particular, he would work in close co-

operation with the Central Planning Unit and the Planning Units of other Ministries. He would, in fact, tap all the resources of the country and pick the brains of every individual, expert or lay, who can contribute to his thinking on the issues involved. The Chief Education Officer's and Permanent Secretary's rôles are all-important in that it is they who will make available to the Planning Officer the accumulated wisdom and experience of the Ministry's professional and administrative staff and arrange for formal collaboration with other Ministries and outside bodies.

5. The Ministry has made a start in setting up a Planning Unit by the appointment of a Planning Officer. We are certain that our motives will not be misunderstood when we state that this wise move has been brought to nought by the fact that the Planning Officer has had little time to do any planning and that the sections of the Ministry which should have been put under his charge and direction are still with other branches. It cannot be over-emphasized that the Planning Officer and the Planning Unit should not be involved in operational duties, and should be deliberately debarred from preoccupation with day-to-day business. The function of the Unit is that of research, analysis, planning, and advising; it concerns itself with long-term needs and educational provisions to meet those needs. It draws up long-term programmes based on expert fact-finding and projection, sets out costs, suggests priorities, and indicates ways of financing the programmes. It thus makes possible policy-making which is purposive, well-reasoned, and economical in time and in material and human resources. He may advise that plans be translated into actions in the first place on an experimental or pilot project basis; when the outcomes can be evaluated, the plans may be adjusted or revised for general application if approved. He would forestall breakdowns in implementation, foresee consequences, and make allowances for changing circumstances.

6. The fact that the Planning Unit takes the first step towards decision-making and consequently may lead to implementation of proposals, means that there must be continuous formal consultation and informal liaison between the planners and the professional services which are to implement the plans.

7. The general functions of the Planning Unit have been given above and a few points mentioned relevant to the selection and training of personnel, methods and phases of work in planning, co-ordination of activities, relationships with sources of information and advice, and the rôle of the Planning Unit within the Ministry. Implied throughout has been the significance of educational planning in the effective implementation of overall plans. The Planning Officer's duties and responsibilities have been dealt with in some detail; the work of the Buildings Research Bureau has been considered in a special Paper. We would, therefore, now turn our attention to the specific duties of the *Statistical Bureau*.

8. The relevance and practicability of proposed educational plans will depend very largely on the accuracy of the information fed to the Planning Officer by the Statistical Bureau, and by its realistic and dependable approach to costing and financing. In order that the economist/statistician in charge of this Bureau be in a position to advise competently he will have to amass and keep up to date statistical data, collate it and process it. He must examine the raw data now made available to the Ministry, investigate their reliability,

determine their comprehensibility, pin-point the gaps, and take immediate steps to ensure a constant and full flow of such information as he requires for his purposes. There is, in fact, at the Ministry a great quantity of data lying unused: a study of this material has convinced us that a great deal of it can be, when collated and processed, valuable; but much of it remains to be checked as it appears to have been collected somewhat haphazardly and by untrained persons who had been given little insight into what was required or the purpose of the inquiry, and little guidance as to the manner or basis of collection of the data. Many fields of basic study have been comparatively neglected (private secondary schools, extra-governmental costs, state of buildings, of furniture and aids, pupil wastage, teacher wastage, non-enrolment of school-age pupils, to mention a few). In particular there is little information on available manpower resources and on manpower needs and supply, without which educational planning may deteriorate to an academic exercise without relevance to actual and projected needs and may be a hindrance and not an aid to economic and social development. The Mission, has in the limited time at its disposal, attempted to fill in some of the gaps, to collate and interpret the data available.

9. We proceed to enumerate the statistical information about education and related factors which are prerequisites for successful planning. Some of this information is the responsibility of other Ministries to collect and process. However, it is mentioned here in order to make the list as comprehensive as possible. No doubt the list can and will be expanded by the Statistics Bureau itself, it is by no means exhaustive.

A. Schools and institutions

- (i) By level and type of education.
- (ii) By regions, by level and type of education.
- (iii) By counties and/or districts, by controlling body, by level and type of education.
- (iv) Numbers of primary schools by grades, by numbers of teachers and numbers of pupils enrolled.
- (v) Numbers of primary schools by grades, by counties and/or districts.
- (vi) Number of classes by grade, by size.

B. Pupils (students)

- (i) By sex, age and grade.
- (ii) Numbers by counties and/or districts.
- (iii) Full-time and part-time.
- (iv) By socio-economic origin.
- (v) By domicile.
- (vi) Average attendance at first and second levels of education.
- (vii) Average attendance by grades, by sex, by age.
- (viii) Average attendance by counties and/or districts.
- (ix) Average attendance by months, by age, by grades.

- (x) Numbers enrolling in primary schools for the first time, by age, by sex, by counties and/or districts.
- (xi) Numbers transferring from one school to another, by age, by grade, by counties and/or districts.
- (xii) Numbers leaving school each year, by grade attained, by sex, by age.
- (xiii) Field of activity of school-leavers, i.e. kind of occupation, further education, etc.
- (xiv) Numbers repeating grades each year by sex, age and grade.
- (xv) (a) Numbers entered for extra-school examinations (each examination separately).
 - (b) Examination successes in detail.
 - (c) Numbers of same grade group not entered for examination.
- (xvi) Students in higher education by field of study, by sex, by age, by grade.
- (xvii) Students in higher education by sex, field of study, by employment (where employed).
- (xviii) Graduates in higher education by sex, field of study, level and type of degree or diploma.
- (xix) First-year students in higher education by sex, field of study.
- (xx) Students abroad, by country, field and duration of study.

C. Teachers

- (i) Numbers by sex, by age, by level and type of employing institution..
- (ii) Numbers by qualification and length of service/age.
- (iii) Numbers by subjects (or group of subjects).
- (iv) Wastage by normal retirement, by qualifications.
- (v) Other wastage by level of employing institution, by length of service, by qualifications, by field of teaching competence. (Reasons)
- (vi) Teacher-requirement projections.

D. Administrative and auxiliary personnel

- (i) Numbers of professional staff in Ministry, by type of employment.
- (ii) Number of non-teaching professional staff in schools and institutions.
- (iii) Wastage of professional staff in Ministry.
- (iv) Number of administrative staff in Ministry by grades and type of employment.
- (v) Auxiliary personnel in Ministry by type of employment.
- (vi) Auxiliary personnel in schools and institutions by type of employment.
- (vii) Estimate of requirements overall by level of education, by field of study, etc. based on (F).

E. School buildings, etc.

- (i) Age composition.
- (ii) By type of construction and by accommodation availability, by counties and/or districts.
- (iii) By classrooms and special rooms.
- (iv) Condition, state of maintenance and repair: estimates of time limit for and costs of repairs and maintenance.
- (v) New building each year, and capital costs of same.
- (vi) Availability, suitability, condition of furniture, equipment, aids. Cost of replacements, additions, etc.
- (vii) Estimate of requirements and geographical distribution of same based on (F).

As regards demographic, economic, and financial statistics - other than those provided by the Accounts Branch of the Ministry of Education - these should be provided processed by the appropriate ministries or departments, e.g.,

Registrar General	Demographic statistics
Statistical Bureau	National account statistics Statistics of production External trade, etc. Employment statistics Apprenticeship statistics Wage statistics
Ministry of Finance	Statistics of Government Revenue and expenditure

The economist should specify his needs for economic and social statistical information, perhaps even design the form of presentation. His duty would be to combine the various statistics according to specific purposes, especially in order to show long-term trends and interrelationships. In short, with social and economic data, the function of the statistical section of the Educational Planning Unit would be not mere collection but relevant correlation, interpretation and analysis.

F. Demographic

- (i) Total population by sex and age (five year age groups) by counties and districts.
- (ii) Single year age groups up to 25, by sex and counties.
- (iii) Migration by sex, age and academic qualification of attainment.
- (iv) Pupil population projections.

G. Economic and financial

- (i) National account statistics, i.e. national income resp. gross domestic product by components and origin.

- (ii) Capital formation by type of investment and industry.
- (iii) Production of main export products and other products.
- (iv) Balance of payment by major items.
- (v) Government revenue and expenditure by major type of revenue and type of expenditure.
- (vi) Development expenditure by major types of expenditure and source of funds.

H. Educational finance

- (i) Public recurrent expenditure by types of schools and institutions sub-divided for teachers' salaries, other salaries and wages, other personal emoluments, for maintenance, equipment, materials, and other charges grouped among kindred items or individually stated.
- (ii) Teachers' salaries by types of schools and institutions and cross-classified by number, sex and qualification of teachers.
- (iii) Income and expenditure of grant-aided secondary schools uniformly sub-divided to be compared with statistics of government schools and cross-classified as to source of revenue (i.e. fees, government grants, private donations, and other sources).
- (iv) Expenditure on scholarships made by Government subdivided for type of student and type of training at home and abroad.
- (v) Loans paid by Government subdivided by type of student and field of training at home and abroad.
- (vi) Repayment of loans.
- (vii) Private scholarships by donor, type of student (secondary school, university student, etc.) and type of training.
- (viii) Public non-recurrent expenditure by source of funds (e.g. revenue, loans, C.D. & W.) and cross-classified by kind of expenditure (e.g. building, furniture, equipment, sanitation, etc.) and type of education (primary, secondary, vocational, higher, etc.).
- (ix) Non-recurrent expenditure of grant-aided secondary schools by source of funds (Government, private, national, foreign, international bodies, etc.) and kind of expenditure (e.g. building, equipment, etc.).
- (x) Capital value of Government schools and grant-aided secondary schools.

