



Republic of Zambia

MINISTRY OF EDUCATION

Educational Reform

Proposals and Recommendations

October 1977

Price K1-75



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FOREWORD

By

Honourable Professor L. K. H. Goma, MP.,
Minister of Education

For some years now the Party, Government and the people of Zambia have repeatedly stressed the need to create a system of education which is properly attuned to, and more fully meets, the needs and aspirations of Zambians and which functions as a powerful instrument for our society's progress in the direction we have chosen as an independent nation. In May, 1974, and in response to this call, the Ministry of Education embarked upon a long and comprehensive educational reform exercise which culminated in a document titled "EDUCATION FOR DEVELOPMENT: Draft Statement on Educational Reform," published in March, 1976. This document was then subjected to a National Debate, launched by His Excellency the President, Dr Kenneth D. Kaunda, on 24th May, 1976, and which lasted for some six months up to the end of November of the same year. The present document, embodying final educational reform proposals for the consideration of, and decision by, the Party and Government, represents the outcome of the National Debate and further reflection by the Ministry.

2. The proposals suggest ways in which we can confront the complex and difficult problems of transforming education in Zambia into a potent instrument of individual and national development; of providing real equality of educational opportunity; and of improving quality and extending coverage. Thus, the reformed education system should provide nine years of good universal basic education for all children in the 7-16 age group as soon as possible, while at the same time rejecting the monopoly of formal education; and the system, at all levels, should embrace the following: cultivating the values of Humanism and better preparation for citizenship; encouraging pride in Zambia's cultural heritage; bringing education into close contact with production and the world of work; the observance and practice of participatory democracy through internal structures and meaningful links between each educational institution and the community it serves and/or where it is located.

3. The reconstruction of curricula at all stages on the basis of these broad objectives is the most challenging and significant task to which much attention must be given. This must go hand in hand with a corresponding programme in the production and/or provision of new teaching and learning materials, in methods of teaching and evaluation and in the types of educational technology to be adopted.

4. Reforming our educational system significantly will demand vast amounts of money. But equally important will be the need for improvement of non-monetary inputs, like creative planning, efficient implementation and administration, creation of a climate of sustained hard work, improvement in the motivation of students, superior performance in the education and preparation of teachers and so on.

5. In presenting these proposals for educational reform, I fully realise the magnitude and complexity of the task the nation is being called upon to undertake. I also do so against the background that there have been many examples in the world of educational innovations which did not succeed even though the ideas behind them seemed valid and promised many benefits. On the other hand, behind every successful innovation there is a long story of trial and error, of planning, of participation by many people, of administrative structures which had to be organised/reorganised, of imaginative materials which had to be prepared, of commitment and will, and so forth. Most important, there is a story of resistances and barriers which were encountered and then overcome in some way. I hope that Zambia can and will succeed in this important endeavour.

6. As indicated above, the Educational Reform exercise which preceded the production of this document was a long one extending over a period of nearly three years. During this period the matter was subjected to intense discussion and refinement involving many people. My Ministry was assisted and benefited greatly from the various views that were expressed

and suggestions that were made; and the contributions of various countries, groups of people, and organisations made it possible for us to proceed in the manner we did. I wish to mention some of them.

7. Firstly, I would like to record our deep gratitude to the Ministries of Education in the Republic of Botswana, the People's Republic of China, the Republic of Cuba, the Republic of Ghana, the Co-operative Republic of Guyana, the Federal Republic of Nigeria, Jamaica, the Republic of Kenya, the Republic of Sierra Leone and the United Republic of Tanzania for affording our officials facilities during their study tours of educational institutions in these countries. In connection with this, I must thank the British Council for the financial assistance extended to us for the study tours to Commonwealth countries in the Caribbean and to the United Kingdom. We benefited greatly also from the consultations one of our officers had with Special Education experts in Switzerland, France and Italy.

8. Secondly, here at home, the Educational Reform exercise would not have been carried out successfully without the support and inspiration which the Party gave my Ministry. I, therefore, wish to record my profound gratitude to His Excellency the President, who launched the National Debate on the Draft Statement on 24th May, 1976, His Honour the Secretary-General of the Party who opened the first Report-back Seminar following study tours abroad, and the Rt. Hon. Prime Minister who also took a keen interest in the reform exercise.

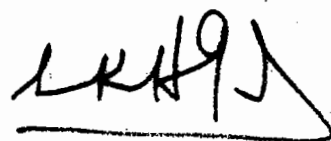
9. Through members of the Central Committee heading each province, the Party and Government mobilised the nation to discuss the Educational Reform proposals in the true spirit of participatory democracy within each Region. I wish to thank all of them for their useful contributions. Although the Draft Statement was not debated in the National Assembly as such, many Members of Parliament made useful contributions in their individual capacity or as members of local groups or organisations.

10. Contributions were also received from individuals, students, members of the staff of the University of Zambia, teachers, staff of teachers' and technical colleges, villagers, Government Ministries and Departments; churches and church organisations, women's organisations, foreign missions, voluntary organisations, trade unions, mining companies and other employers.

11. Thirdly, during the whole Educational Reform exercise, the University of Zambia, apart from participating in the National Debate, played a very important role in providing facilities for meetings and accommodation to participants in the Report-back and Evaluation Seminars.

12. Fourthly, I wish to thank the Press for the keen interest they took in publicising the Draft Statement. The *Zambia Daily Mail*, the *Times of Zambia*, the *Sunday Times of Zambia*, the *Mining Mirror*, the *Mirror of the Multi-media Centre*, as well as the Zambia Broadcasting Services, all made the Educational Reform exercise a major item during the period of the National Debate. My thanks are also due to a popular music group of primary school-leavers called the Mother Breed who composed a signal tune which was used to herald or introduce discussion of the Educational Reforms on radio.

13. Lastly, I must conclude by paying tribute to members of the Steering Committee, the Retreat Group and my Ministry officials who worked tirelessly and without whose dedication and courage the work that has covered many months would not have been easily accomplished and who, apart from their contributions as members of the Retreat Group, were largely responsible for substantial revision and production of the final document at the Ministry Headquarters. Naturally, in thanking all those in my Ministry who participated, I wish to include the secretarial staff, the typists, printers, office orderlies and drivers, all of whom worked unusually long hours to bring the Educational Reform work to a successful conclusion.



Lusaka.
31st October, 1977.

L. K. H. GOMA
Minister of Education

CHAPTER 1

INTRODUCTION

Background to the Reform

1. This document sets out some new policies to reform Zambian education. It is the result of the most comprehensive evaluation of our education system since Independence in 1964. The exercise included submitting draft proposals on educational reform to the judgement of the people of Zambia, through a National Debate, in the spirit of participatory democracy.
2. The need to change certain aspects of our education system has been felt for a long time. When UNIP came to power in 1964, among its immediate educational priorities were the elimination of racial segregation in schools, expansion of educational provision and achievement of rapid output of high-level manpower. In order to implement these priorities, a number of bold decisions had to be taken. The structure and organisation of the education system were changed; tuition and boarding fees were abolished; the capacity of the system was substantially increased as the investment programmes of the Emergency, Transitional, First and Second National Development Plans were executed and as a result many more children entered school and remained at school for longer periods; the expansion and diversification of adult, technical, teacher and higher education were embarked upon; the University of Zambia was established and developed rapidly; and Government expenditure on educational services increased at unprecedented rates.
3. These rapid changes created a new set of problems for the education system. The training and recruitment of teachers fell behind requirements. New schools had to be occupied before being completed. At the same time, the rate of expansion at the secondary school level did not keep pace with the massive expansion of the primary school sector.
4. By 1969, such problems had given rise to a strong public feeling that the education system was not growing fast enough, that the quality of education was declining and that vast numbers of early school-leavers were being eliminated from the system without satisfactory preparation for adult life. Such views were expressed and remedies were examined at the First National Education Conference, convened by the Minister of Education in September of that year. In his opening address to the conference, His Excellency the President called for a fundamental reform of the educational system in conformity with Humanism.
5. While the previous Development Plans emphasised quantitative aspects of educational development, the Second National Development Plan concentrated on both qualitative and quantitative aspects. Energies could now be directed not only towards increasing numbers but also towards re-shaping objectives and curricula.
6. The completion of the Zambia Primary Course and its implementation were given high priority; the junior secondary programme was extended from two to three years and new syllabuses were created. The secondary school curriculum was diversified by the introduction of a range of practical subjects. Systematic attention was given for the first time to the educational needs of handicapped children. The new technical education and vocational training system was consolidated. Separate initiatives were launched to rationalise and co-ordinate adult education programmes, youth development policy and tertiary education.
7. All these and other changes were reflected in the findings and recommendations of the *ad hoc* Committee on Education in 1973. This Committee was one of several which were appointed by His Excellency the President in 1973 to prepare policies for incorporation in the Party's new manifesto "UNIP: National Policies for the Next Decade 1974-84".
8. Despite the quantitative expansion and qualitative improvements during previous years, many of the problems had not been resolved by 1974. The time was now ripe for a full-scale evaluation of the education system in accordance with UNIP policies on Education.

9. UNIP policies require that the system of education should be expanded, improved and re-structured in such a way as to provide for a "compulsory basic ten years of education" to adequately prepare young people for the challenges of life and enable others to continue with further education. These policy stipulations are explained in more detail at page 51 of "UNIP: National Policies for the Next Decade 1974-84".

10. In March, 1975, when the first public announcement was made that the educational reform exercise had commenced, the Minister of Education, speaking in Parliament, urged the nation to use the opportunity to assess its educational progress, learn from past errors, and chart a new course for the future.

Preparation of the proposals

11. Between May and December, 1975, study groups visited a number of countries, prepared and submitted reports, which together with special investigation reports, constituted working papers for the Report-back Seminar opened by His Honour the Secretary-General of the Party, on 30th December, 1975. This seminar, which was representative not only of the Ministry but also of the other sectors, carefully analysed the various reports. This was the first step in crystallising the main lines of the reform exercise.

12. The preparation of the Draft Statement was then undertaken by a "retreat group" led by the Permanent Secretary, Ministry of Education. The group completed its work in late March, 1976, after having produced the document "Education for Development" (Draft Statement on Educational Reform). About 40,000 copies were produced and distributed, without charge, throughout the country, to our missions abroad and to other agencies. Summaries of the Draft Statement in local languages were prepared and distributed to each province.

13. His Excellency the President launched the national debate on educational reform at a special press conference held at State House on 24th May, 1976.

14. Members of the Central Committee for the provinces were responsible for the organisation and conduct of the debate in each province. The Ministry of Education arranged special briefing meetings for provincial officials in Lusaka, and these briefings were then repeated at provincial headquarters, district and other centres. All educational institutions, Ministries, churches, trade unions, voluntary associations and other public bodies were requested to organise discussions among their members. The daily newspapers serialised the document and provided space for letters, views and reports on the Draft Statement. Radio and television broadcast special programmes in English and the other seven official languages, namely, Silozi, Chitonga, Chibemba, Luvale, Chinyanja, Kikaonde, and Lunda.

15. During the period of the national debate about 1,500 written comments on the proposals were received from individuals, schools, associations and various groups from all over the country. The national debate formally closed on 30th November, 1976.

16. The Ministry of Education arranged for submissions to be studied and objectively summarised in twelve reports covering the full range of the discussion during the national debate. These reports comprised the working papers for the Evaluation Seminar which was opened by the Minister of Education on 31st January, 1977, at the Great East Road Campus of the University of Zambia.

17. The "Retreat" was then re-convened in mid-February, 1977, to prepare the final Statement on Educational Reform for submission to the Party and Government.

18. The present document represents substantial revision of the Draft Statement published in March, 1976, taking into account the outcome of the National Debate.

Scope of the reform proposals

19. The document deals mainly with formal institutional education, that is, the education provided through pre-schools, schools, colleges and institutes; organised instruction and

learning through radio, television, correspondence and part-time classes, courses mounted at places of work or by community agencies and some other forms of systematic education. However, there are other agencies of education, which are equally important in conveying knowledge, attitudes, skills and values. Among these other agencies are families, religious bodies, mass media and the Party. The proposals make references to the role these agencies will play in the implementation of the changes.

20. The reform proposals concentrate on stating general goals and principles, defining the new structure of education, describing the individual components of the system, and the main methods of implementation, but details such as curricula and syllabuses are not dealt with in full in this document. These will be prepared by specialists in collaboration with teachers and others.

Criteria

21. The criteria which have been used in choosing solutions to problems in our education system include the following:

- (a) acceptability of the solutions by the people whose needs the system is going to serve;
- (b) appropriateness of the solutions to pedagogical principles;
- (c) consideration of available professional, financial and other educational resources;
- (d) need to fulfil the goals envisaged in the theme "Education for Development".

22. Ideally, these criteria complement one another. In some cases, however, they may conflict. For instance, a pedagogically sound criterion may not be entirely acceptable to the public, or a solution which meets the other three criteria may not be immediately achievable because resources are lacking. In such cases, it has been necessary to strike a balance or compromise in the interest of practicability or feasibility.

23. The reform proposals are an agenda for action, rather than an operational plan, and would, therefore, be translated into plans and programmes in separate exercises. Some of the changes which may be envisaged as taking place within the next five years will be reflected in the Third National Development Plan (1978–82) document.

24. It is in the nature of educational reform that some changes can be implemented immediately, whereas others will be achieved only in the long term. This is an important observation and should be clearly understood by everyone. As some changes may take longer to implement, there will be need to allow for flexibility in the face of changing circumstances during the implementation stage.

25. A thorough review and analysis of the progress of the reforms will also be necessary and will be undertaken periodically so that adjustments and improvements can be considered in an integrated manner.

CHAPTER 2

EDUCATION FOR DEVELOPMENT

The aim of National Education

1. A guiding principle in a humanistic society, such as the Zambian society, is that human life is precious, regardless of race, tribe, creed, status or ability. The importance and worth of the individual is, therefore, the central point in the Zambian humanistic approach to socialisation of society. This belief has its origin in our natural heritage, and is based on moral and spiritual values which embrace the attributes of the individual that contribute to the dignity of man, betterment of self and the community, and to the general welfare of mankind. Our education system, therefore, should continue to build on this solid foundation.

2. In the Zambian society each individual should be accepted into the education system without consideration of status and should be provided with the right kind of environment and opportunities for learning to promote his development that will effect continued satisfactory adjustment to an individual's life at each stage of his development. But it must be accepted that equal opportunity means more than the opportunity to develop mediocre competence in the area of someone else's strength. Equal opportunity means being provided with the tools to develop one's own special talents to the point of excellence. This will enable people to make real and valued contributions both to their own personal lives and to the Zambian society and mankind.

3. In fulfilment of the above principle, opportunities shall be provided to each person within the limits of his capacity so as to:

- (a) obtain an education based on his interest, abilities and needs to attain intellectual excellence and acquire practical skills or experience;
- (b) contribute to the economic and social development of Zambia;
- (c) learn how to participate in the national and community problems and to foster national unity;
- (d) develop emotionally, morally, spiritually, socially and politically so as to be increasingly able to cope with life's problems;
- (e) develop cultural and aesthetic appreciation;
- (f) develop the spirit of self-reliance and patriotism and the sense of international solidarity.

The aim of national education in the Zambian humanistic society, therefore, can be simply stated: to develop the potential of each citizen to the full for his own well-being as well as that of society and for selfless service to his fellow men. Such education should thus be true to the integrity of individuals as well as to the needs of our society and our common humanity

Humanism, development and education

4. Humanism is the guiding philosophy of Zambian development. It is a philosophy of purposeful change in individuals and society, based on the conviction that the humanity of each individual person has value. The theme which runs through all humanist thought is the need to enable men and women to liberate themselves from want and oppression of all kinds, and to grow to their full stature in harmony with their fellows.

5. An essential part of the process of building Humanism is the re-organisation of the institutions of society in such a way that they help men and women to rise above their limitations, whether personal or imposed upon them by society. Society "must organise itself in such a way that it helps man as an individual to bring out the best in himself" (Humanism Part II, p. xiv). From this perspective, the re-organisation of the education system has central importance in the building of Humanism, since education is concerned with the guided or purposeful growth of each individual, as well as with the cultivation and beneficial use of knowledge and skill.

6. Education is a social institution which will continue to reflect the characteristics of the Zambian society but, on the other hand, society will continue to be influenced by it as there is inter-dependence between any education system and the society it serves.
7. Despite great efforts to expand our present education system it has not been possible to narrow the gap between the steadily rising demand for its services and its capacity to admit more students and give them a satisfactory education. The scanty financial resources have been sparsely spread over educational materials, books, teachers, classrooms, etc. Some children go without education, while others leave school too young to be useful to society.
8. As there is disparity between the number of school leavers each year and available opportunities for employment, we have a pool of the educated unemployed. This pool tends to accumulate in urban centres creating frustrations, resentment and presenting a growing threat to social and economic stability.
9. This fact must be emphasised because as a consequence of the large numbers of young people who look unsuccessfully for paid employment after leaving school, especially at Grade 7 and Form 3 levels, some people have come to believe that a child can only get a job if he is very highly educated; while others have stated that there must be something wrong with the type of education being offered to our children. Even if it is conceded that the education system is not responsible for creating employment for these school-leavers, it is frequently said that the education system has created unemployment by giving students an inadequate or irrelevant kind of preparation for life and work. Such views are nearer the mark, since education, among other things, must include the preparation of students for entry into the world and life of work.
10. The problems mentioned in paragraphs 7 to 9 above must be confronted as aggressively as our resources permit. However, it should be recognised that the creation of economic and social conditions which would provide useful employment to all school-leavers is well beyond the scope of the education system alone. The education system, other sectors of the economy and society have common obligations and responsibilities in preparing students to enter the world of work. These should together create conditions whereby relevant productive skills, gained by students during the process of education, could be put to use in appropriate fields immediately on leaving school.

Education in Production Work

11. Production activities in educational institutions have educational value. Through production, students can apply knowledge, appreciate the importance of working with their brains as well as their hands, develop the spirit of self-reliance and learn how to contribute to the nation's production activities. This important aspect of education, which is part of a child's up-bringing, has not been emphasised in the past.
12. In future, production and service to the school community and the nation will be among the main features of education to be developed and emphasised in curriculum organisation. However, this will take into account the age of the students and the need for proper balance with other subjects in the curriculum.

CHAPTER 3

THE NEW EDUCATION SYSTEM

Introduction

1. The changes which will come about as a result of the educational reforms will not merely consist of changes in the structure and the accompanying nomenclature, or in the improvement and acquisition of new physical facilities or changes in organisational patterns. While these changes in the framework are part of the major and essential elements of the reforms, it is the content, the methods and the organisation which must receive the greatest attention and these aspects embrace meaningful reform in the curriculum leading to its enrichment and being made more relevant to the needs and aspirations of the individual and society. Appropriate teacher education should be undertaken to enable the teacher not only to understand, but also to be involved in the development of the new curriculum and make necessary adjustments in his own attitudes and approach. The developments and provision of adequate literature and other educational materials to interpret the curriculum in the context of the changes envisaged will also have to be done.
2. Reforms, therefore, must involve change in direction, in depth and in breadth. They should include a substantial change in the intrinsic value of the educational enterprise and should, therefore, take into account the various factors which are the basis of the interplay between the education system and society. They should seek to improve quality without sacrificing quantity so that the majority of the people, if not all, should benefit from effective implementation of the changes.
3. In discussing the major components of the structure of the new education system, therefore, it is intended that the components should serve as a framework of the vehicle which will carry the essential elements of the reform exercise. In short, there are dynamic and quantitative elements as well as qualitative aspects to be looked at in the process of implementation.

The new structure

4. UNIP policies stipulate that there should be provided "compulsory basic ten years of education" for every child within the decade 1974 to 1984. Although this is laudable, there is need for a variation of this policy statement with regard to the stipulated duration while the general principle of providing universal basic education remains unchanged. Instead of ten years of universal basic education, the ultimate goal should be to provide nine years of universal basic education, whereby a child entering Grade 1 at the age of seven will remain in school for at least nine years until the end of Grade 9 at the age of sixteen.
5. This nine years of basic education is a common feature in most developing and developed countries and, in the case of Zambia, it offers opportunity to design the programmes of basic education and of senior secondary in a manner that would meet the needs of an enhanced curriculum.
6. The seven years of primary plus two years of the junior secondary, in terms of the enriched curricula, would be sufficient to prepare the child to proceed to the next stage, or to leave school. What the child will have learnt by this time should be sufficient and lasting to enable him to play a full and useful role in his community if he leaves school. On the other hand, senior secondary would begin at Grade 10 and last for three years, giving more time for in-depth study in each field so that those who may have the opportunity to specialise in technical, scientific, cultural and artistic fields, etc. during the next stage of education, will have good grounding.
7. At present, the work of senior secondary classes begins to be taught at Form III (Grade 10) because there is not sufficient time in the present two-year senior secondary period to cover it. Yet, Form III is part of the junior secondary and is the terminal point and those who leave school are overloaded with sections of the curricula which may not be really necessary.

8. The arrangement, in terms of curriculum organisation when universal basic education is achieved, should be six years of primary, three years of junior secondary and three years of senior secondary. Unlike at present, this arrangement would not provide for a terminal point in the primary sector, since at this time the terminal point will be at the end of Grade 9 following three years of junior secondary.

9. This arrangement should, therefore, facilitate the effective implementation of the curriculum objectives for primary, junior secondary and senior secondary as there will be adequate time allocated to each unit of the educational ladder. It would also make it easier to rationalise teacher training programmes. For example, the teachers of the pupils in the first six Grades would be Grade 9 graduates who will have had three years more educational background than the pupils they are going to teach. The teachers of Grades 7 to 9 would be ex-Grade 12 who would have three years more educational background than their pupils; while the teachers of Grades 10 to 12 would be University graduates or their equivalents in specialised field. This should contribute to the improvement of quality generally, in addition to other measures discussed in later chapters.

10. Further, with the nine years universal basic education, there would be a saving in capital and recurrent expenditures as the resources would then be applied to fewer people who really have need for Grade 10 to enable them to complete Grade 12 satisfactorily.

11. The structure of the new education system is described in broad outline in this chapter and is represented in schematic form in the diagrams at pages 10 and 11. A tentative approach in the implementation of UNIP policies on education is indicated and in the process the problems of interpretation and feasibility are also mentioned but are discussed fully in later chapters.

Pre-school education

12. Pre-school education is intended for children below the age of seven who normally will not have started full-time education. However, pre-school education will not be available to every child for a long time to come but its development, through provision of more facilities to cater for more children, both in rural and urban areas, will be encouraged along the lines described in the chapter dealing with Pre-school Education.

Full-time education

13. This part of the education system would cater mainly for the young generation who are full-time students in schools and colleges. Their curricula will include production activities and, therefore, the concept of Production Units will be consolidated into their normal school activities.

14. Full-time education will, as at present, begin at the age of seven when children enter Grade 1. Children will remain at school until they complete Grade 9, which is the end of the nine years basic education programme (completion of primary and junior secondary). Some will leave full-time education at this point, while others may continue with second stage programmes at secondary schools, trade institutes, agricultural and other training institutes. Some of the graduates of the second stage will enter third stage programmes at universities, training colleges, technical colleges and other institutions of higher learning.

15. In the new structure, there will be three successive stages of full-time education as follows:

1. *Basic Education*

- (a) This first stage will aim at providing general education, including some practical skills and a sound foundation for further full-time or part-time education. The ultimate goal is to provide nine years universal basic education.
- (b) Due to insufficient number of school places available at present in Grades 1 and 5, and in Forms I and IV (Grades 8 and 11), the achievement of nine

years of full-time universal basic education cannot be immediately accomplished; not even by 1984 when it may be expected that Party policies on education will have been fully implemented. However, the goal of nine years universal basic education can be achieved over a period of time through phased expansion of facilities and increased resources.

- (c) As a first step towards nine years universal basic education, it will be necessary during the Third National Development Plan to begin on the expansion of facilities so that significantly many more seven-year-old children than at present can enter Grade 1. Grades 1 – 7 will constitute the first phase of basic education while Grades 8 – 9 will constitute the second phase.
- (d) In the interim period before nine years of universal basic education is achieved, students will continue to be selected at the end of Grade 7 to embark on the second phase of basic education.
- (e) Those who leave full-time education after Grade 7, during the interim period, would have the opportunity to enter available appropriate programmes in continuing education or join other fields of training and productive activities such as the agricultural sector and various skills training programmes in crafts and trades.
- (f) When nine years universal basic education is ultimately achieved, there will be a continuous programme from Grade 1 to 9 with the curricula organised on the basis of six years of primary and three years of junior secondary.
- (g) The achievement of nine years universal basic education may take a long time, but the Party and Government should persistently work towards its accomplishment.

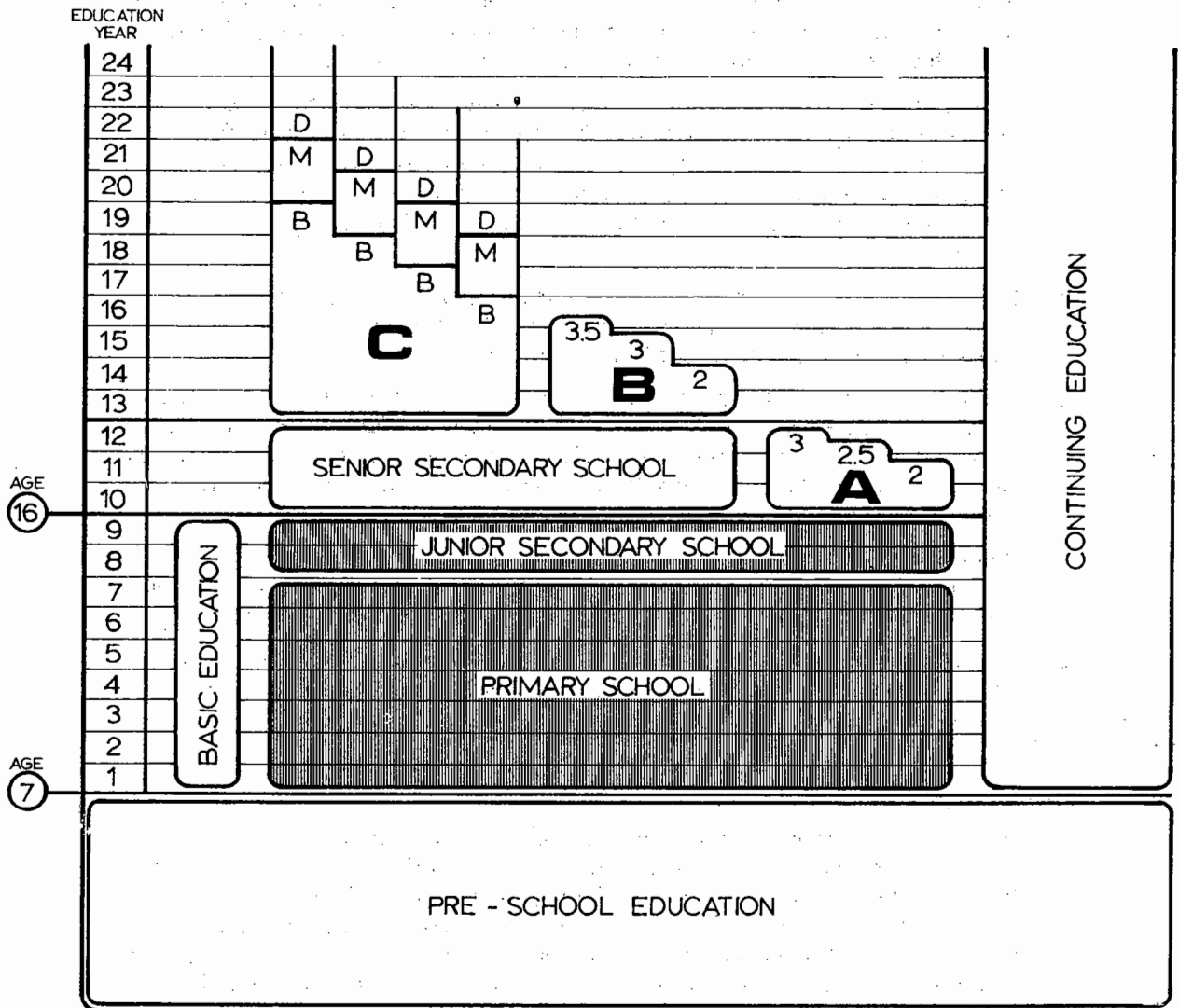
2. *Second Stage*

- (a) At the end of Grade 9 students may be selected to enter full-time general education programmes for Grades 10 – 12 (Forms III to V). They may also be selected to pursue specialised training programmes such as the Zambian Enrolled Nurses' Course, trades training courses, etc. All second stage programmes will be properly co-ordinated to avoid unnecessary over-lapping, to improve efficiency and to maximise the use of facilities and available manpower.
- (b) Some of those who leave full-time education at this stage may join the world of work, pursue training programmes in various sectors of the economy and may take advantage of Continuing (part-time) Education programmes.

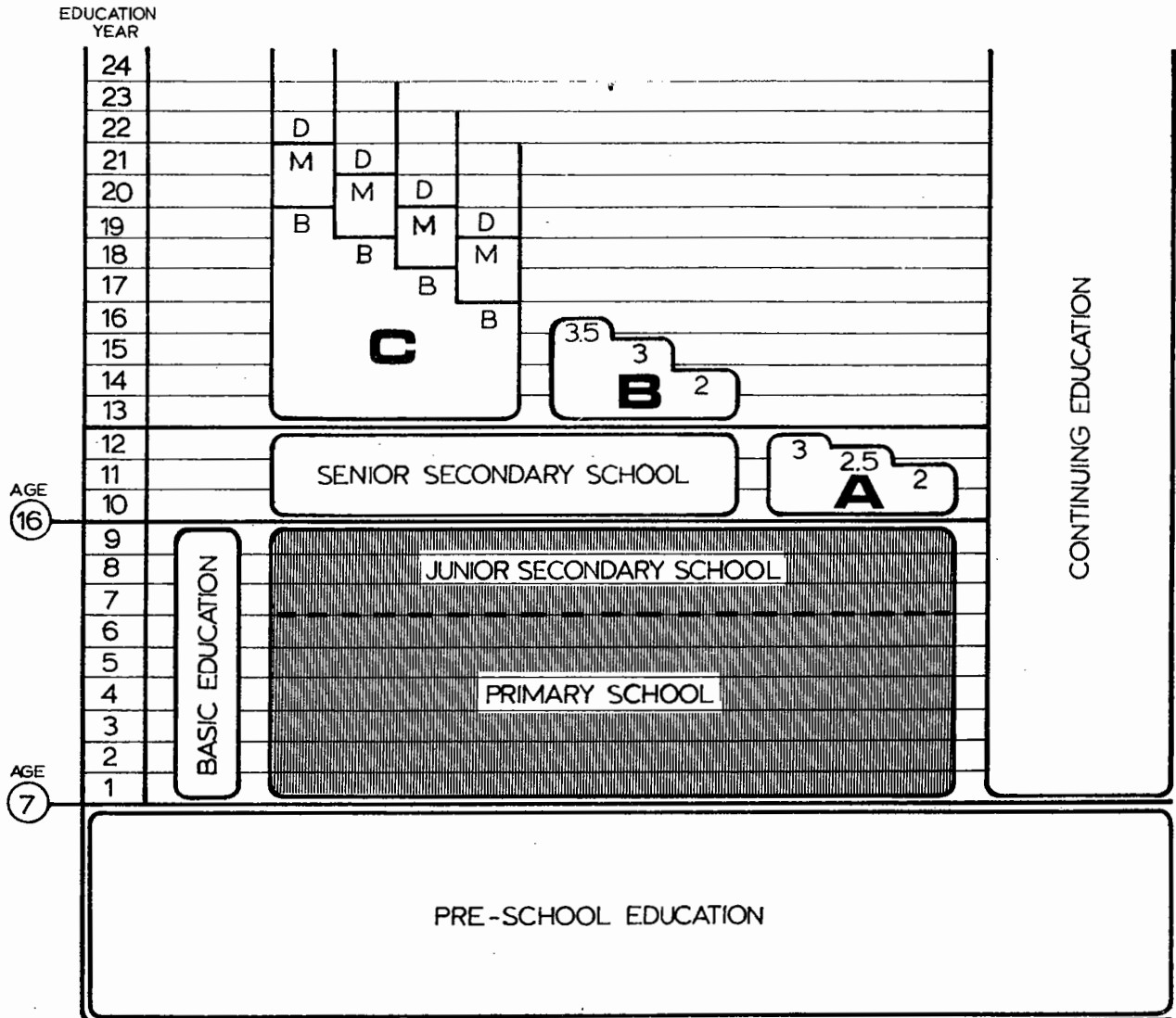
3. *Third Stage*

- (a) Within this stage there is a wide range of fields of study, such as advanced specialised programmes leading to the Diploma in Teaching, Diploma in Technology, Diploma in Nursing, Diploma in Agriculture, etc., and programmes to be taken at university level. There is, therefore, a wide variety of programmes or courses for which Grade 12 graduates could be selected. Further, some candidates for these programmes would be Grade 9 graduates who through further study or other appropriate training may meet entry requirements to such programmes. Co-ordination of the programmes will be undertaken as at the second stage and for the same reasons (see para. 15 (2) (a)).

Interim structure of education



Final structure of education



NOTES

- A** Various vocational programmes, e.g., Trades, Nursing, Teacher Training, etc., leading to a certificate.
- B** Various programmes, e.g., Agriculture, Technology, Commerce, Nursing, etc., leading usually to a diploma.
- C** University degree:
 - D = Doctorate.
 - M = Master.
 - B = Bachelor: 4 years – Ordinary.
5 years – Engineering, Agriculture, etc.
6 years – Veterinary Science.
7 years – Medicine.

NB

In A and B there are also some courses which take less than 2 years.
From primary to senior secondary an education year represents a grade.

