

9615899

UND

Education Division documents. No.15

Education in Mozambique 1975-84

A review prepared by Anton Johnston.

TILLHÖR

 Sida

UTV



May 1984

TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES	iii
FOREWORD	v
EDITOR'S PREFACE	vi
1. SOME BASIC FACTS ABOUT MOZAMBIQUE AND ITS HISTORY	1
2. MOZAMBIQUE'S ECONOMY	4
2.1 The Colonial Heritage	4
2.2 Development after Independence	7
2.3 Development Perspectives	11
3. THE EDUCATION SYSTEM	16
Introduction	16
3.1 Education Prior to Independence in 1975	17
3.1.1 Colonial Education	17
3.1.2 Education in the Liberated Zones	22
3.2 The Structure of the Education System after Independence	23
3.3 Restructuring the Education System, 1983-1994	25
3.4 The General Aims and Objectives of Education	30
3.5 The Current Overall Educational Situation in Mozambique	34
3.6 The General Education Subsystem	37
3.6.1 Primary Education	37
3.6.2 General Secondary Education	53
3.6.3 General Lower and Middle Secondary Education	54
3.6.4 General Upper Secondary Education	63
3.6.5 University Education	65
3.7 The Adult Education Subsystem	68
3.7.1 Mass Campaigns and other Primary Level Activities	69
3.7.2 Secondary Level Adult Education	79
3.8 The Technical Education Subsystem	82
3.8.1 Elementary Technical Schooling	83
3.8.2 Basic Technical Schooling	84
3.8.3 Medium Technical Schooling	85
3.8.4 Technical Schooling Quality and Results	87
3.8.5 Technical Education Subsystem Administration	88
3.8.6 Special Characteristics and Future Plans	89

TABLE OF CONTENTS (Continued)

	<u>Page</u>
3.9 The Teacher Training Subsystem	92
3.9.1 Evolution of Teaching Staff, and Teacher Training	92
3.9.2 Levels of Teacher Training	94
3.9.3 Teacher Training Problems	98
3.9.4 Future Perspectives	99
3.10 Curriculum Development and Textbook Production and Distribution	100
3.10.1 Curriculum and Textbook Development	100
3.10.2 Textbook Layout, Publishing and Printing	103
3.10.3 Distribution of Textbooks and Other Didactic Material	105
3.11 Education Costs and Financing	109
3.12 Conclusions	112
4.1 BIBLIOGRAPHY	121
4.2 REFERENCES AND SOURCES	123

LIST OF TABLES

	<u>Page</u>
2.2.A Import-Export, 1981	10
2.2.B Development of Global Social Product	10
3.1.A Colonial Education Growth, 1950-1971	20
3.1.B Educational Qualifications of the Population - 1970	21
3.1.C School Coverage - 1970	21
3.2.A Structure of the MEC (1976)	23
3.2.B The Education System by 1980	24
3.3.A The New National Education System Structure by 1994	27
3.3.B Equivalence between Old and New Education Systems	28
3.3.C Structure of the MEC (from 1983)	29
3.5.A Education Statistics from National Census, 1980	35
3.5.B Graduates, 1975-1982	36
3.6.A Pre-primary Enrollment, 1975-1980	37
3.6.B Primary Enrollment, 1973-1981	38
3.6.C School Coverage by Sex and Age Group	40
3.6.D Primary School Teachers	41
3.6.E Primary Schools	41
3.6.F School Grade Levels and School Size	41
3.6.G Distribution of Total Primary Cohort over the Four Primary Grades	47
3.6.H Primary School Efficiency	47
3.6.I Primary School Repetition Rates	48
3.6.J Primary School Coverage 1973	49
3.6.K Distribution per Province of Untrained Teachers, 1982	50
3.6.L Lower + Middle Secondary Enrollment, 1973-1981	55
3.6.M General Lower + Middle Secondary Teachers	55
3.6.N General Lower + Middle Secondary School Expansion	56
3.6.O School Distribution in Zambezia, 1979	56
3.6.P Secondary Teacher Qualifications (1981)	58
3.6.Q Secondary School Efficiency	60
3.6.R Pupil Distribution per Secondary Grade	60
3.6.S Sex Enrollment Ratios, 1977-1980	61
3.6.T Estimated Enrollment in General Upper Secondary	64
3.6.U University Enrollment	66
3.7.A Campaign Results	71
3.7.B Makubulane CFAT Results	81

LIST OF TABLES (Continued)

	<u>Page</u>
3.8.A Technical Secondary Schooling (Elementary and Basic)	83
3.8.B Elementary Technical School Enrollment	84
3.8.C Basic Level Technical Schools (1982)	84
3.8.D Enrollment in Basic Level Technical Schools	85
3.8.E Medium Level Technical Institutes	86
3.8.F Enrollment in Medium Level Technical Institutes	86
3.8.G Specializations in Technical Schools	91
3.9.A Teaching Staff	92
3.9.B Teacher Training Development	93
3.9.C Technical Teacher Training 1978-1982	96
3.10.A The National Institute for Education Development	104
3.10.B Titles Edited by INDE	107
3.10.C Development Plan for the Editorial Nucleus of INDE 1982-1990	108
3.11.A Average Costs per Student Graduated per Level	109

FOREWORD

Swedish cooperation with Mozambique in the field of education dates back to the time of Mozambique's Independence.

This report gives a comprehensive description of the overall development of education in Mozambique since then. The purpose of the report is two-fold.

Firstly, it is meant to serve in the planning of future programmes of cooperation in this field. Experience shows that successful development cooperation does not come about through good will and mutual confidence only. There is also a need to build up, gradually, a common foundation of basic information. This report forms part of a continuous effort to do so.

Secondly, it represents in the Swedish context, an important piece of information that facilitates for SIDA the justification and explanation of the background and present direction of the cooperation with Mozambique.

The report comprises a summary of "what we know" about education and training in Mozambique. It has been based on material readily available in Mozambique and in Sweden, including material from a joint mission in 1982.

Mr. Anton Johnston, who has wide experience from working in Mozambique, has been instrumental in analysing, selecting and compiling this information. We are grateful to him for the dedication and carefulness with which he has carried out his task.

We were pleased to receive from the Mozambican Ministry of Education the comment that "the reportconstitutes a valuable contribution to information about the process of education and training in Mozambique."

Stockholm, December 1983.

Lennart Wohlgemuth
Head, Education Division

EDITOR'S PREFACE

During the period 1978-1983, SIDA has been one of the major contributors to the development of education in the People's Republic of Mozambique. Apart from material and financial help, SIDA has helped in the contracting of various consultants to assist in preparing projects and has sent its own consultants, notably in 1982, to evaluate the support and prepare the ground for the next cooperation period, 1984-1986. Consultations have also been held on a regular basis between SIDA and representatives of the Ministry of Education and Culture in Maputo. The reports, minutes and documents resulting from all these contacts have stacked up, and so SIDA requested me to prepare from them this background paper, with the objective of serving as a basic source of reference for the final consultations to be held on the details of the next cooperation period, counting on my experience in education in Mozambique to fill in vague areas and correct or confirm statements and opinions expressed by previous consultants. I gladly undertook the task, not least because Mozambique has made such giant strides in education (and in many other fields) and I feel that the work is fully deserving of all the support it can get.

The final version becomes a rather large work! This reflects the number of fronts on which education has been extended, improved, revised and reformed. Apart from vast growth since the conquest of independence in 1975, the education system has undergone a process of constant revision and change, from complete change of all school curricula and fundamental advances in making the school serve people's power, to a general reform of the entire education system beginning its implementation in 1983.

A proper study of education in Mozambique would need be even more extensive than this one. In particular, this study has not entered on a proper analysis of the politics of education, in which the Frelimo Vanguard Party has made great contribution even at international level; nor has it dealt with the revolutionary process at work in the educational institutions themselves. By its nature - a point of reference for the decisions on where substantial support may most fruitfully be channeled - the paper deals mostly with structures, statistics and educational problems, needs and difficulties. It is important to bear in mind that the educational process in Mozambique is much more than what is presented here.