I. Labour force statistics and employment statistics.

- (i) Working force by sex, age (five year age groups) and counties (census).
- (ii) Working force by sex, under 20 years and 20 years and over and by districts (census).
- (iii) Working force by sex, age (under 20 and 20 and over) by occupations and counties (broader occupation groups for districts) (census).
- (iv) Working force by sex, industrial groups, and counties (census).
- (v) Working force by sex, socio-economic status and counties (census). (These census statistics which are to be provided by the Registrar

General's Office form the basis for interpretation of current employment statistics to be supplied by the Department of Labour.)

- (vi) Employed persons by sex, broad age groups (under 18 years and 18 years and over), and industry.
- (vii) Apprentices by type of training.
- (viii) Trainees in Government vocational training schemes by sex and type of training.
- (ix) Trainees in Government vocational training schemes completing training by sex and type of training.
- (x) Wage rates by sex and qualification of workers and by industry.

Combination of data with total public expenditure, national income, total development expenditure, etc. should always be up to date. The same refers to the calculation of standard averages, e.g. expenditure per head of population, per pupil etc. to show changes over time. All these standard calculations must be performed separately for types of schools and institutions and types of students.

10. The economist/statistician will analyse and interpret the collated figures bearing in mind that the Planning Officer will base his plans on the findings. Both will appreciate that the direction of policy, the establishment of targets of development, the attainment of targets within a specified time, may be critically affected by their handling and interpretation of statistical data. After having assessed human resources and the quantity and quality of existing educational facilities, considered anticipated money availability and searched for possible sources of finance, they will draw up their proposed plans to be consonant with the educational philosophy of the country as translated in educational policies, with full awareness of the relationship of these plans to the overall economic and social development plans, and equally full awareness that their recommendations for translation of policies into educational provisions must be practically possible. They cannot afford to permit eagerness to achieve what is theoretically desirable to obscure the limitations of the availability of resources, and to overlook the impact on public opinion, habits and attitudes. The planners will bring out alternative approaches to the fulfilment of aims and achievement of targets. They will determine priorities and suggest practicable staging so that the best use is made of the human, financial and material resources, after making allowances for historical and geographical, social and cultural factors which may affect the tempo of change and of innovation. In all this thinking they will be guided also by the work done by the other sections of the Unit - the Buildings Research Bureau and the Educational Research Bureau.

11. If and when a plan is approved and implemented, the Planning Unit personnel will make themselves available, not to operate the plan, but to advise, when required, the administrators and supervisors executing the plan. Furthermore they may be called upon to draw up plans for specific projects contained within the major plan. They will be engaged, too, in evaluating the plan. Evaluation in fact is a continuous process and the plan operators at all levels should be feeding in at all times data and information which will make evaluation possible in order that modifications may be made to meet new situations.

12. We do not think it necessary at this stage to go into details of the

specific functions of the Educational Research Bureau or the Textbooks Research Bureau. A few pointers will suffice. It is in these fields perhaps more than in any others that the Planning Unit will make the greatest use of working parties, advisory committees and individuals or groups of individuals. Teachers and school supervisors in particular will be mobilized to assist.

13. The Educational Research Bureau will be principally concerned in the interpretation of the material provided by the Statistical Bureau, and in locating problems that hamper or restrict qualitative advance in collaboration with the other sections of the Planning Unit attempting to find the solutions. It is, that is, directly concerned with qualitative educational planning, not that its findings may not make substantial contributions to economies in indicating new approaches and techniques which will cut down on quantitative needs. Among the questions it may investigate may be:

- (i) Curricula and syllabuses for the various levels and types of education.
- (ii) Results of curriculum changes.
- (iii) The need for educational and vocational guidance.
- (iv) Social structure and mobility.
- (v) The rôle of education in rural areas.
- (vi) Attitudes towards vocational education.
- (vii) Teachers' status and rôle in rural areas.
- (viii) Teacher-training curriculum as a result of (v).
- (ix) School organization.
- (x) Teaching techniques.
- (xi) Improvised apparatus and teaching aids.
- (xii) Television and radio for education.
- (xiii) Wastage in teaching personnel.
- (xiv) Drop-out of pupil population.
- (xv) Trends in enrolment.
- (xvi) Levels of intelligence.
- (xvii) Aptitude tests.
- (xviii) Language problems.
- (xix) School attendance.
- (xx) Unpunctuality.
- etc. etc.

14. The Textbooks Research Bureau has an important rôle to play in that the Curriculum Guide, recently published for trial in schools, specially accepts as a basis that educational content divorced from the realities of the country itself is unsuited to the needs of a country and the aspirations of a people moving to independence and desirous of establishing a national identity. There is a great deal of wastage of talent, particularly in rural areas, a great more effort and strain in the learning processes, a great deal more artificial, misdirected teaching, as a result of the fact that textbooks content is often alien to the conceptual background and experience of both learners and teachers. We

would quote examples from every field of study and at every level. We take a few only: we question the educational value to pupils of having to learn by heart - there is no other way - what a textbook writer has to say on the causes of the Civil War on England in the Seventeenth century, and this to children who have no acquaintance with English history before or after that period, or any glimmering of concept of "divine right", "privileges of Parliament" and other such phrases which they glibly mouth. The history of their own country waits to be written authoritatively and in suitable form. Some, but insufficient progress has been made in introducing - foreign produced - readers somewhat closer to B.G. realities; enterprising teachers have thrown out the flora and fauna of the temperate climates which were so assiduously and theoretically studied until recently, and turned to the rich source of supply all around them. External examination boards have to some extent tried to satisfy in special syllabusses the new trends which demand that education in British Guiana should have its roots in, stem and move outwards from British Guiana life and realities.

15. The schools need books - textbooks, reference books, library books, supplementary literature - in all the fields of study and at all levels. There is little money for books; the Government makes little or no provision in the all-age schools; the parents cannot afford to purchase any great number for each of their many children; and books are often expensive (and unsuitable) when imported, particularly for the new secondary divisions. And we repeat the youngsters must have books, more so because of the large classes, and the inadequacies of teachers in numbers and competencies. Group work becomes difficult to control when children have nowhere interesting to turn; a good textbook can compensate in part for the poor presentation of material by a raw, overwhelmed temporary teacher. The appropriately-written textbooks and supplementary readers can open up and broaden horizons, build up vocabulary range and language control, arouse and stimulate children's imagination, creativity and initiative. They can, that is, give the pupil the opportunity to develop his potential as an individual and as a citizen making a positive contribution to the country.

16. The Textbooks Research Bureau, with such working parties or advisory committees as are set up to assist it, has to consider the implications of the Curriculum Guide (or its revised form) in terms of:

- (i) its overall objectives and targets ultimate and at the various levels of education;
- (ii) the content range and grading of material in each field of study;
- (iii) the co-relationship or interlocking of the content of each field of study with other fields of study;
- (iv) the breakdown of the overall material into year by year, or where appropriate term by term, units for the various grades and levels of education;
- (v) the possibility of alternative approaches to the overall objectives and targets in order to allow for the specific needs of special groups or of special areas.

17. In the course of this study the Bureau will undertake in conjunction with field officers a thorough investigation into the existing situation in the

schools and round off its findings after consultations with the headmasters and teachers, individually and collectively, who have to operate under existing conditions. The Bureau will then be in a position to confirm or to revise its original findings (paragrpah 16) and arrive at a realistic picture of the actual needs at various levels, and be in a position to recommend priorities.

18. The problem having been defined and analysed, the Bureau may proceed to the next step - consideration of the satisfaction of the needs. Until such time as arrangements can be made for books written specifically for the schools of British Guiana, the Bureau will scrutinize textbooks and other "literature" from abroad to decide which of them fit the local situation best. If the Bureau's selection is approved, the titles should be strongly recommended to the schools - in fact we would say that schools should be directed to use the books so selected. We give our reasons for this step which runs counter to present practice. Government does not supply books to schools. the parents have to pay for them. But Government has a responsibility to see that the most appropriate books are used and at least cost and inconvenience to parents. Headmasters are not in a position to examine the volume and range of books daily streaming out of publishing houses all over the world; we would go further and say that not all headmasters are able to assess the suitability of a textbook. This is no criticism of headmasters; there are not many educationists who are trained and experienced in applying accepted criteria for textbook assessment. The introduction of secondary school curricula, too, is something beyond the scope of the training most heads have received. Again, there is considerable movement of pupils from one school to another; unless there be some uniformity in the use of textbooks, parents will have to make a second outlay for books in the course of a year. We commend the areas where headmasters have foreseen this difficulty and have in consultation together and with the Education Officer drawn up a list of the basic books to be used in all the schools of the area. This is a good beginning, but it is not enough; there is still insufficient possibility of examination of the wide range of books available an experience in selection. A possible compromise is that the Bureau should provide sets of alternative titles but all schools in each district, at least, would then be required to use the same set. It should be mentioned here, very emphatically; that no title should be discarded without at least one whole school session warning having been given of the intention of having it deleted from the list.
19. This approach to standardization ties up with what we have to say on local publications, where authors encouraged to prepare textbooks must be assured of a minimal market, or where the Ministry having taken over the copyright must ensure a definite market for the book it publishes. We should remember, too, that headmasters will have choice in selecting supplementary texts and library books.
20. In this period of transition from imported to local publications or locally-written publications (and afterwards) the Bureau should give careful attention to the preparation of material to supplement the textbooks, material which would bring pupils into closer contact with their own neighbourhood, their own country and its people and history and activities. The preparation of such material should be stimulated and assisted at two levels - the school