Continuing education

16. This part of the education system will cater for adults or youths who have left full-time education or may never have entered it, but may wish to engage in education and training by part-time study. The scope is wide, but in this document, attention is focused on the following four aspects:

- (a) *Literacy education*: literacy education is necessary to enable illiterate persons, both youths and adults, to achieve mastery of the basic skills of reading, writing and reckoning.
- (b) *Formal education*: part-time study will provide access to formal education at Basic, second and third stage levels of education.
- (c) *In-service training and workers' education*: in-service education is aimed generally at increasing the understanding, competence and productivity of persons in the world of work and, therefore, enables workers to improve their vocational and professional skills. Workers' education deals with a variety of subjects or topics which mainly are the responsibility of the Ministry of Labour and the Department of Industrial Participatory Democracy, with which the Ministry of Education will continue to co-operate in order to ensure proper co-ordination of programmes.
- (d) *Cultural and recreational education*: cultural and recreational education offers programmes for adults and out-of-school youths in art, crafts, music, dance, drama, language, sports, etc.

National Service Training

17. In terms of the provisions of the Zambia National Service Act, No. 35 of 1971, at some stage students, like other youths, are liable for call-up by the Zambia National Service. Further, under Zambia National Service (General) Regulations, 1973, Statutory Instrument No. 2 of 1973, Heads of prescribed institutions are required to furnish the Zambia National Service with names and particulars of students in Form V or its equivalent for the purpose of enlistment.

18. According to directives issued by the Ministry of Defence in 1975 in terms of the provisions of the Act governing the Zambia National Service, Form V graduates are required to enlist in the Zambia National Service and fulfil the requirements of the Act before entering the world of work or before they are admitted to colleges or other institutions of higher learning within or outside Zambia.

19. Therefore, the present practice, whereby Form V school-leavers are called up for National Service duties and thereafter to undertake skills training and production programmes, may continue subject to the requirements and exigencies of the service, in terms determined by the Ministry of Defence as is the case now. The period of service for those selected for University programmes or for programmes at training colleges or other institutions may be broken into two parts as at present, or into such other shorter periods as may be decided upon, from time to time, by the Ministry of Defence in terms of the provisions of the Act.

20. During their National Service period the students may continue their formal education by part-time study, through correspondence, or by attending locally organised classes where this is possible.

21. During their National Service period, students may also engage in various activities, drawing upon the skills they are learning or have learnt, or may be involved in fields relevant to their previous education or training; for instance, teaching in schools, literacy work, agricultural production, industrial production, manufacturing, technical and craft work, community development work, etc.

22. Before permanently entering the world of work, students may need guidance in their careers. In this case, the Occupational and Assessment Services in the Ministry of Labour and Social Services, in consultation with the Ministries of Education and Defence, should give the appropriate advice.

CHAPTER 4

FULL-TIME EDUCATION

Introduction

1. As mentioned in Chapter 3, full-time education will comprise of programmes of general and specialised education and will begin at Grade 1 in the primary school through to various advanced programmes or studies at Universities or other institutions of higher learning, such as institutes, colleges, etc. Since the basis of full-time education for any child must be laid at the primary school level, the primary sector is very crucial in providing opportunities for orderly progression on the educational ladder. In the circumstances, it is necessary to examine the present limitations and problems to which the new system must address itself if it is to achieve nine years of universal basic education for every child in the long term. After examination of these limitations and problems, full-time education, its various components and their goals and the proposed organisational patterns that would be necessary will be discussed.

2. It has already been mentioned that nine years of universal basic education cannot immediately be achieved for every child, although it is the intention of the Party and Government to continue striving for this goal until it is reached. It must be mentioned here that only a few countries in the world have yet been able to provide nine or indeed ten years of universal basic education for all their children. It may also be noted that many countries with much greater resources than Zambia are still far from achieving this.

Imbalances in the present system

3. The available child population figures are approximate but, as far as has been determined, the present level of school provision is as follows:

- (a) About four out of every five children of primary school age are actually enrolled in Grades 1–7.
- (b) Many children who are old enough to enter Grade 1 do not have the opportunity to enrol because there are not enough places. The shortage of lower primary school places is greater in urban areas than in rural areas, and in some towns the shortage is so severe that one-third of the children cannot go to school. This is because the urban child population has increased faster than new classrooms have been built. Another reason is that many parents enrol their children when they are younger than the minimum entry age of seven due to lack of birth certificates and unreliable affidavits. This partly contributes to preventing many children who are of the correct age from being enrolled.
- (c) All children enrolled at Grade 1 in urban schools have the opportunity to complete seven years of schooling; a substantial number of children in rural schools do not have the same chance. In some rural districts, four out of ten pupils have to leave school at Grade 4 because there are not sufficient Grade 5 places. In the country as a whole, one-quarter of the pupils enrolled in Grade 4 cannot find places in Grade 5.
- (d) The chances for a child to continue school become very remote after Grade 7 because there is an insufficient number of Form I places in the system. The Grade 7 enrolment has been increasing much faster than the number of new places in Form I (Grade 8). More than four out of every five Grade 7 pupils cannot proceed to Form I because of insufficient places in the country.
- (e) There are more boys than girls enrolled in the secondary school sector; although this imbalance is not attributed to shortage of places alone, it is still part of the problems which have to be resolved over a period of time. Part of the answer to redress this imbalance, may lie in providing more separate facilities for girls at certain levels of the educational ladder than is the case at present.

4. To summarise, quantitatively the present assessment of the sad situation is as follows:
 - (a) only about 85 per cent of the eligible age group have the opportunity to be enrolled in Grade 1;
 - (b) only about 62 per cent of the eligible group (i.e. those completing Grade 4) enter Grade 5;
 - (c) only 12 per cent of the eligible group (i.e. those completing Primary Education or Grade 7) enter Form I.
5. In every respect, therefore, the task of providing nine years of basic education to all children is immense. To enrol every child between the ages of seven (entry to Grade 1) and sixteen (end of Grade 9) in school today would require additional resources on the following scale:

	<i>Grades 1-7</i>	<i>Grades 8-9</i>	<i>Total</i>
Additional school places	56,744	187,858	244,602
Additional teachers	1,190	7,827	9,017
Additional annual recurrent funds	K2.7m	K44.3m	K47.0m

The capital costs of providing the additional school places and teachers' houses would be in the region of K591.87 million (at current prices), not counting the cost of building additional capacity for the teachers' colleges.

6. The nation does not at the moment have such amount of resources at its disposal, whether in terms of finance, manpower or other kinds of resources which normally would form part of the input into educational infrastructure and services. While it is true that the cost of providing educational facilities both in terms of capital and recurrent expenditure can be held back in check by the adoption of certain measures, any such measures have their own limitations and, therefore, their application is a matter for careful consideration. One such limitation, for instance, would be the achievement of quantity at the expense of quality. During the course of the National Debate on the Draft Statement on Educational Reform, it was clearly indicated that Zambians would not wish to accept, as solutions to quantitative expansion, methods which would have an adverse effect on the quality of education offered to citizens. As stated in Chapter 3, this would defeat the whole purpose of educational reform. The real needs of Zambia and of individual Zambians cannot best be served by mediocrity.

Financial and other implications towards the provision of nine years of universal basic education.

7. The first step in achieving nine years of universal basic education would be to enable every child of school-going age to enter Grade 1 and continue to at least Grade 7 level, which is at present a terminal point and will remain so in the interim period. This, however, is in itself an ambitious target and requires the mobilisation of resources in an efficient manner combined with careful planning and proper choice of methods of implementation. For instance, the following would be required in the first step towards the implementation of nine years of universal basic education:

- (a) *Between 1978 and 1982*
an annual average of:
 - (i) 511 new lower primary classes of 40 pupils each;
 - (ii) 483 new upper primary classes of 40 pupils each;
 - (iii) 910 new primary school teachers.

(b) *Between 1983 and 1987*

an annual average of:

- (i) 684 new lower primary classes of 40 pupils each;
- (ii) 787 new upper primary streams of 40 pupils each;
- (iii) 1,388 new primary school teachers.

8. Excluding teachers' colleges, the approximate cost of such expansion at current prices would be:

(a) *Between 1978 and 1982*

an annual average of:

- (i) K22.27 million for capital expenditure;
- (ii) K1.9 million for *additional* recurrent expenditure.

(b) *Between 1983 and 1987*

an annual average of:

- (i) K32.9 million for capital expenditure;
- (ii) K2.8 million for *additional* recurrent expenditure.

9. The figures at paragraphs 7 and 8 above do not take into account the requirement of expansion at the junior secondary level (Grades 8–9). The following are indications of the resources that would be required in this sector, if all Grade 7 graduates entered Grade 8 in 1978 and thereafter:

(a) *Between 1978 and 1982*

an annual average of:

- (i) 513 new Grade 8 classes of 40 pupils each;
- (ii) 471 new Grade 9 classes of 40 pupils each; and
- (iii) 1,640 new junior secondary school teachers for expansion only, excluding the need for replacement.

(b) *Between 1983 and 1987*

an annual average of:

- (i) 217 new Grade 8 classes of 40 pupils each;
- (ii) 219 new Grade 9 classes of 40 pupils each; and
- (iii) 727 new junior secondary school teachers for expansion only, excluding the need for replacement.

10. Excluding teachers' colleges, the approximate cost of such expansion, at current prices, would be:

(a) *Between 1978 and 1982*

an annual average of:

- (i) K141.36 million for capital expenditure;
- (ii) K7.3 million for *additional* recurrent expenditure.

(b) *Between 1983 and 1987*

an annual average of:

- (i) K67.07 million for capital expenditure;
- (ii) K3.1 million for *additional* recurrent expenditure.

11. The implications of paragraphs 7 and 8 and paragraphs 9 and 10 taken together, even though on static basis, indicate how formidable is the task of providing nine years of universal basic education. These figures are only illustrative, since they are based on current prices; but it is clear that prices will continue to rise under inflationary pressures. Further,

the figures do not include expenditure on expansion of teacher training and an increased number of administrative personnel at various levels of the system. Account must also be taken of the resulting increased pressure for places at the second stage level.

12. From the examples given above of the requirements and financial implications, it is clear that the strategy and methods for implementing universal basic education must be based on realistic assessment, on useful and efficient employment of our resources and on the benefits to be derived by the individual and the nation. The most pressing educational needs of the individuals must be met without sacrificing quality and the needs of the nation as a whole.

Basic education

13. It will not be until a child enters Grade 1 that he will begin on formal full-time education which would comprise of two phases: the first phase would consist of seven years of primary school education (Grades 1–7); while the second phase would be composed of two years of junior secondary education (Grades 8–9). The intention of basic education is not only to provide the minimum basic knowledge, but also to inculcate the attitudes, values and skills which everyone needs in order to realise his potential as an individual and also to be able to become an effective participant in the advancement of his community.

14. If basic education is to have practical meaning and value, it must be so designed as to be able to contribute to the progress of the people at large, and to offer them the possibility of gaining access to other educational activities, both formal and non-formal, which will enable each individual, when the situation allows and when he so desires, to supplement the education with which he had to be satisfied initially, to improve his skills, to increase his knowledge and to enrich his personality. It is considered that nine years of basic education should be adequate to enable pupils to benefit fully from an imaginative curriculum. As pupils will have had the correct perspective of the learning process during the nine years, identification of special talents will be possible and opportunity to develop correct attitudes towards life with a view to channelling them appropriately will have been taken. By the end of the nine years basic educational programme, students should have been equipped with useful skills and knowledge. They may engage in schemes promoting self-employment in groups such as co-operatives, community-based projects or other work activities and schemes. They should have developed physically and psychologically and their social understanding and responsibility should have been enhanced.

Goals for Grades 1–7

15. Primary school education should be preparatory to further learning, and for most parents, sights are set on the selection for Secondary school (Grades 8–12). This will not change until all Grade 7 graduates will have the opportunity to enter Grade 8.

16. Primary schools should, therefore, concentrate on the fundamental task of learning so that every child can master the essential learning skills on which he can build as he proceeds with further education or as he joins the life of work. The school, therefore, should assist him to develop intellectually, socially, emotionally, physically, morally and spiritually; he should be enabled to acquire learning and practical skills so that he is able to apply knowledge intelligently. The school should also assist in shaping his attitudes and values.

Important areas of learning

17. The primary school curriculum should, therefore, concentrate on the following areas of learning:

(a) *Communication skills*

(i) *Speech and listening*

Pupils should be able to express themselves and communicate through speech and listening.

- (ii) *Reading*
Pupils must be able to develop the art of reading well and communicating effectively.
- (iii) *Writing*
Pupils must develop the skill to write properly and without mistakes in order to communicate accurately.
- (b) *Mathematical skills*
Pupils should master or show ability to use mathematical concepts and processes, especially as applied to everyday life.
- (c) *Practical skills and science education*
Pupils should be able to master useful practical skills which they would apply in life in various ways; they should adopt a scientific approach and attitude; they should observe, collect information, draw conclusions and apply what they know.
- (d) *Creative arts*
The importance of participating in or appreciating music, dance, drama, art, crafts and other expressive arts, should be emphasised as these form part of the cultural heritage of Zambia.
- (e) *Physical and health education*
Physical exercise, sport and recreation, hygiene, elements of nutrition, etc., are important aspects of education and should be accorded their due respect in the curriculum.
- (f) *Political education and social studies*
This should involve an understanding of Zambian Humanism, Zambian political institutions and their functions; social studies; cultural and economic development.
- (g) *Spiritual and moral education*
This will partly link up with Humanism; should also be concerned with the importance of appreciating spiritual, religious and moral values.
- (h) *Production Units*
These will form the basis for practical training and the various aspects of productive work should emphasise their educational value.

18. The designing of the curriculum, syllabuses and material for the primary school sector will be done by specialists and other professional people taking into account the different levels in the educational ladder, individual differences and the age of the pupils to whom the curriculum will apply.

19. In conclusion, primary school education will have fulfilled its function if, in collaboration with the family and community, it enables the pupils to acquire the essential skills of learning and harmonise their development so as to apply what they have learnt in and out of school in a useful and socially acceptable manner.

Goals for Grades 8–9

20. The goals of the second phase of basic education, Grades 8–9, cannot be entirely different from those of Grades 1–7 stated earlier. Grades 8–9 are a continuation of the first phase and a preparation for life as well as for further education. Because students will by now have mastered the essential learning skills and will be reaching adolescence, it is necessary for the curriculum and other activities to be more diverse in range, depth and breadth.

21. In view of the variety of routes to be followed by Grade 9 graduates, the Grades 8–9 programmes should not be too specialised. These programmes, therefore, will consist of general academic education with practical subjects on which more emphasis on the applied approach will be laid so that the pupils will, at some stage, during the learning process, be engaged in actually making useful products rather than token items in their productive activities, such as agriculture, carpentry, metal work or supplying services. Accordingly, the Grade 8–9 programme will, among other things:

- (a) build a firm foundation by consolidating the learning skills acquired in phase one;
- (b) identify students' special talents or aptitudes and encourage their development;
- (c) assist students to acquire employable useful skills and knowledge through practical or work-oriented programmes;
- (d) assist students to develop intellectual abilities and apply knowledge intelligently.

22. In designing curricula for Grades 8–9, the general principles in curriculum development will be observed. For instance, over-loading of the curriculum will be avoided but the curriculum should cover both the general and special needs of the learner. The curriculum will also need to be differentiated but should, as much as possible, achieve association and integration between subjects.

23. All students will be required to cover a common core area of the curriculum with options which will include practical subjects. In this way, the core subjects will give the student a general basic education and the options will cater for his special needs and interests. This will enable him to either go to second stage education for general education, or to join vocational training programmes, or indeed, to enter the world of work as he will be equipped with some practical skills.

24. The new Grades 8–9 curriculum should, therefore, cater for both those who will continue with their full-time education, those who will enter the world of work and those who will join vocational training programmes.

The infrastructure and organisation of nine years of basic education

25. Since the ultimate goal is to achieve nine years universal basic education, the ideal situation would be one where each school will be built to cater for Grades 1–9. However, in the interim period, schools will exist with Grades 1–7 and others with Grades 8–9, but their planning will be such that with future expansion, it will be easier to complete the facilities for Grades 1–9. It is possible, and this will be the case for the foreseeable future, that the primary and junior secondary programmes could be offered at separate schools but still constituting a nine years universal basic education programme provided these two components are inter-related in terms of curricula and streams.

The calendar for basic education

26. In terms of the provisions of the Education Act, the Minister will determine, as at present, the calendar. The Minister will take into account the curricula, agricultural seasons and other relevant factors which may have a bearing on the quality of education. However, the three-term academic year should continue.

Skills training programmes for Grades 7 and 9 school-leavers

27. For the foreseeable future, only a small fraction of the Grade 7 graduates will be able to continue with full-time education up to the end of Grade 9 for reasons already stated. This problem will also be there even when ultimately nine years universal basic education is achieved, since the bulge of the school-leaver population will then be at the end of Grade 9 instead of at the end of Grade 7. Thus, the problem will shift from Grade 7 to Grade 9 level. In either case, there is need for well organised skills training programmes in a variety of fields. Although literate and able to reckon, the present Grade 7 school-leaver has no practical or employable skills to immediately fit him into any job. This is the dilemma of

the school-leaver today. The Party and Government, therefore, in conjunction with local authorities and other agencies, must devise definite skills training programmes in a variety of fields of occupational activities in order that each school-leaver, who may not be immediately proceeding with full-time education, will have the opportunity to choose from any of such programmes.

28. The variety of skills training programmes could include tailoring, sculpture, embroidery, bead work and sewing, toy making, carpentry, poultry production, maize farming, fish farming, tobacco growing, rice growing, vegetable growing, fruit growing and other agricultural activities, skills in salesmanship, typing, automotive servicing and simple repairs, shoe repairing services, simple repairs of electrical appliances, heavy vehicle and farm equipment operation and maintenance, etc. These are only a few examples from agricultural production, crafts production and production of services for the public and in the commercial and industrial fields generally. In pursuing these programmes, the graduates of the first stage will no doubt be able, as stated already, to draw upon the experience or skills they may have acquired in the course of their basic education. These programmes should be available to each and every school-leaver each year. Only then can a meaningful system be built up to deal with the problem of the school-leaver more systematically and more competently on a national basis rather than on an *ad hoc* basis and at individual or at group level.

29. The organisation and administration of these programmes should be carefully thought out and be designed in such a manner that before leaving school, the child should know what he has to do and where he will go to pursue the programme, so that he can look forward to acquiring some skill or training that may best fit him for the world of work.

30. Existing skills training facilities of this type are far inadequate in capacity and scope and their activities are not properly co-ordinated. It is, therefore, important to establish a strong and separate section, under the present Commissioner for Youth, whose functions should concentrate on school-leavers skills training programmes and not on the social and welfare aspects of youth programmes. This section should co-ordinate the programmes offered by various agencies such as the Party, Local Authorities, the local community or groups, etc. It should maintain adequate records of all school-leavers and the projects to which they are assigned. The Commissioner for Youth should work directly under the Party and not under the Ministry of Education as is the case now. However, he should maintain liaison and co-ordinate with the Ministries and the various agencies which directly deal with skills training programmes for youths not catered for in training colleges and institutes. Further, all international and local assistance in skills training programmes for youth outside school should be taken up with the Party.

31. The Commissioner should maintain close links with schools for the purpose of keeping pupils informed of the existence of skills training programmes or projects outside the technical colleges and trades training institutes.

Second stage education

General

32. At the second stage of education, there are many and varied programmes. Further, the programmes will, as at present, be run by appropriate institutions under various Ministries. Examples are general education programmes leading to Grades 10 and 12; Zambia Enrolled Nurses' course; Agricultural Assistants' course; Medical Assistants' course; Veterinary Assistants' course; Forestry Assistants' course; Primary School Teachers' Certificate course; Trades Certificate courses and several others. The duration of all these programmes will continue to be determined by each institution in terms of the course requirements. Grade 9 will be the minimum entry level to second stage programmes.

33. There will be need for consultation and co-ordination in curriculum development between institutions offering general education at this level and those offering trades and vocational training. In this way, teachers of various programmes can help one another in improving the curriculum and method of teaching and production of teaching materials. Students' record of work can be properly assessed and the level of previous attainment can

be determined and taken into account before admitting him to a particular programme. Further, this will assist teachers to assess the level of attainment of students in programmes which they may not necessarily be teaching. For instance, a student at the Zambia Institute of Technology would transfer to an appropriate programme at the University of Zambia. To this end a Council for second stage education should be established to determine inter-relationships, equivalences and creditations. Its membership should include representatives from Ministries and institutions concerned with programmes at this level of education.

Grades 10–12 programmes (Senior Secondary School Education)

34. At present the senior secondary programme forms part of the five-year secondary school programme which begins at Grade 8. This will continue to be linked in curriculum with the programme of Grades 8–9. Senior secondary will continue to be a preparatory programme for entry into what are presently called tertiary institutions, such as universities and training colleges. In addition, this programme should also adequately prepare students for life since most of its graduates will, after completing their National Service, join the world of work. The introduction of practical skills and the idea of education and production are even more relevant here and should be pursued in more depth than at the first stage. Therefore, students, where facilities exist, will be able to study some areas in more depth in accordance with their interest and special aptitudes. Considering the country's acute shortage of manpower, these special interests must be reconciled with the needs of the nation as a whole. Often, these should coincide.

Goals for Grades 10–12 (Senior Secondary School Education)

35. Since the Form V (Grade 12) examinations will be localised by 1980, it will be desirable to design the curriculum and content of the programmes of Grades 10–12 in such a manner that the curriculum will be relevant to the needs of the individual and also of the nation. In this way, it should be possible to meet the objectives of the new education system. The general goals of Grades 1–9 will still be valid at this stage except that account will be taken of the fact that the pupils will by this time have had more experience of the educational process and will be of more mature age. The curriculum will consist of common core subjects which give general education and optional subjects, including practical subjects, which may be studied in greater depth. In order to minimise expenditure and conserve manpower, certain curricula may be confined to a few schools. Studies will be made to ensure maximisation of facilities and manpower.

36. Since the programme for Grades 10–12 is partly preparatory to entry into the third stage education programmes, there should be closer consultation between the Ministry of Education, the University and other tertiary institutions to which some of the graduates will gain entry; in addition, specialists from these institutions would be involved in designing the curricula and syllabuses for Grades 10–12. This is important as there is need, for instance, for the University to relate their curriculum and content of the courses or programmes to the background of the student and preparation which he may have received during the Grades 10–12 educational process. Equally, the University may wish to advise on certain aspects of the curriculum to bring it in line with some new University programmes which may be envisaged. The Council for second stage education could discuss and advise on all such matters.

37. At the end of Grade 12 students will have been better prepared than those at the end of Grade 9 leaving to further their education through full-time or part-time study. In fact, the school-leavers at the end of Grade 12 should also have received adequate preparation for a full and useful involvement in the life of work.

Vocational training

38. As stated above, there are a variety of vocational training programmes included in the second stage of education. These will consist of trades training and other specialised

programmes. The programmes will be planned with a view to satisfying the manpower needs of the various sectors in the technical, commercial, agricultural and industrial fields. Normally, these programmes should be available to persons who have had at least Grade 9 educational experience. For sometime to come only a few would gain access to such programmes due to limited facilities.

39. The candidates for such vocational courses will have had sufficient general background education to understand and grasp their chosen fields of specialisation. On completion of their courses some of them may set up service industries, such as automotive servicing and repairs, repair and servicing of electrical appliances, carpentry, joinery, construction and jobbing, etc. Others may be employed in the public and private sectors.

40. They may also have had commercial skills such as typing, book-keeping, etc., which could be used in a number of fields in the economy. Those who will have acquired agricultural skills will participate in the agrarian revolution in various ways, such as becoming producers themselves or by being involved in agricultural extension work.

Third stage education

41. The third level of education includes a range of separate programmes, administered by different institutions or agencies. Among these are such existing programmes as the Diploma in Agriculture, Diploma in Forestry, Zambia Registered Nurses, Diploma in Accounts, Diploma in Technology, Technician Certificate, the certificates, diplomas, degrees and post-graduate programmes of the University of Zambia.

42. Successful completion of Grade 12 or other equivalent programmes will normally be a requirement for entry to third stage education. Normally, Grade 12 graduates will have attended their National Service, or would have been granted exemption, before they proceed to colleges, universities or joining the world of work. Some of the Grade 12 graduates may further their education by part-time study.

43. Although the entry requirements for the third stage programmes may be comparable, the programmes themselves vary considerably in length and in their levels of academic and professional specialisation. However, many third stage programmes are related to one another in professional functions, such as the technician, technologist and the engineer in the field of engineering. It is, therefore, desirable that the planning of related programmes and curricula should be co-ordinated. This is necessary partly because graduates of such related programmes will work together and depend on each other's expertise and experience and partly because graduates at one level should be enabled to undertake programmes at *more advanced* levels with due credit for their previous professional education and experience elsewhere.

44. The expansion and diversification of third stage education or programmes will be planned in accordance with the needs of the country for higher level manpower especially in priority areas.

45. A council for third stage education should be established and will draw its membership from representatives of those institutions or agencies connected or responsible for third stage educational programmes. The council will, among other things, facilitate consultation and co-ordination of third stage programmes.

CHAPTER 5

SPECIAL EDUCATION

1. Special education, as the term implies, refers to education especially designed and adapted to suit the needs of unfortunate handicapped children who may be suffering from mental or physical disability.
2. To adequately meet the special needs of such handicapped children, it is necessary to identify the cause or causes of the disability and determine the individual needs and thereby give full attention to the physical, mental, social and emotional development of the child. Special education, therefore, does not only need the professional services of the teacher but also involves the services of other professional officers in such fields as medicine, psychology and sociology.
3. The following are among the many types of handicapped children: the blind, the partially sighted, the deaf, the dumb, the physically handicapped, the mentally handicapped and those who suffer from speech defects.
4. Although there is a lot of concern about the handicapped among most of Zambian communities, this concern may not be accompanied by positive attitudes to assist them to overcome their disability through education or occupational training. For instance, instead of assisting a blind child to have education or occupational training and prepare him well for life, some communities will be happier if the blind child was merely looked after, as to them to involve such a child in any occupation is to be unkind to him. On the other extreme, there has developed an unfortunate tendency in some relatives of the handicapped, whereby they exploit the handicapped by assisting them to be beggars on the street, particularly in urban areas. This is an alien habit; fortunately, the tendency has not developed to as great an extent as in other countries. Clearly, both of these are unhealthy attitudes or prejudices even though they are supposedly to be in favour of the handicapped. There is thus need to educate the Zambian society, both in rural and urban areas, that the handicapped, if properly trained, are capable of looking after themselves and of making a useful contribution to society.
5. All handicapped children, like any other children, are entitled to education. They should receive basic and further education by full-time or part-time study as any other children. Further, since the handicapped children are a special case, there should even be "positive discrimination" in their favour in the provision of facilities and amenities for educational purposes.
6. Special education in Zambia is not yet fully developed as, for a long time, it was not properly organised; was only provided by voluntary agencies, mainly Mission Agencies; and was not even part of the responsibilities of the Ministry of Education. In 1971, however, education for the handicapped became the responsibility of the Ministry of Education and since then a Special Education Inspectorate has been in existence in the Ministry. There is also an Inter-Ministerial Steering Committee on Special Education which advises on the organisation and improvement of education for the handicapped. Before 1971, teachers were not trained to teach handicapped children. In fact, some of the teachers in this field were untrained.
7. Since taking over the responsibility for Special Education, the Ministry of Education has established the Lusaka College for the Teachers of the Handicapped, which has trained teachers in the field of the blind, the deaf and the physically handicapped. Those who are trained at this College are specially selected from serving teachers who have shown interest in special education. There are eighty-two teachers who are graduates of the College. This figure does not take into account those who have taken refresher courses or overseas training.
8. The College cannot, at present, increase its output due to limited accommodation and classroom space. There is need, therefore, to expand the capacity of the College, both in terms of enrolment and the range of courses to include other types of handicaps which are not catered for at present.

9. At present, there are several institutions dealing with special education, some of which are run by voluntary mission agencies. The present efforts in special education in the country as a whole can be summarised as follows:

- (a) *The Blind:*
7 primary schools and 6 units in secondary schools and 1 unit of Home Economics in a Secondary School;
- (b) *The Deaf:*
2 primary schools and 4 units in primary schools;
- (c) *The Physically Handicapped:*
3 primary schools and 2 leprosaria;
- (d) *The Mentally Handicapped:*
5 units in primary schools and 5 hospital teaching services units;
- (e) *Teacher Training Colleges:*
1 college at Lusaka established in 1971.

Identification and ascertainment of handicaps

10. There are some handicapped children who have not been identified. This problem may continue unless definite measures are taken to set up machinery which will operate on permanent and regular basis to identify such children. Identification of handicaps cannot be carried out successfully unless it receives the co-operation of the parents, the community and the specialists in the medical, social and educational fields. All concerned should appreciate the importance of disseminating information about the varieties of handicaps and the importance of surveying and identifying handicapped children early so that appropriate medical, social and educational provision can be made at the right time. The process of identification and ascertainment will help the individual children whose handicaps might otherwise have gone undetected.

11. In the identification of handicaps, schools and pre-schools have also an important role to play. They should provide opportunities for teachers to recognise children with apparent or manifest physical or mental handicaps who should be referred to specialists for appropriate action.

12. The main categories of the handicaps are discussed below:

- (a) *The Mentally Handicapped:*
There are degrees of mental handicaps; firstly, there are those children with severe mental handicaps who cannot benefit from attendance at a normal school. Separate schools should be provided for them. Secondly, there are those children who are able to benefit from attendance at normal schools but must be taught, at least for some time, in separate classes.
- (b) *The Deaf and Hard-of-Hearing*
The information regarding the numbers in various categories of loss of hearing is best given by hospitals and clinics. At the moment, however, only the Kitwe Central Hospital and the Ministry of Education, in conjunction with the staff of the Ear, Nose and Throat Department of the University Teaching Hospital in Lusaka, are able to supply and fit hearing aids to children. Until the Ministry of Health is able to establish similar Departments throughout the country, it will be difficult for the Ministry of Education to plan and provide adequate services. Children who cannot hear do not learn languages unless they have special help; without language, children have difficulty in communication and understanding. It is, therefore, vitally important to identify children's hearing handicaps as early in life as possible as their entire social progress will depend upon prompt identification and treatment. There are degrees of impaired hearing. For instance, there are the following groups:

- (i) the profoundly deaf who require special establishments to be given academic and occupational training;
- (ii) those with a moderately severe hearing loss and are able to learn to hear and speak with the help of aids if they use them when still young. These children require separate tuition from those at (i) above;
- (iii) those with a mild hearing loss and are able to be integrated into a normal school once they are able to use hearing aids successfully;
- (iv) those who may become deaf through illness or accidents while already attending school, and could be profoundly or partially deaf. Each requires individual assessment, treatment and placement.

(c) *The Blind and Partially Sighted:*

The blind and partially sighted should also receive appropriate medical treatment and suitable training to enable them to cope with their handicaps. Those who are totally blind cannot learn through the use of methods involving sight. So special methods have to be devised such as braille, use of tape-recorders and typewriters. At the moment, this is the category that has made more advances in education as there are secondary school graduates as well as University graduates. Secondly, those who are partially sighted also need medical attention and education. These are handicapped children who cannot follow the ordinary teaching and learning process without treatment and aids for their sight. Special equipment and materials may be necessary such as lenses, spectacles, books in large print, etc.

(d) *Multiple Handicaps:*

As cases of children with multiple handicaps are relatively rare in Zambia, it may not be necessary at the moment to establish separate schools for them. However, it will be necessary for a number of trained special education teachers to be knowledgeable in a second type of handicap. For example, a trained teacher for the deaf could learn to teach the blind as well and vice-versa.

(e) *Children needing remedial education:*

These are handicapped children who may need remedial education as they have only been able to learn at a slower rate than normal for one reason or another; for example, emotional, mal-adjusted and those with minor physical defects etc. Most of such children may be helped by their teachers by the use of appropriate remedial techniques. However, some children may have to be assigned to special classes for professional help after testing and ascertainment of their handicaps. After they have overcome their handicaps, they should return to normal classes.

(f) *The Physically handicapped:*

There are handicapped children who may have a physical impairment that prevents them from functioning normally in some way or who may suffer from various diseases that prevent them from benefiting from the ordinary school. Medical, surgical, orthopaedic and physiotherapy treatment are important aspects of care for such cases. Hospitals which provide prolonged treatment, usually have a school unit incorporated within the complex. There are in Zambia schools catering for the physically handicapped and also hospital teaching services units where children who are physically handicapped may receive treatment and return home to be integrated into normal schools.

Curricula for Special Education

13. The principles of education discussed in Chapter 4 and the objectives of the curriculum discussed in Chapter 6 also apply to special education. However, because of physical or mental disability, the curricula, materials, equipment and methods have to be designed in such a way as to enable the student to cope with the disability and meet his needs. The handicapped child may have to receive remedial treatment before he can meaningfully

embark on his education. It is in special education that differentiation in materials and method in the curriculum process is even more important. For this reason, there is a variety of specialised equipment and materials in use. At present most of these have to come from outside although some are prepared or made locally even now.

14. The curriculum, even for the handicapped, should include production. Actually, institutions dealing with the handicapped were among the pioneers in the idea of learning and production as is evidenced by the various products on the Zambian market made by the handicapped such as trays, baskets, chairs, tables, etc.