I have used in all cases, statistics which have been published or which have been provided to SIDA, through consultations or through documents

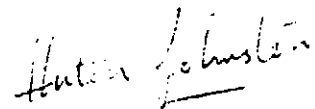
delivered. I think it important to say, however, that some statistics should be regarded not as exact numbers, but rather as reliable indicators. The process of statistics collection in Mozambique in colonial times was rather fragmentary; indeed, one of the forms of popular resistance to colonial oppression was to avoid being counted, while the colonial authorities had the opposite tendency, of "polishing" their statistics to reflect favourably on the colonial power. After Independence, the struggles of the first few years left little time for the mounting of a really efficient statistical apparatus; although a considerably better one now exists, there still are many difficulties in collecting statistics in Mozambique, principally because the ways and means of communication are very deficient and some cadres at the base still have difficulty in compiling statistical tables. As a result, some conflicting statistics have appeared - a previous release may be rectified later, new information may suddenly become available, etc. Some statistics appear "rounded up", others not.

I would like to thank SIDA's Education Division for putting into my hands the necessary material and for making important comments on the manuscript. My thanks also go to Shirley Isgaard and Hilma Andersson for so expertly typing the final version.

For myself, I would like to declare that I am an enthusiastic supporter of the Mozambique Revolution and a Socialist; within the limitations thereby implied, I have tried to remain as objective as possible. Many opinions expressed in this paper are mine, and better-informed (especially Mozambican) sources may well hold different and better-grounded ones.

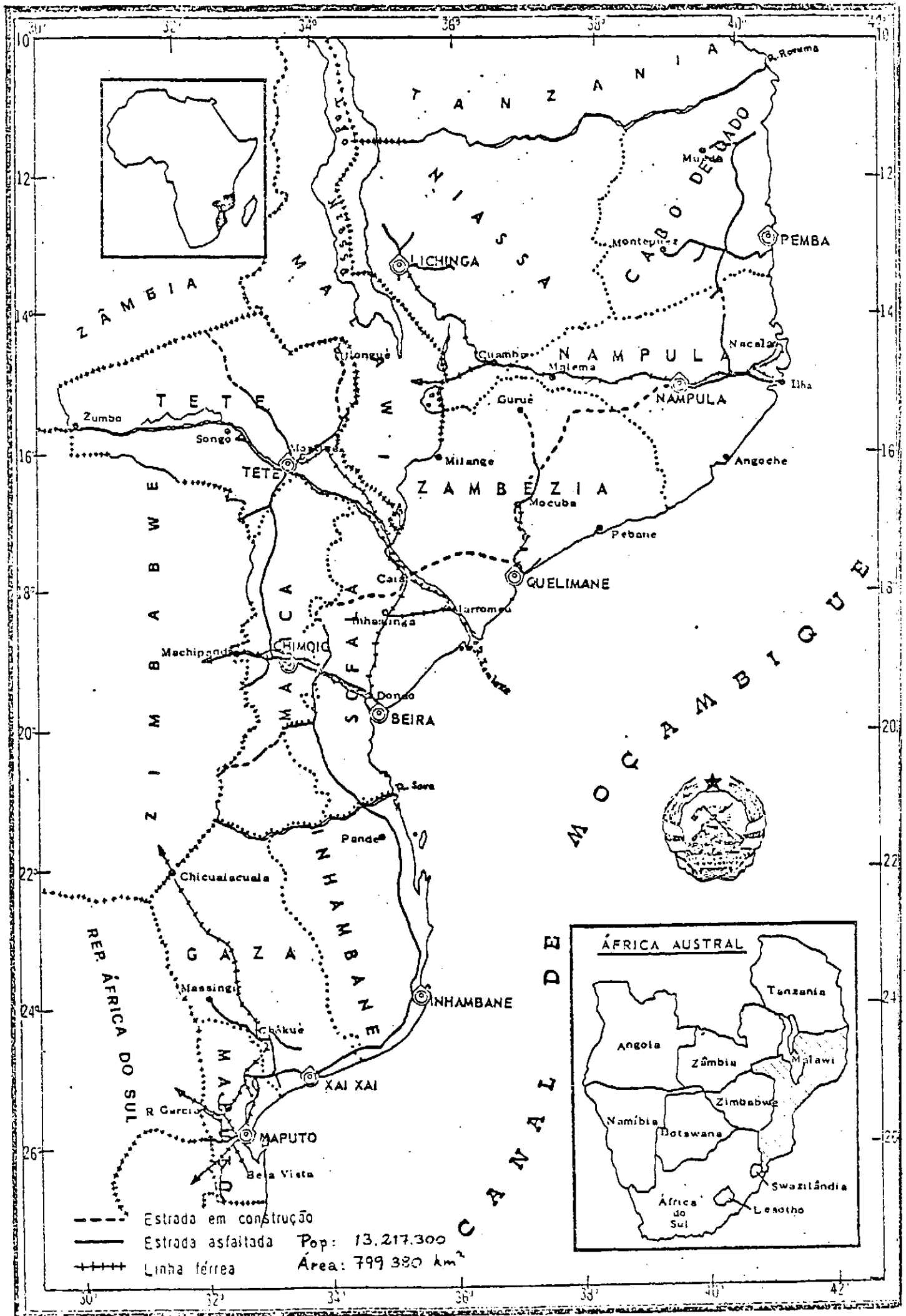
I remember well participating in a group which prepared an analysis of a sector for the Minister of Education; she politely but firmly returned it for revision, saying "Start again, but this time thinking - what if we had never done anything? What have we achieved?" A fundamental dialectical point!

A Luta Continua!



Stockholm, 1983-12-11.

viii
REPÚBLICA POPULAR DE MOÇAMBIQUE



1. SOME BASIC FACTS ABOUT MOZAMBIQUE AND ITS HISTORY

Mozambique is situated on the east coast of Africa, forming part of the Southern African subcontinent. It covers a surface of 799 380 km², of which 13 000 km² is lake surface. The coast extends 2 470 km², and half the country is coastal plain. Most of the country is situated at less than 1 000 metres altitude. The climate is tropical, though normally rather dry in the South. Numerous large rivers traverse the country from the interior.¹ Given its extension, it serves as a natural route to the sea for its neighbours, South Africa, Zimbabwe, Swaziland, Malawi and Zambia. Tanzania occupies the coast to the North.

The climate, rivers and lakes, and the topography give Mozambique great agricultural potential; the coast offers enormous fishing resources. Mineral resources are not as abundant as in the neighbouring countries of the interior, but reserves of coal, iron, bauxite, lime, tantalites, semi-precious stones and natural gas exist, as well as small quantities of gold and copper.

The country is divided into ten provinces, and has a population (1982) of 12 615 000. The capital is Maputo, in the South, with about 700 000 inhabitants. The majority of the population, 85 %, is peasantry. Population density in the countryside is very low, varying between 4 per km² in Niassa Province and 30 per km² in Nampula province.²

Mozambique fell prey to Portuguese influence in the 16th Century, the Portuguese completing their occupation and defeating local resistance by the turn of the 20th Century. The colonial power imposed colonial rule of the most retrograde kind, subjecting Mozambicans to all forms of cultural, political, economic and social violence, characterized by a total contempt for their values and society, a virulent Catholic missionizing, and gross exploitation through various forms of forced labour. For many years, Portugal had no means of governing directly, leaving the inhabitants at the mercy of large trading and plantation companies and a few "settler kings" ("prazeiros").³ After occupation became necessary to guarantee the 1885 Berlin Conference donated "territorial rights", more direct rule was imposed and some colonial settlement began, though widespread malaria kept the numbers of settlers low in relation to the neighbouring territories. By 1973, some 250 000 settlers were to be found, most of them in the towns.⁴

A more forceful governing presence by the colonial power brought little redress from past wrongs. Forms of forced labour continued into the 1960's. Portuguese capital was weak, and so made little investment, relying rather on cheap labour. Struggles against exploitation were met by violent oppression and secret police activity, characteristic of a metropolitan power itself directed by a fascist political system.

Despairing of ever attaining peacefully their due political and economic rights and the independence of their country, Mozambicans formed the Mozambican Liberation Front (FRELIMO) in 1962, and initiated the Armed National Liberation Struggle in 1964.