level and the national level. Teachers should be encouraged to prepare supplementary material - a great many do now under great difficulties - primarily for use in their own schools. Education Officers should encourage such resourcefulness and also make their own contributions as should the Training College staff and trainees. County Education Officers and the Ministry can assist by making available typists and by cyclo-styling the material. Where the material prepared is considered of good quality, it can be circulated to other schools. We are now speaking of single sheet or four-six sheet pamphlets. Such material, because of its temporary format, should be given out for a particular lesson and taken in immediately the lesson is over for use on another occasion or with other classes, or, where it is intended to be used extensively in a class, the pupils should provide themselves with file-jackets to contain the sheets. Material of higher quality and of wider application should be bound a little more substantially but cheaply (actually useful training for bookbinding classes) and sold at a price to cover costs and small honorarium for the author. In this way the whole of the teaching body can pool its resources and teachers assist each other. The Education Officer's role as an inspirer and adviser cannot be overestimated and the Bureau should make available to him all its resources. We should not omit to mention that the subject supervisors can use these techniques very successfully to assist hard-working teachers who lack content background and presentation techniques.

21. Supplementary material for the primary schools would for the most part take the form of supplementary reading material. This does not preclude the introduction of geographical, historical, nature study, etc., content but we suggest it should be presented as reading material i.e. in story or playlet or dialogue form. Pupils' written work in the form of a school newspaper may be distributed between schools and always arouses interest. Supplementary material for the secondary schools, on the other hand, is intended principally to fill in the gaps left by textbooks. It may, for example, take the form of a series of science lessons with diagrams drawn, etc., to cover a part of the syllabus which the textbook has treated scantily. It may be a series of informal history lessons dealing with a period of British Guiana history which the textbook has completely ignored. There is no end to what can be done when teachers are interested and equipment and material is made available. The results of such efforts may be of considerable help to the Bureau's research projects.
22. Another sphere of activity which should engage the attention of the Bureau is the production of a children's magazine for the primary schools. We do not think we need expand here.
23. In the meantime the Bureau will have forged ahead in its major project of fostering and stimulating the preparation of textbooks which satisfy the needs of the schools and conform with the principles inherent in the Curriculum Guide. We do not recommend that the Bureau should take on a staff to write textbooks if it wishes to avoid stilted, artificial writing; nor can a permanent staff ever be big enough to have cumulatively the background, the experience, the competence, the qualifications to cover the whole gamut of subject areas at the various grades and levels. The Bureau by providing incentives must encourage teachers and others to prepare textbooks for submission to the Bureau for scrutiny. If the Bureau finds the book satisfactory it will then arrange for

publication and issue. The Bureau, however, must save intending authors from putting in time on efforts which are misdirected in that they do not comply with the requirements. Consequently the Bureau should announce:

- (a) the subject-areas of textbooks it is prepared to consider at any specific time;
- (b) the grade(s) and level(s) for which a book is intended;
- (c) the specific material to be covered;
- (d) the approximate size of the book required;
- (e) the extend to which diagrams, illustrations, etc. are to be used;
- (f) the general terms of contract between Government and the successful author;
- (g) the date of presentation of summaries of drafts with content table;
- (h) the date of presentation of full scripts of those summaries considered by the Bureau worthy of further consideration;
- (i) proposed date of issue to schools.

24. It is suggested that Government buy the copyright outright so far as sales in British Guiana are concerned by paying the author an honorarium to be fixed. The author would receive royalties on any sales outside the country. In this way the cost of the sale will be the cost of publication with a small addition to cover the honorarium and costs of distribution if Government distributes; if, however, Government puts sales and distribution into the hands of booksellers, then it should fix the retail price by adding the booksellers' commission and not permitting sale above that price.

25. We recommend that Government should print locally where the local printing press can handle the type of content competently, even if this should (why should it?) add slightly to the price?

26. In certain cases the Bureau may commission an individual to write a particular textbook, or where two authors have submitted scripts better than those of others but still inadequate, it may suggest that the two authors should collaborate, indicating what is acceptable or can easily be made acceptable in each script. There is, too, available a ready source of possible textbooks. It is known that a number of individuals on their own initiative have written textbooks and the Publications Committee has through the Ministry called for scripts prepared or in preparation. A study of these may prove illuminating; it will be interesting, among other things, to see to what extent the principles underlying the Curriculum Guide and the suggested courses of study contained therein have made an impact.

27. One last question. In considering needs and priorities the Bureau would be

well advised to consider costs to parents. We have noted in our investigations, to take just one example, that Class III needs a history book, a geography book, a nature study book, a simple atlas, supplementary readers as well as a more appropriate reader. Should all these textbooks be required at once? can parents bear the costs? or rather would they be prepared to bear the costs at that level? If we may digress: We ask the question because we have seen many classes in which many of the children had not procured even the single textbook used in the class. Would it be naive on our part to ask how it is that in Class III the parents cannot afford to buy one single book, and yet in Class IV (scholarship class) we have seen all the children each with four-eight books for English alone? Apart from this, if the Bureau engages in attempting to supply, four, five, six, eight, ten textbooks in every class all at one time, we fear that it will supply none for a long time or cause frustrating delays to would-be authors while it is evaluating the scripts received.

28. In the primary divisions, to our minds, the priority need is for a suitable well-graded reader course, for an arithmetic course, and for supplementary readers of a somewhat more substantial nature than those suggested earlier.

29. The provision of acceptable textbooks would, then, be a major function of the Textbooks Research Bureau, but not the only one. It would be engaged in research work to arrive at principles which would be of assistance to authors and teachers in the preparation of books and "literature".

30. We recommend that Government request the United Nations for assistance in the establishment of a Textbooks Research Bureau by providing:

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

31. We urge Government to set up an **Interdepartmental Planning Commission** consisting of experts of the:

Ministry of Education (Planning Officer and Economist and Statistician)
 Ministry of Finance
 National Planning Unit
 Department of Labour
 Youth Employment Section
 Ministry of Agriculture
 Ministry of Trade and Industry
 Statistical Bureau

This Commission should meet from time to time, at least every third month, and discuss common problems related to educational planning. It is necessary that the findings and suggestions of the educational planning officers be checked and adjusted to needs and possibilities beyond the compass of responsibility of the Ministry of Education. On the other hand, planning procedures of the other

ministries would gain in effectiveness if they took into account the requirements of education. The Commission could occasionally be enlarged by inviting other experts in the specific fields under discussion, e.g. the Registrar-General in the case of demographic problems, but it should more often be narrowed to a core of experts from the following ministries:

Ministry of Education (Planning Officer, Economist)

National Planning Unit

Ministry of Labour

This group most directly engaged in social and economic planning should be in constant contact in order to balance the programmes devised for the individual social and economic purposes. The Ministry of Labour, for example, is the proper Institution to indicate the available supply of labour by skill and regional distribution and the possibilities of retraining labourers for specific jobs or of shifting labour from areas of over-supply to areas of demand. It can assist also in estimating labour cost for general economic projects as well as for school buildings. The Ministry of Education, again, has to relate its training programmes in respect of formal vocational training and secondary and higher education to the specific requirements of labour accruing directly and indirectly from realization of the economic projects. Above all, by involving other competent ministries into educational purposes from the development budget, education would no longer be treated as fringe item, but as a legal concomitant of economic development which creates its own funds. Projects designed by way of co-ordination as outlined above could be discussed by the whole interdepartmental planning commission and adjusted and co-ordinated with the requirements of other ministries, especially Agriculture, and Trade and Industry.