Important considerations

15. Among important considerations in special education are the following:

- (a) Handicapped children should attend ordinary schools and colleges in view of the importance of socialisation but this should depend on the nature and the degree of their disability. It may be necessary to have separate schools and separate classes for the handicapped but, as soon as it is no longer desirable to separate them from other students, the handicapped should join ordinary schools or classes.
- (b) More effort should be made to improve the educational conditions for the handicapped by :
 - (i) expanding facilities both in capacity and range of fields of handicaps for which training opportunities should be offered;
 - (ii) increasing the number of institutions concerned with the training of teachers for Special Education to increase output;
 - (iii) designing curricula and making available material and equipment to suit the nature and degree of the various handicaps;
 - (iv) intensifying the co-ordinated effort of the medical, social and educational services for the handicapped;
 - (v) designing schools, school buildings and equipment in such a way so as to cater for the needs of the various handicaps; for instance, it should be possible for wheel chairs to go through doors.
- (c) Some handicapped children may enter full-time education at an early age or spend longer periods in one sector of education because of their particular handicap. In fact, there may be need for some handicapped children to attend pre-schools and Government should recognise pre-school education for the handicapped as necessary and preparatory to Basic Education.
- (d) Special programmes in occupational training to suit each category of handicap should be designed. In designing such programmes there should be co-operation between various Ministries (such as Education, Health and Labour and Social Services) and Industry; the exercise must also include vocational guidance and placement after completion of training.
- (e) There should be community education programmes to ensure public understanding and support for Special Education. Such programmes could elicit public co-operation in surveys, identification and ascertainment.

Responsibilities of Government Ministries and Agencies

16. The educational needs of handicapped people cannot be separated from their medical, social and occupational needs. For this reason, special education must be organised as a collaborative responsibility of many Government and voluntary agencies.

Responsibility of the Ministry of Education

17. The Ministry of Education will retain responsibility for the co-ordination, administration, professional development and planning of the special education system. It will be responsible for designing special education curricula and teaching materials; for prescribing specifications for special education school buildings, furniture and equipment; for assessment, teacher education and professional supervision. Continuing education for the handicapped, including vocational skills training, will be developed by or under the appropriate departments.

18. In order to provide essential professional leadership and advice to the growing number of special education institutions, it will be necessary to expand the Ministry of Education's specialist staff both at Headquarters and in the field. It will be desirable that in particular, small units of special education inspectors, educational psychologists and peripatetic teachers will be built up in each region, so that a faster and more versatile service can be made available to handicapped students and their teachers both in ordinary and special institutions.

Inter-Ministerial co-operation

19. However, the Ministry of Education alone does not have all the professional competence needed to develop a thorough system of special education. Before a handicapped child can enter a special school he must first be identified as one needing special care. The nature of his handicap must be known, and the degree of severity and time of onset of the handicap must be established so that the child can receive the sort of education which will help him most. The child may need social and medical care to correct or alleviate his handicap which may affect his capacity to learn. His family may need guidance in understanding the nature of the handicap and how to help the child to cope with it. When he leaves full-time education he may need appropriate occupational training and help in finding suitable work. At all these stages, the Ministry of Education will collaborate with specialists from other Ministries and agencies.

20. The Steering Committee on Special Education will continue and will comprise of senior officers from the Ministries of Health, Labour and Social Services, Education, the Council for the Handicapped, the Zambia National Union of Teachers and the voluntary agencies. The committee's main responsibility would be to organise professional co-operation between the Ministries and agencies concerned so that effective collaboration takes place in the field. The committee will advise the Ministry of Education on the priorities for development in special education and the effectiveness of its programmes.

General

21. At present there are very few specialists or qualified personnel in the field of Special Education as teachers or as professional administrators. If Zambia is to see orderly development in this field, she should intensify her training programmes. Special Education cannot develop effectively unless the various types of qualified personnel are available for deployment at different levels of establishment in Special Education schools at district, regional and headquarters level.

CHAPTER 6

CURRICULUM DEVELOPMENT, MEDIUM OF INSTRUCTION, MATERIALS AND EQUIPMENT

The role of the curriculum in Educational Reform

1. Whilst the reform of the educational structure serves the purpose of offering education to citizens on a more equitable basis, this in itself is not enough. If educational reform is to have real significance, in terms of the role of education in meeting the real needs of individuals and of the country, it must encompass reform of the curriculum. It is the curriculum content that determines the type of education given.
2. Today we live in a scientific and technological era; more and more importance is being attached to the ability to apply the achievements of science and technology to one's work in confronting the developmental problems of the country. Thus, the problems the country faces in matters of providing balanced diet, development of mineral resources, water supply, health and sanitation, modern scientific farming and combating livestock diseases cannot be solved without calling for scientific and technological dexterity. It is, therefore, clear that mathematics, science and technology must play a vital role in the new curricula, so that education can increasingly and most effectively be responsive to some of the major needs of the country.
3. Equally important is the need to include productive work in the curriculum. This must be seen not merely as a concern for the development of certain skills for employment purposes: it has other important merits; it associates the student with the vital activity of the community, and at the same time it abolishes the dividing line which artificially separates study from manual work. It could also be a means of contributing towards the national productivity.
4. Educational reform should also be seen as a means of ensuring greater relevance to the cultural environment of the country, better preparation for citizenship and active participation in change, and greater understanding of humanity and the world we live in. An imaginative curriculum should facilitate all this.
5. The curriculum for the new system, therefore, should be enriched. Its content should be flexible so as to reflect both the urban and the rural environment. It is especially important that the needs and requirements for rural development should be given priority as these have deeper significance for meaningful rural development. The teaching of agriculture and other productive activities related to rural development work should be an integral part of the new curriculum.
6. It is, however, essential that the curriculum should be so designed that its effective implementation, through use of appropriate educational materials, equipment and other resources, should result in the type of product the educational system is intended to produce. In this regard, methods to be used should also be such that the objectives and goals are met, i.e., the children will be properly taught and will learn effectively.
7. In all this, the teacher, as the number one resource, should continually play an important role. He must understand and be involved in the curriculum process and be adaptable to necessary changes brought about by the new curriculum; while his knowledge, methods and expertise are important, his attitude to the new curriculum is even more crucial and can make the difference between reform on paper and reform in reality. Indeed it can be said that few reforms in the content of the curriculum and method of teaching are of any value until they are understood and willingly accepted by the teachers who are to apply them. The travesty that can result from misinterpretation of a reform by a proportion of teachers can do more to discredit it than does straight opposition.

Curriculum development

8. In the course of designing and developing curricula it is important that the quality of education to be offered, following the introduction of revised or new curricula, shall not be

reduced; rather we should seek to raise the quality of education from its present level. Therefore, among the important steps to be taken in this process are the following:

- (a) designing an appropriate pre-school curricula;
- (b) designing the curriculum for nine years basic education as a complete unit but with two related phases, i.e., one for the first seven years (primary education phase) and the other for the next two years (junior secondary education phase);
- (c) reviewing of secondary and other curricula to be in line with the new thought in education;
- (d) reviewing of curricula for teacher, literacy and special education;
- (e) reviewing of curricula for continuing education, reflecting adult interests and encouraging skills that adults might wish to acquire;
- (f) creating common cores of essential compulsory subjects with a number of options at the levels where this could be applicable;
- (g) making production training an important educational activity;
- (h) integrating theory and practice through properly related programmes in practical work;
- (i) preparing materials for the new curriculum and ensuring its availability to schools and institutions;
- (j) preparing teachers adequately in the use of the new curriculum and materials;
- (k) undertaking systematic evaluation of curricula and all programmes periodically.

Co-ordination between subjects

9. In some programmes, more attention has been paid to the sequence of topics and materials within subjects than to co-ordination among subjects. In the new system, with the division of the curriculum into core subjects and optional subjects, and with its clear definition of objectives, it will be necessary to co-ordinate the syllabus topics and teaching material so that they make a purposeful whole. The intention of reducing the number of subjects in the curriculum at each stage is to intensify and deepen the students' learning of what is essential in relation to the interests and ability of the student.

10. In pursuing the above points, proper consultation between specialists and other professionals, teachers and interested groups or organisations should be undertaken since it is important that the expertise and experience of all these should be available and made use of, thereby ensuring cross fertilisation of ideas. Existing curricula should be examined and in the process of re-writing, relevant parts should be retained; strategic points in the curricula and in the time scale for implementation should be identified to facilitate smooth introduction. For instance, the strategic points for introduction of new curricula and materials could be at Grade 1, Grade 5, Grade 8 and at Grade 10, with timing for each grade and the extent of adoption of new curricula being determined during implementation of the new system.

The role of teachers in curriculum and materials development

11. Curriculum construction, review and revision, innovation and research should involve a two-way communication process by being initiated from below as well as from above. Teachers in the field should, therefore, participate, as they do now, in the identification of objectives, design of curricula and syllabuses for each programme and each subject. They should be involved through curriculum committees at schools and through subject associations. Some of the teachers should have the opportunity to serve on Subject Curriculum Committees of the Curriculum Council and other appropriate professional bodies such as the Council for second stage education.

12. Every teacher should, by virtue of his professional interest, be motivated to take part in curriculum development and implementation. Therefore, teachers should be enabled to have

the opportunity of participating in and improving methods, materials and teaching; in the process, those who should become resource teachers could be identified. Depending on interest and professional competence, teachers will be encouraged to become resource teachers in their areas of specialisation.

Resource teachers and centres

13. A resource teacher should be any teacher who is carrying out innovations in curriculum development, educational materials and teaching methods in addition to his normal functions; he should, in fact, be a vital link in the curriculum development process. His role will include initiating and interpreting changes in the curriculum. He should also feed back information on the success or failure of the changes; in this way he should be an agent of cross fertilisation. The Ministry of Education will organise seminars and workshops involving resource teachers, inspectors, teachers, the staff of the Curriculum Development Centre, teachers' colleges and the University of Zambia to discuss curriculum changes, write new materials and evaluate them.

14. Resource teachers will organise workshops in areas of their specialisation for teachers at Resource Centres, which will normally be teachers' colleges or schools. At such workshops, teachers will have the opportunity to discuss new methods, write new course materials and produce teaching aids to be evaluated by specialists, including those in the Curriculum Development Centre and the University of Zambia.

15. The scope of each particular workshop will be determined by what it may be intended to achieve; for example, the workshop may wish to discuss the problems encountered with new materials in the classroom situation, methods to be used, writing of new materials, use of new equipment and evaluation.

16. However, the idea of resource teachers cannot succeed unless there is a definite programme to train teachers to specialise in areas of importance and scarcity, such as chemistry, biology, mathematics, physics, agricultural science, metal-work, languages, etc.

Resource Schools

17. A resource school should be understood to be any school that is carrying out innovations in curriculum development, materials and methods of teaching; it should also be involved in evaluation of educational material, equipment and aids. Depending on availability of competent teachers with special interest in particular fields, some schools may offer programmes which may not be covered by other schools. In this way, meagre resources may not be thinly spread over the entire country. For example, music, commerce, art, etc., are, even now, offered only by a few schools.

18. In their role as resource centres, schools should not merely wait for innovations to come from the Curriculum Development Centre. They should discuss innovations and curriculum changes at district and later at regional levels, linking up with the Curriculum Development Centre through Regional Representatives of the Curriculum Council. They could follow the example of the JETS organisation where student initiatives at the school level plays an important role and contributes to the success at national level of the final JETS fair each year.

19. Schools should emulate this example in initiating innovations in curriculum materials and in improving methods, while at the same time recognising student interest, initiative and progress in each field. In this way, the most promising and acceptable innovations could be incorporated in the national system for wider application.

Evaluation and assessment

20. Evaluation is a process by which it is determined whether the education system is, in fact, achieving its objectives. Therefore, it will be important to evaluate periodically the new programmes, curricula and syllabuses to ensure that they are having the intended effect. Teachers and other professionals will be involved in the evaluation process.

21. In order that students learn effectively and benefit from education, they should be given guidance in the methods of study, the choice of curriculum and career. Good guidance leads to correct placement and will, therefore, be one of the important functions of teachers. In designing curricula and their implementation, the methods to be used in assessing students' performance should also be devised. Further, teachers should assess students continuously as this forms part of the teaching and learning process. Guidance of students can only be effectively done if it is done in conjunction with assessment.

Medium of instruction

22. Communication is essential in teaching and learning. For this reason, language has a vital role to play in the educational process and, therefore, the attainment of language skills during the basic education stage will be extremely important in the new system.

23. Although it is generally accepted by educationists that learning is best done in the mother tongue, this situation has been found to be impracticable in the case of every child in multi-lingual societies, such as the Zambian society. In some cases, the mother tongue may not be the means of communication outside the home in some localities. In such situations, often the educational principles which learning in the mother tongue is expected to foster are confused with the problems of language policy or lingua franca. Therefore, a satisfactory balance should be struck between pedagogical principles, public acceptability and practicability in the choice of the medium of instruction. Further, the cost involved if too many languages are designated as media of instruction should be seriously considered. To this must also be added the problem of availability of teachers who are able to teach in a variety of languages. It is also important to distinguish in the Zambian situation between language as a subject and language as a medium of instruction.

24. English has always been the medium of instruction in upper grades of the primary school and onwards. In 1965, however, English was designated as the medium of instruction from Grade 1 and has since been introduced progressively. It is now used in most, if not all schools. Teaching materials, teaching aids and assessment exercises are all in the English language for most subjects of the Zambia Primary Course.

25. However, the use of English as the medium of instruction from Grade 1 has not been without some difficulties since most Zambian children do not at present speak English in the home. Teachers, therefore, have had, in some cases, to use one of the seven official Zambian languages which may be familiar to the majority of pupils in the class to drive home certain objectives of the lesson or to explain concepts which the class might not have grasped. On balance, however, it can be said that the use of English as a medium of instruction from Grade 1 has succeeded.

26. Further, if English is going to be the medium of instruction in the higher grades, it is advantageous to the child to be introduced to the English language as early as possible. Although English may be taught as a subject in Grade 1 while the medium of instruction could be a different language, the fact of the matter is that, even in the use of English as a medium of instruction the child has the opportunity to learn and improve his language ability and thus using English as a medium of instruction is also an aid to learning English as a subject. It has been noted that when pupils have been using English as a medium of instruction for a few years only, there is great difficulty in coping with the work when, in the upper grades, they are faced with more subjects and in which English is now the sole medium of instruction.

27. There is now greater mobility of people in Zambia than was the case before Independence and, as a consequence, children of school-going age, even in the lower primary education grades, may go to live in an area where the Zambian language used is different from that of the area they moved from and perhaps also from the one spoken in the home. In circumstances where the particular Zambian language were to be the medium of instruction in the area, there would be great difficulty on the part of the pupils concerned in coping with their school work. This could well frustrate the effective implementation of the policy of decentralisation of both the Party and Government, which entails considerable

mobility of individuals who are, at the same time, parents or guardians of children of school-going age. Further, it has been found, in some areas, that the problem of the teacher in this regard is also acute. Pupils may be conversant with the Zambian language spoken in the locality and which might be used as a medium of instruction, while teachers may not be conversant with the language, let alone be in a position to teach in it. It is, therefore, obvious that the language difficulty will seriously inhibit desirable placement and mobility of teachers at the primary school level.

28. Further, there is a great shortage of adequate and appropriate educational material and literature in almost all the Zambian languages. There is thus a lot of work to be done in language development, not only at the level of the school, but also at the level of the University if we are to see a meaningful change in the study of Zambian languages as subjects and in their use as media of instruction. There are certain concepts in Mathematics, Science and Technology, for instance, which cannot be expressed precisely in any of the Zambian languages at the present, simply because such concepts and the technical terms used have no equivalents in the Zambian languages or for which the equivalents are imprecise, inadequate and perhaps completely misleading. Therefore, the establishment of the Zambian languages in terms of functionality, richness of vocabulary and social integration, may have to await such developments as have been indicated above. However, it is recognised that the use of the mother tongue in teaching and learning can stimulate the child's effective faculties and aid its development emotionally and psychologically. It can encourage the socialisation process which education brings through song, folk stories, dance and play, etc. In turn, these contribute to the development and preservation of cultural heritage, thus establishing links between the new society and the past. This important aspect can be taken care of by emphasising the status and teaching of Zambian languages as subjects. Also the parents must accept some responsibility in promoting the use and deeper knowledge of the mother tongue, by their children, in the home and the community.

29. In conclusion, the present policy, whereby English is a medium of instruction from Grade 1, should continue; but if a teacher finds that there are concepts which cannot be easily understood, he may explain those concepts in one of the seven official Zambian languages, provided the majority of the pupils in that class understand the language. In fact, this does happen even now. Secondly, the teaching of Zambian languages as subjects in schools and colleges should be made more effective and language study should have equal status with other important subjects.

30. The University of Zambia should intensify and expand its activities in Zambian languages so that Zambian languages can be studied as subjects as opposed to merely using them in linguistic studies. There should be definite measures taken to improve the availability of literature and other materials which would facilitate the teaching and learning of Zambian languages more effectively.

Educational materials and equipment

31. Educational materials and equipment are aids to the teaching and learning process and must be consistent with the objectives of the curriculum if they are to reinforce the teaching methods which may have been devised to support the particular curriculum. Therefore, mere change in curriculum and structure would not by themselves constitute meaningful reform if the educational materials and equipment to support the curriculum are lacking or are of a poor assortment and irrelevant.

32. Educational materials and equipment normally used would include the following: books, audio-visual teaching aids, libraries, magazines, newspapers, workshops, fields or gardens, science equipment, radio and television programmes, etc. All these, properly organised, contribute to meeting the objectives of the curriculum and improvement of educational quality. For example, they aid:

- (a) the teaching and learning process effectively and develop the intellectual ability and skills of the students;
- (b) the acquisition of knowledge and its intelligent application to life situations;

- (c) the development of the student's mind in areas which belong to the affective domain, such as, awareness, attitudes and values;
- (d) students to progress at their own pace and to undertake self-assessment, for example, through self-instruction materials; self-instruction material should not, however, replace the teacher;
- (e) group effort in the learning activities of students;
- (f) student's self-expression; for instance, through school magazines, drama, art and various practical subjects.

The use of local educational materials and equipment

33. The great expansion of the education system will call for more educational materials both in coverage and range. Methods of materials procurement should, therefore, seriously take this into account at every level if Zambia is to avoid paying too heavily for its national education.

34. Since the attainment of Independence, Zambia has made some progress in the local production of curriculum materials in the form of books, some visual aids and simple science equipment. However, the local production of books has been far from adequate and local efforts have yielded even less satisfactory result with respect to instructional equipment.

35. There are many advantages in producing educational materials and equipment locally for every level where this is possible. For instance, locally produced books could be made more relevant to the curricula. To devise new curricula but rely entirely on foreign-produced educational materials for every level would be the best way to defeat the purpose of the reform exercise as most such material may not meet the objectives of the new curriculum. A good example is in political education, where, although the Ministry of Education is already working on the "Syllabuses for Political Education" produced by UNIP, there is, as yet, not sufficient material produced on this subject, and also on Humanism, suitable as school texts. Such material must be produced by Zambians in Zambia if the intentions of the reform are to be properly interpreted and realised within the historical, social, political and economic context of the Zambian people.

36. Further, the production of books and other educational materials and equipment locally could shorten the long supply lines which now link the classroom with the suppliers abroad, and avoid all attendant delays and foreign exchange problems, etc. At present, the National Educational Distribution Company of Zambia, though trying hard, is still finding it extremely difficult to resolve these problems. Schools should not be without appropriate educational materials and equipment when they most need them as this makes it very difficult for schools to operate efficiently and impedes effective teaching and learning.

37. It is, therefore, important that steps be taken immediately to initiate local production, where feasible, of educational materials and equipment, to enable the country to become self-sufficient for its educational materials and equipment as far as possible. Existing local expertise should be actively promoted. This is a challenge not only to teachers but also to other people who may have the ability to participate in this important endeavour. Accordingly, it is strongly recommended that:

- (a) teachers in schools and colleges and other interested people should take the first initiative to write or produce such materials as this is a matter that cannot be left to chance;
- (b) the University of Zambia should, in addition to concentrating on educational research, participate in the production of educational materials and equipment;
- (c) Production Units in some Technical Colleges/Institutes and schools and the JETS organisation should also produce educational materials and equipment and the University of Zambia should play an important role in designing, advising and in offering other professional services;

- (d) local industry should explore ways and means to undertake the production or manufacture of equipment and materials using local designs or resources where this is possible.

38. The great expansion in educational opportunities envisaged will demand a tremendous increase in the provision of educational materials and equipment. Accordingly, local production of good quality educational materials, equipment and furniture should continue to be promoted. Preferential purchasing and use of these local products should be intensified. The Kenneth Kaunda Foundation and other local firms should *actively* engage in local manufacture and assembly of educational goods. It is highly desirable that Zambians should improve their attitude to their own products and their use. The Party and Government should provide fiscal and other incentives to local firms manufacturing educational goods and should facilitate the importation of necessary inputs where applicable. Zambian authors should place their manuscripts with local publishers and printers, as a first option.

Use of educational materials and equipment from abroad

39. Although it has been strongly emphasised at paragraph 35 above that educational materials and equipment should, as much as possible, be produced and obtained locally, clearly this cannot be necessarily the case for every part of the curriculum as in some areas principles and concepts are the same throughout the world. There would, therefore, be no disadvantages in implementing the curriculum by use of materials and equipment produced and obtained from abroad, if these cannot be produced less expensively locally.

40. For some time to come, Zambia may not have all the expertise needed to produce certain educational materials and equipment, nor would she be in a position to have the technical capacity to produce them or the opportunity to lower the unit cost and produce them cheaply. In some cases, environmental and climatic factors may not make it possible for certain materials and equipment to be obtained or produced locally. The areas in which materials and equipment from abroad would continue to be relevant include: science, mathematics, agriculture, medicine and certain other professional and technical fields. Even in the field of humanities, cross pollination and fertilisation of ideas is necessary and materials and equipment or studies undertaken in other countries can be extremely beneficial in the teaching and learning process. However, where importation of educational materials and equipment is unavoidable, sufficient planning should be carried out to ensure that the materials and equipment imported are the most suitable to the real needs of the educational system in the country and that they are acquired at the least cost possible.

CHAPTER 7

EVALUATION

1. It has already been stated in Chapter 6 on Curriculum that evaluation is a process by which it is determined whether the educational system is achieving its objectives. Evaluation is, therefore, an important aspect of the teaching and learning process. However, there are two aspects of evaluation which, though complementary, are actually undertaken by two different groups. One aspect is that determined by society which looks closely at the product of the educational system in terms of the students' performance and attitude in life. The other relates to evaluation undertaken by teachers and other professionals in the field of education to determine the effectiveness of the curricula, the programmes, methods, and to test the achievement of the student. The most important aspect of evaluation is the assessment of the student which is concerned with determining his worth, performance and personality.

2. In assessing the student, the teacher has first to determine the readiness of the student to learn and then his rate of progress. The teacher should also recognise the difficulties the student may be meeting and remedy them. Assessment is, therefore, part of a continuous teaching and learning process. In Zambia the assessment procedure which is of great concern to the public is the written examination that terminates one stage of education and serves as a selection instrument for admission to the next stage. In view of so much public attention that is focused on this type of assessment, it will be discussed in more detail.

3. Generally, examinations are used to indicate the level of attainment and most of them lead to certification. Examinations provide statements about the degree of competence attained by an individual as measured by the particular examination. The statements constitute a record of competence in different subjects or courses at the end of the programme. A combination of continuous assessment of one type or another and terminal tests may constitute a system of examination.

4. It is a sad fact that at present the general public, and even a considerable proportion of the teachers, view examinations as merely fulfilling two functions: namely, those of awarding certificates and selecting some students out of the many for the next stage of education. As a consequence, the examinations become the test of whether a school is doing its job; teachers tend to be blamed if too few of their students are selected for further schooling; students are considered to have 'failed' if they do not get selected; and teachers feel compelled to direct their efforts towards examination success. Furthermore, most public examinations tend to pay more attention to what students can remember and far less to how well students can think, to what they have acquired and to what they can do. But it should be quite possible to harness well constructed examinations, to serve worthwhile educational purposes; and this is the direction in which the reformed educational system should move more actively.

Examinations as an evaluation tool

5. As an evaluation instrument, examinations can be most valuable for they can provide the teacher and the student with information on the effectiveness of the interaction between the teacher and the student. Analysis of the examination results can reveal aspects of the learning situation which are difficult to students; for individual students, analysis can reveal their weaknesses and strengths.

6. In addition, examinations can help to assess the performance of each institution and the results can be used in finding solutions to problems each institution may be facing. Further, the information provided by the responses in an examination can lead to adjustments in teaching methods, organisation of the syllabuses and to changes in the structure of the curriculum to ensure that overall intellectual development of the students is more adequately catered for.

Examinations as a tool for guidance

7. Since examinations can indicate the strengths and weaknesses of individual students in each area of learning, the results can be used for the purpose of guidance of each student. For example, a student may be encouraged to pursue those areas for which he has shown interest and ability so that he can be able to attain the fullest personal development. At the same time, the student may be assisted to improve in those areas where he is weak; or he may be directed to those areas where he can do better.

Examinations as an incentive

8. Examinations can also be an incentive for hard work on the part of the students. Students work hard to prepare for examinations and are thus enabled to reach excellency not only in comparison with the performance of other students, but even more important, in terms of the progress made with respect to the demands of their programme.

Examinations and certification

9. The function of certification is to indicate and certify the level of competence reached by the student on completion of his programme. The statements indicate the performance and level of competence in different subjects and provide a meaningful record of the students' accomplishments. Certification is also the only way of ensuring that the level of attainment is actually that recorded on the certificate.

Examinations and maintenance of the quality of the programmes

10. Public examinations are a means to maintain or improve the general standard of quality in any programme. By having public examinations it is possible to maintain quality and uniformity as all candidates for a particular programme are subjected to the same measurements.

Selection and placement

11. Examinations can be used for selection and placement. Wherever there is a limited number of school places at the next stage of education, or where there are limited employment opportunities, it is often necessary to apply selection criteria of one sort or another. In a number of cases, especially in general education, certification examinations are also used for selection purposes to the next stage or to advanced programmes, i.e., the same examination serves two purposes. However, there are some training programmes that call for separate selection or placement examinations. In such programmes, certification examinations alone do not necessarily meet all the requirements.

12. In Zambia it will take a long time for everyone to advance through every stage of the educational system due to shortage of places; selection criteria will, therefore, continue to be used. Selection and placement are not only the consequence of the educational process but are also a result of the law of supply and demand. The criteria used for selection are immaterial provided they are applied equally and fairly to every candidate.

Continuous assessment for evaluation

13. Continuous assessment is a method of evaluating the student's work continuously for the purpose of the teacher to diagnose the strengths and weaknesses of the class or of the individual student in order to apply remedies or to applaud excellence. In this case, continuous assessment is intended to be directed to the improvement of the teaching and learning process. Continuous assessment by the student himself, through the use of self-instructional material, can help him to recognise areas in which he is weak or strong so that he can be able to direct his efforts accordingly. It can also assist the student to acquire the discipline to work purposefully on his own.

14. Continuous assessment is normally determined from exercises performed by students in the classroom, laboratory, workshop, from homework assignments and results of termly or annual school examinations. It can also be undertaken through interviews and personal observations.

Continuous assessment for certification

15. The second aspect of continuous assessment is that which relates to the evaluation of the students' attainment or for certification purposes. Students are tested as they work and their assessment is not put off until the end of the year. They are thus tested in a normal situation without undue pressure and the teacher who knows the students better has some constructive contribution to make to the assessment. However, this method has the disadvantage that it alters radically the relationship between the student and the teacher as the student is always being examined while the teacher continues to evaluate. The teacher who has now too much power, may award higher marks to a weak student, with whom he sympathises, and the bright student may be awarded lower marks on the basis of some other ground, such as bad or poor personality. Since continuous assessment grades may vary from teacher to teacher, the standard would also vary from one school to another and it would be difficult to equate the level of attainment for certification purposes.

16. Even where the teacher may be objective, continuous assessment as an examination technique may result in parents accusing teachers for the misfortunes of their children.

17. In Zambia, continuous assessment, as part of certification or selection technique, cannot be applied generally. For example, it cannot be applied at Grade 7 or Grade 10 in all subjects. However, it can be used in assessing practical subjects, as is the case now. It is also used in technical, vocational and professional programmes and in the programmes of the University of Zambia, where the element of subjectivity is very minimal.

18. Continuous assessment should not be introduced indiscriminately in Grades 7, 10 and 12 terminal examinations for certification and selection. It should, however, be useful to apply continuous assessment in practical subjects. Continuous assessment should continue to be used as a method of teaching and should also be applied in determining borderline cases or difficult cases resulting from personal handicaps or circumstances.

19. For continuous assessment to be applied successfully, it is necessary that teachers are properly taught the techniques. Teachers should also appreciate that continuous assessment should be in addition to other methods of evaluation. In this regard, the role of continuous assessment, in combination with other methods, should be properly weighed and a definite percentage of the total marks should be assigned. Often, in some programmes it may be necessary to have moderators. The keeping of proper records is extremely important and teachers should be aware of the positive aspects and the limitations of continuous assessment.

Assessment of the non-cognitive areas

20. The assessment of the non-cognitive areas, such as attitudes, interests, physical activities and human relations, cannot be easily accomplished since they concern the emotional part of a student's development. They cannot be easily measured so as to be usefully included for certification or selection purposes. They are, however, necessary for sound development of the individual. The inventory or battery of tests on assessment of the non-cognitive areas are difficult to construct and analyse; expensive to administer and do not necessarily achieve the required degree of accuracy or certainty. Teachers should do their best to also assess students by observation and interviews.

Public examinations and selection

21. In the present system, students sit for public examinations at the end of Grade 7, Form III (Grade 10) and Form V (Grade 12). Students are awarded certificates which show their grading in each subject. Forms III and V certificates indicate division attained or failure.

22. At Grade 7, there is no failure in the composite examinations which students sit for and every candidate is awarded a certificate. However, the same examination is used for selection purposes as well. The composite examination consists of general subjects taught in the classroom (e.g., Arithmetic, English, History, Geography, General Science, etc.) and two special papers of verbal or non-verbal reasoning which are not considered for certification but are included, with other subjects, for selection purposes.

23. Before the introduction of the composite examinations, there were a number of selection problems as a result of having two separate examinations, i.e., one for certification and the other for selection. For instance, teachers were concentrating their effort on papers for selection, especially in Grade 7 classes, and some students suffered because they did not complete the syllabus covering general education subjects. Secondly, some students achieved better results in certification examinations than they did in selection examinations and, therefore, they could not be selected. On the other hand, there were students who did not achieve high grades in certification examinations but did better in selection examinations and were selected. Clearly, this was embarrassing as it was extremely difficult to explain to parents the different purposes of the two examinations. To resolve this problem, it was decided to combine the two examinations into one examination called the composite examination. This arrangement appears to be working satisfactorily as teachers and parents now look forward to only one examination.

24. However, as long as there is a limited number of Form I places, people will continue to complain despite the improvement in methods of selection. There is a similar amount of pressure experienced at Form IV level due to the fact that there is a disparity between the number of candidates and school places available, although the progression ratios are better at this level. Before the achievement of universal basic education, the composite examination at Grade 7 should continue. Test construction should, however, be improved so that examinations should not only test knowledge but also understanding and application. In regard to Grade 9 (Form II) examination, which will now be terminal, similar improvements will also be necessary.

25. Although public examinations and selections are not done at the end of every grade, there are annual school examinations and internal tests so that evaluation takes place all the time. However, due to shortage of school places, there is selection for entry into Form I and for entry into Form IV.

26. Every term school reports are sent to parents and some parents have found it necessary, on the basis of the school reports, to request for their children to repeat a grade. This, however, is not compulsory and does not happen to any great extent as it is not encouraged. Insisting that a child repeats a grade is a negative approach as what may be really required is remedial action, or proper placement in the case of a child with some type of handicap.

27. At present, Form V (Grade 12) students sit for the School Certificate Examinations of the University of Cambridge Local Examination Syndicate. Zambia has been associated with the Syndicate's examinations for a long time. The Syndicate's examinations cater for many other countries as well; it is not easy for such an examination to reflect most of the needs of present-day Zambia. For instance, Zambia is subjected to the curricula, syllabuses and regulations of the Syndicate and, therefore, has little say in the general policy and this is in fact the case with many other countries which use the Syndicate's examinations.

Localisation of School Certificate Examination

28. It is necessary to design curricula, syllabuses and regulations that reflect Zambia's needs and that will be in accord with the changes in direction and emphasis of the national development effort. To this end, the Party and Government decided in 1976 that the School Certificate Examinations be localised by 1980. This change cannot be accomplished without adequate preparation and assistance from those who are experienced in the construction and administration of School Certificate Examinations. Therefore, in collaboration with the University of Cambridge Syndicate — the British Council and the British Government — the Ministry of Education has drawn up a training programme for teachers and other specialists in the construction, marking and administration of the examinations. The training programme, which started in April, 1977, will last until 1980 when it is expected that Zambia will have a cadre of examiners and other staff specialised in the administration of examinations.

29. In order to ensure that the quality of education and standards of examinations are maintained, even improved, close links with the Syndicate will continue. In particular, the Ministry of Education has requested the Syndicate to exercise a monitoring function with regard to setting and marking of examination papers for a number of years. The Syndicate has also agreed to assist in those areas where Zambia may not have examiners for some time.

30. Although some people have argued a case for international recognition, it must be noted that in education, there is no standard unit of measurement like in weights and measures. In fact, when the quality of education and method of examination are of a high standard, the international community recognises the qualifications awarded. There is, therefore, no need for fear that the localisation of the School Certificate Examinations will raise the problem of recognition since adequate measures have been taken to ensure that the quality of education and standards of examinations are high.

31. Besides training programmes, adequate administrative arrangements and security will be established. For example, in the construction of Phase II of the Educational Services Centre, provision will be made for facilities to cater for functions related to examinations.

Attainment and certification

32. When localisation of the School Certificate examination is completed, Division Certificates will no longer be issued. Instead, Certificates will be issued which will show grades attained in each subject. The merit in this arrangement is that each candidate can be judged on his success in each subject rather than on aggregate performance. In this way, various employers, institutions or organisations will be able to judge the holder of the Certificate on actual performance in those areas which interest them or which are necessary for entry to some programmes or to higher educational institutions.

Examinations Council

33. At present the examinations at Grade 7, Form III and certain other examinations in the Department of Technical Education and Vocational Training are given by the Zambia Examinations Council. This will continue and when localisation is achieved, the Zambia Examinations Council will also be responsible for the School Certificate Examination.