Large areas in the North of the country were swiftly liberated; and for the first time Mozambicans were able to experiment their own forms of administration there. In 1974, the Portuguese army was defeated by FRELIMO, and Independence was gained on the 25th June, 1975. FRELIMO set out upon the daunting task of rebuilding the society and the economy, which had been sabotaged and reduced to chaos by the departing Portuguese settlers and foreign companies. It was faced with a society which was heavily scored by colonial ideology and divide-and-rule strategy, manifest in tribalism, regionalism and racism, and the oppression of women. Portuguese settlers had held all skilled and white-collar jobs in the economy, the illiteracy rate was 90 %.⁵

FRELIMO, confident in its Marxist-Leninist ideology which had been tempered and proved over ten years of armed struggle, set out to transform the society completely. The FRELIMO 3rd Congress in 1977 stated that the economy was being brought back under control. Large steps had already been taken towards the construction of a Mozambican socialist society, including the nationalization of the land, many agricultural, industrial and commercial enterprises, rented housing, the banks, health and education. FRELIMO would transform itself into the Marxist-Leninist Vanguard Party of the worker-peasant alliance in order to direct the process of transition to socialism.

The 3rd Congress firmly laid down the political and economic guidelines for the development of the economy and the society for the benefit of the Mozambican people. The economy was to subordinate itself to central planning, beginning with a series of one-year plans.⁶

In 1980, on the basis of progress made, the 1980-1990 period was heralded as the Decade of Victory of Underdevelopment, and a ten-year Prospective

Plan (PPI) was drafted to put long-term economic and social development into perspective and balance.

However, in the period succeeding the 3rd Congress, some serious setbacks also occurred, with particular force in the period 1982-1983. Neighbouring states, first Rhodesia and then South Africa, made armed incursions, promoted insurgency and carried out economic sabotage. Natural disasters shook the society, beginning with large scale floods in some regions, followed by extensive droughts over the past three years. To cap all this, the international economic crisis wrought havoc with Mozambique's terms of trade and credit balance, curtailing many areas of investment policy. In the given situation, it is a great tribute to FRELIMO, and proof of its popular base and mobilizational power, that the economy was recovered from the chaos left by the departing colonialists in 1974-75 and grew appreciably over the period 1977-1983.⁷

As mentioned above, Mozambique is divided administratively into 10 provinces, with its capital city, Maputo, enjoying the status of an eleventh province. The Frelimo Party directs the society and the government. At the head of the Party are the Executive Political Bureau and the Central Committee, which are elected by the Party Congress. At the head of government is the elected People's Assembly with the Council of Ministers as its executive. Party and State President is Marshal Samora Moises Machel. At provincial level, both Party and Administration have similar organs presided over by the provincial Party First Secretary and Governor. Each province is divided into several districts (between 8 and 18), making a total of around 115 districts at present. Each district has similar Party and State structures presided over by the district Party First Secretary and Administrator. For purposes of exercise of people's power, each district is further subdivided into several localities, or electoral divisions, in each of which the population elects its own Popular Assembly with local administrative powers.

As a country's economy and its education system are tightly bound together, the economy determining the resources which can be dedicated to education and, to some extent, its content; while the education system trains the people who will operate, develop, direct and benefit from that economy; so the next chapter makes an assessment of Mozambique's economic heritage and development, in order to provide a clear background against which the education system and its development may be put into perspective.

2. MOZAMBIQUE'S ECONOMY

2.1 THE COLONIAL HERITAGE

Portuguese colonialism left Mozambique with an extremely underdeveloped, distorted and dependent economy. Portugal itself was an underdeveloped country with weak capital, and its colonies served to provide inputs to bolster the Portuguese economy. While Portugal often seemed to be making a loss on its colonies, the nature and purpose of that loss is significant: for instance, in January - June 1967, Mozambique's trade balance was a debit of 668 million escudos within the Portuguese "escudo" zone, but a credit of 343 million escudos with the rest of the world. Mozambique produced primary goods, mainly agricultural, and acquired from Portugal the finished products. Thus in 1967 Mozambique exported cotton fibre to Portugal, while her imports thence of cotton cloth and wine and spirits exceeded her imports of industrial and farm equipment.¹

Not only was Mozambique's economy geared to Portuguese interests, but also to those of other capitalist countries, notably South Africa and Rhodesia, Britain and the United States. Mozambique began to be integrated into the Southern African economic structure under South African hegemony as far back as the 1860's (migrant labour to the South African sugar plantations and diamond fields), and was very fully integrated by the end of the colonial period.² A short analysis of the main sectors of the late colonial economy is indicative:³

- a) Plantation agriculture, mainly for export. Portuguese, British, South African, Swiss and French companies controlled vast plantations, mainly in the centre and north, of sugar cane, cotton, sisal, citrus, copra, tea and tobacco. Mainly in the south, individual Portuguese settlers controlled plantations of rice, oil seeds, tobacco and citrus. Some basic industry was developed for primary processing of the products - cotton gins, sugar mills, oil plants, tea factories, food canning plants, plastic sacking plant, textile mills, etc. The exploitation of naturally-occurring tropical hardwoods led to the creation of a network of saw-mills. A series of cashew-nut processing factories was set up, supplied almost entirely by peasant harvesting of the naturally-occurring trees along the entire coastal belt. Forced peasant cropping of cotton and oil seeds, for payment of tax in kind, also contributed to export production.

In 1970, 4 200 farm units controlled above 50 % of all cultivated land, while 1.2 million family units held 23.7 % of all cultivated land as small plots of 2 hectares or less. Only 6 % of the African population lived in urban areas.⁴

- b) A second major source of income for the colonial economy was the export of migrant labour to South Africa and Rhodesia. 60 % of the salary of migrants to the South African mines was paid directly to the Portuguese administration in gold at a fixed price, from 1964. An idea of the value of this can be assessed by migration figures to the SA mines:⁵

1904	51 000	1966	109 000
1927	107 700	1973	99 400
1939	81 300	1976	44 100
1951	106 500		

- c) From the 1890's, the colonial economy invested heavily in providing services to the countries inland:

- Lourenco Marques (LM) (now Maputo) provided port and rail facilities for South Africa (the Witwatersrand), Swaziland and Rhodesia;
- Beira provided port and rail facilities for Rhodesia and Nyasaland (Malawi);
- Nacala provided port and rail facilities for Nyasaland (Malawi).

It is to be noted that no good rail and road links were built to connect Mozambican cities.

- d) The transport services gave rise to an infrastructural boom in the cities of LM and Beira, especially in the 1960-1973 period; in particular, the construction of large office and flat blocks. A network of "parasite" services grew, in banking, insurance and commercial institutions, and a printing service to supply the bureaucracy.
- e) The growth of transport services and the building boom gave rise to two other types of service industries:
- oil facilities, including an oil refinery in LM and the Beira - Umtali oil pipeline;
 - construction material industries, including quarries for marble and limestone, cement factories, asbestos and prefabrication

unit factories, plumbing facilities factories, a fibreglass factory, etc.

- f) Another service offered to neighbouring countries was tourism, leading to the building of large luxury hotels along the coast from Ponta de Ouro to Inhambane and in Beira.
- g) The large rivers led to the creation of hydroelectric schemes, in Manica and in Tete, notable being the multi-national construction of the Cahora Bassa Dam on the Zambezi, calculated to supply 10 % of South Africa's power needs - though almost none of Mozambique's.
- h) Some import substitution industry was developed for the manufacture of toiletries, detergents, dairy products, beer and spirits, plastic utensils, fertilizers, etc., almost always dependent on the import of some or all of the raw materials.
- i) Some extractive industry was developed, notably coal in Tete, semi-precious stones and tantalites in Zambezia, and some small extraction of gold and copper in Manica. Reserves of iron, bauxite and natural gas were discovered but not exploited.
- j) Heavy industry and producer goods industry were limited to a scrap-iron smelter, a paper recycling plant, a rail wagon factory and a truck body plant, all in LM.
- k) Coastal and sea fishing was an important source for export, particularly of crustaceans.

This development⁶ put Mozambique in the top ten industrial countries in Africa, but it should be noted that:

- most of the firms were in the hands of foreign companies, the rest, of Portuguese settlers;
- much of the industry relied to a great extent on imported raw materials and parts;
- very little heavy industry or producer goods industry was created;
- important industries and services depended entirely on links with South Africa and Rhodesia, and on the export market.