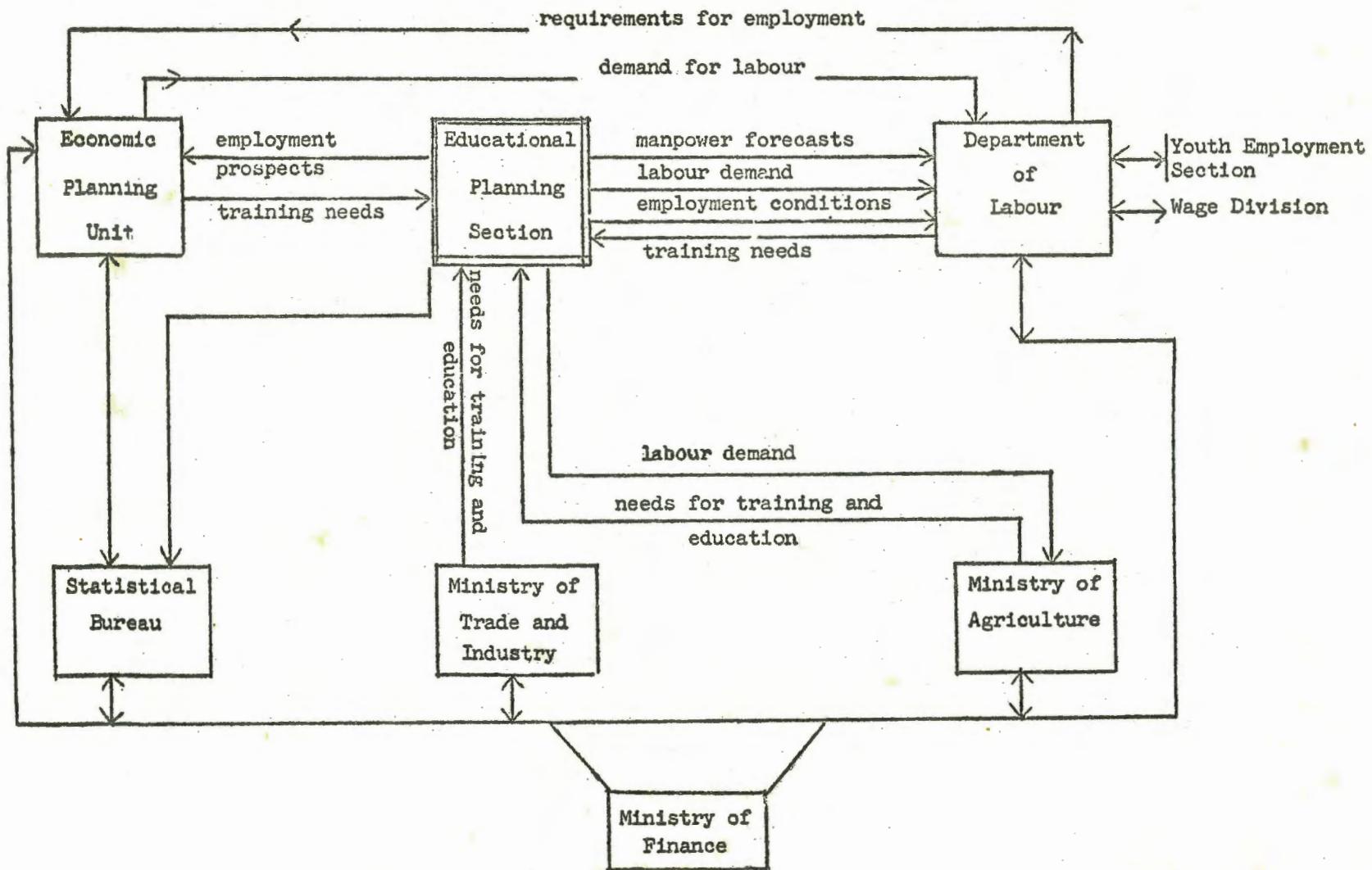
32. It cannot be left to the initiative of the educational planning officers when and under what conditions they seek the co-operation of other ministries or departments.

The supervisory services

33. One of the problems challenging the Ministry of Education and Social Development is that of ensuring that the many millions of dollars allocated for educational purposes are used to the wisest and most economical advantage in terms of efficient and effective education embracing the principles laid down in the "White Paper on Educational Policy". We have attempted to illustrate the fact that the administrative services must be strengthened and alerted, and the legal basis for the educational system brought up to date, but in addition there is required on-the-spot control, supervision and guidance of education if full value is to be obtained.

34. After careful examination of the supervisory services of the Ministry, the Mission is of the opinion that they are inadequate to cope with the situation that has developed and will further develop as a result of the extraordinary expansion of educational provisions. Admittedly the supervisory services have been strengthened of late in numbers, but inadequately so, and

Chart 4 - Scheme of an Interdepartmental Planning Commission
(to assist in educational planning)



in any case the officers who should be engaged in maintaining at least, if not improving, the quality and standard of education, are in the main functioning as quasi administrators of a dubious level - checking pay sheets, investigating complaints, furnishing examination centres, etc. Their professional skills, experience and wisdom are not available at all times to the persons who need it - the teachers. We venture to suggest that they would be more effectively employed and happier in their work if their days, evenings and many week-ends were taken up with report-writing on schools and teachers, with preparing "guides" and "literature" for their teachers, organizing and conducting teacher conferences or in-service courses, sponsoring extra-school educational, social and cultural activities, rather than as at present wading through papers not directly connected with such activities.

35. It is in the field that the officers of the supervisory services can make the greatest impact on the quality of education. (The term supervisory services is used to denote those services of the Ministry which are, or should be, in daily contact with the schools and with teachers in order to give on-the-spot training to teachers, to assess the full educational value of a school's effort, and to act as liaison between Ministry and teachers and between teachers and Ministry.) It is appreciated that one reason why the supervisors or Education Officers are not in the field as much as they ought to be, is that the administrative services have not been able to cope with the volume of new work; that is why we have strongly recommended the overhaul and strengthening of the administrative services and the establishment of County Education Offices. If this be done, the Educations Officers (supervisors) may be allowed to make their real contribution to education.

36. But this in itself is insufficient. The new direction of the expanded programme - that is secondary education for all and a diversification of this secondary education at a certain level - demands not only the expansion of but also a widening of the range and deepening of the competence of the supervisory services; without this the supervisory services may be unable to play a positive part in making education more efficient in the higher levels of study of the new institutions of the reorganized system. There must be no deterioration in the quality of education: on the contrary there must be advance and all are concerned that this be so.

37. We proceed on the assumption that there is acceptance of our view that:

- (a) the counselling/advisory/supervisory staff are needed in the field on a full-time basis;
- (b) the expansion of educational provisions calls for urgent compensatory expansion of linked services;
- (c) the diversification of educational provisions at secondary level demands a new type of supervisory service competent to function at this level, and we expand on this before turning our attention to principles for definition of functions of the supervisory services, reallocation of job-assignments, and the "establishment" strength of these services.

38. The secondary divisions of the all-age schools, which are to be developed into comprehensive secondary schools when resources of finance and man-power permit, and the secondary grammar/high schools, Government and grant-aided (and eventually the private secondary schools also), will require - (have required) - intensive supervisory and counselling services. In the past the secondary schools have but rarely been paid anything but fleeting visits, the large numbers of untrained staff given little guidance except through occasional all too short courses or seminars. These schools, new secondary schools and the secondary divisions of all-age schools will now have a significance in the educational structure and consequently in the attainment of economic and social development targets which can no longer be overlooked. Furthermore, the grant-aided schools are receiving public monies which it is the responsibility of the Ministry to see are put to good purpose. The establishment of a secondary schools supervisory services section at the Ministry appears therefore to be imperative. These services will establish that (and advise to that end):

- (a) schools are aware of the general lines of educational advance and diversification of educational provision expected of them;
- (b) schools are aware of their responsibilities as the sole feeders to the College of Arts and Sciences which can stand or fall by the quality of student and adequacy of numbers of students fed into it by the secondary schools;
- (c) that instructions or recommendations (e.g. on curriculum planning, syllabus construction, time-tabling, intra-school staff distribution, selection of textbooks, etc., etc.) put forward by the Ministry are intelligently interpreted;
- (d) that modifications to, or adaptations of, such recommendations are wisely made to be consistent with the school facilities and competencies and with the needs of the area in which the school is located.

39. It is recommended that there be two sets of supervisory services established, one to be responsible for nursery and primary schools and for all-age schools, and one to be responsible for the secondary schools proper i.e. the secondary grammar/high schools as at present established, the secondary comprehensive schools to be established, and the secondary schools formed as and when the secondary divisions of all-age schools break away from the primary divisions and are housed separately from them. The first will be under the charge of a Senior Education Officer (Primary) - it may be more tactful for the time being to give him the title of Senior Education Officer (All-Age Schools); the second under a Senior Education Officer - (Secondary Schools) - Senior Education Officer (S).

40. The Senior Education Officer (P) will control and supervise the work of the 11 District Education Officers who are, very rightly, stationed in their respective districts. The very nature of his duties together with geographical and communication obstacles makes it necessary that the supervisory officer responsible for the general work of all-age schools should be based at a vantage point within his own district. Only thus can he get to know the peculiar problems of the milieu of each of his schools; an understanding of these is essential

if the supervisor is to advise wisely and realistically in the schools and is to encourage the wider educational, social and cultural activities of the area. In addition to the 11 District Education Officers, the Senior Education Officer (P) would have under his immediate control at the Ministry an Education Officer who is a specialist in nursery and infant education. She would move about from district to district assisting the District Education Officers in the junior classes and supervising the work of such nursery schools as have been established or are about to be established.