34. Since there are many diverse and specialised programmes, particularly in the third stage, it is clear, that only the appropriate statutory bodies have the expertise and, indeed, the powers to make awards in the programmes which are their speciality. Therefore, appropriate bodies will continue to be responsible for examinations and award certificates in those fields. For example, the General Nursing Council of Zambia, the Medical Council of Zambia and the Department of Civil Aviation will continue to conduct their own examinations. There is, however, need for close liaison and collaboration between all such bodies and the Zambia Examinations Council for obvious reasons.

Imbalances in educational provision and selection

35. There are imbalances in educational provision between Regions and also in facilities for boys and girls; some of the inequalities arise from various and different circumstances in the historical development of educational provision within each Region. At the same time, the shortage of Form I places in the entire system throughout the country and the shortage of Grade 1 places in urban areas and of Grade 5 places in rural areas constitute a substantial part of the imbalances in educational provision.

36. The shortage of places has forced the Ministry of Education to introduce selection at various levels, resulting in cut-off points. For example, there is a national cut-off point for Form I selection where there is a big disparity between Form I places and Grade 7 candidates aspiring to secure Form I places.

37. A cut-off point is the minimum mark which a student should attain in order to be selected for Form I. It is fixed by considering the number of Form I places available and the number of Grade 7 candidates.

38. There are thus national cut-off points introduced in the system, one for boys and one for girls, for boarding places. These cut-off points vary from year to year. The national cut-off points for boys have so far been higher than those for girls. This is in order to redress the present imbalance in opportunities and facilities between boys and girls.

39. There are also Regional cut-off points which may vary from one Region to another and in some Regions may even be higher than the national cut-off points depending on performance and progression ratios of Grade 7 to Form I. As in the case of the national cut-off points, there are different Regional cut-off points for boys and girls.

40. For day secondary schools, cut-off points are on a district rather than Regional basis, since it is important that students should be able to come easily to school in the morning and return home in the afternoon. Each district has different cut-off points for boys and girls.

41. At present, with the disparity of Form I places, it has been necessary to allow not more than 20 per cent of the pupils who have satisfied the national cut-off point for boarding places to come from other Regions while 80 per cent come from within the Region; this allows some Regions with fewer places to have some students from other Regions who have done very well and shown potential for further studies to continue their education. Further, the 20 per cent factor also enhances national unity as some students are enabled to learn and appreciate the way of life in another part of the country different from where they were born or normally reside.

42. With regard to selection for Form IV or other sectors of education, there have not been many complaints from parents when their children fail to qualify, nor have parents vehemently voiced their feelings about the admission of pupils in a local school from other Regions. On the other hand, for Form I (Grade 8) selection, a large number of parents have been able to register their complaints and disappointments more strongly.

43. Parents have sometimes advanced reasons for the misfortunes of their children which have ranged from down-right condemnation of teachers, Heads of schools and Chief Education Officers; in desperation, parents have even accused the computer of bias as they see their children having no chance to advance in education beyond Grade 7 level. This attitude is most unfortunate but understandable. The truth is that it is the number of available Form I places that determines the number of Grade 7 candidates that will be selected.

44. When universal basic education is achieved it will assist in resolving the problems of imbalances in the primary and junior secondary sectors, since there will be no need for selection at these levels. This, however, is a long-term solution.

45. The answer lies in providing more primary and secondary school places on the basis of achieving equal progression ratios throughout the country. To attain this would take some time.

46. Therefore, initially, the Party and Government should concentrate on increasing the provision of educational facilities in those Regions which have fewer schools and lower progression ratios in order to redress the imbalances. Thereafter, educational provision should be planned on the basis of population. This will require understanding and clear explanation so that the people as a whole should know that it is important to have balanced national development instead of concentrating on parochial interests.

CHAPTER 8

PRODUCTION, APPLICATION OF SKILLS AND KNOWLEDGE

1. It has already been stated that production activities should emphasise educational value rather than economic value and that such activities should also form the basis for practical training, since the main objective in school production activities is to give students an all-round education. This process involves the intelligent application of knowledge and skills and the cultivation of the right attitudes. Furthermore, production activities motivate young people to play an active role in their own development and that of society.

2. The combination of study and production in a Zambian society has, as its main purpose, the interests of the *child's own proper up-bringing*. The involvement of students in production should, therefore, not be seen as a foreign practice. However, the opportunity should not be used for exploiting students for economic purposes, even though their production activities may result in economic gain which should only be consequential. This early first-hand experience in the process of production should assist in closing the gap in attitudes between the manual worker and the mental worker. Each of the two types of workers should be able to see and recognise the complementary contribution of the other to national life.

3. There should be a proper balance between productive work, study and recreation, taking into account the age and physical condition of individuals so that the student is not overburdened. Further, the student should be able to derive satisfaction from productive work so that the productive skills, intellectual, moral, physical, spiritual and aesthetic aspects of his development are properly harmonised.

4. The involvement of pupils in productive work enables theoretical knowledge and intellectual skills to be applied because knowledge and skills are a means to an end. Secondly, it ensures that teaching and learning are not abstract, bookish or dull. The knowledge and skills so imparted are of significant and beneficial effect in many avenues of life where there may be new application. Students become acquainted with measures taken to develop the community and the nation. In the process, they may learn about the problems and the development potential of their country, and their own individual and corporate role in this. The knowledge they gain may be useful even long after they have left school. This is the best way of applying political education in a real life situation.

Forming desirable attitudes

5. Production activities in educational institutions contribute to the formation of the right attitudes towards manual work. Students are able to derive from experience in production activities, undertaken collectively, personal satisfaction and a sense of achievement. They also develop personal discipline. The students learn to be self-reliant and to be innovative in tackling various problems which they may have to overcome before their efforts yield results. The students have also the opportunity to learn to work together as a group, i.e., with or for others and, in so doing, develop into better future Zambian workers in various fields of endeavour. Some of them may acquire leadership qualities and contribute to national development as leaders. As already mentioned, mental and physical productive work are complementary in personal and national development. It is, therefore, necessary that students should know, whilst in their formative stages, that working with hands is as important, desirable and acceptable as working with the brain.

Social value of production

6. Educational institutions are part of society and should not be regarded as islands because one of the purposes of education is to prepare the young people to be useful to society. Production work is, therefore, one form of preparation which is necessary to fit the young people in life and also to enable them to contribute to the welfare of the school, the community and the nation. This, in itself, is as educationally valuable as it is socially desirable. In the traditional Zambian way of life, children are taught to contribute to the welfare of society and to recognise and work for the common good. Production activities in educational institutions should offer opportunities for fostering this spirit,

particularly with the disappearance of the traditional methods of teaching the social value of work, due to urbanisation and as a result of the school system itself. It is also here that political education and Humanism should find full expression and practical application. The involvement of students in programmes which link the school with the community also enables the students to learn about the social, political and economic organisation of the nation and its institutions; in this way, the students should be able to apply their knowledge in the right way.

Educational value of production

7. Educational institutions are, by nature, centres of learning. All the activities they undertake should be related to the overall aim of education, which is to enable every citizen to develop his capacities fully for his own good and the benefit of society. Production work must, therefore, serve this general aim as well as contribute as far as possible to the specific educational purposes of each institution. It follows that production work which undermines or counteracts the learning function of an educational institution will not be acceptable. The teaching and learning programme of each institution is paramount, and production must be organised as part of that programme.

8. Production work in educational institutions should provide opportunity for integrating theory and practice as production and learning interact in many ways. Production activities may provide opportunity for demonstrating practically many topics in the syllabus. For example, in Mathematics, it should be possible to apply concepts of mensuration in a field of maize or in constructing a poultry run or pig sty. In Geography, topics on climate and weather could be applied to the agricultural production cycle. The inter-relation of subjects could also be brought out through practical work by project method since some topics in Science, Mathematics, Geography, Wood-work, Metal-work, Technical drawing, etc., can be applied to projects in crop or animal production. Production of various simple but useful articles in the metal- or wood-workshop, the provision of services, such as running mini bus transport as some schools do, making clothes, and cookery, could also be areas of interaction.

9. There should also be opportunity for testing knowledge and skills acquired in the classroom or laboratory or workshop. For example, those who have learnt book-keeping may engage in preparing accounts for the project or the production process in which the institution is engaged. Students who have learnt metal-work could repair metal furniture such as chairs, beds or even make some simple but useful metal items. Those students who may be studying commercial English could be engaged in correspondence to arrange or order a number of necessary inputs in the production process.

10. The degree of interaction between learning and production depends on various factors such as the level which the students have reached, the content of the syllabus, the educational programme of the particular institution and the nature of the production which is being undertaken.

11. Opportunity may also be taken to discover individual talents especially in those areas which are not connected with the curriculum. Students may learn useful skills which they may use later in life even though they may be pursuing a different career. For example, technical students may be engaged in crop or animal production. Generally, all students could have some insight in planning, management, marketing and financial control. This would enrich the general educational experience of the students.

12. The students could discover their own aptitudes and develop interest in specific areas. For some, these areas could be a base from which they would develop further when they leave school. For others, the interests may be channelled into hobbies or special skills leading to self-satisfaction and a sense of achievement, apart from the possibility of supplementing income or rendering useful service to the home.

13. Since production has both educational and social values which have an important influence on the development and up-bringing of the student, it is desirable that production should be undertaken by every student and that it shall be a compulsory subject and shall form an integral part of the curriculum. It is, therefore, necessary that:

- (a) each student should be engaged in learning and production; however, the age, condition and health of the student should be taken into account in determining the type of production in which he should be engaged;
- (b) production work should be so arranged as to emphasise educational and social aspects;
- (c) the range or type of production may vary according to the nature and circumstances of the particular educational institution;
- (d) the type of production could be related to the vocational training already being offered in the programmes.

Production and the spirit of self-reliance

14. Although the institution of Production Units in educational institutions should not be used for exploiting students for economic purposes, it can and should, nevertheless, play an important role in generating or enhancing the spirit and practice of self-reliance or self-help. Students in boarding institutions can and, in fact, do feel happy to help improve their diets through Production Units. Similarly, students and their institutions can also meaningfully contribute towards the improvement, and sometimes, expansion of educational facilities through self-help. All this should not really deflect the educational institutions from their primary responsibilities and functions as described in this and other chapters. Indeed, this should not absolve the Party and Government from seeking to make adequate provision for the education of their citizens; in fact, the spirit of self-reliance in the social and educational objectives of production in educational institutions should merely be to reinforce the efforts of the Party and Government and the local community.

15. Production activities were undertaken in many institutions for many years in the past, particularly in the old-established institutions. For example, crop and animal production, carpentry, brick-laying, mechanics, fruit growing, etc., used to be undertaken by many Mission and Government educational institutions. Although several of the mission schools have continued with some of these activities, most schools, particularly Government schools established after the attainment of Independence, apart from the activities of Young Farmers' Clubs, did not have properly organised production activities. There have been only a few institutions with properly organised production.

New impetus to production work in educational institutions

16. On 20th July, 1975, at Solwezi, His Excellency the President announced that, with immediate effect, all educational institutions would be Production Units. This gave new impetus to production work in educational institutions, as even those that had hitherto not engaged in production began to organise Production Units seriously.

17. Following this announcement the Ministry of Education issued a number of circulars containing guidelines on how Production Units could be organised and managed. Each institution was directed to establish a Production Unit Committee whose membership was to be drawn from teachers, pupils, members of the Parent Teachers' Association and any suitable persons from the local community. The Production Unit Committees appoint or elect their own Chairman and Secretary and are expected to keep books of accounts and minutes of the meetings of the Committee. The Committees also plan and decide on what type of production may be engaged in and determine their own production targets.

18. Since then, progress has been made and success in varying degrees has been recorded. A Production Unit Section at the Ministry of Education has been set up to promote production and assess progress. Officers from the Ministry of Education, schools and colleges, work in close liaison with officers from other Ministries, Extension Officers from the Department of Agriculture, officials from the National Agricultural Marketing Board, representatives from financial institutions and others who assist in the work of Production Units.

19. Since their introduction, Production Units have received overwhelming support from the public and there has been a lot of enthusiasm shown by both staff and students. It is

encouraging that despite the lack of adequate expertise, finance, tools and previous experience, the performance of most Production Units has been reasonably good and greater improvements are bound to come in the future with more experience.

20. The range of production activities has included many fields, some of which could not have been envisaged when guidelines were issued to each educational institution. Fortunately, it is the Ministry's policy, as indicated earlier, that Production Units' Committees should decide on their own type of production and determine their own targets and that production need not be confined to agricultural activities alone. This has made enterprising Production Unit Committees to embark on production which might not be very common. Some Production Units have proved to be useful, either as a service to the community or as producers of needed commodities.

21. Various reports so far received, for the 1975/76 agricultural season, have indicated a good record of performance by many Production Units. For instance, well over 7,000 bags of maize and 100,000 kilogrammes of vegetables were produced. The production of cotton was also high and the quality of the crop was good; 306 bales were produced by one district alone. Over 30,000 kilogrammes of sunflower seed and 1,880 kilogrammes of tobacco were produced. One primary school, which produced 25 bales, did particularly well in the production of good quality tobacco. In poultry, 141,374 birds were produced despite the critical shortage of day-old chicks and stock-feeds. Many Production Units also planted fruit trees of various types.

22. In urban areas where land is not easily available, non-agricultural types of production were undertaken. For example, the production of blackboard dusters, school uniforms, reflective triangles and reflective number plates for vehicles, services such as hair-plaiting and mini bus transport, have all been undertaken fairly successfully.

23. The performance reported may not look impressive but since it refers to the first year of the introduction of Production Units, and there were problems, the performance is encouraging. Moreover, returns had not been received from every school.

Financing Production Units

24. It has not been easy for Production Units to organise finance for their production activities, but most of them have relied mainly on school funds, donations, grants or loans from the Parent Teachers' Association; on self-help schemes in co-operation with the local community; and, for the better organised Production Units, on assistance from banks in the form of loans. However, the Party and Government are already considering setting up a fund to which Production Units will have access for the purpose of purchasing inputs: tools, agricultural implements, seeds, day-old chicks, building materials, etc.

25. Of particular note, are the efforts of the Standard Bank Zambia Limited and Barclays Bank of Zambia Limited which have designated special personnel to discuss and advise educational institutions on agricultural production activities in connection with their financing schemes. The Tobacco Board of Zambia has supplied seed and fertiliser to some schools and donated agricultural implements and has been offering technical advice.

Problems faced by Production Units

26. There are a number of problems which are still being experienced by many Production Units, particularly those dealing with agricultural production. The problems are only slowly being overcome. In some cases, the problems are national and Production Units may not resolve them on their own. Many Production Units engaged in poultry, for instance, have difficulties in obtaining day-old chicks and stock-feeds even when they may have raised sufficient funds to cover payments for their orders. Transport to bring stock-feeds, or to carry produce to markets, has been a serious problem for most Production Units.

27. Tools and implements have not been available in sufficient quantities and most Production Units have consequently been hindered in their production effort. In some cases, tools have not been available from the suppliers in the country at all so that some Production

Units have not been able to purchase tools and equipment even when they were able to raise sufficient funds to pay for them.

28. Availability of sufficient water for crop growing is a problem in most primary and secondary schools; in some cases, the schools have difficulty in getting water even for domestic use. Boreholes are expensive and in view of the large number of primary schools they cannot be sunk at every school. However, the construction of small dams, weirs and wells is possible if the local community and the Department of Water Affairs can co-operate and jointly provide a service to a school or group of schools. The Party and Government should find ways and means to solve problems of water shortage.

29. The problem of the unavailability of land for Production Units has been experienced, even in rural areas, where it could be expected that land would be more easily available than in urban areas. The Ministry of Education has sought the assistance of Local Authorities and Chiefs through appropriate channels to obtain land. While there is some response, the problem has not been completely resolved and the Party and Government should look into this and find acceptable solutions to all parties concerned.

30. Some schools in areas where the National Agricultural Marketing Board does not operate, face problems in marketing their produce, due to either lack of transport or lack of markets in the locality. It is, therefore, necessary that transport and/or marketing facilities be properly organised. Adequate school transport would be of great assistance to Production Units.

31. Such problems as have been discussed above are among the bottle-necks which should be removed if the enthusiasm of teachers and pupils is to be maintained.

Evaluation of production

32. It has been emphasised that Production Unit Committees should do their own planning and manage their own production. It is necessary, therefore, that the Committees should also be able to evaluate the planning, organisation and execution of the production process. For example, if a Committee had set a target but did not achieve it, that Committee should be able to determine the reasons for failure, discuss and take corrective action.

33. One way of evaluating the production effort of educational institutions is to determine the output and compare with the inputs. The output could be the form of goods, agricultural commodities or services which can be converted into monetary terms. It is, therefore, necessary that each Production Unit should keep records of its activities and among such records, the books of account are extremely important, since accounting is one of the basic tools of managing production. The students, by being involved through their Production Unit Committees, would acquire elementary knowledge of book-keeping and this is educationally and socially valuable to them. Production Units, therefore, should keep records of their production and books of account which should be properly audited.

Participation of staff

34. All teachers should be involved in production activities since each educational institution is a Production Unit and production projects are the collective responsibility of all members of the institution, i.e., staff and students. Although the responsibility for planning and organising the production process lies with the Production Unit Committees, teachers are expected to contribute in any suitable form or manner to the running and success of the Production Unit.

35. Non-teaching members of staff and, indeed, any member of the local community, some of whom may offer special skills or knowledge, or some other form of assistance, should also participate in Production Unit activities. This is, in fact, already happening and should be encouraged.

Students' interest groups

36. There are a number of areas for which special practical application of knowledge and skills gained in school can give rise to activities in the form of organisations catering for

interest groups of the young and up-coming students. For instance, the Junior Engineering, Technicians and Scientists (JETS) organisation is a good example of an interest group organisation engaged in practical application of skills and knowledge acquired through the learning process. They also promote the educational process.

37. JETS get the assistance of teachers and other interested organisations like the University of Zambia, the mining companies and, indeed, the Ministry of Education. Through this assistance, JETS have not only been able to do research in agriculture, traditional medicine and technology, but have also produced simple equipment which has been sold to schools. They also have produced prototypes of equipment which industry could adopt and modify for commercial production, for example, equipment harnessing solar energy for domestic uses.

38. The JETS example could be followed by other groups such as those interested in expressive arts (i.e. those involving drama, dance, music, art and crafts), agriculture, Humanism, Commerce, etc.

39. The formation of such interest groups or organisations should be encouraged by the Party and Government through appropriate Ministries, departments or voluntary agencies. In addition, it is important that the funding of any such clubs or organisations should be properly organised as more often experience has shown that a reasonable programme may be abandoned due to lack of financial support, thereby frustrating the efforts of the young students and, indeed, of those individuals and organisations who normally assist them technically with advice and guidance in various ways.

40. The activities of students' groups would ensure the application of knowledge which may lead to production work in some cases. The students also have the opportunity to learn the methods and importance of research. Interest groups should generate students' interest in various areas of human endeavour. These activities, therefore, are part of the mobilisation effort and with the emphasis on the development of such areas as science, technology and agriculture, the importance of students' groups or organisations cannot be over-emphasised. The Party and Government should, therefore, ensure that such organisations are encouraged and once they have been formed they should be put on a sound financial footing if Zambia is to see the desired goals achieved.

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CHAPTER 9

TECHNICAL EDUCATION AND VOCATIONAL TRAINING

1. In the early days, Mission schools had attached to them workshops in which some trades or crafts were taught, mainly for the purpose of servicing school expansion or for maintenance programmes. Later, Government, following the example of Mission schools, established carpentry and brick-laying trades as part of training in some educational institutions. This was the beginning of trades schools. However, in 1962 and thereafter, most trades schools were closed. Following the Saunder's Report of November, 1967, Government decided to formally establish technical education aimed at providing comprehensive training programmes. It was recognised that technical education and vocational training deserve the highest priority and that these are a more meaningful and permanent form of national development. Therefore, the objective in technical education is to train Zambians to meet the needs and requirements of industry for skilled manpower and to facilitate more meaningful Zambianisation in critical areas of technology and economic activities.

2. In 1968, the Government took a decision to expand technical education and trades training. This decision set the pace and pattern of Zambia's present training programmes in the Department of Technical Education and Vocational Training. At present, technical education is governed by the provision of the Technical Education and Vocational Training Act, 1972, which also converted the Commission for Technical Education and Vocational Training into a Department. Since the establishment of the Commission in 1969, and subsequently the Department, training programmes have been on a sound footing.

3. While Zambians are working hard to make the agrarian revolution a success, it is clear that in addition, Zambia needs a technological revolution. The two revolutions are complementary to each other in bringing about self-reliance, higher productivity, efficient use of natural resources and in giving impetus to rural development programmes. Indeed, His Excellency the President, Dr. K. D. Kaunda, emphasised the importance of technology even more clearly when he wrote, on 6th November 1969, in a foreword to the "Statement of Policy and Intent" on technical education and vocational training that "We live in an age of technological achievement and if the Nation is to serve itself and to play an effective and productive role in the world community, it must itself be prepared to train its people, not only to use but to maintain and create the technical apparatus which increasingly supports the modern community. If we allow ourselves to rely entirely upon foreign expertise, we run the risk of becoming the slaves of technology rather than its master."

4. One of the major aspects of policy in technical education and vocational training has been to concentrate on full-time pre-employment training in technical colleges and trades training institutes which are furnished with modern equipment and materials to enable them to give in depth theoretical training properly integrated with practical programmes. This approach is in contrast to the apprenticeship scheme which, in Zambia, is not considered suitable for a variety of valid reasons and is, therefore, not generally followed apart from the "on the job training" in some aspects of the building and construction industry and in some other technical fields. This policy on technical education and vocational training will continue.

Trades and crafts training programmes

5. At present the minimum entry requirement to crafts and trades training programmes is Form III (Grade 10). There is a six months' basic training programme which is followed by two years' technical training leading to an interim craft certificate. One more year of acceptable practical work experience in industry is required before a final craft certificate is awarded. Examples of training programmes include agricultural mechanics, automotive mechanics, carpentry and joinery, brick laying, panel beating, plumbing and sheet metal, painting and decorating, radio and television repairs, light metal fabrication, cutting and tailoring, electrical repairs and maintenance, etc.

6. There is at least one trades training institute in all but three Regions. It is, however, intended to establish trades training institutes in these three remaining Regions during the

course of the Third National Development Plan. All trades training institutes are organised on a national basis in that they admit students from all over the country provided they meet the entry requirements. Enrolment of students at trades training institutes is scheduled for every six months to meet the demand. This allows enrolment of approximately 2,500 students training in twenty separate trades and crafts.

7. As can be seen from the variety of programmes in useful crafts or trades offered by the trades training institutes, the graduates of these institutions should be able to play an important role in development. The country does not, at the moment, have sufficient of this type of trained manpower, particularly in the rural areas where their services are also badly required. As these trades and crafts programmes have proved to be satisfactory, they will continue to be offered but will be subject to review periodically.

Training programmes for technicians

8. The entry requirement for technician programmes is Form V. The Technician Certificate programme includes eight school terms and two terms in industry, making a total duration of 2½ academic years. The experience gained by the students during the "industrial break", as the term spent with industry is designated, is an integral part of the technicians' training. There is a further one or more years of industrial experience after award of the interim certificate. This period is also considered an essential part of the technicians' training. Promising students in technician programmes may be offered places in the technologist training stream, especially since the programmes for the first four terms are common to both of these groups. Examples of technician courses are building, mine ventilation, science laboratory, construction, metallurgy, architecture, refrigeration and air conditioning, instrumentation, mechanical and civil technicians, etc. It is obvious that the technician group, along with the technologists, are the back-bone of the industry in Zambia. Teachers for various trades are also drawn from this group. The Department should, therefore, continue to offer these technician programmes in accordance with present practice.

Training programmes for technologists

9. The entry requirement, as in the case of technicians, is Form V. However, the academic year for those following courses leading to a diploma in technology includes ten school terms and three terms in industry, making a total duration of 3¼ or four academic years, depending on the particular programme. This group is extremely important as it plays a major role in industry and technological fields, for it is the technologist who translates the engineer's ideas and plans into practical reality. The technologists have a sound theoretical base while at the same time they have achieved the highest standard in practical skills. Examples of courses leading to the award of diplomas are mine ventilation, industrial science, electronics, town and country planning, mechanical, quantity surveying, building technology, etc. The variety of programmes offered by colleges should be increased, depending on capacity and availability of funds.

Other areas of vocational, business and commercial training

10. There are other equally important programmes offered by various educational institutions under the Department. The business studies training programme has recently been carefully reviewed and re-structured to provide a large common first year intake of Form V school-leavers who have the opportunity now to study for a *two-year* certificate course or a *three-year* diploma course in accountancy, management or related fields. The courses are tailored to the needs of Zambia as the Department is required to be responsive to the needs of the country. In the fields of applied arts, graphic design, journalism, music, textile design and fashion design are offered while the commercial and business programmes include computer programme, audio typing, secretarial, shorthand typists, and courses for systems analysts. There are also para-medical diploma programmes which include pharmacy, physiotherapy, radiography, public health, etc. Diploma and certificate programmes are also offered in catering, hotel services and management. Plans to increase the capacity for the business and commercial programmes to cater for the needs of the country have already been finalised and physical expansion should begin in 1978.

Zambia Air Services Training Institute

11. At the Zambia Air Services Training Institute (ZASTI) diploma and certificate programmes are offered in such fields as commercial pilot, aviation electronics, aircraft maintenance, air traffic control, aviation telecommunications and meteorology. The Institute, however, should expand its facilities to increase enrolment and should mount staff development programmes. The Institute should also be adequately provided with the right type of equipment and materials to avoid frustration of training programmes. For instance, suitable and appropriate aircraft should be available for each stage of the commercial pilots' training programme offered locally. Since the Institute has sufficient infrastructural base, there is scope for it to become a regional training centre whose facilities could also be used by neighbouring countries. Technical assistance from bilateral sources or from international agencies, such as the U.N.D.P. which contributed to the institute's growth, could effectively be utilised.

Extension and evening programmes

12. Evening classes and extension studies are held at the Northern Technical College, the Zambia Institute of Technology and at the Evelyn Hone College of Applied Arts and Commerce. Programmes offered are upgrading courses and extension studies through part-time training for which there is much demand in industry. In organising these courses, advantage is taken to maximise the use of educational facilities since a great variety of the programmes can be offered in the same building or campus through rationalisation in scheduling. Evening programmes also suit the needs of the worker since he has the opportunity to study without necessarily having to stay away from work. In fact, the Department's evening and extension programmes are a good example of continuing education and how educational institutions could facilitate it if they are responsive to the needs of the people, industry, commerce and the professions. At present, these programmes include diploma course in accountancy, business administration, Pitmans book-keeping, intermediate and advanced shorthand, mechanical crafts practice, marketing, purchasing and supply, public administration, personnel administration, etc.

13. Following the example of the programmes which are already offered, the Department should introduce part-time upgrading courses for trade-tested workmen. Such courses could include upgrading in general education and communication skills before participants could be articulated into regular or special classes for further trades training.

Curriculum and Standards Advisory Committees

14. The Department has established Curriculum and Standards Advisory Committees to liaise with industry. The committees give useful advice on training needs, quality and curriculum content. The graduates of the various programmes with industrial experience are also invited to contribute and enrich the training programmes. There are now many such committees to cater for the numerous crafts, technician, technologist, applied arts, commercial and business programmes.

15. Curriculum and Standards Advisory Committees should continue as they ensure that the expectations and needs of Government, industry and commerce are met within the aspirations and goals which the Ministry of Education and the Department have set for various institutions to fulfil the technical and vocational training requirements of the country. Indeed, such participation in monitoring the standards and quality of the training offered by the Department is healthy and is a practical demonstration of participatory democracy.

Staffing and Zambianisation

16. In many fields the Department still relies on expatriate staff. For example, it has been very difficult to recruit suitably qualified Zambian teaching staff for para-medical, commercial and technology programmes. However, there has been more success in crafts or trades where there is 80 per cent Zambianisation of the teaching and administrative posts. The major difficulty in Zambianisation is to attract and retain qualified Zambians within the teaching force. The high demand for persons with such qualifications in the whole country, combined

with the offer of better salaries and fringe benefits in commerce and industry, puts the teaching profession at a disadvantage. However, despite these problems, the Department should vigorously pursue a Zambianisation programme through pedagogical training and staff development as discussed in the Chapter dealing with teacher education.

Training technical and vocational teachers

17. Technical and vocational teacher training began in 1970 and is now centred at the recently opened Luanshya Technical and Vocational Teachers' College. This college shares a common campus with the Luanshya Trades Training Institute and each institution has capacity for 300 students. Training programmes include two-year training for commercial teachers and industrial art teachers primarily for secondary schools. There is also a ten months' technical teacher training programme for persons already qualified in trades, technology or related fields, mainly for the various institutions under the Department of Technical Education and Vocational Training. These programmes should be intensified in order to enable the Department to adequately Zambianise the staffing of its institutions.

Courses for instructors based in industry

18. In view of the need for continued co-operation between the Department and industry, particularly during the period of practical training of students in industry, there should be established special instructor courses whereby those people in industry who have something to do with supervision and follow-up of the progress of each student, while in industry, could be acquainted with the demands and expectations of the Department. These instructors would be people employed and paid by industry and not by the Department which would only organise instructors' courses for them. This should enhance the Zambian technical personnel in industry who work with crafts students holding interim certificates and those on "industrial break". The same instructors could also assist in trade-tested workmen's programmes.

Local awards versus foreign awards

19. The facilities and the training programmes offered by the institutions under the Department of Technical Education and Vocational Training are among the best in Africa. The Department, in co-operation with industry, ensures that the standard of the programmes offered and the quality of the graduates continue to be good and acceptable to employers and the Government. This is done through strict control and supervision during training. However, despite the high standard of the programmes and the good quality of the graduates, there is an historical hangover, whereby both Government and industry continue to use foreign qualifications or awards as a point of reference and for the purpose of job classification, instead of using local qualifications and awards.

20. This puts the programmes of the Department into oblivion and leads to misinformation resulting in underestimating the value of the local awards. A glaring example is in the area of salary scales and conditions of service which do not make any reference to the Department's awards. Instead, foreign awards, such as the City and Guilds Certificates, are used as a point of reference. This results in students wishing to go abroad to get the qualifications which society apparently values more. In some cases, students who have attended local training programmes in the Department's Institutions and have been awarded certificates have been forced to sit for external examinations in order to obtain external certificates which employers, including the Government, consider more prestigious. It is, therefore, strongly recommended that where local qualifications are available, they should be used as the point of reference for the purpose of appointment and salary scales, while foreign awards could also be referred to if necessary. This should apply to both Government and industry.

Selection for trades or craft training programmes and expansion of facilities

21. Although the original intention in establishing trades training institutes was to cater mainly for Form III school-leavers and, in some cases, Grade 7, these two categories of

students are slowly being replaced by Form V school-leavers. Form III is, in practice, the minimum entry qualification. The same situation obtains with crafts or trades programmes offered by colleges. There are more Form III than Form V school-leavers as only 50 per cent of the Form IIIs have the chance to go on to Forms IV and V. The Form V school-leaver who enrolls for a craft programme is, therefore, being offered a chance for advancement twice as compared to a Form III school-leaver whom he is replacing in the crafts programmes. Although this is a direct result of the shortage of places both in the formal and technical education programmes, it is necessary to review the situation closely to ensure that a higher proportion of the places in the crafts programmes are offered to Form III school-leavers. It is, therefore, strongly recommended that two-thirds of the programmes should be reserved for Form III school-leavers while the remaining one-third should be open to both Form III and V school-leavers.

22. The Department of Technical Education and Vocational Training should continue to consolidate its present training activities and seek to expand in terms of the variety of programmes offered. There is also scope to expand full-time and part-time student enrolment. At present the enrolment for full-time students is 6,458. The three trades training institutes for the North-Western, Western and Eastern Regions should be established during the Third National Development Plan. When these are completed, additional 900 students on full-time basis will be able to enrol for crafts and trades programmes.

Training for other school-leavers

23. The Department of Technical Education and Vocational Training cannot offer a place to every school-leaver who may need it as its capacity, even with further expansion, will continue to be limited in comparison to the large number of Forms III and V school-leavers. There is also a very large number of Grade 7 school-leavers who need crafts training but who are not at present admitted to the Department's institutions. The problem of Grade 7 school-leavers will continue until the nine years universal basic education is achieved; then the Party and Government will have to contend with the Grade 9 school-leavers' problem. Such large groups of school-leavers, whether at Grade 7, as is now the case, or at Grade 9 in future, require definite but shorter practical training programmes which are production orientated in specific fields. This concept has been fully discussed in the chapter dealing with full-time education.

Relationship with the University of Zambia

24. There should be consultation and co-ordination between the Department and the University of Zambia in regard to diploma programmes offered by the Department in business studies and accountancy and in technology. The University should be able, through this consultation, to determine whether credit may be given to certain categories of students who may wish to pursue degree programmes in relevant subjects after graduating at the technical colleges. This may be particularly important and useful for those students who may wish to take teaching careers in the technical colleges. Further, the consultation should be useful to determine whether an associate relationship could be established in some programmes.

Students' participation

25. The idea of students' participation in the affairs of the colleges and trades training institutes should be firmly established since this practice can only ensure effective communication between students and staff of the educational institutions concerned. To this end it is recommended that each institution should establish a Students' Representative Council and a Parent Teacher Association as is the case in schools dealing with formal education.

CHAPTER 10

CONTINUING EDUCATION

1. Unless the people have been given the means, through education, to improve their practical skills, knowledge and efficiency, to achieve self-fulfilment and understand national and world affairs, their effective participation in, and contribution to, national development is seriously impeded. Therefore, the education of adults is very important in a participatory democracy because as many citizens as possible should be enlightened so that they can effectively play their role in the affairs of the nation.
2. There would appear to be a misconception in the minds of some members of the general public that continuing education is only that part undertaken by the Adult Education Section of the Ministry of Education because many people place more importance on formal education programmes leading to examination and certification. Actually, there are Party, Government and Voluntary agencies which offer continuing education programmes, some of which are not necessarily of a formal educational nature and yet are very useful to participants as well as to the nation. Examples of such agencies or programmes are: trade unions, the President's Citizenship College, Farmers' Training Centres, Farm Institutes, Department of Community Development, church or other voluntary organisations dealing with school-leavers' skills training programmes, extra-mural activities of the University of Zambia, colleges and schools, industrial and commercial enterprises, museums, cultural programmes, libraries, etc. Continuing education, therefore, involves many and various institutions and covers a wide range of programmes throughout the country. However, the country's needs in continuing education are so vast and the resources so inadequate that existing programmes barely scratch the surface.