Agriculture, fishing, industry and commerce were all in the hands of foreigners, and almost all skilled and white-collar jobs were held by Portuguese settlers, including the civil service sector. Unskilled jobs

were taken by Africans, in agriculture on a seasonal basis, in industry and services, on short-term contract. Salaries for these jobs were very low, most workers maintaining a foothold in the countryside to supplement their income. Much of the industry was developed in the 1960's. As a result, very little fixed proletariat was created, almost no skilled labour force, and no African managerial class. As one FRELIMO official put it, "To sell matches in this country you had to be Portuguese".⁷ Industrial development was concentrated around LM (50 %) and Beira (15 %), with very little anywhere else.

The benefits of the colonial economy to the Mozambican people may easily be calculated from a few relevant statistics:

GNP per capita 1974 ⁸	\$US 150
Illiteracy in 1974	90 %
Life-expectancy 1975 ⁹	40 years
Infant mortality 1975 ¹⁰	150 %
Primary school coverage 1973 ¹¹	<36 %

Most of the people lived on the land, producing maize, rice, manioc and millet for subsistence, forced-producing cotton or oil-seeds for tax, selling their labour as migrants to the large plantations or to the South African mines.

The cost and the activities of the Portuguese army over the 1964-1974 period caused substantial social and economic upheaval.

2.2 DEVELOPMENTS AFTER INDEPENDENCE

When FRELIMO won the armed struggle in 1974, enormous economic disruptions followed.

In agriculture, Portuguese and other foreign companies withdrew, in most cases, as did the settler farmers, in the process often destroying infrastructures, removing all available liquid capital, killing livestock or driving it over the border, and removing all vehicles and other moveables.

In industry, machinery and plant were sabotaged, assets illegally transferred abroad, accounting, stock-lists and order books destroyed, while the skilled workers - all settlers - fled the country.

In the services, tourism ground to a halt and most construction projects were abandoned. Subsequent implementation of the official UN sanctions against Rhodesia in 1976 cut a large portion of the transport revenues

and put thousands out of work, while Rhodesian incursions gave rise to large human and material losses. Mozambique estimated the loss arising from this action and its consequences, at \$US 486,5 million.¹

South Africa cut back on migrant mine labour, from 99 400 workers in 1973 to 44 100 in 1976 - less than in 1904!² It also unilaterally changed the migrant salary payment agreement, from paying in gold at a fixed price to paying in gold at "free market" rates (i.e. 10 to 15 times less),³ and rerouted much import and export away from the port of Maputo.⁴

Even the commercial network fell apart, as the colonists fled and vehicles were destroyed or removed. Overall, about 95 % of the settlers left the country between 1973 and 1977. The GNP is estimated to have declined by as much as 20 % over the period 1973-1975, with further decline until 1978.⁵ FRELIMO was faced with a ruined economy and no skilled personnel to run it. Of necessity, many underqualified, inexperienced or incompetent people had to be promoted to important posts in the economy and the state apparatus. "Crisis management" became the order of the day. FRELIMO took radical steps in the face of the situation, including the nationalization of the land, rented housing, many agricultural, commercial and industrial enterprises which had been abandoned, were committing economic sabotage, or were particularly strategic; the nationalization of the banks and insurance companies, of health and education.⁶ "Grupos dinamizadores" (dynamizing groups) were created at all levels to mobilize the population, keep control of the political situation, and maintain vigilance against further economic sabotage. Popular mobilization was very high and the material bases had been created for a socialist programme.

In 1977, FRELIMO held its 3rd Congress, where it transformed itself into the Marxist-Leninist Vanguard Party of the worker-peasant alliance, ready to direct the transition to socialism which was the overriding policy line of the Congress. The period 1977-1979 was called the period of "National Reconstruction", during which pre-Independence production levels were to be attained. The Congress stated: "Agriculture will be the base of the economy, and industry the leading factor and driving force." Production of food, raw materials for industry and export goods was put at priority, under the dominant and determinant hand of the state agricultural sector.⁷ The state developed central planning for the economic and social sectors, drawing up annual plans over the period 1977-1982, a prospective plan for the 1980-1990 decade in 1980, and a three-year plan

for 1983-1985 in 1982. In 1982, the state planning system covered about 70 % of the country's total production.

Redevelopment of commerce was undertaken through the development of a network of consumer cooperatives, people's shops ("lojas do povo", partially reprivatized in 1981), and a peasant produce marketing enterprise, AGRICOM. A computerized rationing system was developed in Maputo. Once pre-Independence levels were overtaken in almost all sectors, the state turned its attention to longer-term goals. The 1980-1990 Decade was named "Decade of Victory over Underdevelopment", and a ten-year Prospective Plan (PPI) was drafted to set development targets and to focus and direct efforts in all sectors. The lines of the PPI are considered in more detail below.

In order to assist the recuperation of the economic and social sectors, Mozambique turned towards support through international cooperation with a large number of countries, in the so-called "East and West blocs" alike. It also took the truly internationalist step of contracting progressive professionals and technicians from a vast array of countries, these accepting 2-year periods of work at relatively low salaries. This step was fairly crucial to the transition period, though the wide range of traditions, types and levels of qualification, origins and even ideological standpoints, sometimes created difficulties of communication, conflicts over line, and even bad advice. Payment of part of the salaries in foreign exchange, essential to many workers, created a slow and steady drain upon the foreign exchange reserves. With the increasing number of Mozambicans being trained in all sectors, fewer of the "cooperantes" will be absolutely indispensable, but some will be needed for a long time.

After the 3rd Congress, the economy ran into new difficulties. Apart from Rhodesian incursions, large-scale flooding of the Limpopo (1977) and the Zambezi (1978) displaced more than a quarter of a million people, and devastating droughts hit the north in 1981-1982 and the south in 1982-1983. The international recession did not help. Between 1975 and 1980, the exchange value of cotton dropped by 143 %, of cashew, by 29 %, while the oil price rose by a factor of 10.⁸ South Africa took over the training, arming and supplying of insurgents ("MNR") from the Rhodesians, sabotaging and killing and diverting efforts and resources from development to military needs. At the same time, South Africa constantly diverted more and more of its import and export traffic away from Maputo harbour. An

acute foreign exchange and balance-of-payments crisis developed as of 1981, further cutting import of raw materials, parts and producer goods, and consumer goods, creating a crisis in industry and food shortages.⁹

In 1983, the FRELIMO 4th Congress reported on the state of the economy and the society and issued directives for future development. In 1981, highest production indices were reached, with an appreciable decline in 1982. The State Sector produced more than 55 % of the total social product. The following tables indicate the situation:

All figures are in \$US million, at 1980 constant prices, using the exchange rate of \$US 1 = 37 MT:

TABLE 2.2.A Import-export, 1981¹⁰

<u>Exports;</u>	Tea	33	<u>Imports:</u>	Equipment	135
	Sugar & derivates	43		Spares	102
	Cashew & derivates	57		Raw materials	317
	Cotton	27		Consumption goods	<u>143</u>
	Crustaceans	55			697
	Other	<u>140</u>		<u>Less: Exports</u>	<u>355</u>
		355		<u>Balance:</u>	- <u>342</u>

TABLE 2.2.B Development of Global Social Product¹¹

	1977	1981	Growth (%)
Global social product	2 027	2 262	11.6
- Agriculture	827	900	8.8
- Industry	751	854	13.7
- Construction	97	122	25
- Transports	211	243	15.2
- Other	141	143	1.4

The average annual rate of growth just kept up with the population growth 1977-1981, though it is significantly below this in the agricultural sector. The combination of drought, insurgency, oil price rises, the rise in average import prices by 3 % and the drop in average export prices by 11 % in the period 1981-1982, led to a drop of 7 % in the GSP¹², to 2 104 million US Dollars in 1982.

The 4th Congress issued the slogan: Defend our country, conquer under-development, construct socialism; and gave specific detailed development directives to the economic and social sectors for the period up to 1985¹³,

covered by the present three-year plan. While the quantitative projections of the ten-year PPI have been seriously undercut by the post-1980 unforeseen developments, its main lines were reaffirmed in the Congress, with one major addition. These lines are considered in the following section.