41. The Senior Education Officer (S) will have the subject supervisors and specialist subject supervisors under his control. These will be based on Georgetown. It would be financially impracticable to duplicate this body at each county headquarters; moreover, for many years to come the volume of work would not warrant such expansion and expense; the secondary schools, too, are predominantly situated in the capital and environs. This team, either singly or in small groups, or as a whole team would be made available by the Senior Education Officer (S) to the Senior Education Officer (P) from time to time for the supervision of the work in their subjects in the secondary divisions of the all-age schools. (These divisions would remain under the general control of the district based supervisor who would call through the Senior Education Officer (P) for the assistance of the secondary school specialist supervisor.)
42. The subject-supervisor in addition to his individual subject supervision would be charged with the general supervisory duties of a number of secondary schools; he would be required to report on such schools as organic educational units and not simply as tools or media for transfer of subject-content and institutions for narrow examination success.
43. It is clear from the above that the supervisory staff would really function as a unit in which there is a wealth of resources and experience at the disposal of each of its members who has general duties to perform in a school, and at the disposal of the Ministry and its various agencies. To a great extent the success of the supervisory services will depend on the co-operation and understanding of the two Senior Education Officers, and since they are responsible to the Deputy Chief Education Officer, it is he who will harmonize and co-ordinate the duties of these services and make them truly complementary to each other. In this way the purpose of the establishment of these services can be achieved, i.e. to provide the schools with the full professional "know-how" of a team of educationists and specialists.
44. The dedicated efforts of such a team can lead to real qualitative progress at a moment when quantitative expansion is near to swamping quality altogether; the danger is doubly imminent in view of the shortage of trained and adequately qualified (academically) personnel.
45. We recommend that the "establishment" of the secondary schools supervisory services be as follows:

SENIOR EDUCATION OFFICER (S)**Six Education Officers
(Academic subjects)**

- 1 for English
- 1 for mathematics
- 1 for sciences
- 1 for history and geography
- 1 for commercial subjects
- 1 for foreign languages

(all-purpose professional work in secondary schools, plus subject work in secondary schools and secondary divisions)

**Eight Education Officers
(Specialist or technical subjects)**

- 1 for primary education (male)
- 1 for primary education (female)
- 1 for home economics
- 1 for agriculture or rural science
- 1 for handicraft
- 1 for music
- 1 for art
- 1 for aural and visual aids

(specialist subject work in all secondary schools and secondary divisions of all-age schools, plus specialist subject work in primary divisions where relevant)

46. This gives a total strength of 28 (13 on the "primary" side and 15 on the "secondary" side). This it must be pointed out is the minimum and we strongly recommend that early steps be taken for appointing and training (if necessary) personnel to bring the services up to this strength by September 1964. By 1970 the services will have required still further strengthening. The weight of work will be increasing year by year and supervisory and administrative services would have to expand accordingly. It is recommended that early consideration be given to a third branch of the supervisory services - for technical and vocational education - under a Senior Education Officer or Technical Adviser.

47. Since we believe that the rôle of the supervisory services is a critical, vitally critical, one in any educational system reaching for qualitative advance, we propose to set out our suggestions as to what should be the duties and functions of the supervisors, their approach to, and aims of, supervision or inspection (using the word in its broadest sense). (These sections have been deleted.)

Boards of Governors

48. The Mission put forward its view that communities through local (or municipal) authorities should take over part of the administration of schools and outlined its reasons. The community, through the local or municipal authority, should take over responsibility for maintenance, repairs, replacement of furniture and equipment and aids of its school(s), i.e. the local authority would prepare estimates each year, with such technical assistance as would be made available to them by the County Education Officer, for proposed works, and after ratification of such estimates by the County Education Officer and District Commissioner (?), would make an assessment on all adults to meet

the costs (as is now done for irrigation maintenance works). Government's responsibility would be the provision of new buildings, major extensions, initial furnishing and equipping of same, the provision of technical advice and supervision of works undertaken by the local authority, and by making per capita grants to assist authorities to fulfil their responsibilities. The local authority would be required to comply with specifications, etc., (e.g. in minor extension works, or seating) as laid down by the Ministry. There is no reason why the local authority should not carry out works on a community, direct labour basis, or self-help basis. The rôle of the County Buildings Inspector is, of course, a significant one in these operations.

49. There are three factors, however, which make this "involvement" of local and municipal authorities difficult of general application:

- (a) dual control - Government cannot interpose another governing body on denominational schools;
- (b) parents' right of choice of schools: as the law now stands, children may go to any school they wish. Consequently, it would be difficult to get popular support from a community if the school in its midst contained a large number of pupils from a neighbouring community which could not be assessed by the local authority in charge of the school. Zoning for purposes of school attendance would be necessary to offset this difficulty or the combination of areas to be served by one or more schools and assessments made on all the inhabitants of those areas for school purposes;
- (c) the whole country is not covered by local authorities.

50. We do not propose at this stage to consider each of these factors and put forward suggestions as to the resolution of the problem involved, or to discuss one alternative method of financing education, i.e. through an education tax which could then be applied directly or through local authorities.

51. For the present, therefore, we recommend that the Ministry should implement its intention of appointing Boards of Governors to all Government schools, but should consider in appointing members, not only the present contemplated functions and powers of the Boards but also possible development in these functions and powers. If, for example, after *full* consideration of *all* the implications of what we have said in the opening paragraphs, Government feels that the tentative proposals there explicitly and implicitly made may be possible of application in the future, then Government should, as from now, involve local authorities in school business by giving a large proportion of the seats on each Board to members of local or municipal authorities. In such a case the term of office of any Board would by Law coincide with the term of office of municipal and local authorities. This would be a beginning of the training of local elected leaders in the educational field. The suggestion that the Parent Teachers' Association should form the Board of a School would defeat the whole purpose of making the community responsible through its *elected* leaders. By judicious appointment the parent body would be represented since not all Board seats would be held by local or municipal authority members. In the case of Georgetown, one Board of Governors would function for all

Government schools, with the Mayor as Chairman; similarly for New Amsterdam, as also where more than one Government school is in the area controlled by any one local authority. Practising teachers should be excluded from appointment to the Boards of Governors of the school in which they are working.

52. We are not suggesting that there is no place for Parent Teachers' Associations. Far from it; we believe they have a most important contribution to make. They would supplement the efforts of the Boards of Governors as they are today supplementing the efforts of the Ministry or of the denominational governing bodies.

APPENDIX M

EAST RUIMVELDT PILOT PROJECT (EXTRACTS)

The building is a new one with 16 classrooms, a staff room, and a very large head's room, storage space, toilet facilities, etc. It has no laboratories, wood or craft shop, or home economics centre. There is adequate land, however, for such buildings to be erected. The school was built to house 800 children at 50 to a classroom; in view of the recommendation to confine it to secondary school work its capacity of necessity is 640 (40 to a classroom). It is not really big enough. We expand.

2. We envisage this school as a four stream entry school moving towards a four-pronged curriculum in the upper forms. For a Georgetown school this diversification *in the upper forms* should allow for courses *in science, technical education, and commercial education*. No provision is made here for an arts stream as this side of the work is being dealt with by a number of high schools. The future development of the country calls for more science teaching in the schools and the Ruimveldt Secondary Comprehensive can help in filling in part the inadequacy of the present position. Two technical streams are suggested as it is important that the Government Technical Institute should as quickly as possible be able to shed its lower echelon to take its intended place as the Engineering and Technological Faculty of the University of Guyana.

Consequently the following extensions are recommended:

- (a) *by September 1963: fully equipped practical centres and shops (wood and metal, metal and a home economics);*
- (b) *by September 1964: two laboratories and four more classrooms, one of which should be fully equipped for commercial education.*

Plans should be prepared taking (a) and (b) as a single unit and the actual construction phased. (Possibly a single-storeyed building would be a cheaper proposition. *The specialist officers of the Ministry and Government Technical Institute must be consulted in detail if costs are to be kept down.* Until the laboratories are built, one of the classrooms may be cheaply converted for use as a demonstration laboratory.)

3. One of the disadvantages of a dual control of schools and of the vagueness of the law on questions of admission, enrolment, etc., is that the planners of the Ministry can never quite arrive at accurate projections of school age population in any particular area or for any particular school. This leads to the ludicrous-tragic anomaly of one school in Georgetown being half empty and its neighbour bursting at the seams. It leads further to children walking right past one school to go on a mile more to another school.

4. **We recommend, therefore, that Ruimveldt pilot an experiment in zoning.** It is to serve, that is, a well defined area. Until such time as the boundaries are fixed we propose that the Ministry limit intake up to and including

Form 3 to pupils who have completed the primary school courses at St. Pius, La Penitence, Ruimveldt Anglican and Ruimveldt Lutheran. If zoning or limit is not fixed, then there must be some form of selection - which, we take it, it is Government's declared policy to abolish. Furthermore, if the school were flooded with children from other areas it would not be able to take the weight off the three schools in Ruimveldt; public opinion in the area would be outraged.

5. Another "nice" problem presents itself here. Suppose some children do not wish to move. Does Government intend to permit them to stay in the feeder schools? Suppose only a handful stay back in each form in the feeder schools, would Government be expected to provide a teacher for each of the small groups? These are problems which should be foreseen and decisions taken as to the manner of handling them so that at all times the administrator and the field officer know what is in each other's mind.

6. The present (1 March 1963) position in these schools is as follows:

	Accommodation available	Pupils enrolled	Standard IV	Post Primary Division				Total
				Form 1	Form 2	Form 3		
St. Pius	400	570	59	50	56			106
Ruimveldt Anglican	400	665	66	61	48	55		164
Ruimveldt Lutheran	750	1,073	135	81	56	74(3rd & 4th)		211
	1,550	2,308	260	192	160	129		481

(a) There are also two remedial classes with 74 children of over 12 years old in this school; these are not included in the total given.

7. The approximate distance between each of these three schools and the new school is

St. Pius - $\frac{1}{2}$ mile.