Main areas of continuing education

3. Among the main areas that should be high-lighted in continuing education would be those that deal with concrete and practical problems of daily life. In this regard, programmes and methods should be so designed as to relate the special problems in the teaching of the youth or the adult to his present and future vocational activities to enable him to contribute competently to his economic, political and social progress. Only in this way can continuing education meaningfully interpret and instil in the minds of both adults and youths the theme "Education for Development". The areas dealing with continuing education include the following:

(a) *Basic skills in literacy*

Basic skills in literacy, i.e. reading, writing and numeracy, should continue to be given so that individuals who acquire these may be able to communicate more effectively and also employ or relate these skills to their daily lives or work situations.

(b) *Improvement of basic practical skills or acquiring additional knowledge*

Continuing education may be used to acquire or improve basic practical skills or knowledge which may be essential in life to particular individuals and to their community. Examples of such areas are: nutrition, farming techniques, sewing, tailoring, crafts making, political education, marketing, public health, etc.

(c) *Technical knowledge and skills*

For people who already possess some technical skills or knowledge, there may be need to improve their skills or acquire advanced technical knowledge in order to be more proficient in their field of activity or for the sake of special interest. This is especially so with the development of industry, commerce, agriculture, applied science and technology since from these fields often arises the need to update one's skills, technique and knowledge. Continuing education of this type is undertaken through in-service programmes, part-time study, seminars, and training within industry, etc.

(d) *Formal education*

Continuing education should also provide opportunity to those who wish to continue with their formal education, through part-time study. Among the people who take advantage of the facilities offered are those who may have missed, for one reason or another, the opportunity to complete their formal education leading to public examinations and certification. It is in this area where there is the greatest activity in Zambia and both youths and adults are involved. Unfortunately, the main reasons for embarking on this aspect of continuing education may not be improvement of intellectual ability and self-fulfilment, but the need to obtain paper qualifications because society and employers demand these before they recognise the worth of an individual.

(e) *Education for self-fulfilment, cultural and artistic needs*

There are some people who may have sufficient formal education they need in their lives and may, therefore, not wish to obtain additional certificates but may be interested in other fields of endeavour for their own sake. They may wish to have avenues for some form of self-expression in sporting, artistic and cultural activities and in the process of their enjoyment or participation, contribute to the nation's knowledge, skills, attitudes and values. For example, footballers, musicians, athletes, artists, golfers, actors, dancers, members of a press club, an economic club, a debating group, a branch of the Party, discussing social, political and economic programmes of their area, etc.

Literacy campaign

4. Until the achievement of universal basic education, the young people who fail to find places in schools will continue to add to the already big number of illiterate adults. Some of these may have been to school but may have left school too early to retain their literacy skills. In either case, there is need to provide opportunity to those who are able to take advantage to acquire or maintain their literacy skills. The Party and Government must persistently seek ways and means of aiding and effectively promoting literacy programmes through the Department of Community Development and other appropriate agencies in this field.

5. Although the Department of Community Development, under the Ministry of Labour and Social Services, is responsible for literacy work, there is an important link between the work of that Department and the work of the Ministry of Education, in that the latter attacks illiteracy at an early age of an individual's life. However, this is not at present the case with every child due to shortage of school places.

6. The Department of Community Development has, over the years, acquired a lot of experience and some expertise in literacy work. The Department has prepared materials, aids and devised suitable methods for teaching adults in the Zambian situation. It has been able to have a deeper insight into the attitudes of the people in various Zambian communities. In addition, suitable literature has been, and is being, prepared for use in literacy programmes. In view of all these activities, the Department of Community Development is better placed in experience, techniques and expertise to launch a sustained campaign against illiteracy provided it receives the necessary support from the Party and other agencies, voluntary or governmental, and that there is close collaboration between it and these other agencies. Therefore, this Department should continue to be responsible for this aspect of continuing education.

7. Since functional literacy is concerned with a variety of programmes which involve directly or indirectly many Ministries and voluntary agencies, the Ministry of Labour and Social Services should establish a board to be known as the Zambia Literacy Advisory Board, whose members should be appointed by the Minister responsible for literacy work. The membership should comprise of people who are genuinely interested in literacy work and should be drawn from various walks of life. The Board would, among other things, advise the Minister on matters of broad policy and methodology to ensure effective and sustained functional literacy programmes and would also work in close liaison with the Continuing Education Advisory Board.

Improvement of basic practical skills

8. As indicated above, there are many agencies involved in imparting, improving or enhancing basic practical skills in many fields of production or in providing services; such fields include marketing, useful knowledge in public health, political organisation, civic responsibilities, in areas concerned with agriculture, water resources, veterinary, community work, information, game and fisheries, etc. The work of the agencies that deal with these programmes should be complementary to the mobilisation of the rural, urban and peri-urban population and of the school-leavers to engage in productive work competently, since their participation in continuing education of this type should enable them to appreciate the value of their own effort and enjoy the result of their work. Although the majority of the school-leavers' training programmes should come under the Commissioner for Youth, it is clear that due to the variety of activities and the multiplicity of agencies involved in such type of continuing education, not all programmes could be undertaken by the Commissioner for Youth. The various agencies may have expertise and experience in the particular programmes they are offering with the support of their parent Ministries or Departments and they should, therefore, continue with this arrangement. There should, however, be inter-agency or inter-departmental liaison and co-operation to ensure maximum support for each programme.

Technical knowledge and skills

9. Many workers in Ministries, Departments, commercial and industrial firms, etc., do take advantage of in-service schemes to register with institutions or with correspondence colleges to advance their knowledge or technical skills in some area of their interest and for which they may have had basic training. Such programmes include the commercial courses at Evelyn Hone College, courses offered by the National Institute of Public Administration, in-service programmes of various firms, seminars, organised to improve management skills in industry, etc. Normally, such courses do not lead to certification as they may only be intended to serve as improvement courses. By their varied nature and the different types of institutions or programmes involved, these courses cannot be organised or administered by one institution or organisation even though they are part and parcel of continuing education programmes. However, there is need for co-ordination to ensure that demand is well catered for, while at the same time avoiding wasteful duplication in some fields or areas.

10. These types of courses are extremely important since they involve the middle management or executive groups, the extension worker, the technicians or technologists in electronics, computer, telecommunications, assistant accountants, book-keepers, the stenographers, mechanics, fitters, etc., whose improved performance is the key to increased production both quantitatively and qualitatively.

11. At present, continuing education in such fields is mostly in urban areas. There is need to improve the geographical spread of some of the programmes, particularly in those fields that do not call for setting-up a lot of specialised and expensive equipment or other facilities before a programme can be offered. The people in the rural areas should also avail themselves of these opportunities locally in the elementary stages of some of the programmes such as typing, book-keeping, marketing, mechanics, carpentry, craft, etc. Trainees in such fields should, however, also have the opportunity to enrol or attend upgrading or advanced courses in those institutions with more adequate facilities.

Formal education

12. It has already been indicated above that formal education programmes at present attract the greatest number of candidates and that both youths and adults aspire to these courses. The range of programmes vary, but the majority are concerned with academic subjects. In the primary sector, there are both adults and youths who, due to a variety of reasons, have not had the opportunity to learn or left school too early. These attend evening classes for the purpose of obtaining Grade 7 certificates, after which some of them may qualify to join Forms I to III programmes again, through evening classes or correspondence courses. Grade 7 candidates below the age of seventeen, who qualify for selection, are

admitted to Form I programmes on full-time basis, thus joining their colleagues who have entered Form I through full-time education. For the last two years this group constituted about 2 per cent of the Grade 7 candidates selected for Form I.

13. In the senior secondary sector, part-time studies are undertaken mostly by working adults for the obvious reason that they can afford the fees. Normally, these adults take advantage of correspondence courses and aspire to sitting for GCE examinations of the University of London, as the University of Cambridge, which at present offers the School Certificate Examinations to Zambian candidates, does not offer similar facilities to external students.

14. Due to the difficulties of studying at home and the problems of the range of subjects offered by some correspondence schools, since at present there is no control on the curriculum for part-time students studying for overseas examinations, some candidates have actually selected subjects irrelevant to their own professional or occupational development; or, indeed, the subjects have been completely irrelevant to Zambia. As long as their studies have led to certification, the candidates have, apparently, satisfied their ambitions. However, this problem will be resolved after the localisation of the School Certificate Examinations and by controlling the curriculum to be followed by correspondence colleges as discussed in the Chapter on the "Role of Non-Government Agencies in Education".

The role of the University of Zambia in continuing education

15. The Centre for Continuing Education of the University of Zambia is playing an important role in offering correspondence and evening part-time studies. Some of the students have been able to rejoin full-time studies at the University itself when they have made satisfactory progress in their studies. A number of students have been able to complete their degree courses in several fields. Apart from this, the University organises many other courses which may not necessarily lead to certification through seminars, workshops and other programmes.

16. In addition, the University has been a venue for courses, seminars and workshops organised by other agencies in continuing education, such as those involving teachers, trade unions, the Library Association, nutrition groups, workshops and the Commonwealth Youth Organisation.

17. The role of the University of Zambia in both of these aspects is likely to grow especially with the impending establishment of the two new campuses at Solwezi and Ndola. For instance, the School of Business and Industrial Studies is likely to have a greater number of activities involving the fields of accountancy and business since there is already a substantial number of working people wishing to pursue studies in such fields through continuing education. For this and other reasons, the growth of the University should be given priority, particularly in the area of continuing education, since, in this way, the Party and Government would be taking the University to the people in various ways to spread its educative influence even to those who may not have the opportunity to enrol as its students whether on part-time or full-time basis.

Education for self-fulfilment

18. Education for self-fulfilment is as important as other types of continuing education as it enables people to develop their talents which they pass on to others; it continues the process of socialisation which began at an early stage and helps people to usefully organise the enjoyment of their leisure and opens up their minds to new horizons by learning new ideas through social contact. There are also the creative aspects in art, music, sports and other cultural activities which may, as indicated before, form the link between the past, the present and the future.

19. The role of the Ministry of Education in these fields is complementary to the role of the Ministry of Labour and Social Services which is responsible for administering policy and gives guidance to a number of organisations, both voluntary and governmental, engaged in such activities. In addition, the Department of Cultural Services should also see its role as

part and parcel of this type of education, even though it is administered, at present, from Freedom House. The passing recently of a Bill in Parliament establishing the National Sports Foundation was a step forward in an attempt to put sport and games on a sound footing. However, a lot remains to be done in other areas discussed above and the Party and Government should consider ways and means of promoting cultural, artistic, social, sporting, musical and other activities by improving opportunities, especially in rural areas, where facilities at present are sadly lacking. The Party and Government could encourage local people to take the initiative in providing some of the facilities they may require.

Methods and facilities for continuing education

20. There are two main methods of teaching and learning in continuing education. One is the distance teaching method where there is no contact between teachers and their students or among the students themselves; for instance, correspondence and broadcasting are distance teaching media. The other is by face-to-face contact; for instance, between evening classes students and their teachers. The main problem of face-to-face teaching in Zambia is finance to pay the teachers, buy books, materials and aids, etc. The lecturers and tutors are paid per hour and in the present financial situation of the country it became imperative to reduce the number of classes, and make some classes join other classes in an effort to rationalise and continue the programmes within the budget. In other cases, some students could not continue with their courses.

21. The second problem is that of manpower. At the primary level, there is no problem as primary school teachers may be available for teaching. There is, however, a problem with regard to secondary school programmes as there are fewer secondary schools and they may not be conveniently located for teachers to participate in teaching. The result is that sometimes certain individuals find themselves teaching classes for which they have neither the experience nor the qualifications to teach. Further, because secondary schools are not located in every community, there are many communities which do not have the opportunity for face-to-face teaching.

22. There is also generally an adverse effect on the performance of the teachers since the same teachers teach full-time classes during the day and part-time classes in the evening, although there is a limitation on the number of hours per week one should teach.

23. Although this is not very acute, in some cases, there has been a shortage of facilities since full-time students must use their classrooms for their evening preparation in boarding schools, thereby limiting the number of part-time students.

24. With regard to distance teaching, correspondence has its limitations as mail is slow in most rural districts and the possibility of instructional material not reaching the student is always there. This affects communication with course writers and the students on one hand, and course writers and markers on the other.

25. One of the problems of teaching through radio is that air time is limited as there is no special channel at present for educational broadcast. In addition, there is a problem of transmission and reception is difficult and even impossible in many areas of the country. Teaching by radio requires that each person has a set or has access to a group radio, but this is not always possible. Even where there are school radio sets, there are not sufficient of them and the school timetables and the time of broadcasting may clash. Further, where there is no electricity, batteries may be very difficult to obtain due to the problems of distribution to remote areas even when batteries may be available in the country. Servicing of school radio sets has now improved with the establishment of the Mobile Maintenance Unit, but there are still a few problems here and there.

26. Continuing education by television faces equally serious problems. First, transmission covers only a small radius in Zambia from Livingstone to the Copperbelt. Even where transmission is available, not many people would take advantage at the moment as the sets are very expensive and some of the residential areas, particularly the site and service schemes, do not have electrical reticulation. The television sets, which work on batteries, are equally, if not more, expensive. Facilities to repair and maintain sets and spare parts are very scarce, nor are the television sets always available for sale.

27. Newspapers and magazines have great potential in exerting an educative influence generally and, therefore, may act as media in continuing education, apart from their conventional role of disseminating news. Their role in continuing education is, however, reduced because of the limited circulation. The two daily newspapers may be readily available to some people in Lusaka, Kabwe, and the Copperbelt towns. In Livingstone, however, these may not be available on time every day. With regard to rural Zambia, the situation is even worse since most areas are very poorly, if ever, served by these daily papers due to communication difficulties. The shortage of newsprint and other problems also add to the difficulty. The other papers and various magazines produced in Zambia also suffer from the same problem of shortages in newsprint and other production difficulties. Again their educative role, as in the case of radio and television, is reduced and these media may not play an important role for some time to come.

28. If radio, television, newspapers and magazines are to play a positive role in continuing education, there should be improvements in all areas, otherwise it is idle talk to regard these media as being among the chief instruments of raising the educational and technical levels of the Zambian people.

Department of Continuing Formal Education

29. It has already been mentioned in paragraph 3 (d) above that there is a great number of both youths and adults, who may have missed the opportunity, for one reason or another, and may wish to take advantage of the facilities offered by the Party and Government or other agencies, to improve their formal education through part-time study. Such programmes are mainly organised by the Ministry of Education through evening classes or through correspondence courses, while approved private schools or correspondence colleges also play a part. These programmes, as well as literacy programmes, hold the key for many participants to benefit more fully from any other continuing education programmes offered by various Ministries, Departments, companies or corporations, trade unions, the Party and other agencies.

30. In view of the importance of formal education in providing a sound base for other types of continuing education programmes, it is important that all such continuing education programmes should be properly co-ordinated and efficiently organised in various parts of the country. Because of the large numbers of people involved and the geographical spread of such activities, there should be a Department of Continuing Formal Education within the Ministry. This department will include the present functions of the Adult Education Section and will be the co-ordinating agent in controlling the curricula and the activities of private correspondence colleges offering formal education.

Continuing Education Advisory Board

31. Since there is a variety of programmes and many agencies involved in continuing education, a new body, to be known as the Continuing Education Advisory Board, should replace the Adult Education Board. The new Board will be advisory in function to various Ministries, departments, corporations and voluntary organisations which are involved in continuing Education programmes of one type or another. Provision should be made by amending the Education Act for the establishment of the Continuing Education Advisory Board, more or less on the same lines as other Boards. Among the programmes which would be discussed by the Continuing Education Advisory Board are the following: nutrition group programmes, continuing education programmes organised by churches, the YMCA, the YWCA, the National Institute of Public Administration, the United National Independence Party, the President's Citizenship College, Local Authorities, Ministries and other governmental or non-governmental organisations.

32. The Membership of the Board should be drawn from organisations in the field of continuing education, including the Centre for Continuing Education at the University of Zambia. This Board would liaise with other organisations to discuss problems and learn from other countries on matters relating to the various fields of continuing education programmes.

33. The Chairman and other members would be appointed by the Minister responsible for Education.

CHAPTER 11

TEACHER EDUCATION, SUPPLY AND RETENTION

The role of the teacher

1. The teacher is the key man in the entire educational system and programme of a country. The success of the educational reform in Zambia will thus depend on the commitment, competence and resourcefulness of the teachers in the system.
2. The teacher's role has many aspects. The teacher should communicate knowledge in a manner that helps children and young people to develop both the desire and ability to learn. This means that the teacher must be able to diagnose the learning needs of his students, assess their educational progress and help each one of them to achieve the best of which he (the student) is capable. The teacher should, therefore, have good command of the subjects he teaches and be resourceful in translating his knowledge into effective learning experiences for his students.
3. In addition to imparting knowledge to his students, the teacher should also be concerned with the development of each student's personality. Accordingly, the teacher should encourage his students to develop themselves into self-reliant individuals; guide them in forming positive and acceptable social values in life. He should also stimulate his students' interest and encourage their positive role in the welfare of the school, the community and the nation.
4. Every teacher has a role to play in the healthy existence and growth of his school or institution and in the development and practice of a spirit of collective responsibility. In this connection, teachers have a professional duty to assist each other, and more experienced teachers have a special responsibility for the guidance of newcomers to the profession.
5. Another aspect of the teacher's role relates to the connection between educational institutions and the community. Schools and colleges cannot fulfil their proper function unless they are truly in the service of their communities. The teacher can, and should, seek to play a crucial role in this endeavour. He should develop a sense of belonging in regard to the community in which he lives and works. He should make proper and effective links with the community not only to assess their needs but also to participate in fulfilling those needs. He must be willing to share his skills and knowledge with the community at large; and to do his share of production work if the task at hand requires this service. He should help in the process of raising the literacy of his neighbours as one who has been more fortunate, rather than one who is their better. Thus, the teacher should be a leader in his community, but one who should willingly and whole-heartedly participate in the development of the community.
6. Further, the teacher as an individual should contribute to nation-building through loyalty to the state and participate in solving national problems. Thus he should be able to have an insight of various political, social, economic and other problems beyond his local community and also have an appreciation of the problems of the international community of which he is also part. This enables him not only to be a teacher of students but also a teacher of other people outside his classroom.
7. The teacher cannot play his various roles successfully from a position of mediocrity. Good teaching demands that the teacher should not only possess a correct attitude and adequate knowledge of the subjects he teaches but also keep abreast of developments in those subjects and in the objectives and methods of teaching. The teacher should not be satisfied with either his present knowledge or his professional competence, but should make every effort to develop further in order to grasp new techniques and knowledge and cope with the rapidly changing Zambian society. Without a deep understanding of the society around him, the teacher is in a very weak position to serve his community properly and effectively. The teacher must, therefore, actively seek to develop himself politically, academically and professionally.

Supply and retention of teachers

8. One of the most pressing problems confronting the educational system in Zambia today is "teacher shortage". The causes of teacher shortage are many and to most of them can be dove-tailed the new problem of the decline of the status of the teacher to which equal attention should be paid in the course of Zambia's effort to deal with the problem of supply and retention of teachers.

9. One of the causes of teacher shortage is that the system does not at present attract to the profession sufficient numbers and does not retain more of the able teachers. Because of the declining status of the teacher, many people do not wish to enter the profession while a good number of those who ever join leave for the same reason. The working environment, conditions of service and the lack of incentives force many to leave and look for what they consider better opportunities elsewhere. In addition, the output of trained teachers from teacher training colleges is inadequate. The shortage of qualified teachers and the low morale of those teachers who still remain in the system adversely affects the quality of education offered to pupils.

10. Considering that education is a high priority and that it is the spring-board from which all other development effort can be launched, the Party and Government should highlight this priority in action by improving the estate of the teacher to encourage him to stay in the system and offer the quality and type of education the country needs. Therefore, the production and retention of teachers should be treated as absolute national emergency matters deserving every possible measure.

11. In 1977 the number of trained and untrained teachers in the primary sector totalled about 20,400, while in the secondary sector the required number was about 3,200 (there are very few untrained teachers in the secondary sector); but a substantial number of the teachers in the secondary sector are expatriates and were estimated to total about 1,900. The 1977 position regarding the number of teachers in the primary and secondary sectors is as shown in the Schedules at page 63, where it can be seen that there was a total of 19,891 teachers in the primary sector, of whom 2,658 were untrained, while 17,233 were trained teachers. In the secondary sector there was a total of 2,663 Government (GRZ) teachers; Lay Mission Associate Teachers (LMT), Grant Aided Educationists (GAE) and volunteers totalled about 507. The breakdown is as shown in Schedules I and II at page 63.

12. The total output from the Primary Teachers' Colleges will be about 1,485 teachers per annum by 1978; while the total output from Secondary Teachers' Training programmes, including the University of Zambia, will be about 635 teachers per annum as shown in Schedule III at page 63. However, the attrition rate, which at the moment has been calculated to be about 4.6 per cent, is fairly high and has a very telling impact on the retention rate.

13. There are ten primary teachers' training colleges and two in-service institutions for primary teachers, i.e. the Chalimbana National In-Service Training College and the Lusaka College for Teachers of the Handicapped. In addition, the University of Zambia regularly organises in-service training programmes for those primary school teachers who may be selected to become lecturers in primary school teacher training colleges. There are also two secondary school teacher training colleges offering diploma courses (Nkrumah and Copperbelt Teachers' Colleges). The Luanshya Teachers' College offers diploma courses for teachers in technical fields and for secondary school teachers in commercial subjects and industrial arts. The Natural Resources Development College has a unit for training teachers for Agricultural Science. Evelyn Hone College has two units for training teachers for Art and Music.

14. The School of Education at the University of Zambia produces graduate teachers for science and arts subjects, in addition to the in-service programmes mentioned above, which are organised by the Centre for Continuing Education. Through this Centre, the University also maintains an associate relationship with Nkrumah Teachers' College, Copperbelt Teachers' College and Luanshya College for Technical Teachers. There are also in-service programmes undertaken overseas through technical assistance programmes from friendly countries.

*THE STAFFING POSITION IN PRIMARY AND
SECONDARY SCHOOLS AT END OF MAY, 1977*

Schedule I

<i>Type</i>	<i>Establishment</i>	<i>Actual</i>		
		<i>Trained and Untrained</i>	<i>Trained</i>	<i>Untrained</i>
Primary GRZ	20,407*	19,891	17,233	2,658
Secondary GRZ	3,267	2,663	2,663	—
LMAT	—	375	375	—
GAE	—	115	115	—
Volunteers	—	17	17	—

Note: (*) These figures are subject to change depending on:
 (a) the number of double sessions introduced;
 (b) increase in the number of schools;
 (c) additional subjects introduced in some Secondary Schools.

*THE STAFFING POSITION OF ZAMBIAN AND
EXPATRIATE TEACHERS IN SECONDARY SCHOOLS
AT END OF MAY, 1977*

Schedule II

<i>Type</i>	<i>Zambian</i>	<i>Expatriate</i>	
		<i>Contract, LMAT, GAE and Volunteers</i>	<i>Total</i>
GRZ Secondary Schools	1,281	1,419	2,700
Aided Secondary Schools	203	507	710
	<i>Total</i>	1,926	3,410
Seconded to teachers' colleges	29	—	29
	<i>Total</i>	1,926	3,439

OUTPUT OF TRAINED TEACHERS (1976-78)

Schedule III

<i>Sources</i>	<i>1976</i>	<i>1977</i>	<i>1978¹</i>
Primary Teacher Training Colleges	— ⁴	1,143	1,485
Secondary Teacher Training Colleges	304	440 ²	500
University of Zambia	123	120 ³	135

Notes: (1) The 1978 figures are projections;
 (2) 39 of the 440 Trainees have already graduated this year;
 (3) 29 of these are Teachers or officers undergoing in-service training;
 (4) Because of change of College terms, there were no graduates in 1976. College year now finishes in March each year.

15. Since the supply of trained teachers from the above sources is inadequate, there are teachers from abroad recruited on contract or through technical assistance programmes. These are mainly teachers for secondary schools, teacher training colleges and technical colleges.

16. In the primary sector, there is a substantial number of untrained teachers who have been employed because the supply of trained teachers from colleges has, even at this level, not kept pace with the expansion of school enrolment. These teachers are normally employed for short durations of up to two years; those who are lucky may enter a teacher training college to train as teachers while the others may be released but only to employ new untrained teachers subsequently. This practice is unrealistic and wasteful. The senior teachers and others spend time and effort to assist the untrained teacher whose services are now no longer available to the system. It is also this untrained teacher who could benefit more from training in view of his practical experience in the classroom.

17. The untrained teacher, therefore, should continue in employment, subject to satisfactory conduct and performance of his duties, until he has the opportunity to enter college to obtain professional training leading to certification. The serving untrained teacher should be given first chance if he applies for admission at a teacher training college, and Chief Education Officers shall select, as candidates to serve as untrained teachers, only those who can at least meet the minimum entry qualifications into an appropriate teacher training institution.

The working environment and conditions of service of teachers

18. The difficult environmental conditions under which the teacher in Zambia works at present do not encourage or stimulate him to continue to grow in his profession and become more proficient. Among such environmental problems are the following:

- (a) Heavy teaching loads and large classes due to the shortage of teachers generally. Although the optimum class size has been set at 40 pupils, it is not unusual, due to the shortage of school places, for a teacher to have 50 children at the primary level and 45 at secondary level in class. This makes personal attention rather difficult and the marking of pupils' work more burdensome.
- (b) Bigger classes also result in over-crowding as a large number of children is squeezed in rooms designed for 35 or 40 pupils at the most.
- (c) Lack of materials, books, equipment and supplies have had disruptive effects on teachers and pupils and the problems of shortage of furniture, food and breakdown of water and power plants have been common in a number of schools.
- (d) General condemnation of teachers by some parents who believe that it must be the teacher's fault if their children have not been selected, when in fact, this is due to lack of places.
- (e) Anti-social elements in the society and non-co-operative attitudes which go unchecked while the teacher continues to be wrongly blamed for the resulting indiscipline of students. For instance, students have been caught taking drugs which they obtain from members of the community. It is also some members of the public who steal from school Production Units and thereby frustrating the efforts of the students and the teacher.
- (f) Lack of transport for school purposes makes it difficult to get supplies and equipment and to render necessary services, for example, getting sick students to hospitals or arranging excursions, field projects or travelling for the purpose of games, sport and cultural activities with other schools.
- (g) The teaching of double sessions, which although maximises the use of classrooms, reduces the time allocation in the upper primary and also affects the performance of the teacher.

19. Teachers form the largest group of any profession in Zambia and this situation is unlikely to change even with steady increase in qualified personnel for the other professions. To meet

the demand for education calls for increases in enrolment at various levels, which, in turn, will mean a proportionate increase in the number of teachers, not even considering the present shortage. While there have been many substantial improvements in the Public Service generally, teachers have not had corresponding improvements in relation to their responsibilities. Various commissions have done commendable work. However, although the Mwanakatwe Commission made recommendations which resulted in some improvement of the estate of the teacher, there is still a lot of room for improvement. Among the areas which should receive special consideration are the following:

- (a) Although the present entry points in the teachers' salary scales are an improvement over those of previous scales, teachers' salaries are still far from being related to their responsibilities. For example, the scales ES 13, ES 12 and ES 11 are too short and teachers reach the maximum of the scales in a short time and stay there too long.
- (b) Further, promotion prospects in the teaching service are unlikely to be as good as in other sectors of the Public Service for the simple reason that there are very few posts for which very many qualified teachers must compete. For example, a graduate entering the Civil Service at the same time as a graduate teacher joins the Teaching Service, may rise very rapidly and even become Permanent Secretary, Managing Director or Ambassador while the teacher remains in the same position.
- (c) Deputy Heads for Primary Schools are in receipt of non-pensionable allowances. Consideration should be given to placing them on a definite salary scale as is the case with Deputy Heads for Secondary Schools.
- (d) Except Heads of Mathematics, Science, Zambian Languages and English in secondary schools, Heads of subjects are not paid allowances.
- (e) Senior Teachers and Teachers In-charge of primary schools are paid allowances but these are non-pensionable. These should be consolidated with the salary to become pensionable in view of their responsibilities.
- (f) The probation period for those teachers who have served as untrained teachers for at least one year, before proceeding for training at teachers' colleges, should be only one year instead of two. For those who have been trained but have not previously taught for at least one year, the probation period will remain two years. In either case, confirmation should be automatic after serving the appropriate probation period, unless there is a written report stopping confirmation.
- (g) Present Teaching Service Examinations which teachers have to pass to be confirmed in promotion posts are, in some cases, irrelevant to the professional growth and needs of the teacher. These examinations should be replaced by relevant professional examinations and a system of professional credits but should not be required for confirmation unless there is an adverse report.
- (h) As a single group of any Government employees, teachers have the most acute housing problems. Formerly, teachers in urban areas mostly lived in institutional houses and were, therefore, better off. However, with the increase in the number of schools, teachers in urban areas had to get houses from Local Authorities along with other people as new institutional houses were no longer available. Since the Local Authorities also experienced long waiting lists, the shortage of houses for teachers still continues and teachers are forced to share with friends, relatives or sleep in classrooms or school libraries, etc. Often the Ministry has entitlements but without housing units being available, these are of no value. The gap is so wide that nothing short of emergency measures can solve this problem. As the main problem is that the country is short of actual housing units:
 - (i) the Ministry's policy that no new schools should be built without teachers' houses should continue;
 - (ii) the Party and Government should continue to allocate funds for the special programme to build teachers' houses which started in 1975;

- (iii) Government and Local Authorities should give preference to teachers' needs in allocating entitlements and actual houses;
- (iv) local communities, where this is possible, should build teachers' houses on self-help basis using approved designs. This has been successfully done in some areas.
- (i) Personnel and management or administration services for the teacher have quite often been impeded by various factors, some of which are beyond the competence of this Ministry. There are the normal constraints of lack of transport, inadequate financial provision, lack of materials and equipment, inadequate facilities for supporting staff, lack and shortage of office accommodation and storage for documents, materials and equipment. There should be improvements in all these areas. Further, the emphasis should be placed on the fact that the Management and Personnel Services exist to serve the teacher, and to furnish him with information on conditions of service, regulations and Government procedures, about which he may be ignorant.

20. The points raised in paragraphs 18 and 19, if not properly attended to, result in dissatisfaction or disillusionment of the teacher, the one agent in the educational process who should be kept as reasonably happy as possible.

In-service training of teachers

21. It is essential that all who are involved in one way or another in the educational enterprise should participate in various in-service programmes. For example, there should be initial training for unqualified teachers, upgrading of professional qualifications, implementing curriculum changes, development and evaluation of curriculum materials, development of professional skills, improvement of administrative and supervisory techniques, orientation courses, etc. Apart from this, teachers or other workers in the field of education may wish to improve their own education but would have to take the initiative and avail themselves of the opportunity for part-time or full-time study.

22. Teachers in primary and secondary schools, teachers in colleges, inspectors, education officers, Chief Education Officers, Curriculum and Examinations Officers, personnel officers, Heads of Institutions and others in supervisory capacity should all attend in-service training programmes.

23. Improvement programmes, as part of the in-service training, should be properly established. Teachers trained to teach Grades 8–9 should take advantage of these programmes and apply for training to convert to teaching Grades 10–12. The training should be at least of one year's duration.

Teachers' Centres

24. In-service programmes should use all available suitable facilities, depending on the nature and the length of the programmes, and these could also be organised in Teachers' Centres where teachers themselves should organise and provide a variety of in-service courses to meet their local needs. For example, the centres could cater for study groups, production of materials, review of educational equipment or any other suitable programmes which teachers can devise for themselves. Above all, these centres could provide teachers with the opportunity to meet socially with professional colleagues. The Teachers' Centres need not be permanently organised in one place as the important part will be the programmes which the teachers devise for themselves and the physical facilities should only be required to adequately accommodate the particular programme. Resource teachers should play a prominent role in such programmes which may be organised even at district level.

25. The activities of Teachers' Centres must be regarded as normal professional activities involving, for example, criticism of classroom practice. This should enable teachers to pass on new knowledge and techniques to their colleagues. In this, as in any other in-service

programmes, the inspectors of schools have an important role to play. In fact, their most important function is to serve as itinerant teacher educators and they should maintain close links with teacher educators in colleges

26. There should be in-service programmes organised by people other than teachers. These programmes may involve orientating teachers to new responsibilities or may be organised to give specific information, demonstrate new techniques or to give an appreciation of new concepts. Usually, these will be short programmes. Secondly, some courses should be organised to improve the teachers' general or professional competence leading to Professional Credit. For example, such programmes could include methods in assessment and guidance, special education, pre-school supervision, literacy teaching, administration, Production Units, conversion courses.

27. Teachers participating in workshops, seminars or courses may receive recognition for successfully completing their course requirements in the form of Professional Credits for which certificates will be awarded. For instance, a teacher may be awarded Professional Credit in the teaching of Mathematics, Science, practical skills, Zambian languages and in assessment techniques, etc.

Pre-service training of teachers

28. The present pre-service teacher education is divided into primary school and secondary school and is carried out at appropriate institutions as mentioned earlier. Secondary school teachers' education is again categorised into programmes for teachers for the junior secondary school and programmes for teachers for the present full range of secondary school up to Form V.