2.3 DEVELOPMENT PERSPECTIVES¹

The PPI's overall political and economic objectives are to lay the material and technical foundations for a socialist society, thus permitting the country to conquer economic independence, increasingly satisfy the needs of the people, reinforce defence capacity, and strengthen the power of the worker-peasant alliance. The main components of the PPI are:

a) The socialization of the countryside

FRELIMO's policy on rural development, evolved in the Liberated Zones during the Armed Struggle, has consistently been that of forming peasant producer cooperatives and of collectivizing the cooperativists and their families in communal villages. In these villages, the people will be able to organize other forms of producer cooperative (carpentry, pottery, weaving et al.) with a ready market at hand. Given the concentration of the population and the growth of the economic base of the village through cooperativization, further services for the improvement of the people's quality of life may be introduced at village level (clean water supply, schools, health services, consumer cooperatives, banks, posts and telegraphs, even electrification); all services which are impossible to provide for a dispersed population.

At the time of the 4th Congress, 1 350 communal villages had been formed in various different ways, catering for about 19 % of the rural population.² However, the concomitant development of producer cooperatives was well behind, with only 37 000 cooperativists registered.³ A major problem with cooperative formation has been the channelling of state resources into the state agricultural sector, leaving little investment potential for the organization and development of cooperatives.⁴

The PPI projects a population of 16,4 million in 1990, with 80 % of these living in the countryside. 10 million are expected to be involved in the communal village programme, a profound rural revolution affecting the great majority of the peasantry.

The 4th Congress noted that, while much attention was being given to communal villages, the cooperativization of the peasantry was not taking off and that the general family sector outside of the collectivization programme had been sadly neglected, causing a drop in their production. Thus, greater attention and resources are to be devoted to these two ends, specifically in supplies of credit, instruments, seeds, and consumer goods to motivate their production for the market. Greater training of cooperativists must also be undertaken.

b) Development of large enterprises and heavy industry

The PPI looked towards the rapid development of Mozambique's resources and potential, especially in agriculture and mining, providing for the channelling of investment into enormous state farms producing for import substitution and export, accompanied by new transformative industry; and for the exploitation of mineral resources, especially coal, bauxite, iron and natural gas. Besides this, investment should also be made into the development of heavy industry (steel, chemical fertilizers, tractors and implements, paper). The investment required - \$US 15 billion - should derive 40 % from external financing through joint venture. Beginning these investments in the period 1980-1983 had the unfortunate result of tying up resources and incurring large debts, as results from this type of project are derived only on the long term.

The 4th Congress studied the experience gained on this type of project and decided that, in agriculture, the state farms created were too large. Thus, they should be cut up into smaller units with more specialized production, capable of being handled by available management. They should be responsible for making a profit, and undertake their own planning rather than being directed in this from the centre.

In industry, small ventures and local projects should be stimulated, and private entrepreneurs encouraged to undertake industrial projects that fit in to the main lines of development. Foreign capital would also be encouraged to invest.

All state projects have a duty to encourage and support local cooperative production and small-scale industry.

c) Stabilization and training of the workforce

The PPI set out the lines for resolving two of Mozambique's major problems, the lack of educated cadres and of a stable workforce. Only some 300 000 workers have permanent employment in the industrial and agricultural sectors,⁵ and even many of these have a rural base to which they return. In order to stabilize this part of the workforce, a salaries policy on the basis of "to each according to his work" is being developed. The remainder of the salaried workforce is a large number of migrant peasants who are employed on short-term contract in the plantations at peak agricultural periods, an imbalance built in by the colonial economy.

To stabilize the workforce, the plantations should also develop communal villages for the workers and their families. Production should be diversified at local level, creating constant employment levels. On this basis, economically fruitful worker training programmes can be implemented, an impossibility with a shifting migrant workforce.

To meet the demands for the socialization of the countryside, the growing cooperative sector, the expanding state farm sector, and the growth and diversification of industry, with all the concomitant demand for worker and peasant training programmes, enormous numbers of educated and trained cadres will be needed. Thus a major component of the PPI is the growth of the education sector - general and technical adult education for the adults who must effect the transformations over the ten-year period; general and technical child education for the future. In a recently liberated country, with 90 % illiteracy at the beginning, where the government and the people have set out to transform radically the whole society, huge manpower requirements are necessary, in terms of professional skills, political consciousness and honesty, imagination, courage and creativity.

As can be seen, the 4th Congress indicated that priority should be moved to some extent away from large-scale projects and into a greater concentration on the family sector, cooperative development and local industry, with greater decentralization of planning. In the case of either strategy, however, large-scale training programmes will be essential, for cooperativization, agriculture and industry. The political objective of creating a socialist society under the leadership of workers and peasants also demands an education of the people that is

qualitatively different to the formal education offered in most capitalist societies.⁶ Mass education will have to be of a genuinely popular character, concentrating not only on the acquisition of knowledge but also on the effective liberation of the people's creative capacities.

Given the importance which the socialization of the countryside is to play in development policy over the next few years, mass education will have to operate in a dialectical relationship with the creation of communal villages, stimulating their creation, providing skills useful to their functioning and growth, and deriving from them better conditions in which to operate and an increasing demand. Fundamentally, the education system will have to concern itself with the needs of the rural population in the process of collectivization, rather than serving as a "chimney system" designed principally to channel participants into university and casting aside as failures those who do not "make it to the top".

In 1983, the education sector will absorb 30 % of the current state budget.⁷ It is evident that the further extension of the education system will require even greater expenditures and investments. The subject of the costs of education is covered in more detail in section 3.11, after a discussion of the objectives, nature and results of the education system.

d) Towards economic independence

As has been indicated above, Mozambique was tightly drawn into dependence on South Africa, with much of its economy directed towards satisfying South Africa's needs. South Africa's active hostility toward the Marxist-Leninist Frelimo Party and government (a dislike amply met by Frelimo's detestation of apartheid capitalism), has been expressed by direct support to the armed bandits of the "MNR", some direct acts of aggression and sabotage of important economic installations, and by economic pressure (reduction of migrant labour and of gold payments, expulsion of "illegal" Mozambican workers, rerouting of traffic away from Maputo, etc.).

In this ugly situation, Mozambique, its neighbours and members of the front-line states, have formed the Southern African Development Coordination Conference (SADCC), designed to direct economic investment and activity in a coordinated way, in order to rationalize the use of resources, cooperate for development, increase mutually advantageous operations in

the areas of transport, industry, agriculture, fisheries, worker training, etc., and, above all, reduce the reliance of all SADCC member states on South Africa. The smooth functioning of the SADCC (violently resisted by South Africa), and the successful implementation of the projects already prepared by the SADCC, could go a long way toward helping Mozambique's development and untangling its natural and its installed resources from the grip of South Africa.

3. THE EDUCATION SYSTEM

3.0 INTRODUCTION

At Independence, FRELIMO took over the governing of a very underdeveloped country with an unbalanced economy and an enormous lack of trained and skilled cadres. It inherited a colonial education system which had been designed principally to cater for the colonists' advancement, with a separate component under mission administration for the "indigenous" population. Only the children of those few Africans who had managed to struggle up to "assimilado" (assimilated) status, had access to the "higher quality" components of the education system. The education system had to be taken over and redesigned for new and totally different objectives - mass popular education, foundation for the creation of a socialist society, educator of the socialist New Man, provider of cadres for socialist development envisaging ultimate economic independence, improvement of the quality of life for the working people, and socialization of the countryside. To be fought were the colonial legacies of passivity, illiteracy and racism, complicated by the contradictory operation of colonialism in both destroying and preserving forms of the feudal "traditional" society as part of its colonizing strategy,¹ leaving marks of tribalism and regionalism, catholicism and animism, and the generalized oppression of women.

It is clearly impossible in such a situation to revolutionize at once, a completely antagonistic education system which had had entirely opposed objectives to the ones that FRELIMO desired to see attained. The first major steps towards this end were taken in the period 1975-1977, beginning with the nationalization of education in July 1975, the suspension of all colonial textbooks and curricula, and the gradual assertion of control over the education administration. The right to education was enshrined in the national constitution, with the concomitant duty that those with education should teach those less favoured, those without education should accept to learn.

From 1978, the organization of the education system became increasingly more tightly planned from the central levels, and the situation became sufficiently controlled for new initiatives to be taken in teacher training, school network extension, introduction of organized adult education, and many others. The whole period 1976-1979 is further characterized by a massive educational explosion, with primary enrolment

more than doubling, secondary enrolment nearly tripling, vast totally new literacy initiatives being undertaken all over the country.