Ruimveldt Anglican - 2 miles

Ruimveldt Lutheran - $\frac{1}{2}$ mile

8. It will be observed from Table I that the number of children in the First Forms of the three feeders is already too high for a four stream entry, and the First Form of the Comprehensive School may have to carry five streams. It is possible, however, to consider that a number of the children in Form 1 at the Anglican School, for reasons of distance, etc., may wish to stay where they are. If not, the school will have to take them in, and as a result of wastage by 1965 the group will be a four streamed one. But the problem will still not be solved since in September 1963 there will be 260 ex-class IV of the three schools clamouring for admission. The need for another secondary school in the

area (on the La Penitence side?) to take in the excess and also the Agricola divisions is with us.

9. It is strongly recommended that the school in April 1963 should start only with First and Second Forms i.e. it will take only the 192 children of the First Form of the three schools and the 160 children of the Second Forms, a total of 350 say, with four-five streams in the First and four in the Second. The numbers are such, unfortunately, that it will not allow in April for transfer to the school of pupils from other secondary schools.

10. The reasons for the above recommendation and the recommendations made in this Paper all lead back to one principle. Government cannot afford to start off its very first venture either on a false note or on false bases. The pattern, the organization, the effort, must be such that people are convinced that this type of school is really going to afford equal (the BEST) opportunities; otherwise parents will still opt for the fee-paying schools. The school must offer the facilities; it must have the staff; it must have the equipment; it must have the furniture; it must inspire confidence and win respect. All this requires time and time is short. There must be time for more thinking not only by the planners and the administrators but also by the specialist officers and the headmaster. By confining the intake in the first place time will be given to consider the many problems involved in the evolution of the middle and upper school. Again, the older children now lumped together in the Third and Fourth Forms of the feeder schools may not fit into the pattern at all and cause undue complications; we must remember that feeder schools are permitted to decide the details of their curricula and syllabuses. There may be very little in common ground to work on. In fact the ideal thing would be to start with a First Form only in September. But the hard facts demand that a start be made on a wider basis; with careful consideration of the problem something worth while can be done with the Second Form.

11. It was recommended that zoning principles be applied for the entry into the first three forms. It is recommended that the Fourth Form in September 1964 include not only the school's own children coming through, but that vastage be made up by admission of children with good College of Preceptors qualifications from secondary divisions of other schools and from other secondary high schools. It will be necessary, however, for entry into the technical courses, that applicants have done a wood course up to the required level in their previous school.

12. It is in fact being strongly recommended that this school in Georgetown should share the position and standing of the other two Government grammar schools, and that Fourth and Fifth Form (i.e. post-College Preceptors level) work in the Rainveldt school, be undertaken only by those who can go forward to General Certificate of Education work in their respective streams. This recommendation may be modified if and when Government acquires or builds other separate comprehensive schools.

13. Consequently:

- (a) All secondary schools must in time be or become comprehensive schools with a diversified curriculum.

- (b) There can be no question of perpetuating or expanding the selection system.
- (c) There can be no question of promoting further institutions of a privileged nature or status.
- (d) All pupils should have the opportunity to the limits of their ability to reach equivalent, though not necessarily identical, recognized and accepted standards.
- (e) For social and educational reasons all pupils will have a common basic education and share common experiences.

APPENDIX N
COSTING TABLES

Table XXXII - Estimate of recurrent expenditure on education^a 1965, 1970 and 1975 in comparison with actual expenditure in 1960 and 1961

(1. Approach^b)

1,000 W.I. \$

	actual (current prices)		estimates (1962 prices)		
	1960	1961	1965	1970	1975
Primary and All-Age Schools					
Teachers' salaries	5,058	5,281	6,557	9,972	13,790
Station allowances))	77	92	106
Travelling allowances	7	8	12	13	15
Removal expenses	.	.	3	5	5
Wages	14	15	21	24	27
Bicycle allowances, etc.	10.4	0.3	0.5	0.6	0.6
Total personal expenditure	5,080	5,304	6,670	10,107	13,944
Maintenance, equipment, etc.	213	224	295	350	400
Textbooks and stationery ^c	-	-	1,718	1,959	2,150
Library for teachers	0	1	18	20	25
Examinations	28	41	42	64	84
School feeding programme	85	85	113	130	150
Total other charges	326	351	2,186	2,523	2,809
Total Primary and All-Age-Schools	5,406	5,655	8,856	12,630	16,753
Practical Instruction Centres and Departments					
Salaries of teachers	63	59	166	557	1,042
Equipment, materials, etc.	28	22	72	204	329
Total Practical Instruction Centres and Departments	91	81	238	761	1,371
Teacher Training					
Salaries of lecturers G.T.C.	63	63	199	188	167
Other salaries and wages G.T.C.))	16	16	16
Maintenance of students G.T.C.	75	79	-	-	-
Other charges G.T.C.	7	11	21	17	16
Courses for teachers ^d	5	5	5	5	5
Total Teacher Training	150	158	241	226	204
Secondary Grammar Schools					
Grants to aided schools	256	325	643	1,154	1,797
Teachers' salaries ^e	355	377	509	532	553
Other charges ^f Gvt. schools	36	47	49	49	49
Total Grammar Schools	647	749	1,201	1,735	2,399
Carry over					
Personal emoluments	5,817	6,128	8,203	12,554	17,519
Other charges	477	515	2,333	2,798	3,208
Total	6,294	6,643	10,536	15,352	20,727

Table XXXII (continued)

1,000 W.I.\$

	actual (current prices)			estimates (1962 prices)	
	1960	1961	1965	1970	1975
Carry over					
Personal emoluments	5,817	6,128	8,203	12,554	17,519
Other charges	477	515	2,333	2,798	3,208
Total	6,294	6,643	10,536	15,352	20,727
Carnegie School of Home Economics					
Personal emoluments ^e	59	65	79	85	87
Other charges	27	29	34	35	37
Total Carnegie Schoole	86	94	113	120	124
Government Technical Institute					
Personal emoluments	135	141	240	254	262
Other charges	30	34	36	38	39
Total G.T.I.	165	175	276	292	301
Special and Reformatory Education^f					
Personal emoluments	58	63	79	85	92
Other charges and grants	46	46	50	52	57
Total Special Education	104	109	129	137	149
Amerindian Education					
Scholarships	24	24	39	43	48
Other Expenditures^g					
Scholarships	286	243	310	375	450
Education Department					
Personal emoluments	296	389	529	690	860
Other charges	187	198	277	352	390
Total Education Department	36	34	50	70	80
Total Education Department	223	232	327	422	470
Education Expenditure total^a					
Personal emoluments	6,256	6,595	8,878	13,330	18,350
Other charges	1,222	1,314	3,381	4,101	4,779
Grand total	7,478	7,909	12,259	17,431	23,129

^aExcluding higher education, agricultural education, and vocational training other than by Carnegie School and Government Technical Insitute. - ^bTotal expenditure accruing from demographic expansion of school population, extension of school attending age to 5 to 16 years, gradual replacement of untrained teachers in All-Age Schools and Secondary Grammar Schools by trained teachers and graduates and from consequent changes in other institutions. - ^cProvided by Government from 1965 onwards. - ^d1960 and 1961 refresher courses; 1965 to 1975 correspondence courses. - ^eIncluding a grant of \$ 2,400 to Frederic School of Home Economics. - ^fEssequibo Boy School, grants to Salvation Army and grants for education of blind children in Trinidad. - ^gMaintenance of Government Schools; School Medical and Dental Service; broadcast to schools and teachers' pensions and gratuities.

Table XXXIII - Estimate of recurrent expenditure on education^a 1965, 1970 and 1975 in comparison with actual expenditure in 1960 and 1961
(2. Approach^b)

1,000 W.I.\$

	Actual (current prices)			estimate (1962 prices)	
	1960	1961	1965	1970	1975
Primary and All-Age Schools					
Personal expenditure	5,080	5,304	6,407	9,707	13,413
Maintenance, equipment, etc.	213	224	268	312	360
Library for teachers	0	1	18	19	20
Examinations	28	41	41	64	84
School feeding programme	85	85	113	130	150
Total other charges	326	351	440	525	613
Total Primary and All-Age Schools	5,406	5,655	6,847	10,232	14,026
Practical Instruction Centres and Departments					
Salaries of teachers	63	59	166	327	647
Equipment, materials, etc.	28	22	70	107	184
Total Practical Instruction Centres and Departments	91	81	236	434	831
Other educational expenditure^c					
Personal emoluments	1,113	1,232	2,042	2,666	3,364
Other charges	868	941	1,123	1,374	1,642
Total other educational expenditure	1,981	2,173	3,165	4,040	5,006
Total Education Expenditure^a					
Personal emoluments	6,256	6,595	8,615	12,700	17,424
Other charges	1,222	1,314	1,633	2,006	2,439
Grand total	7,478	7,909	10,248	14,706	19,863

^aExcluding higher education, training in agriculture, and vocational training other than by Carnegie School and Government Technical Institute. - ^bSame assumption as for Approach 1, but excluding pupils below the age of 5 years 9 months and assuming school places and practical subjects centres to increase according to the revised building plan only (see Table XXXVI). This calculation does not make allowance for textbooks and stationery which are expected to be provided by parents. - ^cIndividual items are the same as for Approach 1.