29. Pre-service teacher training programmes will take into account the structure and organisation of basic education programmes. The training programmes should lay stress on developing the teacher's personality, right attitudes and responsibility. Teacher education should assist the teacher to develop his planning and instructional skills through the use of a variety of techniques and teaching methods. It should also develop his organisational and management abilities, awareness and understanding of the pupils' needs to be able to establish responsive relationship with them. On completion of his training, the teacher should have been adequately prepared to evaluate the effectiveness of the instruction and the progress of each student through available methods and techniques.

30. The training programme should include the principles of good human relations for which there should be special appreciation of the importance of man in the teacher's own country and, indeed, in other countries. It should also give him a sense of belonging and responsibility to contribute to the political, social, economic and cultural development of his local community and society. In short, teacher education should prepare the trainee teacher for the task of guiding children, youth and adults in the pursuit of knowledge to become useful and self-reliant citizens, since it is in the social responsibility, the economic contribution, the attitudes and moral values of the individual Zambian that the strength of Zambia as a nation lies.

The curriculum for teachers

31. It is obvious that the curricula may differ according to his interest and function the teacher is expected to undertake after leaving college; generally, it may contain common core subjects and a small number of options which will enable an individual teacher to specialise or to meet his individual interests. As is generally the case, teaching practice should continue to be an integral part of a teacher's pre-service training. The curricula should, as at present, include principles and practice of teaching, educational psychology, evaluation and guidance, general education as well as other professional training. The curriculum should also concentrate on enabling trainee teachers to understand the objectives of the school curricula and the underlying principle of learning in the choice and use of teaching materials.

32. As indicated in the Chapter on Curriculum, Political Education, Humanism, Production Units will be among the important areas of learning in the school curriculum. If teachers are to teach and impart knowledge and practical skills in these areas, the curricula for their own pre-service training programmes should include such fields.

33. It should be recognised that pre-service training is the initial stage of a continuous process of teacher education. It is essential that the teacher should build on this base as part of a life-long process to improve his competence, his skills and increase his knowledge.

Training for primary school teachers

34. At present, the minimum entry qualification to primary school teachers' colleges is Form III although colleges also accept Form V. In future, the minimum entry qualification to primary school teachers' colleges will be Grade 9. Trainees, i.e. both Grades 9 and 12 candidates, will have two years' residential training, but Grade 12 will have, as at present, a different salary scale in view of their additional three years' general educational background. However, those who will be trained for teaching in the primary sector and have Grade 12 education, may take conversion courses to teach in the secondary sector.

35. As at present, untrained teachers will work under the guidance and supervision of Heads, Deputy Heads and Senior Teachers and they should take every opportunity to enter a teachers' college for training. For this reason, as already indicated, all untrained teachers recruited should be those who would also satisfy the minimum entry requirements to any of the teachers' colleges. Each year, a certain proportion of untrained teachers should be admitted to various teacher training colleges. The Ministry Headquarters will indicate to each Principal each year the number of such teachers to be enrolled. The untrained teachers should, however, apply early to a college of their choice through the Chief Education Officer who will immediately pass on their application.

Training for secondary school teachers

36. Diploma programmes for those with Form V (Grade 12) educational background will continue as at present at the appropriate existing colleges or others which may be established. The graduates will be equipped to teach junior secondary school programmes. The University of Zambia and other colleges will continue to train teachers for the full range of secondary school programmes.

Student participation

37. As discussed at paragraphs 15 to 17 in Chapter 15, there should be effective student participation in management and other college affairs. Teacher training colleges should establish Students' Representative Councils. However, students should be elected or nominated to membership of such College Councils or Committees as Boards of Studies, disciplinary committees, etc., which should deal, among other things, with matters concerned with general improvement, academic progress and welfare of the college as a whole. Participation in such committees will teach trainee teachers the art of organisation and decision-making.

Colleges as resource centres

38. Instead of being solely concerned with their own residential students, teachers' colleges will become teacher education resource centres, that is, centres for educational development where there should be a lot of activities covering innovations, techniques, etc., to improve education. Colleges should also exert their educative influence generally on the community in which they are located. In the case of their first role, colleges should, among other things, be directly responsible for:

- (a) initial or pre-service course;
- (b) in-service training programmes;
- (c) development and maintenance of libraries, materials and teaching aids;
- (d) collecting and collation of information on general or specialised education;
- (e) research in curriculum and other fields through co-operative effort of staff and students.

39. In its second role the college should be an integrative force between the teachers in the field and the trainees so that the student may have the opportunity to draw upon the experience of those already in the field. Similarly, the community and the college have certain goals whose fulfilment require their co-operative effort.

Demonstration schools

40. Certain schools, as at present, should be designated demonstration schools whose functions should be to provide the students at the college with the opportunity to observe and practice teaching methods which will reflect the educational principles they have learnt. However, the practical experience of the trainee teacher should not be limited to demonstration schools but should also include experience in ordinary schools where the trainees can see the problems they are likely to meet when they have been appointed.

The role of the University of Zambia in the training of teachers

41. The associate relationship which Nkrumah, Luanshya and Copperbelt Teachers' Colleges now enjoy with the University should continue as it has beneficial effects which go beyond the curriculum requirements. The relationship represents one of the many ways in which the University continues to exert its educative influence beyond its walls as this important institution is being taken to the people. However, to continue effectively with this associateship and in anticipation of any other colleges being brought into the orbit, the Centre for Continuing Education at the University of Zambia should be strengthened, as a matter of priority, through adequate staffing and provision of financial and other resources.

42. The University of Zambia at present awards degrees with education and diplomas in teacher education to successful candidates. It is the main supply of graduate Zambian teachers for Secondary Schools and Colleges. Besides, it is the University's diplomates in teacher education who staff the Primary Teacher Training Colleges as lecturers.

43. The University of Zambia is currently in the process of revising its teacher education programmes in the light of its past experience and in order to ensure that they can more adequately respond to the country's needs for really well-motivated, committed and high quality teachers. In particular, the University is considering the provision of a degree programme in education which will be unambiguously professional, to replace the present Bachelor of Arts with Education and Bachelor of Science with Education degrees. It is strongly recommended that such a programme should lead to the award of a Bachelor of Education degree to successful candidates in the following categories:

- (a) direct entrants to the School of Education; and
- (b) qualified teachers from whatever level who meet the University's basic entrance requirements or who, through the Mature Age Scheme, can satisfy the University that they are able to undertake an appropriate programme of study for the degree; but all such candidates must have at least two years' teaching experience.

44. It is expected that the new degree programme will allow for a considerable degree of flexibility and for the introduction of optional courses in such fields as Special Education, Educational Assessment, Educational Administration and Student Guidance. There are immediate needs for training at degree level in these fields.

45. In the past the system whereby students were directed into the School of Education, regardless of their interest in teaching, entailed the channelling of valuable University resources into the education and training of a large body of students who were not necessarily committed to the profession and who gave little promise of remaining in it. It is to the credit of the University that many of these students developed more positive attitudes to teaching during the period of their degree studies. However, the recruitment of large numbers of students with little or no interest in, or aptitude for, teaching is no longer acceptable and must not be perpetuated.

46. The University has now established the School of Education as a school to which students will be admitted direct. This will enable the University to enrol in the field of Education only those students who show commitment to teaching. Although the short-term effect of this policy may be a temporary decline in the number of Education students, the long-term effect should be to supply the school with a cadre of highly dedicated and professionally well-qualified teachers. However, the quota system in the allocation of funds should continue to be biased in favour of education, but students should not be forced to take education. This should, in time, improve the rate of retention of teachers in the system since most of them will have chosen teaching as a career voluntarily.

47. The establishment of suitable post-graduate programmes in Education can improve the morale of the teaching force by providing an avenue for advanced professional education. Such programmes can also serve specific national needs identified by the University in conjunction with the Ministry of Education and, in particular, can help in promoting a staff development programme for the teachers' colleges. The University is presently preparing more appropriate Master of Education degree programmes. In addition to this, the University will be requested to provide other advanced programmes leading to higher qualifications for persons wishing to improve their professional status and for graduates wishing to enter the teaching profession.

Increasing teacher training facilities

48. In view of the continuing shortage of trained teachers, present enrolment should be increased through:

- (a) expansion of existing colleges where this is possible and appropriate;
- (b) building new teachers' colleges as funds become available;
- (c) conversion of some of the existing facilities into teacher training colleges where this is possible;
- (d) establishing Teacher Training Units in some of the existing educational institutions.

Quality in the education and training of teachers

49. It has been emphasised elsewhere in this document that the quality of education is crucial in the role that education can be expected to play significantly in the development and life of any nation. Only good education can lead to Zambia's proper development. But if we are to secure the quality of education we need, it is essential that we should have teachers who are capable of promoting and maintaining high educational standards in all our educational institutions in the country.

50. A good teacher is not a product of chance. He is the product of good education both academically and professionally. It is, therefore, necessary to provide the best possible training programmes in general as well as professional education to those in training in our teacher training institutions. This, among other things, implies that those who educate and train our teachers must themselves be highly competent and of superior quality, and that the teacher training institutions must have adequate and appropriate facilities to do their job effectively. It is also necessary to attract a fair share of the ablest youth in the country to enter the teacher training institutions to train as teachers.

Staff development

51. Absolute priority should be given to the development of an adequately trained force of teacher educators since, as indicated above, the quality of education offered in schools will depend on the competence and skill of the teacher graduating from Training Colleges. The effective implementation of the curriculum process will be dependent on the skill and dedication of the teachers the Training Colleges will turn out. They should be knowledgeable in their respective disciplines and competent teachers for the stage of education for which they will be training the students. There should, therefore, be short in-service and upgrading courses for teacher educators to ensure that they, too, keep up-to-date with new developments and techniques in their fields.

52. There is, at the moment, much reliance on expatriate teacher educators. Apart from the problem of discontinuity when expatriates leave, there is also the question of cost. Therefore, a systematic programme aimed at localising the staff of the Colleges as soon as possible should be mounted. Identification of teachers with potential should begin at the time the teacher is about to leave college on graduating for appointment to a teaching post. This should be followed up by the Chief Education Officer in consultation with Heads of Schools or Colleges and Regional Inspectors at the end of each year, by submitting to the Ministry Headquarters a list of teachers who may have been identified as potential material for training as teacher educators.

53. In view of the country's high demand for scientists, engineers, technologists and other specialists in key areas, it is extremely important that the teaching of these skills in the technical colleges and trade institutes and elsewhere should be given the emphasis it deserves. Although the nation has made some progress in this area, the demand cannot be met. Above all, the teachers in technical colleges are almost entirely expatriate and these institutions often have staffing problems when expatriate teachers leave as it takes a long time and it is a difficult task to replace them. Further, there is lack of continuity.

54. To stabilise the staffing of these colleges, there should be staff development programmes for Zambians who show potential in their field of specialisation. The Principals of Technical Colleges and Trades Training Institutes should identify students with potential during training and the Director of the Department of Technical Education and Vocational Training should identify those among his staff who have potential for training as lecturers. The lists should be submitted at the end of each year to the Ministry Headquarters.

Conduct and professional ethics of the teacher

55. Although teaching is a profession, paradoxically, there may be doubt as to whether teachers are, or can, constitute a professional body much in the same way as lawyers, doctors, engineers, etc. Such a doubt may arise from the lack of observance of a professional code to regulate the professional conduct and behaviour of the members of the teaching force. Usually, professions initiate the establishment of a code of conduct without waiting for the state or other outside authority, so that observance of their own code fulfils not only the need for professional pride but also has a remarkable impact on discipline of each member and the profession.

56. In Zambia, there is no professional body for teachers as such, although a strong union, which fulfils different functions altogether, exists. Further, no sanctions appear to have been imposed by the teaching force in itself on any member who may have departed from the expected conduct. However, there can be no doubt that the teacher, even where no professional body exists, has ethical obligations and responsibilities to the student, society and, indeed, to his own profession. The lack of a professional organisation for teachers does not, therefore, imply that teachers in Zambia have no ethics or professional principles by which they shall abide.

57. However, it is important that there should be a professional organisation for teachers which would embrace all teacher associations. For instance, the "Heads of Secondary Schools Association" and a number of subject associations, etc., could be part of the main professional body for teachers so that members would be enabled to provide better service to society and, at the same time, enhance the professional competence of its members, and check-out the type of conduct that would bring the teaching profession into disrepute. This should not conflict with the existence of the Teachers' Union; in fact, the functions of the two could be complementary in improving the status of the teacher in Zambia. At present these matters are covered by the employer's conditions of service but these do not always have the same effect on the conscience, loyalty and responsibility of the teacher to his profession.

58. The teaching force should be requested to consider the desirability and possibility of establishing a code of conduct for the profession. Appendix I indicates some of the principles on which such a code can be based.

CHAPTER 12

PRE-SCHOOL EDUCATION

The need for pre-schools

1. The best environment for early learning is the child's home and surroundings that are in sympathy with the values of his family and culture.
2. As indicated in Chapter 3, pre-school education is intended for children below the school-going age and who have not started on full-time education. It is now necessary to examine more closely what is generally meant by pre-school education, what its goals should be, how it should be organised and catered for in the Zambian situation.
3. Studies carried out in a number of countries have revealed that the definition of pre-schools is a matter of great difficulty. The list of institutions regarded as pre-schools has included creches, clinics, day nurseries, hospitals, infant care centres, etc. The list, in fact, includes practically all the institutions which may have to do with children in one way or another at an early age.
4. In Zambia at present, there is no provision in the Education Act for the establishment and management of pre-schools. The Day Nurseries Act, Cap. 541, provides for the establishment, registration and regulation of day nurseries and these are described as "any premises where more than two children from more than one household are received to be looked after for reward for periods exceeding two consecutive hours in any one day". In the prescribed forms for registration, the indicated age range of the children who may attend day nurseries is from under one year to under seven years. Cap. 541 excludes any institution registered under the provisions of Part III of the Education Act.
5. It is clear, therefore, that the term "Pre-school" is also used rather loosely in Zambia at the moment in many cases to refer to day nurseries. As a result, some day nurseries have been teaching part of the primary school curriculum and others have confined themselves to day nursery activities provided for under Cap. 541. In future, those proprietors who may wish to carry out the functions of pre-schools, as recommended in this Chapter, will have to register under the Education Act which will be suitably amended to provide for pre-schools. Those proprietors of day nurseries who may wish to continue teaching the primary school curriculum should register as private primary schools under the provisions of the Education Act.
6. Pre-schools perform their function most effectively when they offer a completely informal type of social and educational experience to very young children. In early childhood, learning takes place mainly through play. Direct instruction by adults is inappropriate and largely unsuccessful until children are older. Unfortunately, many parents expect a pre-school to provide the same kind of formal teaching as a primary school and some pre-school operators have misguidedly tried to adopt primary school organisation, curriculum and methods. This is harmful to very young children and must be discouraged.
7. Pre-school education supplements learning in the home by providing children with a larger circle of play-mates and a wider range of supervised play activities and learning experiences which promote physical, mental and social development of the child. Pre-school education should not substitute for the home and it should never imitate the methods and content of the school.
8. Pre-school education will not be compulsory but it should be given to as many children as possible. However, pre-school education will not be a pre-condition or an advantage for enrolment at Grade 1 and all concerned should be quite clear about this to avoid misconceptions. While entry age into Grade 1 is seven years, because of educational and other reasons, the minimum entry age into a pre-school should be three years in both rural and urban areas. Separate provision should be made for infant day care centres, which are needed in many communities for the protection and supervision of infants up to the age of three. Such centres are not regarded as pre-schools for the purpose of this document.

Goals for pre-school education

9. The goals for pre-school education should include the following:
 - (a) to aid the development of communicative skills through speech and listening and other modes of expression;
 - (b) to promote mental development through creative activities etc.;
 - (c) to promote the socialisation of the child through meeting his need for company or group work;
 - (d) to assist the child's physical development through play and other activities;
 - (e) to develop and provide for the child's emotional aspects or the need for affection;
 - (f) to promote correct attitudes and values;
 - (g) to promote patriotism and culture through appropriate songs, dances, stories and plays;
 - (h) to encourage moral, religious or spiritual development;
 - (i) to identify the child's handicaps, if any, early and arrange for remedial or corrective measures.
10. The curriculum for pre-school stage should be so designed and arranged that it will cater for the developmental needs of the child according to age, but, at the same time, meet the goals of pre-school education stated above. The curricula may have to be different to suit different local communities. For instance, curricula for rural pre-schools might be different from those of urban pre-schools.

Materials and equipment

11. Materials and equipment are extremely important in the field of pre-school education. In the choice or design of these, availability must be taken into account and efforts should be made, as much as possible, to rely on equipment and materials locally produced.
12. The equipment and materials must be cheap, yet robust; they must be functional and yet aesthetically attractive; and should be carefully selected so as to fulfil pedagogical, psychological and intellectual functions. Because of the differing ages of children, the size of the equipment to suit each group is important. Further, the educational value of the materials and equipment should be such that it can be used as a basis for skills in handling and for future logical thinking.

Provision and organisation of pre-schools

13. Studies have indicated that pre-schools, the world over, are not normally directly run, managed or owned by the Central Government. There are a variety of reasons for this state of affairs in different countries. In Zambia, institutions which include pre-school education in their activities are run by private or voluntary agencies. For some time to come the Government should not provide or run pre-schools. Instead, the Government must concentrate on the formidable task of providing educational opportunities to every school-going-age child. Besides, it is not necessary that pre-school education should be provided by the Government as this type of education is best given by the home and local community.
14. Therefore, voluntary agencies, Local Authorities and others should provide pre-school education as desired. Communities could organise themselves and set up pre-schools if they consider them necessary in their localities. Constituency officials of the Party, Councillors and other leaders should take the initiative and join hands with parents to set up pre-schools on self-help basis or, where possible, Local Authorities may be responsible for establishing pre-schools.
15. Among the existing institutions, there are a good number which charge exorbitant fees. The Party and Government should not approve of such practices whereby some people

would be capitalising on the demand for educational services to exploit others. Provision will, therefore, be made in the intended amendment of the Education Act to set up appropriate machinery for the Minister of Education to regulate the level of fees to be charged.

16. In order to ensure proper co-ordination and effective management of the affairs of pre-schools, each pre-school should set up a Pre-school Committee whose membership could be drawn from parents, specialists and others interested in pre-school education. These Pre-school Committees will initiate action on relevant matters and will also act as communication links with the Pre-school Association, Local Authorities, the Ministry of Education, the Ministry of Labour and Social Services, the Ministry of Health and other agencies which may have a role to play in pre-school education. The role of the Pre-school Association in promoting pre-school education should be encouraged and its activities should be expanded to cover rural areas.

The role of the Ministry of Education in pre-school education

17. The Ministry of Education will be responsible for the training of pre-school teachers and supervisors and for providing professional services and guidance on matters relating to pre-school education. In addition, under the auspices of the Ministry of Education, specialists, pre-school teachers and supervisors will design pre-school curricula and also participate in the choice and design of materials and equipment. Pre-school teachers will, however, not be employees of the Ministry of Education but of the Local Authority or the proprietor(s) of the particular pre-school(s).

18. Amendments to the Education Act will seek to bring into line the activities of existing institutions indicating what they should or should not do as pre-schools. At present, due to shortage of school places in Grade 1, some of these institutions have assumed the functions of a primary school and illegally have been teaching reading, writing and arithmetic and other subjects and, in the process, have done a lot of harm to children especially as, except for a few, most of these are run by untrained people from the proprietor down to the staff. In any case, these or any other subjects, should not be taught by pre-schools. As already indicated, any institution which is not Government and which may wish to teach these subjects or any other, should apply for registration under the provisions of the Act governing private schools and be registered as a primary school.

CHAPTER 13

THE ROLE OF NON-GOVERNMENT AGENCIES IN EDUCATION

1. The Party and Government have the responsibility of ensuring that educational facilities are available to all citizens. However, due to limited resources, the state has not been able to make adequate provision for everyone, although this remains the ultimate goal. Therefore, the important role played by mission agencies and other voluntary organisations will continue to be appreciated and encouraged by the Party and Government, especially in pre-school, primary, special, secondary, technical and teacher education.
2. Non-Government institutions which currently provide educational facilities include the following:
 - (a) grant-aided schools, colleges and institutes;
 - (b) private schools and colleges;
 - (c) private correspondence colleges.

Grant-aided educational institutions

3. Grant-aided educational institutions are those institutions to which the Government contributes 75 per cent of the cost of their capital works programme in the form of a grant and to which a grant on recurrent expenditure is also made to cover the payment of teachers' salaries, school requisites, boarding costs, etc. Examples of this category are mission schools, teacher training colleges and trades training institutes run by mission agencies.
4. There are other educational or training programmes which may not be formally classified as schools, but to which Government makes small grants. For example, youth training programmes, community-based skills training projects for youths, etc. These are important sectors where there should be clear policies and where systematic expansion and improvement are urgently required. The policies discussed in this and other chapters will provide a firm basis for voluntary organisations to extend their work in collaboration with the appropriate Government agencies.

Private educational institutions

5. Private educational institutions in Zambia cover a wide range of functions. They offer pre-school, primary school, secondary school, vocational and cultural programmes. Some have been established primarily to serve the expatriate community, or a particular religious group.
6. In terms of the provisions of the Education Act, Chapter 234, as amended by the Educational Act, No. 40 of 1972, and the provisions of Statutory Instrument, No. 97 of 1975, and the Technical and Vocational Training Act, No. 37 of 1972, Part IV, private educational institutions are permitted if they satisfy the requirements for registration and are run or operated in accordance with the provisions of the relevant Act. The main purpose of the legal requirements is to protect the students concerned and the general public against exploitation, by ensuring that the fees charged by the proprietors of the institutions are reasonable in relation to the service rendered, and that satisfactory standards of educational provision are maintained.
7. The variety of private educational institutions operating in Zambia thus include the following:
 - (a) institutions that aim at providing educational programmes which enable expatriate children to integrate smoothly into the school system on return to their home countries;
 - (b) institutions which provide education and charge fees but are operating on a non-profit making basis;
 - (c) institutions which charge fees for providing general, commercial or technical education and are run on a profit-making basis as business enterprises;

- (d) institutions which provide education with the aim of catering for persons who have a vocation for the priesthood for particular religious groups;
- (e) institutions which organise and run workers' education programmes, such as trade unions, industrial and commercial enterprises, the Party and other institutions.

Private correspondence colleges

8. Private correspondence colleges are at present permitted if they satisfy legal requirements for registration. These should continue to be administered in accordance with the provisions of the relevant Act. At present, most private correspondence colleges operating in Zambia are foreign-based companies. They offer a wide variety of courses, many of which are not relevant to the Zambian environment and requirements.

9. It should be a requirement that private correspondence colleges operating in Zambia shall at least have locally registered offices and shall offer relevant courses, leading to qualifications recognised in Zambia.

10. Meanwhile, it is recognised that many courses offered by private correspondence colleges in Zambia may provide useful opportunities for general and vocational studies which would not otherwise be available to Zambian students. However, it is particularly important that the Ministry of Education should ensure that the educational quality of all courses offered to Zambians by private correspondence colleges is of acceptable standard. It is important that the public should be protected from exploitation which would result from some correspondence colleges offering courses leading to qualifications which are of no value or are not recognised in Zambia.

Control of non-Government educational institutions

11. The role of non-Government institutions in education is essential and, to all intents and purposes, these institutions will continue to be part and parcel of the Zambian education system. These institutions will follow approved curricula and syllabuses, and will be subject to professional inspection. Students will sit, as at present, the same examinations and be subject to the same selection procedures as students in Government schools. It is important, therefore, that efficient control by stricter enforcement of the provisions of the relevant Education Act should be exercised by the Ministry of Education. To this end, the Ministry of Education should organise and set up adequate administrative machinery to improve its performance in this respect.

12. In addition, the Ministry of Education should ensure that the proprietor of each institution is a fit and proper person or body of persons to be a proprietor and to be responsible for sound and efficient management of the institution.

13. The proprietors should facilitate the establishment of Students' Representatives Councils and Parent-Teachers' Associations (PTA). However, it must be mentioned that in some schools these organisations are already established.

Education of Zambians abroad

14. The existing Education Act does not prevent parents from arranging schooling or other training for their children abroad. Further, the Government cannot at present provide school places for all children of school-going age at every level in the educational ladder and some children, therefore, may be out of school. In some cases, some parents, even though school places may be available for their children, may wish to send their children to study abroad for one reason or another. In any case, the Party and Government and parastatal organisations grant bursaries and scholarships to students to study abroad and also, the Government accepts scholarships or bursaries offered by friendly countries and international organisations. Most of these countries or organisations offer bursaries or scholarships for study abroad rather than within Zambia.

15. In the circumstances, the Party and Government should continue to allow students to study abroad. There is, however, need for control and for establishing proper machinery to ensure that individuals, as well as the Nation, derive maximum benefit from studies undertaken abroad. Before approval is given, the nature of the proposed study or training, the relevance and the educational value, the content of the programme to be followed and whether the sponsoring authority, organisation, parents or guardians have made satisfactory arrangements for tuition, travel and boarding costs, etc., should be scrutinised.

16. In view of its responsibilities for national education, the Ministry of Education is the competent authority to approve all applications for clearance for students wishing to study abroad. All prospective students wishing to be cleared for the purpose of study abroad or training should, therefore, continue as at present, to apply for clearance to the Ministry of Education. These requirements apply to all pupils who are Zambian nationals, regardless of the status of their parents.

CHAPTER 14

MOBILISATION OF MANPOWER AND OTHER RESOURCES

1. Success in education and training will require considerable contributions of resources by Government, commerce and industry, voluntary agencies, local communities and individual citizens. In order to implement the educational reforms, the nation's human, material and financial resources should, therefore, continue to be mobilised on an ever-increasing scale. As many other priorities make claims on our limited national resources, it is imperative to ensure that all appropriate financial and other resources to support education are correctly applied and used to the greatest effect. This will require substantial effort and good judgment by all concerned with the provision of education, whether in Government, educational institutions or the local communities, so that education should continue to be one of the top priorities in national development.

Mobilisation of teachers

2. It has already been stated that reforms cannot succeed unless the teachers in the system understand and support the proposals. It follows, therefore, that teachers have to develop the right attitude to the purpose and intention of the reforms. They have to appreciate that they hold the key to a successful change and they should be among the first to recognise and appreciate the improvements which should be brought about in the quality of education.

3. Further, for the reforms to be properly implemented, there should be a sufficient number of teachers. Since it has already been noted that there is a great shortage of teachers, one of the first areas for mobilisation is the training of teachers. There should be a substantial increase in the output of new teachers joining the system by:

- (a) attracting more students to become teachers through improvement of working conditions and conditions of service;
- (b) building new teachers' colleges so as to increase the output of teachers;
- (c) converting, where appropriate, some of the existing educational facilities into teachers' colleges to increase the output of new teachers.

4. The retention of teachers in the system is equally important, otherwise increased output from teachers' colleges would have no marked effect. The measures to be taken in order to reduce the rate of attrition have been discussed in the chapter dealing with "Teacher Education, Supply and Retention".

5. Retired teachers, who were good teachers and are healthy and interested to continue teaching, would be encouraged to rejoin the teaching force.

Other manpower

6. In order to perform their functions efficiently, teachers need the services of other staff and the community. Administrative, supervisory and other officers, such as education officers, inspectors, library staff, personnel officers, accounting staff, members of the local community, etc., have an important role to play. They should all be mobilised just as much as the teachers, because teachers cannot succeed if they do not receive good or adequate services.

Volunteers

7. Although planning will not be based on volunteers, Zambian and expatriate volunteers should be welcome to participate and be involved in the implementation of the reforms. There are, in fact, already a number of volunteers in the service and voluntary agencies provide services of one type or another to promote the cause for education.

Educational materials and equipment

8. Under the chapter dealing with curriculum, it has been emphasised that educational materials and equipment are aids to the teaching and learning process. The early availability

of adequate educational materials and equipment should play an important role in the implementation of the reforms. There can be no meaningful mobilisation without educational materials and equipment. For example, the Nation should address itself to writing, printing, publishing and distribution of books. The activities of the National Educational Company of Zambia, the Zambia Publishing Company and others should be intensified and supported; they should gear themselves to full participation in the mobilisation for anticipated educational development.

Services

9. There are services of an infrastructural nature, on which some educational activities must depend: for example, radio and television services. It has already been mentioned that existing radio and television services are not adequate as transmission does not cover all areas. There are also other associated problems, such as lack of separate channels for educational programmes, etc. For radio and television educational programmes to be effective in a manner envisaged by the educational reforms, substantial improvements should be undertaken in transmission, coverage and in quality of production. Adequate time should also be allocated to educational broadcast and separate channels be established.

10. The present Library Service, though an improvement over what it used to be a few years ago, is still inadequate. The service should be expanded so that there are more libraries to serve local communities and also the number and range of books and other educational materials should be increased.

11. Correspondence students depend on postal services. While there has been some improvement in recent years, the mail to and from some districts is still very slow and some areas which badly need the services of a post office are still without one. These problems affect the coverage and effectiveness of correspondence as an educational medium.

Transport

12. As has already been mentioned, the inadequacy or shortage of transport to serve the needs of education has been a nightmare of the Ministry of Education in recent years. Yet, the successful implementation of the educational reforms and the improvement of the quality of education all depend on reliable and adequate transport. Considering the variety of educational activities, transport services cannot, as at present, continue to be left to chance. There should, therefore, be an adequate fleet of vehicles for educational purposes allocated to the Ministry of Education. Separate sums of money should be voted for purchase and maintenance of vehicles for use on educational purposes. The Ministry of Education should be allocated institutional vehicles for which it would have full control. This would ensure that the vehicles would be available when they are needed. The Party and Government should ensure that:

- (a) an educational transport fleet is established;
- (b) the composition of the fleet is standardised to take into account economy, utility and specialised need of various institutions;
- (c) the Ministry of Education, like the Police, is allocated separate funds for the purchase of vehicles; and
- (d) the large number of teachers, pupils, schools and colleges and their supporting staff are properly served with transport.

13. The following are some of the examples of the areas in which over 26,000 teachers and over one million pupils and students should be served by an adequate transport fleet:

- (a) transporting school supplies, including food, teaching materials and equipment to schools;
- (b) taking salaries and other supplies to teachers;

- (c) transporting building materials, supervisors, etc., to work sites;
- (d) transporting field officers such as Inspectors of Schools, District Education Officers, Planning Officers, Continuing Education Organisers, etc.;
- (e) transporting students to field projects, cultural activities, games and sports;
- (f) transporting teachers during seminars, workshops or other organised educational activities.

Educational facilities

14. The expansion and improvement of education, as required by the reforms, call for additional facilities and maximisation of the use of existing ones. In addition, economy measures should be exercised even more carefully as provision of new educational facilities is costly, especially in the face of a difficult economic situation.

15. The main method of adding to educational facilities is to build new ones. However, this should be done as cheaply as possible. The design of educational buildings should be simple and functional. The teacher and his class should be able to operate in a conducive environment which should suit the choice and adaptation of teaching methods and techniques. Often, high costs have been incurred using designs which have incorporated the use of poor or unsuitable materials which, though expensive, have resulted in high maintenance costs; for example, a number of secondary schools built in recent years have used less durable materials such as asbestos panels. Materials to be used should be durable but not costly.

16. As far as possible, local materials – which should be available if the designs are kept simple – should be used. Designs should be such that, particularly for primary schools, the work can be undertaken on self-help basis provided there is adequate supervision and assistance. Furnishing could also be done on a similar basis.

17. Although the provision of educational facilities is the responsibility of the Government, the construction of new educational facilities should not entirely depend on Government alone. There should be a lot of room for self-help schemes particularly at the primary school level. Communities can provide educational facilities in the form of class-room blocks, libraries, school halls, teachers' houses or furniture. This is not a new idea as there are examples of this having been satisfactorily done in some communities in the past. However, communities should be provided with standard plans and be assisted in the choice of materials and in site supervision to ensure that the buildings are built to agreed specifications for the sake of maintenance, durability and safety. Each self-help project should be the full responsibility of the community, through to completion.

18. It is necessary to plan for provision of teachers, professional services and educational requisites. It is, therefore, important that communities take the initiative to complete the construction of educational facilities early in accordance with the stipulations of the Ministry of Education in order that their needs may be taken into account in time. Such initiative could provide some indication as to how ready the local communities in various areas are to participate or to be responsible for certain functions of the educational enterprise. Since the schools are part of the community, they can join with local communities and participate in self-help schemes for educational facilities. The schools and the community will have observed Humanism in practice.

Maximisation of the use of facilities

19. The maximisation of the use of educational facilities is one of the methods of increasing the capacity of the educational system. This implies the use of the same educational facilities or buildings more than once per day by different groups of students, including students following the continuing education programmes. The other groups could use the buildings in the evenings, during week-ends or during the holidays for such activities as courses, seminars, etc. This is already happening in various sectors of education. It should continue and be expanded.

20. As already mentioned, double-sessioning is one of the ways of maximising the use of facilities but it has its own limitations. However, in some schools there may be room, with or without modifications of the facilities, for double-sessions. This should be studied carefully in terms of the new curriculum and the demand it would make on teachers and students.

21. Boarding facilities cost a lot of money, both in terms of capital and recurrent expenditure. Therefore, if a day school, where appropriate, is built instead of a boarding school, there could be an increase in the number of school places as the funds can be used for the purpose of providing more classroom places. Further, where boarding facilities are no longer needed, the facilities could be converted into classrooms, thereby increasing the number of classroom places. There are a number of schools where boarding facilities have been phased out which could, accordingly, be converted.

22. In planning and siting new schools, care should be taken to ensure that, as far as possible, day schools should be suitably sited, taking into account population, accessibility, transport facilities, etc.

Upkeep and maintenance

23. Upkeep and maintenance of educational facilities must be done regularly if the buildings and other facilities are not to deteriorate rapidly. Regular maintenance is important because it can constitute savings on costs. Schools should, on self-help basis, undertake simple repairs to buildings, apply new coats of paints, undertake simple maintenance of equipment and general upkeep of school grounds, including horticultural aspects. Buildings and equipment should always be in a reasonably good state of repair and the school grounds should be presentable.