In 1980, it became necessary to take a series of new steps to consolidate and control the situation, and resolve the multiple problems that had arisen in the preceding years. School enrolment was slightly cut at primary and secondary levels to enable teaching staff to keep up. In coordination with all other sectors of the economy and the society, the general Prospective Plan (PPI) for the 1980-1990 Decade was drawn up, with the education component a major item for fulfilling national policy and meeting political, economic and social development needs. In parallel, work was started on the drafting on plans for a new National Education System (NES), to be introduced in stages from 1983 in order to meet desired national objectives as to the quantity, quality, methods and results to be attained through education.

In 1983, therefore, a new phase begins in Mozambican Education, the introduction of the NES, scheduled for completion by 1994. This period will be characterized by innovations on all fronts, vast structural changes, a certain degree of confusion through the parallel functioning of parts of the previous and parts of the new system. Enormous investment of human and economic resources will be necessary. It is probable that mistakes will be made, rectifications needed, and that the results will not reflect the total transformation desired, certainly during this period. The burden of the past will still lie heavily, especially as the goal is the transformation of the Mozambican Man.

The chapter that follows attempts to analyse the development of the Mozambican education system, especially over the period since Independence in 1975, and indicates some of the transformations planned on the basis of this experience, which should become effective over the next ten years.

3.1 EDUCATION PRIOR TO INDEPENDENCE IN 1975

3.1.1 Colonial Education

The development of formal education within a school system was very slow in colonial Mozambique, and characterized by its discriminatory nature. To quote Eduardo Mondlane:

"There are two categories of school system... (1) the Roman Catholic mission schools, whose principal function is to educate Africans through the primary level; and (2) the more sophisticated government school system, catering for whites, Asians and assimilados. The schools for Africans are organized as follows:

Ensino de adaptação... (whose) aim ... is 'to lead the indígena gradually from a life of savagery to a civilized life. This programme is officially the responsibility of the Roman Catholic missions ... The school years are: iniciação, ... primeira classe, and segunda classe.

Ensino primário - this programme is for students who have passed the ensino de adaptação. It comprises terceira classe, quarta classe and admissão (preparation for secondary).

The schools for Europeans, assimilados and others are organized on the following lines:

Ensino primário, a five-year programme ...

Ensino liceal - including the primeiro ciclo (two years), the segundo ciclo (three years) and the terceiro ciclo (two years).. (the last) for those preparing to enter a Portuguese University."¹

Note:

assimilado: an "assimilate", an African qualified as equal to a Portuguese citizen.

ensino de adaptação: "adaptive" education, with three years programme: initiation, first grade, and second grade.

indígena: "native".

ensino primário: primary schooling.

ensino liceal: secondary general education, of prestige value, comprising three "ciclos" (cycles).

"At all levels, the schools for Africans are primarily agencies for the spread of the Portuguese language and culture. Broadly, the Portuguese ideal has been that carefully controlled education would in time create an African people speaking only Portuguese, embracing Christianity, and as intensely nationalist Portuguese as the metropolitan citizens themselves... But in 1950, only 4,554 Africans in Mozambique had reached the legally recognized state of assimilation into Portuguese culture."²

"We try to reach the native population both in breadth and depth to (teach them) reading, writing and arithmetic, not to make doctors of them ... to educate and instruct them to make them prisoners of the soil and to protect them from the lure of the towns, the path ...

of good sense and political and social security for the province (i.e. Mozambique) ... schools are necessary, yes, but schools where we teach the native the path of human dignity and the grandeur of the nation which protects him."

(Pastoral letter of Cardinal Cerejeira, Lisbon, 1960).³

Colonial education objectives are clear - to give basic religious education to the savage, to inculcate a "desire to work" and the "rudiments of civilization", so that he might recognize Portugal as his standard and point of reference, and the colonist as his master.

A number of checks prevented the Mozambican who had access to a mission school from advancing to assimilado status; many mission schools did not offer the secondary school entrance year, and secondary entrance was limited by age to fourteen - few could get through the primary net in time to qualify for secondary entrance. In general, secondary schools were only to be found in the towns, further barring access.

With the founding of FRELIMO a new element was introduced and the colonial authorities sought to reform and extend schooling as a counter-balance.

As well as marking the beginning of the Armed Struggle, 1964 saw the expansion of the colonial education system. Restrictions on foreign investment had been totally relaxed and a demand was arising for a more trained work-force, while the threat of the liberation struggle induced the colonial power to invest more in ideological struggle, the creation of a petit-bourgeoisie, and the satisfaction of some popular demands. The following table indicates the relative growth of the colonial education system between 1950 and 1971.

TABLE 3.1 A Colonial education growth, 1950-1971.⁴

	1950	1960	1971
Primary			
Official	8 238	23 612	100 368
Officialized (mission)	159 015	416 911	413 532
Private	6 946	2 503	10 110
Pre-school	-	-	831
Secondary (preparatory)			
Official	-	-	12 636
Private	-	-	4 389
Technical	-	270	306
Agricultural	-	-	55
Teacher prep.	-	-	1 262
Secondary			
Official 'liceu'	952	2 822	5 819
Private 'liceu'	-	-	2 614
Tech industrial	428	1 664	4 509
Tech commercial	524	1 530	5 951
Tech agricultural	-	-	33
Upper secondary technical			
Industrial	-	-	548
Commercial	-	-	629
Agricultural	-	-	208
Primary teacher	-	-	91
Higher			
University	-	-	2 120

Mouzinho de Albuquerque, colonial commissioner, is quoted as saying:

"Schools are a fiction ... As far as I am concerned, what we need to do to educate and civilize the indigena, is to develop his abilities for him in a practical way for a manual profession and take advantage of his work for the exploitation of the Province."⁵

The result of this attitude and of the educational expansion undertaken after 1963 was not impressive. A census was conducted in 1970, at the high point of the liberation struggle, and therefore leaving out the population of the liberated zones and missing much of the population

of military call-up age or liable for taxation. (This is confirmed by the 1980 census statistics, which indicate that the average population growth rate would have been 4.03 % per annum if the 1970 census figures were correct.)⁶ The 1970 statistics give the following indications:

TABLE 3.1 B Educational qualifications of the population - 1970.⁷

	Male	Female	Total	% total population
Illiterate	3 472 886	3 850 724	7 323 610	89,65
Primary	511 032	246 587	757 619	9,27
Secondary	49 913	30 348	80 261	0,98
Higher	4 718	2 725	7 443	0,09
Total			8 168 933	100

According to the same census, school coverage of the 5-15 year old population was as follows:

TABLE 3.1 C School coverage - 1970.⁸

age	5	6	7	8	9	10	11	12	13	14	15
% cover	0.15	24.2	32.1	33.7	31.3	24.8	25.9	18.8	26.8	3.3	4.4

On the same dubious statistical background, educational coverage was said to average 37.7 % for the 6-11 age group, 10.2 % of the 12-17 age group in 1972.⁹

It should also be recalled that a large proportion of the children in secondary and higher education were the children of the colonists, most of whom left with their parents after independence. In 1973, only 40 African students were to be found in the 3 000 place university.¹⁰

A further heavy inheritance is to be noted in the area of the teaching staff. As table 3.1.A indicates, in 1971 only 1 353 students were in teacher training, 1 262 of these at 6th Grade level. The vast majority of teachers had no proper training. The large majority of secondary and university teachers were colonists, who abandoned the country also. In 1973 there were 11 000 primary school teachers "on the books" for 5 281 primary schools, 1 800 general secondary and 700 technical secondary teachers for 60 secondary-level schools.¹¹

There was almost no adult education (a very limited literacy access was opened in 1970). As colonists held all the skilled and semi-skilled

jobs in government, industry, services, agriculture and even petty trade, few African workers had any chance even to obtain on-the-job training.

3.1.2 Education in the Liberated Zones

As FRELIMO liberated large areas of the North of Mozambique over the period 1965-1973, so it took over their administration. By 1972, 160 primary schools catering for about 20 000 children operated, with soldiers and young students as teachers. Some 60 pupils were enrolled in the FRELIMO secondary school in Tanzania.¹² Some adult literacy work was also undertaken. One estimate puts the number who became literate in these zones at 20 000 people.¹³

The experience of the liberated zones still serves as a point of reference for the education system. Many basic principles were evolved through this experience,¹⁴ including:

- counting on your own resources
- the duty of all to teach and learn
- the application of the contents and methods to the local circumstances and realities
- the fostering of a sense of Mozambican nationality, and of combat against tribalism, regionalism and racism (as a result, the decision to use Portuguese as the official language of national unity)
- education linked to production and to the community
- praxis
- the school as a democratic centre, where new types of relation between teacher and pupil should evolve
- the principle of combat against superstition through education with a scientific base, designed to form the New Man.