Table XXXIV - Estimated building costs^a for Primary and Secondary Schools
 (calculated for 105,600 new places required by 1975)
 (1. Approach)

	Number of			total space 1,000 sq.ft.	costs per sq.ft. \$	Total costs at 1962 prices 1,000 W.I.\$
	schools	class- rooms/ workshops	pupils			
Primary Schools	145	870	43,600	872	5.50	4,796
Secondary Schools						
4-stream entry	40	800	32,000	640	5.60	3,584
3-stream entry	30	450	18,000	360	5.80	2,083
2-stream entry	50	300	12,000	240	7.00	1,680
Total	120	1,550	62,000	1,240	5.93	7,352
Laboratories						
4-stream entry schools	40	120		72	5.60	403
3-stream entry schools	30	60		36	5.80	209
Total	70	180		108	5.67	612
Home Economics Laboratories						
4-stream entry schools	40	92		111	8.30	916
3-stream entry schools	30	46		55	8.50	469
2-stream entry schools	50	50		60	10.00	600
Total	120	188		226	8.80	1,985
Handicraft Shops						
4-stream entry schools	40	100		120	7.40	888
3-stream entry schools	30	50		60	7.60	456
2-stream entry schools	50	50		60	10.00	600
Total	120	200		240	8.10	1,944
Grand total	265	2,988	62,000	2,686	6.21	16,689

Reconditioning of schools and practical subject centres

	No. of schools	average costs \$	total costs 1,000 W.I.\$
Primary schools	100	6,000	600
Home Econ. Dep.	29	3,000	87
Handicraft Dep.	8	3,000	24
Total			711
Teachers' houses	265	10,000	2,650

^aExcluding site costs.

Table XXXV - Estimated costs of furniture and equipment for
 Primary and Secondary Schools
 (calculated for 105,600 places required by 1975)
 (1. Approach)

	Unit No.	Costs per unit W.I. \$	total costs at 1962 prices 1,000 W.I.\$
Primary Schools			
Benches (18 vacant schools)	7,000	16	112
Benches (145 new schools)	21,800	16	349
Cupboards, shelving, etc. (18 vacant schools)	278	50	14
(145 new schools)	870	50	44
Teachers tables, chairs	1,148	26	30
Staffroom tables, chairs	326	130	42
			591
Secondary Schools			
Benches	31,000	16	496
Cupboard, shelving etc.	1,550	55	85
Teachers chairs, tables	1,550	26	40
Staffroom tables, chairs	240	140	34
			655
Office Equipment			
Typists' chairs and desks ^a	70	40	3
Desks and chairs ^a	140	50	7
Filing cabinets, cupboards		700	14
Gestetners	120	450	54
Typewriters	120	170	20
			98
Teaching Aids			
General Science Laboratories	200	500	100
Equipment, tooling, stocking of:			
Laboratories	120	750	90
Handicraft Shops	180	8,000	1,440
Home Economic Laboratories	150	3,000	450
Multi-purpose craft shops	138	2,500	345
Multi-purpose Home Econ. Lab.	50	5,000	250
Commercial Rooms	50	3,500	175
	20	2,500	50
			2,710
Furniture and Equipment for existing:		Total	4,244
Handicraft Shops	8	1,500	12
Home Economics Departments	29	1,500	29
			41
		Furniture and Equipment	4,285

^aFor large comprehensive schools only

Table XXXVI - Revised Plan and Cost Estimates of buildings and equipment of Primary and Secondary Schools, 1963 - 1975 (at 1962 prices)
(2. Approach)

	1963 - 1964			1965 - 1969			1970 - 1975		
	No.	average costs 1,000\$	total costs 1,000 W.I.\$	No.	average costs 1,000\$	total costs 1,000 W.I.\$	No.	average costs 1,000\$	total costs 1,000 W.I.\$
<u>Buildings^d</u>									
Primary Schools									
New buildings	1	33	33	4	33	132	6	33	198
New buildings ^a	5	15	75	10	15	150	15	15	225
Reconditioning ^a	20	4	80	40	4	160	40	4	160
Multipurpose shelters ^a	40	0.5	20	140	0.5	70	-	-	-
total			208			512			583
Secondary Schools									
New buildings ^b				11	105	1,150	23	117	2,690
Extensions	1	16	16	2	24	48			
Additional Craft shops & Home Econ. laboratories, etc.	8	22	176	6	25	150	1	46	46
total			192			1,348			2,736
Reconditioning of Craft Centres^c)			23						
Home Economic) departments^c)			23						
Teachers' houses	5	10	50	20	10	200	25	10	250
Total building			473			2,060			3,569
<u>Equipment</u>									
Primary Schools			50			125			125
Secondary Schools^b			131			500			1,029
Craft Centres^c			12						
Home Economic departments^c			29 ^e						
total			222			625			1,154
Total building & equipment			695			2,685			4,723
average per year			347.5			537			787

^aWith self-help. - ^bPractical subjects centres included. - ^cExisting centres and departments. - ^dExcluding site costs. - ^eIncluding Carnegie School of Home Economics.

Table XXXVII - Revised Cost Estimates for building and equipment
of Secondary Comprehensive Schools, 1963-1975

	1,000 W.I. \$ (1962 prices)		
	1963-64	1964-69	1970-75
Buildings			
4-stream entry (14 schools) ^a	-	450	1,650
3-stream entry (11 schools) ^a	-	520	680
2-stream entry (9 schools) ^a	-	180	360
Additional classrooms to existing schools	16	48	-
Additional practical subject centres to existing schools	176	150	46
Total buildings^b	192	1,348	2,736
Equipment			
4-stream entry (14 schools) ^a	-	174	694
3-stream entry (11 schools) ^a	-	173	223
2-stream entry (9 schools) ^a	-	33	63
Additional classrooms to existing schools	24	16	-
Additional practical subject centres to existing schools	107	104	49
Total equipment	131	500	1,029
Total building and equipment	323	1,848	3,765

^aIncluding practical subject centres. - ^bExcluding site costs.

Table XXXVIII - Requirements and Provision of Places in Primary and Secondary Comprehensive Schools, by 1965, 1970 and 1975
(Calculated for the revised building plan)

	1965	1970	1975
Primary Schools Assumption A			
Total number of places required	102,800	110,300	122,700
Available Places by end of 1962 ^a	89,000	89,000	89,000
New places to be built after 1962	2,100	6,300	12,600
Total number of places available	91,100	95,300	101,600
Remaining deficit: number	11,700	15,000	21,100
percent	11.4	13.6	17.2
Primary Schools Assumption B			
Total number of places required	116,000	126,000	138,600
Available places by end of 1962	89,000	89,000	89,000
New places to be built after 1962	2,100	6,300	12,600
Total number of places available	91,100	95,300	101,600
Remaining deficit: number	24,900	30,700	37,000
percent	21.5	24.4	26.7
Secondary Schools			
Total number of places required ^b	47,700	56,700	62,100
Places made available by 1963 ^c	5,500	5,500	5,500
New places to be built after 1962	160	7,540	20,640
Total number of places available	5,660	13,040	26,140
Remaining deficit: number	42,040	43,660	35,960
percent	88.1	77.0	57.9
Primary and Secondary Schools Assumption A			
Total number of places required	150,500	167,000	184,800
Available places by end of 1962	94,500	94,500	94,500
New places to be built after 1962	2,260	13,840	33,240
Total number of places available	96,760	108,340	127,740
Remaining deficit: number	53,740	58,660	57,060
percent	35.7	35.1	30.9
Primary and Secondary Schools Assumption B			
Total number of places required	163,700	182,700	200,700
Available places by end of 1962	94,500	94,500	94,500
New places to be built after 1962	2,260	13,840	33,240
Total number of places available	96,760	108,340	127,740
Remaining deficit: number	66,940	74,360	72,960
percent	40.9	40.7	36.4

^a9 schools with approx. 6,000 places converted into comprehensive or secondary modern schools. - ^bFor pupils 12 to 16 years only. - ^c640 places Ruimveldt Comprehensive School and 4,860 from primary schools (see footnote a). Places in secondary schools have been calculated on the basis of 40 pupils per classroom.
Assumption A: Excluding children below 5 years 9 months.
Assumption B: Including children 5 years to 5 years 9 months.

APPENDIX P
NOTES ON ADULT EDUCATION

We have shown that there is a considerable amount of somewhat unco-ordinated activity in the field of adult education. The Adult Education Association, without an office and with only voluntary part-time staff, is not in a position to make any significant contribution. The imminent closure of the local branch of the Extra-Mural Department of the UWI will aggravate the situation and make the more necessary the establishment of a more comprehensive and better integrated system which would make possible the realization of Government's policy to establish an all-embracing, flexible programme which would make full use of existing voluntary organizations. *What is required is an extra-mural department of the University, with a Director who should have professional status but who should be above all a person with wide practical experience and administrative ability. He should be given an adequate office staff.*

There should be an Extra-Mural Council, composed of members nominated by the Council of the University and by each of the Member Organizations of the present Adult Education Committee (which would henceforth have no *raison d'être*), together with (*ex officio*) the Head of the Department of Social Studies of the University, the Adult Education Officer, Ministry of Education, Assistant Director of Agriculture (Extension), the Principals of the Training College, the Technical Institute and the Carnegie School of Home Economics.