24. These efforts on self-help basis should not, and cannot, replace maintenance funds allocated by the Party and Government for major maintenance of plant, equipment, buildings, etc. Such maintenance normally requires special expertise or equipment and is undertaken departmentally by the Ministry of Education and the Buildings Branch. In this regard, it is important that a maintenance programme should be drawn up by each institution covering various aspects.

Financing education

25. In a developing country such as Zambia, education should be regarded as an investment rather than only as a consumption area. Education is an investment in human resources and it is for this reason that in a humanistic country, such as Zambia, education should always be regarded as a first priority in development. There cannot be meaningful development unless the people are also developed through education. There is, therefore, need to continually allocate ever-increasing amounts of funds to capital and recurrent costs from education.

School fees

26. It has been the feeling of some people that the re-introduction of school fees might assist Government to meet educational costs. While this has been suggested in good faith, the truth in the Zambian situation is that the moneys so collected would not cover a significant proportion of the cost of education per child. It is important to distinguish between the actual and true cost of education per child at various levels to the Government and the nominal cost to the parent. The parents' contribution in the form of school fees cannot cover the full cost of education in terms of recurrent expenditure, unless the intention is to charge economic school fees which would be very high. Most parents would not be able to afford such fees and the result would be to put out of school a substantial number of children which, for a humanistic society, should not be allowed. This would result in education for the privileged few, i.e., the few who could afford to pay economic school fees. On the other hand, if nominal school fees are introduced, these would be grossly inadequate to cover the true cost of education.

27. The level of economic school fees can be gauged from an example of a private school in Lusaka which is not in receipt of assistance from the Government and has to raise the funds to run the school through charging economic school fees. The school just broke even in the last academic year when it charged K180 per term in the primary sector and K230 per term in the secondary sector. Zambians who can afford such fees must be very few.

28. The cost of education per pupil has been increasing due to inflation as the Kwacha now buys less than it used to buy eight years ago. The average recurrent expenditure per pupil in real terms has, therefore, been decreasing. Over and above that, the actual allocation has decreased while the enrolment has increased. The result is that the expenditure per pupil in student requisites, boarding cost, sundry services, etc., has decreased considerably. At the same time, Government has been finding it extremely difficult to get the amount of revenue it needs for various capital works programmes and recurrent expenditure on services, including education.

29. The allocation directly applied to the cost of educational requisites and services per pupil are no longer adequate and, as a result, the pupil is not fully provided with all the facilities and materials he needs for his educational development and thus education is being adversely affected. While the Party and Government are extremely concerned and are doing everything possible to ensure that the actual expenditure per pupil does not continue to decrease, parents may wish to make their own contribution. The contribution, however, should not take the form of school fees, nor should it be an indirect introduction of school fees as it is UNIP policy not to charge school fees.

30. The question, therefore, is: should parents contribute to the cost of education and in what form or to what extent, bearing in mind the inability at present of most parents to contribute meaningfully to the true cost as opposed to the apparent cost of education?

31. Some parents may wish to contribute to the cost of education of their children. At present, parents already pay for uniforms, transport to and from school and for their children's contributions to the School Fund. Of late, some parents have bought stationery and textbooks when these should have been provided by the school but, because of lack of sufficient funds, the school has not provided adequately for the needs of the students. In addition, some parents have contributed, in one form or another through the PTA, to the well-being of the school in the spirit of self-help.

32. It is, therefore, intended to encourage such efforts on the part of parents to assist the Party and Government in the provision of educational facilities through contributions made in acceptable form and at levels that parents may afford. Such efforts, however, shall not replace Government provision as the aim is not to reduce what Government is already providing, but rather to supplement it and enhance Government effort. It is also important that the areas in which such contribution may be made shall not adversely affect children of poor families or indeed their parents.

33. In the light of the foregoing, the following could be considered as among possible forms of contribution by parents to the cost of education:

- (a) parents and local authorities should contribute to the cost of educational facilities through various self-help schemes by building new schools, additional classrooms, teachers' houses and by providing furniture;
- (b) parents should be responsible for the cost of stationery (pens, pencils, exercise books, etc.);
- (c) parents should be responsible for the cost of bedding, cutlery and plates since, in any case, parents provide these items when their children return home on holidays or when the children are attending day schools;
- (d) parents should contribute, as at present, to meet the cost of uniforms and contribute to the School Fund.

34. It is the policy of the Party and Government which has since been embodied in the law, that fees shall not be charged in Government schools. In terms of Statutory Instrument, No. 254 of 1973, Cap. 234, The Education (Primary and Secondary Schools) Regulations,

1973, no tuition or boarding fees shall be payable in respect of any pupil enrolled at school to which the provisions of this instrument apply. In this regard the Party and Government will continue to provide free education. The Regulations apply to Government and Government Aided schools but not to private schools which are provided for separately.

35. The Education Act, however, does not forbid contribution to other costs such as uniforms, examination fees, school fund or any other fund which may be prescribed by the school authorities and to the establishment of which the Minister responsible for education has given his approval.

Ministry Headquarters facilities

36. At present, the Ministry of Education Headquarters is very inadequately accommodated as there is not enough space for various officers administering various functions and rendering supporting services. For example, the Personnel, Accounts, Inspectorate, and Planning sections, etc., are all very poorly provided for. Three or four officers share a small room and it is difficult for them to operate efficiently. Records cannot be properly kept and the Registry cannot arrange files properly to ensure orderly flow of work and processing of documents expeditiously.

37. The present Ministry Headquarters building cannot cope with the present demands of the educational system and it should be even more difficult during the implementation of the reforms. The Ministry of Education should, therefore, be provided with a new Headquarters in the form of a purpose-made building next to the Educational Services Centre for which the construction of Phase II is to begin in 1978. This would ensure easy co-ordination and consultation with the other educational services apart from providing enough room for the Ministry.

CHAPTER 15

ORGANISATION AND MANAGEMENT

1. As already stated in the Chapter dealing with mobilisation, without an efficient system of management and supporting services, much of what has been proposed and recommended in previous chapters may not be implemented. It is of great importance, therefore, to ensure that the organisational structure shall be adequate and designed in such a way as to meet, in function and effectiveness, the demands that will be placed on it from time to time during the implementation of the educational reforms.
2. Whatever organisational structure may be chosen, there must be team work and proper consultation, both vertically and horizontally, to ensure that implications of the decisions are properly understood by everyone. Secondly, the role each person is to play in supporting the implementation of the decisions should be clear at every level. Consequently, all workers in the educational system must have full appreciation and understanding of the goals and objectives of educational policy and should develop or acquire the *esprit de corps*. It will, therefore, be part of the workers' education to enlighten all cadres, such as directors, assistant secretaries, inspectors, accountants, education officers, secretaries, typists, clerical officers, drivers, office orderlies, etc., so that they can understand the importance of their own role or contribution to the proper functioning of the education system as each of them is a link in the management process.
3. Generally, Government Ministries operate under the principle of collective responsibility and there can be no departure from this as it is the cardinal point in the Zambian style of participatory democracy. In the Zambian situation the organisational structure of any Ministry must conform to the accepted pattern which is more or less influenced by the prescribed regulations governing the channels which have to be followed in decision-making. Cabinet, Central Committee and Parliament are some of the most important institutions with which the Civil Service has to work in implementing decisions. The final authority in any Ministry rests with the Minister responsible and there is adequate legal provision to enable him to exercise such authority. The Civil Service in each Ministry is responsible for interpreting and implementing decisions and ensuring consultation and co-ordination with Ministries, Departments, Parastatal Organisations, Agencies, etc.
4. For the time being, existing Departments and Sections in the Ministry of Education will continue. However, as the educational reforms are implemented, it may be necessary to re-organise the structure of the Ministry. The Adult Education Section should, in view of increased responsibilities, be immediately upgraded to form the new Department of Continuing Formal Education.

The administrative functions of the Examination Council

5. In view of the localisation of the School Certificate Examination, there is need to re-organise the functions and administrative machinery of the Republic of Zambia Examinations Council. To this end, Statutory Instrument No. 256 of 1967, Cap 234, The Education (Examinations) Regulations, will be amended to provide for the establishment of the Secretariat and Executive Committees whose members shall be professionally qualified persons with relevant experience in the administration and conduct of examinations.

The Executive Committees to be established shall include the following:

- (a) Executive Committee on School Certificate Examinations.
- (b) Executive Committee on Technical Education Examinations.
- (c) Executive Committee on Grades 7 and 9 examinations (which later may only cater for Grade 9 after the achievement of nine years universal basic education).
- (d) Executive Committee on Teacher Education Examinations.

6. The Secretariat shall be accommodated in a specially designed and constructed building to take into account the need for security. Special attention will be paid to security in the preparation, printing, distribution, storage, etc., of examination papers.

Statutory bodies

7. There are a number of statutory bodies whose establishment has been provided for under appropriate legislation. Such bodies include the Local, Regional and National Councils of Education, the Parent-Teacher Association, the Republic of Zambia Examinations Council, the National Council for Technical Education and Vocational Training, the Zambia National Council for UNESCO, etc. These should continue to operate in the same manner as at present in accordance with the relevant provisions of the Acts. However, to this list may be added any other statutory bodies which may be established in the course of implementing the educational reforms.

8. The performance of these statutory bodies should be improved. There is need, therefore, to improve the quality of the membership of all these organisations. In appointing or nominating persons to the membership of these statutory bodies, due emphasis should be placed on individuals' interest in educational matters and their ability to participate and contribute meaningfully to the work of the statutory body concerned. Consideration should also be given, where appropriate, to students' participation in educational matters depending on the level, age and the ability of students to contribute. For instance, students at Colleges and the University of Zambia could be appointed as members of some of these bodies.

Participation at the local level

9. In accordance with the policy of decentralisation, local participation in decision-making on educational and administrative matters is imperative. Before effective decentralisation and efficient execution of decisions can take place, it will be necessary for the Party in each Ward or Section and the local people, to learn and understand educational policy, appreciate the problems and generally to share the expertise and experience of the people in the field of education with whom they must work in very close liaison. For example, social and political problems may adversely affect the smooth running of a school and the quality of education offered. The problems of the school must, therefore, also be seen from the local context. In particular, local representatives as individuals or members of the Local Council of Education, or as Councillors, should be encouraged to participate and be obliged to assist the school.

10. Despite the policy of decentralisation, there is still a tendency on the part of many people in authority at the local level to await decisions from Lusaka in areas where they could decide on the spot and take appropriate action. Officers at the local level, i.e., Chief Education Officers, District Education Officers, Inspectors of Schools, Heads and Deputy Heads and supporting staff should all ensure that teachers are fairly treated and concern shown for their personal welfare or needs.

11. It is of the utmost importance that teachers are provided with up-to-date information regarding their conditions of service and other matters related to their profession. Teaching Service Regulations have now been incorporated in the revised and latest General Orders (1976 Edition) issued early in 1977. Although copies of the General Orders are dispatched to each Regional Headquarters for distribution to schools, there are not always sufficient numbers to give to each teacher. Heads and Deputy Heads of educational institutions are, therefore, obliged to ensure that teachers have access to copies kept by them. This should also apply to any other documents which teachers should be provided with but are in short supply, such as curricula, syllabuses, handbooks, etc.

12. In an effort to decentralise decision-making, shorten the channels of communication and the time required to process urgent matters, the Teaching Service Commission holds sessions in each Region. This arrangement should continue but the sessions should be held more frequently to ensure speedy and effective decentralisation of decisions.

13. The Party at the local level, and in conjunction with Local and Regional Councils of Education, should also concentrate on promoting and actually carrying out self-help schemes to provide more classrooms, teachers' houses and furniture for schools, and on assisting

School Production Units in their production work generally, in transporting inputs or produce and in organising the marketing of their produce or products.

14. The foregoing are some of the ways in which the Local Authorities, local Party officials, local institutions or organisations and the people can demonstrate to the Party and Government their readiness to shoulder more responsibilities involving decisions of a more complex nature whose execution may require more initiative, resourcefulness and innovative approach. Participatory democracy can be more meaningful in this way since local communities will be involved in the welfare of their educational institutions and in the improvement of their performance.

Participation at the institutional level

15. There are, in existence, College and School Representative Councils at secondary level which are generally concerned with the welfare of the students. These organisations are not covered by legislation like the Parent-Teacher Association. They are, therefore, administrative in nature. Depending on the Head, such organisations may not be properly organised and effectively administered in all schools. These councils should, however, continue to exist and to be established administratively; but they should be better organised; their scope should be widened so as to be recognised not only by the Head of the institution but also by the Parent-Teacher Associations and the Local Councils of Education which, among other things, should discuss their recommendations. Members of Students' Representative Councils should be invited when their recommendations are being discussed. They should serve on certain school committees as is the case now with the School Fund Committee where, according to Statutory Instrument No. 46 of 1975, Cap. 234, Education (School Accounts) Regulations 1975, the pupils are appointed by the Head of the School, in the case of primary schools or elected by the pupils, in the case of secondary schools. Students should also serve on Production Unit Committees as has already been mentioned. In colleges, similar organisations to Parent-Teacher Associations should be established. Once per year joint meetings of the Parent-Teacher Associations and Students' Representative Councils should be held to discuss or review problems affecting the welfare of students and the school generally.

16. Students' unions are well established only in some colleges and at the University of Zambia. Schools and some higher educational institutions do not have unions. Students' unions in educational institutions, even where they are better organised as branches of the National Union of Zambia Students, have tended to assume a militant posture common to trade unions. However, it is healthy for students to be able to express their feelings on a variety of issues, provided that such expression is constructive and not of a violent nature. Self-expression by students is part of their learning experience and, therefore, they should be encouraged to participate in discussions on various problems which may confront the nation since they are part of society. In general, however, Students' Unions have tended to concentrate on wider aspects of students' interests, national and international issues. Matters of direct interest to particular institutions or to the quality of education and training offered have not been highlighted to the same extent and yet there is also need for meaningful involvement of students in day-to-day matters and in the running of the institutions to which they belong. Students should be free to discuss any matters directly concerning their lives and welfare and, indeed, matters affecting their institutions. Students' unions and Students' Representative Councils could exist side by side in institutions to play specific but complementary roles. It is, therefore, recommended that Students' Representative Councils should be established where they do not exist and students encouraged to contribute to the smooth running of the institutions.

17. The University of Zambia is already implementing the idea of student participation in educational matters and affairs of the University. The Senate recognises the importance of student representation and has taken advantage of Section 8 of Part II of Cap. 233, the University of Zambia Act, which allows "such other persons, not exceeding three, as the Senate may appoint" to be members of that body. There are also two student representatives who are members of the University Council and there are student representatives who attend, as members, meetings of the Boards of Studies. Such participation should be encouraged in other educational institutions.

CHAPTER 16

THE ROLE OF STUDENTS IN NATIONAL DEVELOPMENT

The need for clear objectives in youth policies

1. The role of youth in political, social, cultural and economic development has been recognised for a long time. At least, during the struggle for Independence, the youth, both in school and out of school, took their place alongside the men and women who fought for Independence. On attainment of Independence, it was necessary to find new challenges for them and ensure that their participation in national life assumed a new approach to enable them to be practically involved in various aspects of national development.
2. Against this background, it was necessary, after Independence, to formulate policies and set goals and objectives for youth development so that the role that young people ought to play in national development could be recognised and brought to the forefront. The trend has been to devise programmes that provide for the needs and activities of all the youth, whether in school or out of school; for example, programmes associated with the former Youth Service, the Zambia National Service, rural reconstruction, school-leavers' skills training projects of the Ministry of Education, Young Farmers' Clubs and other youth programmes undertaken by voluntary agencies. It is clear that such needs could be met satisfactorily if all agencies that deal with youth are equally enthusiastic, effectively mobilised and co-ordinated. There is, therefore, need for concrete programmes, especially for out-of-school youth, an area where there is a massive waste of human resources because of the lack of concrete plans for youth development.
3. Youth should be aware of their responsibilities which will enable them, through their personal development, to make a contribution to national development. The Party and Government should, therefore, establish training for youth to be engaged productively in whatever sphere of activity they may choose. In an effort to inculcate self-reliance, through production activities that would facilitate income-earning later in the life of the youths, the Party and Government, with the assistance of voluntary agencies, should devise concrete programmes for out-of-school youth.
4. The youth in educational institutions, who are the subject of this chapter, do not present difficulties in terms of access to them by various agencies and organisations and exposure to various training programmes. They, therefore, have opportunity to acquire some skills whilst they pursue their studies. On the other hand, the youth outside school are difficult to reach and may not be easily organised for programmes by such agencies or departments as fall under the various Ministries.
5. The previous chapters have dealt with how and what the educational system, the Party and Government should do to develop students in order that they become good citizens and effective future workers. This chapter deals with how and what students, as young citizens, should contribute to education, the school, the community and, therefore, to national development, taking into account their limitations.

The nature and extent of students' contribution to national development

6. Students have potential for significant contribution to national development. The potential can be harnessed and properly directed towards the achievement of national goals associated with development in each area of need. The students should, therefore, be made to realise that as they grow mentally and physically, and indeed advance in education, society can expect an increasing contribution from them whilst they prepare themselves for adult life. However, there is need to strike a balance between what may be expected by society from youth in educational institutions and what they can really achieve.
7. In the first instance, students, as they grow up, have many things to learn, both at school and outside school. Such learning is important for their own development and up-bringing. Accordingly, students cannot be expected to have a lot of time at their disposal

to spend on their contribution to national development at the expense of their studies. To do so would imply arresting their own development in essential areas of learning. Students should, therefore, do enough to make their contribution meaningful to national development but should, under no circumstances, be expected to contribute more than their fair share.

8. Secondly, the extent to which the students may be asked to contribute should depend on their age, educational background and the experience that they may have. It may also depend on the knowledge they have acquired through exposure to various activities in the nation and international activities in case of older students. For example, students taking Agricultural Science should be expected to contribute more in food production because of their knowledge and interest. Similarly, students in technological fields should contribute more in these areas as they have more opportunities and facilities from which to learn.

9. Thirdly, environment will always play an important role in determining the nature and extent of students' contribution to national development. The situations which are conducive to productive learning and lead to innovation should be encouraged to ensure that the students are maximising their efforts to learn new things and adopt them in various walks of life. An even more important environment, particularly at an early stage, is the home situation. Children should be given encouragement and this is possible when there is understanding on the part of parents who should inspire their children to reach greater heights and be proud of what they can do. On the other hand, there are some homes which adopt a "couldn't care less" attitude and so the children acquire wrong social attitudes and do not engage in production and other useful activities which really should be initiated in the home as they are part of the child's up-bringing.

10. Fourthly, there is sometimes a conflict of values, not only in social outlook but also in economic approach to problems. The conflict of values takes place since students, as a group, constitute fertile ground for cross fertilisation of ideas, some of which can have good and beneficial effects while others can be extremely disruptive. There are, however, also instances where, instead of assisting the students to evaluate new ideas and in the process learn how to think clearly, such ideas have merely appealed to their emotions, making them accept uncritically the new values which may turn out to be quite meaningless in their own environment and culture. It is here that education ought to be more careful in highlighting the contribution of students to social and cultural development. The object lesson should not be to stifle away self-expression or to prevent critical analysis of issues in local institutions or indeed in society; it should be to enlighten and make students more knowledgeable so that when they analyse and evaluate issues, they may be able to understand, interpret and draw correct conclusions.

Students' contribution to educational development

11. The best contribution a student can make towards national development is to be an effective learner so that the investment in education does not go to waste. It has been established that educational experience of each generation of students can be used in such a way that it can benefit other generations of students who follow afterwards. In many ways, outstanding academic work of former students in institutions can be put to good use, as well as the traditions which they may have set up, by incoming students.

12. Students should have the right attitudes towards learning so that the knowledge and skills which they acquire shall not only help them but shall also be of some benefit to their local communities and to the nation as a whole. The education each student gets should, therefore, be regarded as personal only up to a point, since the success of each such student must be the success of the nation. Opportunities must arise where the student must share his knowledge and expertise and be a catalyst in the socialisation process of education. The right types of attitudes can properly be cultivated at school, beginning from early stages. The educational programme, therefore, must be orientated towards these goals.

13. It is important also that recognition be given to such areas which at the moment may still be thought to be outside the school curriculum. Students should participate in many varied programmes in the community. The importance of students being involved in such

programmes as literacy campaigns, public health, population census, nutrition work, and many other types of services cannot be under-rated. In this way, students should offer service to their communities, using their knowledge and expertise and thus contributing to developing people directly by assisting them to understand what they should do, why and how to achieve better results.

14. Further, research work by students in such programmes as study of the ecology of river regimes associated with bilharzia, practical assignments in social and economic geography and participation in planning, explaining and implementing such programmes as village regrouping should be encouraged. Students' contribution to such programmes should constitute educational and socialisation processes in the communities involved. The contribution may not be easily quantifiable, but there can be no doubt that it can be considerable and of an inestimable value.

Students' contribution to social and cultural development

15. It is unlikely that there can be any meaningful development in other fields unless there are accompanying social and cultural aspects to interpret the advancement or development in such fields in the right context; for there is an inter-dependence between the cultural and social values of a particular society and meaningful national development. Unless these social norms and cultural values feature highly, Zambia is unlikely to profit much from any advances since there would be a crack in the foundation of the pillars of society, leading to uncertainty.

16. Students must, therefore, as at present, continue to participate in social and cultural fields such as the performing of arts, drama, music, progressive and acceptable traditional ceremonies and festivities, etc; they should be able to express themselves without the fear of under-scoring or deflecting themselves, and those who watch them, from norms and values of the society. In this regard it must be recognised that Zambia, unlike most African countries, has been lucky to be much stronger in social and cultural heritage and can, therefore, contribute to the pool of international experience and understanding. The era when African scholars had to go to Europe in order to study and interpret the material in connection with the life and work of their own societies at home has come to an end. Through international co-operation, agencies can establish learning and information centres, libraries and offer research programmes related to work that can help to preserve the original African image. This should foster authenticity and enrich Africa's contribution to the full understanding of man and his environment. For example, through such facilities, Zambian students and scholars should take advantage to expose, expound and develop the Zambian concept of Humanism.

17. Much emphasis has been placed on students' faults in common with out-of-school youths, such as drunkenness, dagga-smoking, arrogance, permissiveness and many other objectionable traits so often condemned by social workers, churches, parents and the general public. These traits, however, may merely be symptoms of much more deeply rooted problems arising from a loss of cultural and social values which are being eroded by modern education and other influences. The real indiscipline, therefore, may not be in the youth or student himself, but with the whole community or the whole nation; for it is the older members of society who lose their own norms and values long before the symptoms of such loss manifest themselves through the youth.

18. In their contribution, students must be assisted to ensure that the socialisation aspect of education does not destroy the cultural heritage and social norms, while at the same time it must be capable of interpreting, even though in a simple way, and bringing home to the village communities the advantages of modern education, technology and scientific advancement. In short, it is an advantage to know the cultural and social background of a community in order to help the people to appreciate and take advantage of modern science, technology and art. The techniques of modern education and art can be used to reflect the past and to express the feeling and mood of an era and so on. For example, drama activities of the Chikwakwa Theatre, which students at the University of Zambia have for some time now organised, have been very successful in this regard. The dances which school children

have been demonstrating during such occasions as open days for schools, agricultural shows, etc., are also part and parcel of areas which should be properly catered for. The play "Soweto" is a good example of an activity that portrays tragedy and has, as its theme, the fight against racism and colonialism, depicted by the various actors; on the other hand, the songs that are sung in the play and the feeling expressed through various actors depict the African cultural setting that in itself is as important as the theme of the play.

Students' contribution to political development

19. The Party and Government have already stressed the importance of political education. A beginning has been made through a publication by Freedom House called "Syllabuses on Political Education in Zambia" and through various seminars, courses for teachers and others. However, political education should not merely consist of facts regarding important events and figures that played a major role in the attainment of Independence. These facts are important but there is need to draw more relevant and appropriate object lessons from them. It is important and heroic to have fought for Independence but it is even more important to continue fighting to defend and maintain Independence in political as well as economic terms. There should, therefore, be concrete efforts towards socialisation and proper interpretation of the facts since, as already stated, the education of an individual, in addition to the benefits accruing to the individual himself, should be for and on behalf of the nation. For example, students ought to be challenged to participate in deciding what Zambia should be doing with her Independence; and what the students' own contribution should be in such a choice. In this way, students, without special effort on the part of the teacher, will be brought closer to practising Humanism, thereby directing their energies to the service of man; for Humanism teaches us, individually and severally, to serve man and recognise his worth.

20. Political education should, therefore, not merely consist of reciting passages from several publications or compendiums of political knowledge, but should seek to translate the substance of social achievement into positive action and interweave it into the fabric of society; it should seek to assess the past and extrapolate it into the present and future; to use the cultural background and social values as a mirror through which society, which includes students, can reflect its own performance and recognise areas of need, scarcity and where there is room for improvement.

Students' contribution to national productivity

21. It has already been stressed, in Chapter 8, that teaching production is a typical Zambian approach to a child's own up-bringing and that this should be encouraged even more when the child is in school. It is envisaged that the main line of students' contribution to national productivity lies through Production Units and such other projects as may be undertaken for the community by students or through joint effort between students and the people in each particular locality. It is not that students should repay the Party and Government for being educated freely, but that production, as an important area of their education, should feature in their training for life. Production, as has already been indicated, is important for cultivating the right attitudes, teaching skills and knowledge and inculcating the spirit of self-reliance while youth are still in school.

22. Self-reliance is a virtue that is necessary for the individual, the community and, indeed, the nation, if meaningful development is to take place and political and economic independence maintained. It should, therefore, teach students, who are part of the community, to contribute physically to national development apart from the educative influence that has been discussed above. Students should, therefore, participate in physical projects with the community or undertake such projects on their own. For example, they could build additional educational facilities by mobilising themselves to execute a specific project; because they are many, the project should be completed once it has started.

23. While a lot could be done during such occasions as Humanism Week and Youth Week, students' projects of this nature should conform to the pattern of useful projects, as these are important in adding quantitatively to development that communities may need in their

areas. Since production activity is to be an integral part of the learning process, it is clear that opportunity could be taken to properly plan projects in which there could be meaningful students' participation or contribution. Projects should be related to the fields of scarcity in order to answer the needs and demands of the particular local community. For example, it would be better if students would specifically participate in a project (in a village or township) that is specifically designed to fulfil the needs of the community there, rather than undertake token projects in the centre of town to celebrate Humanism or Youth Week.

24. Munali secondary school is a good example of students' contribution to national development in physical terms. The bricks were made by one set of students during the holidays while another set of students built the walls, erected the roof and put final touches, assisted and supervised by building teams. There is no reason why this example cannot be repeated elsewhere, whether at primary or secondary level, provided that proper planning is done well before implementation starts. The initiative, however, should come from the students themselves and such efforts should not be limited to building schools; clinics, community centres and libraries could all be undertaken in a similar manner where the students have mobilised themselves to fulfil the needs of the community by executing a specific project to serve the particular community.

General

25. The youth can be categorised according to age and each age group has its own problems which must be tackled. The youth in educational institutions, generally referred to as students, can be further categorised into those who are younger and are in primary schools and those who are older and are in secondary schools, colleges or universities. There are also out-of-school youth who constitute a substantial proportion of the youth population in Zambia and whose problems are different from those of the youth still attending educational institutions. This group can be further divided into urban and rural youth, but due to the influx of rural populations into urban areas, the rural youth also flock to town. There are employed and unemployed youths and it is the out-of-school unemployed youths in rural, as well as urban areas, who present the Party and Government with the most harassing problems and for whom there has not been adequate and definite training programmes, both in scope and variety, to involve them in income-earning openings.

26. As the problem of the out-of-school youth cannot be properly dealt with in detail in a document that is mainly concerned with educational reforms, these problems should be dealt with by the Party which should closely examine what so far has been done and is intended to be done for such youth. Their contribution to national development should be dealt with separately if only to highlight the complexity, the urgency and the variety of the needs of the out-of-school youth.

IMPLEMENTATION

1. It must be emphasised, as stated in Chapter 2, that the recommendations on policies and the structure of the new educational system are an agenda for action. To translate the envisaged educational reforms into a system that works and has integrity will call for a pragmatic approach.
2. As it has been stated already, it is not in the nature of educational reforms that all the various proposals or recommendations can be implemented immediately. Thus there are aspects of the present proposals which should be implemented fairly soon and, in fact, preparation has already begun in connection with such areas. At the same time, there are some areas of the reforms whose fulfilment will be achieved only in the long term. Periodical review will be necessary since circumstances may require a number of assumed strategies to be changed in order to cope with the new factors and constraints which may have a bearing on implementation.
3. The implementation exercise will be closely related to the nation's ability to confront the major constraints on the expansion and improvement of education: namely, the insufficiency of qualified Zambian teachers, inadequate educational facilities (buildings, materials and equipment) and financial resources.
4. The policy to expand and improve the whole system of education and to provide basic education for every child is a desirable goal; but ten years of compulsory education, as discussed earlier, cannot be achieved immediately due to inadequate facilities and insufficient manpower and financial resources. The Ministry of Education should, therefore, progressively implement UNIP policies by providing nine years universal basic education rather than "ten years compulsory basic education," as recommended in paragraphs 5 to 11 in Chapter 3. In any case, Zambian parents and their children are now clamouring for education and do not have to be compelled. As more teachers, educational facilities, financial and other resources become available, the Ministry of Education should:
 - (a) more aggressively improve the quality of education and services;
 - (b) eliminate regional and other inequalities in educational provision;
 - (c) provide opportunity to every child of school-going age to enter Grade 1;
 - (d) provide seven years of full-time education for every child as a first step towards the achievement of nine years of basic education;
 - (e) clear the bottle-neck at Grades 4–5 levels so that every Grade 4 pupil, as far as possible, proceeds to Grade 5 and continues to Grade 7;
 - (f) progressively increase Grades 8–9 places so that, in due course, every child who completes Grade 7 shall be able to enter Grade 8 and complete Grade 9;
 - (g) expand and provide a wider range of continuing (part-time) education programmes;
 - (h) facilitate the professional development of teachers and general staff of the Ministry of Education;
 - (i) more effectively co-ordinate, on a national basis, provision for primary and secondary education to enable equal opportunity in enrolment within Regions and to facilitate Grade 7 students to proceed to Grade 8 within the same Region;
 - (j) ensure that there is proper and adequate consultation in the preparation or planning of programmes and their content in various stages of education;
 - (k) improve the Production Units' programme introduced in educational institutions in 1975;
 - (l) ensure that new buildings are simple in design, durable and constructed from as much local materials as possible;

- (m) encourage self-help projects by communities and ensure that educational projects shall be executed to completion;
- (n) ensure continuation of present policy that all new schools shall be built with their complement of teachers' houses.

5. As indicated earlier, one of the first steps in the process of achieving nine years of universal basic education is for the new system to enable every child to enter school at the age of seven and receive at least seven years basic education. It is, therefore, intended in the short term to concentrate more resources in this phase in our effort to attain nine years universal basic education.

Maximisation of the use of time and facilities

6. More economic use of time and facilities will be carefully studied by the Ministry at all levels of the education system. For instance, one way would be for Grades 1–7 to have double sessions.

7. Where there are fewer teachers it may also be necessary to double session teachers in Grades 1–4. This happens even now in some schools. The Ministry will conduct further studies before this method of maximising the use of facilities and manpower is adopted as a long-term measure.

Curriculum development and change

8. After the recommendations have been accepted by the Party and Government, specialists will study them carefully and begin work on curriculum design and development. Accordingly, the following programme will be instituted:

- (a) The work on the new curriculum and syllabuses should begin in 1978 and be completed within three to five years.
- (b) The curricula for Grades 1–7, 8–9 and 10–12 will be designed to achieve a meaningful continuum.
- (c) Syllabuses and Regulations will be made after completing curriculum design.
- (d) In preparing syllabuses for Grades 10–12 programmes, specialists and others involved will take into account the link between these Grades and Grades 8–9 on the one hand and Grades 10–12 and third stage education programmes on the other hand.
- (e) Strategic points in the curricula and in the time scale for implementation will be identified to facilitate smooth introduction of new curricula and syllabuses where this will be the case. (*Chapter 6, paragraph 10.*)
- (f) Since localisation of examinations can still be done with existing syllabuses provided the Regulations, the administration of examinations and decisions are made by the Republic of Zambia Examinations Council, the localisation of School Certificate Examinations will still be achieved by 1980. The syllabuses in use now could form an interim curriculum if the curriculum design and development are not completed early.

Special education

9. During the Third National Development Plan (TNDP) Special Education will be given proper and adequate attention and training programmes for teachers of the handicapped will be expanded in terms of enrolment, range and variety of courses to cater for the different types of handicaps. The Ministry will also set up machinery for initiating and co-ordinating the identification of handicaps affecting children in connection with their education.

10. The Party and Government should also initiate action to improve many aspects of special education in accordance with the stipulations under paragraphs 15 (b), 18 and 21 of Chapter 5.

Teacher education

11. The University of Zambia should start enrolling only those students who are interested in the teaching profession as direct entrants to the School of Education beginning from the 1978 academic year. Emphasis should be placed on the training of more science teachers.
12. The quota system at the University of Zambia, whereby there is a bias in favour of the School of Education in the allocation of scholarships, should continue in order to accelerate the supply of teachers.
13. As from January, 1978, Chief Education Officers shall select, as candidates to serve as untrained teachers, only those who can also meet the minimum entry qualifications to appropriate teacher training institutions.
14. Teachers' centres and resource centres programmes will be established during the TNDP since these are an important aspect of mobilisation.
15. The Party and Government should intensify the training of technical and vocational teachers, to ensure that colleges, trades training institutes and schools will be adequately staffed without undue delay.
16. Viable staff development programmes will be initiated immediately for teachers in teachers' training institutions and technical colleges early in the Plan period.
17. There will be expansion in seven primary teachers' colleges during the TNDP to increase capacity and out-put by creating additional boarding places. One new primary teachers' college will be erected during the Plan period.
18. Expansion will be undertaken to Nkrumah and Copperbelt secondary teachers' colleges during the TNDP to increase enrolment. One new secondary teachers' college will also be built during the Plan period.
19. Construction of the three additional trades training institutes will be undertaken during the Plan period to cater for additional 900 students.