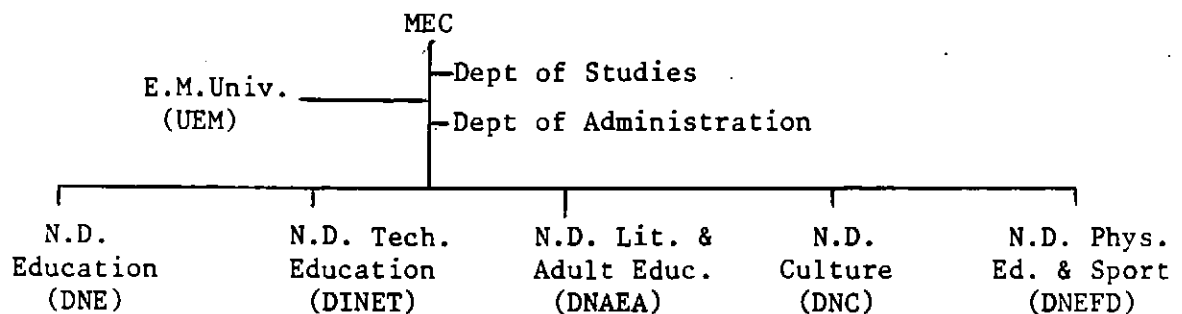
In the liberated zones, some teacher training was undertaken, along with the organization of collective work and study for teachers.

3.2 THE STRUCTURE OF THE EDUCATION SYSTEM AFTER INDEPENDENCE

After the 25th April 1974, the education system virtually ground to a halt all over Mozambique. Hundreds of teachers at the higher levels abandoned the country, as did thousands of colonists' children. Only with the assumption of power by FRELIMO in 1975 and the nationalization of education in July of that year, was it possible to begin to recuperate the situation.

In February 1976 the Ministry of Education and Culture (MEC) was officially structured along the following lines:

TABLE 3.2.A Structure of the Ministry of Education and Culture (1976)

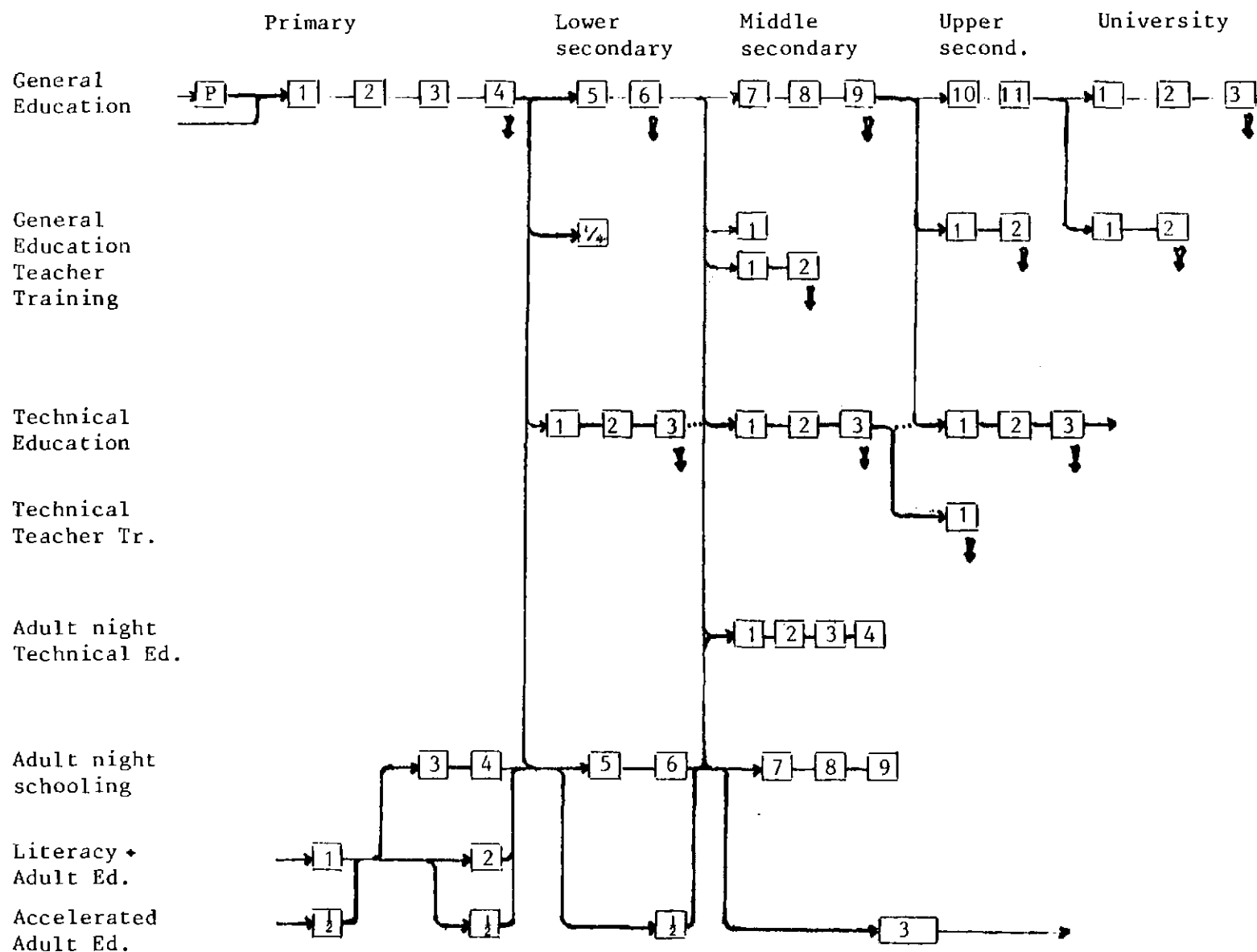


Colonial textbooks and curricula were abolished, and each National Directorate (N.D.) took over the administration of its own section of the education system. The Eduardo Mondlane University was administered by its own semi-independent office. The National Directorate of Literacy and Adult Education (DNAEA) began to develop mass adult education for the first time.

1976 - 1977 were years of "crisis management", involving the replacement of curricula and some textbooks, coping with the sudden enormous school enrolment expansion, covering the flight of hundreds of teachers, making basic policy decisions and learning how to administer the system.

A number of emergency measures were taken to cover existing difficulties. In general, therefore, the structure of the colonial education system was basically retained, with some new and some 'ad-hoc' elements added onto it:

TABLE 3.2.B The Education System by 1980.¹



Numbers represent years.

↓ indicates major exit from system into working life.

The three principal components (General Education, Technical Education, and Adult Education) were attributed a theoretical equivalence at indicated levels, but the separate administration of each resulted in non-equivalence in practice. The Teacher Training component became the most confused aspect, as there had been almost no experience in this field previously, and as it was added in 'ad-hoc' to meet as swiftly as possible the demands for all kinds of teachers in the greatest possible number. Thus all levels of teacher training offered no higher level equivalence, not being counted on to the basic educational qualification of the trainee teacher.