The Council should include in its terms of reference:

- (1) the stimulation and co-ordination of adult educational activities throughout the country;
- (2) the provision, either independently or in association with others, of such courses, as might be required to meet the expressed needs of the community;
- (3) the provision of regular courses of training in methods of adult education;
- (4) the maintenance of a panel of speakers and discussion leaders;
- (5) the responsibility for schemes of general education;
- (6) the promotion of research into the educational requirements of the adult population with special reference to fundamental and moral education.

There should be a local committee in each county on which all interested parties should be represented with an honorary part-time secretary who would work in close co-operation with Education Officers, social development officers and agricultural officers in stimulating and meeting local demands, making full use of local resources and working, whenever possible, through existing organizations.

It would, we think, be useful if the honorary office of correspondent could be created in each village, or group of two-three villages, to act as the agent of the local organizer.

Much, we feel, can be done at the local level, merely by showing how the principle of self-help can be applied in this field and by encouraging the pooling of resources with neighbouring communities. The community centres of the sugar estates present a special problem and offer special opportunities. If their facilities and, in particular, the services of their full-time trained staff were made available to the whole of the community, and we believe that this could be done without detriment to sugar estate employees (rather the contrary), the possibility of creating a fruitful and comprehensive service for the whole community would be greatly enhanced.

We saw more than one example of how promising and ambitious schemes had withered through lack of a regular follow-up. A good follow-up and, initially, the choice of the natural leader, are essential ingredients.

There seems to be a need for simple pamphlets, giving information and suggesting talking points, to assist speakers and discussion group leaders, and of simple reading material for distribution in the rural areas, especially as there is much evidence of a relapse into near-illiteracy of many children within a few years of leaving school. The Government Information Service could perhaps help as well.

We found that there was a general awareness of the special problem created by the large number of youths - and girls - who, on leaving school, were unable to find employment, but at the same time, little idea of what might be done to solve it. As we see the situation, there is, quite apart from the need to give these people something to occupy their minds at this time, the need to create in them a receptivity to new ideas and activities - a willingness to learn - that is often sadly lacking.

APPENDIX Q

AGRICULTURAL EDUCATION

We have discussed elsewhere the place of agricultural education in the primary and secondary schools. It is, however, outside the schools that the real work of agricultural training has to be done. The great need – and the great opportunity – seems to lie with the boys – and girls – between the ages of 15 and 20. Many are out of work and with little prospect of obtaining worthwhile work. For the country boy in particular, there often appears to be hope for nothing more than occasional casual unskilled labour. An intensification of conventional extension work, with increased emphasis on Young Farmers' Clubs and short practical courses in locally important branches of agriculture could help substantially. Bearing in mind the need to open up underdeveloped areas and to bring new land under cultivation, it is suggested that in connexion with every land development project there should be, on the site, a farm school taking a small number of selected groups of the age of 18-20, for a period of two years' intensive practical training, at the end of which, if they had proved suitable, they would be allocated land in the area and assisted with loans to establish themselves as farmers. A certain proportion of land in each development area could be set aside for this purpose.

An intensive programme of agricultural extension work, such as we are convinced that the country needs, requires a large and well trained staff. Whether they devote their whole time to extension work over a wide area, or perform other duties also within a more restricted area, it is essential that they should not be wasted on clerical work which could be done just as well, if not better, by a good clerk.

The training of agricultural officers will, for some years to come, have to be done abroad. We feel, however, that this will need to be supplemented by a special course in adult educational methods which should be provided at the College of Arts and Sciences. Without the acquired skill to communicate their knowledge they would lose a great part of their effectiveness.

The training of agricultural field officers, who are required in even greater numbers and on whom the larger share of the extension work must fall, is a problem that requires urgent solution as the country is now cut off from its previous source of supply – the Eastern Caribbean Farm Institute.

A school has just been established at the Agricultural Research Station at Mon Repos. This, we think, should have as its full-time Director an officer of great experience who would be responsible for the general direction of the course and a substantial amount of the teaching. Space is lacking, nor would it be economical to provide more buildings for laboratories. It is suggested that all practical work in chemistry, physics and biology should be done in the laboratories in the College of Arts and Science under the supervision of teachers at the College, the syllabus to be drawn up in collaboration with the Director of the Agricultural School. Similarly, the College should assist in the provision of a course – and teaching practice – in adult educational methods as applied to agriculture.

It is for consideration, once the College of Arts and Sciences is fully established whether the College should not take over the basic education of potential field officers who would then spend two years following a general two year past "O" level course before going on to the Agricultural School for an intensive third year of practical work. Such a reorganization would leave the Agricultural School more free to undertake special courses for established farmers, young farmers, teachers of agricultural subjects in the primary and secondary schools, etc.

The whole programme of agricultural education and training calls for much careful and detailed planning. We recommend therefore the appointment of an adviser, not primarily to make a fresh appraisal but rather to guide the development, co-ordination and implementation of existing plans.

APPENDIX R

EXAMINATIONS PROCEDURES AND MACHINERY

Procedure

We feel that the procedures for marking and determining results are administratively extremely laborious and that they do not ensure uniformity of marking standards. Moreover the concentration in the hands of a very few examiners of the responsibility for marking the full range of local examinations is at least one of the causes of the very serious delay in issuing results.

We consider that the following revised procedure would safeguard standards, lighten the load on senior examiners and give valuable examining experience to their assistants. It would also place where it belonged, that is, on the shoulders of the examiners who marked the papers, the responsibility for ensuring uniformity in the marking and the ultimate accuracy of the results.

- (a) A moderator shall be appointed for each subject offered at any local examination. His duty shall be to approve the question papers in his subject, review a number of the scripts, including all those in the borderline, and approve the final pass list. He should be a member of the Board for every examination at which his subject is offered.
- (b) A separate Board of Examiners shall be established for each examination. This Board shall consist of the moderators and an examiner in each subject, the latter to be responsible for setting the paper, marking the scripts and preparing a list of marks, subject at each stage to the approval of the moderator. A meeting of the Board of Examiners shall determine a final pass list.
- (c) We would stress the necessity for maintaining a uniform standard at present markedly lacking. This we think can best be done by placing the responsibility on the examiners themselves and by seeing that they have before them, when they are determining results, the statistics for the previous years. They would then be in a position, if necessary, to adjust the marks of the examination as a whole or of any single subject. It is suggested that in order to secure standards in the long term for each subject of each examination, about ten scripts - say, the two best and the four on each side of the borderline - be retained together with copies of the examination papers and that every five years these should be reviewed, preferably by an external expert.

Staffing and accommodation of examinations branch

There is a serious lack of working space and of storage space even for highly confidential documents and above all there is a very serious lack of trained permanent staff. Even if the branch had its full establishment it would, we think, be inadequately staffed to deal with the mass of highly confidential and detailed work which it has to undertake. It is vital to the proper conduct of examinations that this administrative work should be in the hands of experienced staff, in the absence of the Examinations Officer who should be in a position to

inspect centres in and out of Georgetown. The inevitable result of under-staffing, either qualitatively or quantitatively, is that essential checks are either omitted or ineffectively carried out by inexperienced people. We make no criticism of the manner in which the Examinations Officer and his staff are carrying out their duties. On the contrary, they appear to be doing extremely well under adverse conditions which should be quickly ameliorated, if examination standards are to be preserved.

Security of examination papers

We have reason to believe that it is by no means unheard of for the packets containing examination papers to be tampered with before the start of the examination. Steps must be taken to ensure that the papers are kept in completely burglar proof boxes and that there is a double check on persons provided with keys.

Identification of candidates

There is at present no serious obstacle to impersonation at any external or local examination; we are aware that cases have in fact occurred. The present procedure of comparing the signature on the application form with a signature given by the candidate in the examination hall is quite inadequate. We would suggest for external examinations each candidate should be required to submit with his entry form three photographs signed by him and authenticated (i.e. signed in his presence) by a local person of high standing, e.g. Education Officer, District Commissioner, Superintendent of Police, to whom he is personally known. One copy of the photograph should be retained with the entry form, one clamped to the admission card sent to the candidate and one, bearing in addition the number of the candidate, should be sent to the supervisor. It should be the duty of the supervisor, as soon as the examination has started, personally to identify each candidate by the photograph supplied to him and by his signature on the "name slip" which he is already required to complete.

In the case of local examinations a simpler but less thorough procedure might be adopted. We would suggest that for the Primary School Certificate and Common Entrance Examinations the Head Teacher or the Deputy Head should be present before the commencement of the examination and personally identify each candidate from his school.

In the case of the PTA, Pupil Teachers' Examination, Training College Entrance Examinations and Teacher's Certificate Examinations, the candidate should submit with his entry form a slip bearing his signature authenticated by a person of high standing to whom he is known personally. These slips should be sent to the supervisor at the centre, who will compare them during the first examination period with slips signed by the candidates in his presence.

Conditions - examination halls

The few examination halls which we visited whilst the Cambridge School Certificate Examination was in progress were without exception overcrowded - candidates frequently sitting elbow to elbow in such a way as to render it impossible for them not to see what was being written by their neighbours. It is urgently necessary that all possible steps should be taken to increase the accommodation; we observed a tendency to be acquiescent to sub-standard conditions; control would be easier if specific minimum physical conditions were laid down, and if every supervisor were required to make a report at the conclusion of each examination giving answers to specific questions covering not only the physical conditions, but also irregularities of all descriptions.