Mobilisation

20. The Party and Government should embark on mobilisation during 1978 in accordance with the recommendations in Chapter 14 dealing with mobilisation.

Youth development

21. The Party and Government should implement the SNDP recommendation, in the Third Plan period, that the Department of Youth Development be established directly under the Party.
22. The Department of Youth Development should report directly to the appropriate level of the youth wing of the Party which is better able to reach the out-of-school youth and to highlight the complexity, the urgency, the variety of needs and problems of youth in this category.
23. During the TNDP the Department of Youth Development should concentrate on skills training, production-orientated and income-earning programmes.
24. The Department of Youth Development, as an implementing organ, should be assisted by the Party organisation at village or ward level to identify the needs and provide definite and concrete programmes related to development areas for such youth

Financial implications

25. The ultimate financial implications to achieve nine years universal basic education have been indicated in Chapter 4, even though the figures did not include expenditure on teacher education. The figures in Chapter 4 are calculated projections on a static basis intended to give an over-view picture of the magnitude of the costs which would be incurred over a

period of time it might take to implement the educational reforms. While the time to initiate implementation of the educational reforms can be determined and indicated, it is not possible to determine with any amount of certainty how long it will take to complete the reforms; the period of implementation will depend largely on the amount of financial and other resources available and on the capacity of the system to cope with the changes (see paragraphs 1 to 4 above).

26. Therefore, only some of the major aspects of the reforms will be implemented in the TNDP period. It is clear that complete implementation will encompass successive development plans. However, it is necessary to give some indication as to what the financial implications would be for the TNDP, which will be the first plan to cover the reforms.

27. The summary below covers some of the main areas for implementation during the TNDP, which amount to a grand total of K180.65m for capital development:

(1) *Primary education*

- (a) 26,270 places should be created to enable every school-going child to be enrolled in Grade 1.
- (b) In addition, 45,960 places should be created to eliminate the bottle-neck at Grades 4–5 levels.
- (c) The capital costs for new expansion in this sector should partly be derived from self-help in various forms, but the exact amount from self-help can only be determined when these self-help projects have been identified and initiated. This is because self-help is largely of a voluntary nature.

Capital costs K101m

(2) *Junior secondary education*

A total of 11,040 Grade 8 places should be created. Although this number still falls short of the total requirement for places, the progression ratio at least will be maintained at 20% instead of allowing it to fall, which it would do, in any case, during the Fourth Plan if additional places are not created early. For additional places to be available early in the Fourth Plan, construction should be completed during the Third Plan.

Construction of new facilities K18.14m

(3) *Senior secondary education*

- (a) There will be no additional places created during the TNDP since the strategy will be to concentrate on expansion of the primary and junior secondary sectors towards the achievement of universal basic education. However, additional places at senior secondary level should progressively be created in the Fourth Plan.
- (b) There will be some expenditure for modification and improvement to laboratories, workshops, home economics and practical rooms in order to accommodate the new Grade 10 streams.

Capital costs K1.60m

(4) *Special education*

Additional units for all types of handicaps should be established, but priority shall be given to the mentally handicapped who do not have suitable educational facilities at the moment.

Capital costs K3.75m

(5) *Continuing education*

Since there will continue to be a large number of school-leavers at each terminal point, continuing education should play a major role. However, the bulk of expenditure is on recurrent and not on capital needs because students use whatever educational buildings are available. Expenditure will be mainly on Adult Education Centres.

Capital costs K0.25m

(6) Teacher education

In teacher education 1,900 places should be created in the primary sector and 750 places in the secondary sector. The total cost during the Plan period would be K15.06 million of which K9.25 million is to be spent on primary school teachers. These figures exclude the expenditure to be incurred on teachers trained at the University of Zambia, Luanshya Technical and Vocational Teachers' College, the Natural Resources Development College and at the Evelyn Hone College.

Capital costs **K15.06m**

(7) Staff development

Staff development programmes will require capital costs of **K0.46m**

(8) Technical education

There should be expansion and extension to existing facilities and three new Trades Training Institutes should be built to increase the total number of students from 4,990 to 6,970.

Capital costs. **K24.84m**

(9) Educational services

To implement the design and development of curricula, examination, printing, evaluation, educational broadcasting, etc., additional facilities should be built during the Plan period.

Capital costs **K2.08m**

(10) Library services

For expansion of regional and district libraries, funds will be required for construction of buildings.

Capital costs **K1.47m**

(11) Youth development

To design and implement youth development programmes in production training, community-based skills training projects, youth production schemes, etc.

Capital costs **K8.00m**

(12) Headquarters building

In order to implement educational reforms efficiently and provide adequate professional administrative facilities, a headquarters building should be constructed in the TNDP period.

Capital costs **K4.00m**

28. The K180.65 million mentioned above is mainly an indication of the capital expenditure during the Third Plan period, to provide additional educational facilities for quantitative improvement towards the achievement of nine years universal basic education. Equally important is the achievement of qualitative improvement which should progressively take place as the various recommendations are implemented. However, the expenditure to cater for the improvement in the quality of education will be more of a recurrent nature. As most of it would relate to administrative and professional functions or programmes, the amount would depend on many factors and can, therefore, only be accurately determined when it is required for a specific programme in sight, such as preparation of materials, books, equipment, design of curricula, in-service training programmes, staffing costs, etc.

APPENDIX 1

SUGGESTED PROFESSIONAL CODE FOR THE TEACHER IN ZAMBIA

As discussed in Chapter 11 on “Teacher Education, Supply and Retention”, a professional code should be based on ethical principles, among which could be the following:

- (a) It is the professional obligation of the teacher to ensure that his primary duty is to help the student to learn and develop his personality through acquiring the right attitudes in terms of the norms and values of society and principles of learning;
- (b) The teacher holds a position of trust. He should not use his position to exploit the student or his profession. His personal relationship with the student, who has been entrusted to him at a tender age and with all those he may come into contact in the execution of his profession, should be above reproach; in particular, his conduct should be exemplary.
- (c) The teacher shall contribute to the growth of his profession through improvement of self and willing participation and involvement in professional activities in his work so that he can be able to represent or speak competently and honourably on behalf of his profession. He should have respect for his professional colleagues, be willing to assist them, maintain a cordial relationship with them and, above all, aspire to excellence in his profession.
- (d) The teacher shall honour his obligations to his employers by recognising and respecting the employers’ authority just as the employer recognises his rights; and he shall conduct professional business, including matters relating to his grievances, through proper and established channels.
- (e) The teacher shall recognise and conform to the pattern of behaviour and conduct expected from professional persons by the general public. He shall also encourage their participation in the affairs of the school through appropriate channels.
- (f) The teacher shall honour the obligations to his profession placed on him by the Code. He shall obey the sanctions imposed on him by virtue of the application of the Code but shall have the right of appeal to the appropriate body.

Following the principles, such as those above, rules or a code could be drawn up to spell out in detail the various aspects implied in the ethical or professional principles.

Chapter 18

Summary of the Main Recommendations

CHAPTER 18

SUMMARY OF THE MAIN RECOMMENDATIONS

The major recommendations of the proposals contained in Chapters 3 to 16 are summarised in this chapter for convenience or reference. It is, however, important to read all the chapters in order that the facts and rationale behind each recommendation are properly understood in the right context. Reading the summary of the recommendations is not, therefore, a substitute for reading all the chapters carefully.

Chapter 3

1. Educational reforms should entail changes and adjustments in various aspects of education, including changes in structure, curriculum content, methods of teaching, improvement in teacher education, educational facilities, organisation, etc. (*Paragraph 1.*)
2. Appropriate teacher education should be undertaken to enable the teacher to be involved in the change and to make necessary adjustments in his own attitude and approach, improve his knowledge and understanding so that he can meaningfully contribute to the success of the reforms. (*Paragraph 1.*)
3. Educational reforms should seek to improve quality without sacrificing quantity. (*Paragraph 2.*)
4. While the general policy to provide universal basic education remains unchanged, the goal should be to provide nine years universal basic education instead of ten years compulsory basic education. (*Paragraphs 4–10.*)
5. When nine years of basic education is achieved, curriculum organisation should consist of six years of primary, three years of junior secondary and three years of senior secondary. (*Paragraphs 6–9.*)
6. The new structure of the educational system should be as described in this chapter and represented in the schematic diagrams at pages 10 and 11. (*Paragraphs 11–16.*)
7. The first step in achieving nine years of universal basic education should be to enable every child of school-going age to enter Grade 1 and continue to at least Grade 7 during the interim period. (*Paragraphs 13–15.*)
8. During their National Service, students should continue with their formal education by part-time study where this is possible; students should also be engaged in activities that help to develop talents in fields related to their previous education. (*Paragraphs 17–22.*)

Chapter 4

9. The Party, Government and people of Zambia should be aware of the fact that the task to provide nine years universal basic education is immense and they should clearly understand the problems arising from present imbalances in the system, financial and other implications. (*Paragraphs 13–15.*)
10. Specialists and teachers should take into account the need to acquire knowledge, essential learning and practical skills in designing curricula, syllabuses and other materials; students should develop critical understanding of the subjects. (*Paragraphs 15–24.*)
11. Skills training programmes for Grades 7 and 9 school-leavers, undertaken by institutions outside formal education, such as community-based skills training projects, voluntary agencies skills training projects or any other such programmes carried out by Departments or Ministries with the co-operation of international agencies, should be co-ordinated and run by the Commissioner for Youth in conjunction with the youth wing of the Party since the Ministry of Education does not have the capacity and manpower to effectively reach the youth outside educational institutions. (*Paragraphs 27–31.*)
12. The development of curricula should be regarded as a continuous and linked process from Grades 1–12 since there should be links between successive grades and between

subjects; education in production should be even more relevant at Grades 10–12 level. (Paragraph 34.)

13. The curriculum should consist of core subjects which give general education and optional subjects, including practical subjects, which may be studied in greater depth. (Paragraph 35.)

Chapter 5

14. All handicapped children, like any other, should be entitled to education and should receive basic and further education. (Paragraph 5.)

15. The training of teachers for the handicapped should be intensified. (Paragraph 8.)

16. The specialists in the medical, social and educational fields should co-operate in the identification of handicaps. (Paragraph 10.)

17. Remedial treatment in handicapped children, where this is necessary, should be provided early so that treatment may be completed before embarking on their education. (Paragraph 13.)

18. Appropriate production activities should continue to be included in the curriculum for special education. (Paragraph 14.)

19. Special attention should be paid, by all concerned, to the recommendations dealing with important considerations to improve special education. (Paragraph 15.)

20. Educational needs of the handicapped should also be provided in the light of their medical, social and occupational needs. (Paragraphs 16–20.)

21. Specialist staff in special education at appropriate levels should be increased. (Paragraphs 18 and 21.)

Chapter 6

22. Educational reforms must encompass improvement of the curricula since it is the curriculum content and method that determine the type of education to be given. (Paragraph 1.)

23. Since mathematics, science and technology play a vital role in the development of the country, more importance should be given to these by curriculum designers without sacrificing the importance of other subjects. (Paragraph 4.)

24. Production and political education should also be given their worthwhile place in the curriculum. (Paragraph 6.)

25. Review or construction of new curricula materials and methods should be undertaken with a view to improving the quality of education. (Paragraph 8.)

26. Account should be taken of the importance of inter-relationships of subjects within the same curricula in constructing curricula and syllabuses. (Paragraphs 9 and 10.)

27. Teachers should participate, as they do now, in identification of objectives, design of curricula and syllabuses and should continue to serve on subject and curriculum committees. (Paragraph 11.)

28. Seminars and workshops should be organised, involving resource teachers, inspectors, teachers, the staff of the Curriculum Development Centre, teachers' colleges and the University of Zambia to discuss curriculum changes, write new material and evaluate them. (Paragraphs 13–18.)

29. Curriculum, syllabuses, materials and methods should be evaluated periodically to ensure that they are producing the intended results. (Paragraphs 20–21.)

30. English should continue to be the medium of instruction from Grade 1 but, due to practical difficulties, teachers may explain concepts in one of the seven official languages provided that the majority of pupils in the class understand the language. (Paragraphs 22–29.)

31. The status of Zambian languages should be recognised by improving the learning and teaching of these languages in educational institutions. (*Paragraph 29.*)
32. The University of Zambia should expand and intensify its work in Zambian languages so that they could be studied as subjects as opposed to merely using them in linguistic studies. (*Paragraph 30.*)
33. Good quality materials and literature in Zambian languages, covering a range of subjects and not confined to routine stories, should be produced. (*Paragraph 28.*)
34. Steps should be taken immediately to intensify local production of educational materials and equipment, exploiting local expertise to the full. (*Paragraphs 31–38.*)
35. Authors in Zambia should place their manuscripts with local firms as a first option; Zambians should improve their attitudes towards educational materials locally produced and intensify their preferential use. (*Paragraph 38.*)
36. The Party and Government should provide incentives to local firms manufacturing educational goods and should facilitate the importation of the necessary inputs where applicable. (*Paragraph 38.*)
37. In certain fields of education, importation of educational materials and equipment is unavoidable; therefore, importation of materials and equipment for such fields should continue. (*Paragraphs 39–40.*)

Chapter 7

38. Examinations should test knowledge and understanding and solicit some indication of what a student is capable of doing and how he thinks. In addition, examinations should be used for evaluation to discover areas of weakness and strength with a view to guiding the student. (*Paragraphs 1–7.*)
39. Examinations should be an incentive for hard work on the part of the students who may be inspired to reach excellence. (*Paragraph 8.*)
40. Examinations should be used to improve quality and maintain uniformity; they could also be used for certification, selection and placement to the next stage or to advanced programmes. (*Paragraphs 9–12.*)
41. Continuous assessment should be used as a tool in the teaching and learning process; it could also be used in certain cases such as practical subjects, as part of the certification examinations when a definite percentage of the total marks should be assigned. Continuous assessment could be used to determine borderline cases, arising from genuine personal difficulties or circumstances in examinations and selections. (*Paragraphs 13–19.*)
42. Students' non-cognitive areas such as attitudes, interests, human relations, etc., should also be assessed but the assessment should not form part of selection or certification; teachers should do their best to assess students by observation, interviews and other valid methods. (*Paragraph 20.*)
43. Until the achievement of universal basic education, selection examinations should continue; however, test construction should be improved so that such examinations shall not only test knowledge but also understanding and application. (*Paragraphs 21–24.*)
44. The Republic of Zambia Examinations Council should issue certificates showing grades attained in each subject instead of issuing certificates on aggregate performance showing divisions. (*Paragraph 32.*)
45. The Party and Government should provide more primary and secondary school places on the basis of achieving equal progression ratios throughout the country to reduce the problems that arise in selection. (*Paragraphs 35–46.*)
46. The Party and Government should initially concentrate on providing school places in those regions which have fewer school places and lower progression ratios to redress imbalances. (*Paragraphs 35–46.*)

Chapter 8

47. Production activities should emphasise educational value rather than economic value and should not be used in exploiting students for economic purposes. (*Paragraph 1.*)
48. Production activities of students should be part of their own up-bringing and should help to form the right attitudes and motivate the young people to make a meaningful contribution to national development. (*Paragraph 2.*)
49. There should be a proper balance between productive work, study and recreation, taking into account age and the physical condition of the individual so that the student is not overburdened. (*Paragraph 3.*)
50. Students should be able to recognise and appreciate, through personal participation, the contribution of the mental worker and the manual worker to national development. (*Paragraph 5.*)
51. Production activities undertaken collectively should be encouraged as they teach discipline, self-reliance, leadership, respect for the dignity of labour and enable students to derive personal satisfaction, a sense of belonging and achievement. (*Paragraph 5.*)
52. Production activity should form the basis for preparation necessary to fit the young people in life and enable them to contribute to the welfare of the school, the community and the nation. Political education and Humanism find full expression and practical application in students' contribution to the welfare of others. (*Paragraph 6.*)
53. Production work in educational institutions should provide opportunity to integrate theory and practice and testing or applying knowledge acquired in the classroom, workshop or laboratory. Production activity may also enable discovery of individual talent, especially those not related to the curriculum. (*Paragraphs 4 and 7–12.*)
54. Production training should be a compulsory subject which shall form an integral part of the curriculum; the range and type of production may vary according to age, health of students, the nature and circumstances of the particular Production Unit. (*Paragraph 13.*)
55. The Party and Government should continue to ensure that Production Units have access to grants or other assistance which may be required to provide initial inputs into production. (*Paragraphs 24–27.*)
56. The Party, Government, Local Authorities and communities should assist Production Units to resolve the problems of land, water, transport, etc. (*Paragraphs 28–31.*)
57. Production Units should keep simple records and books of account relating to their activities; students should be members of Production Unit Committees. (*Paragraph 33.*)
58. The community, teaching and non-teaching staff of educational institutions should all be involved to ensure viability of Production Units. (*Paragraphs 34–35.*)
59. Interest groups should be encouraged and their interest directed towards important areas of development such as Science, Technology, Mathematics, Agriculture, Humanism, etc. Therefore, the formation of various interest groups such as JETS should be promoted by the Party and Government through appropriate ministries and voluntary agencies. (*Paragraphs 36–40.*)

Chapter 9

60. The objective of technical education in Zambia should be to train Zambians to meet the needs and requirements for skilled manpower to facilitate more meaningful development in the critical areas of technological, industrial, agricultural and economic aspects of national development. (*Paragraphs 1–3.*)
61. The main method of providing technical education in colleges and trades training institutes under the Department of Technical Education and Vocational Training should be to concentrate on full-time pre-employment training in contrast to the apprenticeship method. (*Paragraph 4.*)

62. There should be expansion in enrolment and in variety of programmes for trades training institutes and colleges by rationalising and maximising the use of present facilities and by building new ones. (*Paragraphs 5–13.*)
63. Technicians' and craft programmes should continue to be offered in accordance with the present practice as the graduates of these programmes are the backbone of commerce and industry. (*Paragraphs 5–8.*)
64. Vocational, business, commercial and technical education should be intensified to meet the needs of the country. (*Paragraphs 9–13.*)
65. Technical co-operation through bilateral and international agencies should be encouraged and used effectively to accelerate the growth and expansion of various programmes under the department. (*Paragraph 11.*)
66. Staff development programmes should be properly planned, well organised and expeditiously executed; Technical and Vocational Teacher training should be intensified. (*Paragraphs 16 and 17.*)
67. Government and industry should recognise local qualifications which should be used as a point of reference for the purpose of appointment and salary scales. (*Paragraphs 19–20.*)
68. In order to enrol a reasonable proportion of Form III (in future Grade 9) school-leavers in trade training institutes, a substantial number of places in these institutions should be reserved for them while the remainder should be open to both Forms III and V. (*Paragraph 21.*)
69. There should be co-ordination between the University of Zambia and the Department of Technical Education and Vocational Training in regard to Advanced Certificate and Diploma programmes offered by the Department so that it can be determined what credit may be given to the Department's students who wish to pursue degree courses at the University later on in fields of their interest. (*Paragraph 24.*)

Chapter 10

70. Continuing education should occupy an important place in the educational system as through it the people have the opportunity to improve their skills and knowledge and increase their contribution to development. (*Paragraph 1.*)
71. Among the most important areas which should be properly planned and executed in continuing education are basic skills in literacy, practical and technical skills, general, cultural and political education. (*Paragraphs 3–14.*)
72. The Party and Government should persistently seek ways and means of aiding and promoting literacy effectively; the Department of Community Development should continue to be responsible for literacy programmes and should intensify its programmes to eliminate illiteracy. (*Paragraphs 4–6.*)
73. The Ministry of Labour and Social Services should establish the Zambia Literacy Advisory Board to advise the Minister on matters of broad policy and methodology. (*Paragraph 7.*)
74. The work of the agencies that deal with programmes concerned with improvement of basic skills should be complementary to the mobilisation of the rural, urban and peri-urban population and of the school-leavers to engage in productive work. There should be inter-agency co-operation and consultation to ensure maximum support for each programme. (*Paragraph 8.*)
75. In-service training programmes in technical knowledge and skills should also involve middle management levels, extension workers, technicians, stenographers, technologists, farm workers, miners, etc., whose improved performance is a key to increased production in quantitative and qualitative terms. (*Paragraphs 9–11.*)
76. There is need to extend the geographical spread of some of the programmes, particularly to rural areas, especially in those fields which do not require setting up of specialised and expensive equipment. (*Paragraph 11.*)

77. Due to insufficient number of school places the majority of the people in continuing education take academic subjects; for this reason it is recommended that there should be established the Department of Continuing Formal Education which will include the present functions of the Adult Education section and will be the co-ordinating agent. (Paragraphs 12-14, 29-30.)

78. The University of Zambia plays an important role in continuing education programmes; its development should continue to be given priority so that it can provide adequate facilities. (Paragraphs 15-17.)

79. The Party and Government should promote education for self-fulfilment such as in recreation, leisure, art and cultural activities, etc. The Party and Government should motivate the local communities to provide some of the facilities they require. (Paragraphs 18-19.)

80. The Party and Government should have more facilities, equipment and materials, including adequate funds, available for continuing education and there should be separate channels for educational broadcasts on both radio and television. (Paragraph 28.)

Chapter 11

81. The success of the educational reforms in Zambia should depend on the commitment, competence and resourcefulness of the teachers in the system. (Paragraphs 1-6.)

82. The teacher should possess correct attitudes and adequate knowledge of the subjects he teaches and keep abreast of developments in those fields and in the objectives and methods of teaching; the teacher, therefore, should actively seek to develop himself professionally, academically, socially and politically. (Paragraph 7.)

83. Since education is a high priority, the Party and Government should highlight this priority by improving the estate of the teacher to encourage him to stay in the system and offer students the quality and type of education the country needs; the production and retention of teachers, therefore, are urgent matters deserving every positive measure. (Paragraphs 8-16.)

84. The Party and Government should improve the difficult environmental conditions under which the teacher works to stimulate him to continue to grow in his profession and become more proficient; improvements in his conditions of service and fringe benefits in relation to his responsibilities should be considered. (Paragraphs 18-20.)

85. In-service training programmes for teachers and other officers connected with education should be intensified through seminars, workshops, refresher-courses, etc., as such programmes should assist to improve the quality of education offered by the system. (Paragraphs 21-27.)

86. Pre-service teacher education should, among other things, lay stress on the developing of the teacher's personality, right attitudes, teaching methods, organisational and management abilities and understanding of the pupils' needs. (Paragraphs 28-29.)

87. Pre-service training should also include good human relations and inculcate a sense of belonging and responsibility in order to properly assist adults and youths in the pursuit of knowledge. (Paragraph 30.)

88. The curriculum should, in addition to the usual professional subjects, contain political education, Humanism and production training. The curriculum should also concentrate on enabling trainee teachers to understand the objectives of the school curricula and the underlying principles of learning in the choice and use of teaching materials. (Paragraphs 31-33.)

89. The *minimum* entry qualification into primary teachers' colleges will be Grade 9 but, in addition, candidates with Grade 12 qualification will also be accepted; In each case a two-year full-time programme, mainly residential, should be offered. (Paragraph 34.)

90. Each year a certain proportion of serving untrained teachers should be admitted to various teachers' colleges. The Ministry of Education will indicate to each college the number of such teachers to be enrolled. (Paragraph 35.)

91. The *minimum* entry qualification into secondary teachers' colleges should be Grade 12; the duration of the training should be two years' full-time training with the majority of the students in residence. (*Paragraph 36.*)
92. Colleges should also be resource centres where there should be many activities covering innovations, techniques, etc., to improve the quality of teaching. (*Paragraphs 38–39.*)
93. The associate relationship of the University of Zambia with teachers' colleges should continue and the Centre for Continuing Education at the University should be strengthened through adequate staffing, financial provision and other resources. (*Paragraph 41.*)
94. The University of Zambia should immediately establish a degree programme in education, which will be unambiguously professional, to replace the present Bachelor of Arts and Bachelor of Science with Education degrees. (*Paragraphs 43–46.*)
95. Staff development programmes for teaching staff in teachers' colleges should be promoted and the University of Zambia should also provide advanced programmes leading to higher qualifications. (*Paragraph 47.*)
96. Those who train teachers should be competent and of superior quality and should be provided with the best possible professional training as the quality of education also depends on their efficiency and competence. (*Paragraphs 49–50.*)
97. Priority should be given to the development of an adequately trained force of teacher educators and there should be in-service and upgrading courses for them. (*Paragraphs 51–52.*)
98. In view of the country's demand for specialised trained manpower, priority should be given to the training of teachers in specialist fields such as science, agriculture, engineering, technology, etc. (*Paragraph 53.*)
99. There should be a definite programme for identifying those with potential for staff development in all fields of education, especially where it has been difficult to Zambianise. (*Paragraph 54.*)
100. Teachers should seriously consider the introduction and enforcement of a code of ethics to regulate their professional conduct and behaviour, as this should have a remarkable impact on the discipline of each individual teacher; a professional body, which would be legalised, should accordingly be established to enforce the code as a self-regulating mechanism by teachers themselves. (*Paragraphs 55–58 and Appendix 1.*)

Chapter 12

101. The Education Act should be suitably amended to provide for pre-schools; in the meantime, any proprietor of a day nursery who may wish to continue teaching the primary school curriculum should apply for the day nursery to be registered as a private school in terms of the provisions of the Education Act. (*Paragraphs 1–6.*)
102. While pre-school education supplements learning in the home, it should never imitate the methods and content of primary school education. (*Paragraph 7.*)
103. Pre-school education should not be compulsory and shall not be a pre-condition or an advantage for enrolment at Grade 1. (*Paragraph 8.*)
104. The minimum entry age to a pre-school should be three years, in both rural and urban areas. (*Paragraph 8.*)
105. Infant day care centres should not operate or be regarded as pre-schools. (*Paragraph 8.*)
106. The curriculum and materials for pre-school education should be so designed and arranged as to cater for the developmental needs of the child according to age; it should also suit the local environment. (*Paragraphs 9–12.*)
107. Government should not provide or run pre-schools; instead, voluntary agencies, Local Authorities, communities or individuals should set up and run pre-schools as may be required in each locality. (*Paragraphs 13, 14 and 16.*)

108. Provision should be made in the intended amendment of the Education Act to provide for the establishment of pre-schools and to provide for machinery to regulate the fees to be charged, approve buildings, premises and syllabuses. (*Paragraphs 16 and 18.*)

109. The Ministry of Education should be responsible for training pre-school teachers and for providing guidance and other professional services. (*Paragraph 12.*)

110. Pre-school teachers should not be employees of the Ministry of Education but of the proprietor of a particular pre-school. (*Paragraph 17.*)

Chapter 13

111. The Party and Government should continue to encourage Mission agencies, Local Authorities, local communities, corporations and voluntary organisations to play an important role in the provision of education. (*Paragraphs 1–9.*)

112. The Ministry of Education should continue to control, in terms of the provisions of the Education Act, the operation and performance of non-Government educational institutions to ensure that the quality of education offered is not lower than that offered by Government institutions; it should also ensure that the public are protected from exploitation and that proprietors are fit and proper persons to be responsible for sound and efficient management. (*Paragraphs 10–13.*)

113. Non-Government educational institutions should follow approved curricula and syllabuses and should be subject to professional inspection as at present. The students will continue to sit for the same examinations as students in Government schools. (*Paragraph 11.*)

114. The Party and Government should continue to allow students to study abroad; all students wishing to study abroad should, as at present, apply for clearance through the Ministry of Education. (*Paragraphs 14–16.*)

Chapter 14

115. Teachers and other workers in education should be mobilised as indicated in Chapter 14. (*Paragraphs 1–7.*)

116. The mobilisation of educational materials and equipment should be given priority. Library services should be expanded so that there are more libraries to serve local communities. (*Paragraphs 9–11.*)

117. The Ministry of Education should be allocated institutional vehicles over which the Ministry should have full control to ensure that vehicles will be available for use on educational purposes. (*Paragraphs 12 and 13.*)

118. In providing new educational facilities on a self-help basis, communities should ensure that each such project is their full responsibility up to completion. (*Paragraphs 15–18.*)

119. In planning new educational facilities, day schools should, as much as possible, be suitably sited in relation to population, accessibility, transport facilities, etc. There should, therefore, be co-ordination among all concerned. (*Paragraphs 19–22.*)

120. Educational institutions should be encouraged to undertake simple maintenance of their facilities on a self-help basis. However, the Government should continue to undertake complicated maintenance. (*Paragraphs 23–24.*)

121. In view of the economic situation facing the country, which may persist for some time to come, the Party and Government could consider possible forms of contribution from parents to the cost of education. (*Paragraphs 26–35.*)

122. Since the Headquarters building for the Ministry of Education does not have adequate space to cope with the present and future demands of the educational system, a new purpose-made Headquarters should be constructed. (*Paragraphs 36–39.*)

Chapter 15

123. All workers in education should have full understanding of the goals and objectives of educational policy so that they can appreciate the importance of their own contribution to the proper functioning of the system. (*Paragraphs 1 and 2.*)

124. The functions and administrative machinery of the Republic of Zambia Examinations Council should be re-organised and legislation passed to provide for the establishment of a Secretariat and Executive Committees. (*Paragraphs 5 and 6.*)

125. Statutory bodies should continue to operate as at present, but their performance should be improved through better quality of the membership which should include students. (*Paragraphs 7 and 8.*)

126. For effective decentralisation, people operating at the local level should identify problems in education, show concern and take appropriate decisions early; councils and individuals should participate in decision-making and in assisting schools in various ways. (*Paragraphs 9–14.*)

127. College and School Representative Councils should continue and students, depending on age, should be invited to serve on several committees. Organisations similar to Parent-Teacher Associations in schools should be free to discuss any matters concerning their education, welfare and those affecting their institutions. (*Paragraphs 15 and 16.*)

128. Depending on maturity, students should be invited to serve on appropriate committees to participate in decisions on educational matters. (*Paragraph 17.*)

Chapter 16

129. The Party and Government, with the assistance of voluntary and other agencies, both local and international, should devise concrete programmes for *out-of-school youth* to teach them production skills which would lead to income-earning activities, contribute to national productivity and instil the spirit of self-reliance. (*Paragraphs 1–3.*)

130. Students should contribute to national development but there should be a balance between what society may expect from youth in educational institutions and what they can really achieve. (*Paragraphs 1–6.*)

131. The extent to which students may be expected to contribute should depend on their age, educational background, experience, time available and the type of environment. Since new ideas may result in conflict of values, students also need encouragement and guidance to make their contribution meaningful. (*Paragraphs 7–10.*)

132. Students should be effective learners so that the investment in education does not go to waste; there should also be opportunities where their contribution can be made through sharing their knowledge and expertise with others in the socialisation process of education. (*Paragraphs 11–14.*)

133. Students should participate in social and cultural development because there is an inter-dependence between cultural and social values on one hand and meaningful development on the other. Education should be used to enhance the cultural heritage rather than destroy it so that in its setting, the advantages of science, technology, art, etc., can be exploited for the benefit of society. (*Paragraphs 15–18.*)

134. Students' contribution to political development should, among other things, be to seek to translate the substance of social achievement into positive action and interweave it into the fabric of society; take up the challenge and decide on and make their contribution within the context of the Zambian concept of Humanism. (*Paragraphs 19–20.*)

135. Students should participate in physical projects within the community or undertake such projects on their own. Projects in which there is to be student participation should be properly planned in relation to their own needs, the needs of the community or the nation. In this way, the educative influence of production training and the virtues of self-reliance should be properly cultivated and organised to assist students in their contribution to national productivity. (*Paragraphs 21–24.*)

136. The Party and Government should examine closely the problems of the unemployed out-of-school youth and devise short but intensive production training leading to income-earning activities which would meaningfully contribute to national productivity. (*Paragraphs 25–27.*)

Chapter 17

137. The implementation of the educational reform should call for a pragmatic approach that works and has integrity. (*Paragraph 1.*)
138. Some aspects of the educational reform should be implemented while others can only be implemented over a period of time, bearing in mind changing circumstances and constraints. (*Paragraphs 2 and 3.*)
139. The Party and Government should adopt an aggressive approach to improve the quality of education, provide efficient management and services and achieve, on a phased approach basis, nine years of universal basic education. (*Paragraphs 4 and 5.*)
140. The Ministry of Education should carefully examine and devise methods of maximising the use of time and educational facilities. (*Paragraphs 6 and 7.*)
141. The Ministry of Education should begin working on curricula and syllabuses for Grades 1–12 in 1978. (*Paragraphs 8 (a) to (d).*)
142. The new curricula and syllabuses should be introduced in such a way that there should be an effective and smooth change through proper identification of the strategic points in the curricula and time scale. (*Paragraph 8 (e).*)
143. Localisation of the School Certificate Examinations should be achieved by 1980 even if this may mean using some of the present syllabuses before new curricula and syllabuses are finalised. (*Paragraph 8 (f).*)
144. During the Third National Development Plan, the Party and Government should embark on intensification of the training of teachers for primary and secondary schools, trades training institutes and technical colleges. (*Paragraphs 11–18.*)
145. In order to cater effectively for out-of-school youth, the Party and Government should implement the Second National Development Plan recommendation to establish the Department of Youth Development which should directly come under the Party to work closely with the youth wing of the Party. (*Paragraphs 21–24.*)
146. The Party and Government should consider the financial implications of the educational reform for the Third Plan period which have been indicated as K180.65m for the capital programme covering several aspects and to which there will be added recurrent expenditure required to improve quality, management, facilities and services. (*Paragraphs 25–28.*)

Conclusion

The educational reform, as proposed and recommended in this document, embraces improvement both in the quantity and quality of education in the country. Accordingly, even if, for the foreseeable future, it may be difficult to expand educational facilities so as to enable *every child* to enrol at Grade 1 and undergo nine years of universal basic education, considerable educational reform will still have been accomplished if Zambia could achieve improvement in the curricula and their content, in the quality of the teacher, in the methods of learning and teaching, and in the educational materials and equipment.