3.3 RESTRUCTURING THE EDUCATION SYSTEM, 1983-1994

In 1980, work began on restructuring the education system with a view to creating the basis for the total reform of the system. Its directive principles are to be:¹

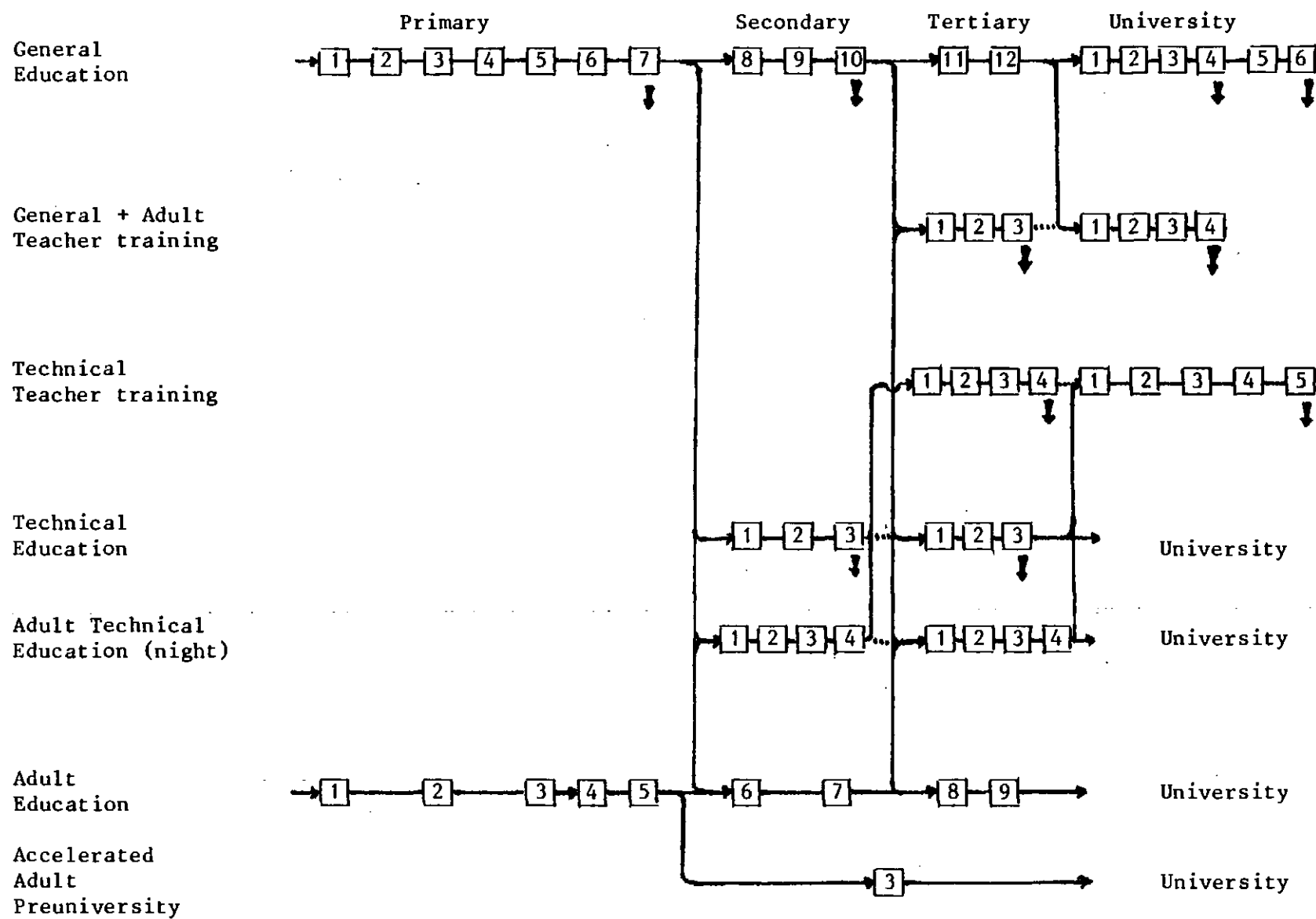
- internal unity of objectives, methods and contents, guaranteeing cohesion between all levels and components;
- correspondence between the aims, contents and structure of education and the development of the productive forces, production relations and social demands, implying a permanent and systematic process of revision;
- articulation, integration and equivalence, permitting complete mobility within the system as a whole so that study continuity should always be possible.

On dialectical principles, it is obvious that the structure which has been selected has been strongly influenced by the one shown in Table 3.2.B, in part to assure that some articulation and equivalence should be maintained between the old and the new education levels and sub-systems.²

A timetable was defined for the introduction of the new structure, according to national development objectives. The General (child) education subsystem is to be introduced one grade ("classe") per year, beginning in 1983 and ending in 1994 (with the proviso that, should it be possible to accelerate the introduction of any specific level, this should be done). As one of the major objectives of the Adult education subsystem is to guarantee the education of the adult working

population in conformity with medium-term development plans, the introduction of this subsystem is to be accelerated, two "years" of study (in themselves accelerated in relation to the "Classes") to be introduced in each calendar year. The technical education subsystem is to be reformed and introduced in harmony with the reform of the two abovementioned subsystems. The Teacher Training subsystem, on the other hand, is being and will be reformed in a whole series of intermediate steps, involving lengthening, upgrading and demanding of higher entry qualifications, progressively over the period to 1994, according to predicted growth in graduate output from the higher levels of the system, demands of the introduction of the system itself, and other factors. Thus several intermediate components of the system will exist for a short period and subsequently be abolished (notably, the lowest level of Technical training and of teacher training). By 1994, the system in operation should be as follows (see Table 3.3.A, following page).

TABLE 3.3.A New National Education System Structure by 1994.³



Numbers indicate years. ↓ indicates major exit from system into working life.

The General education subsystem should serve as the definitive standard for the maintaining of the abovementioned directive principles (internal unity, correspondence, equivalence). In terms of the transition between the old and the new systems, relative equivalence between diplomas issued under the one and the other will be:

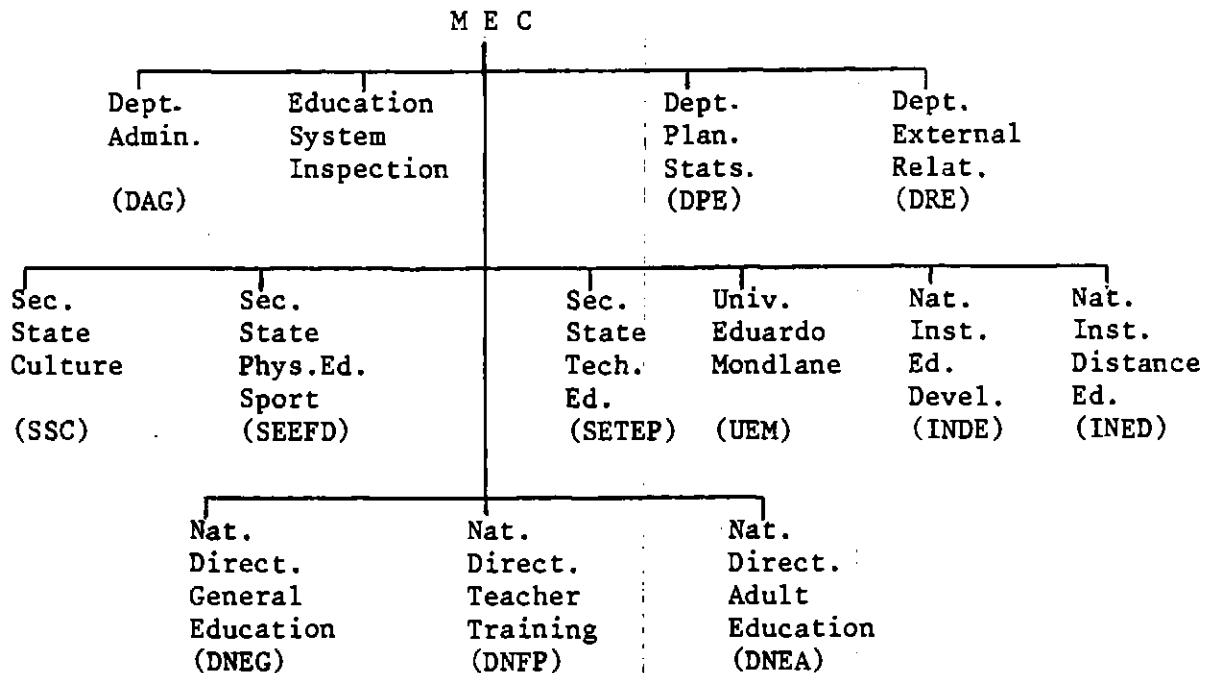
TABLE 3.3.B* Equivalence between Old and New Education Systems⁴

1975- 1982	pp	1	2	3	4	5	6	7	8	9	10	11	University	
	pre prim	primary				lower		middle			upper			
								s e c o n d a r y						
1983+		1	2	3	4	5	6	7	8	9	10	11	12	University
		(lower)				(upper)		(lower)			(upper)			
		p r i m a r y						s e c o n d a r y						
		"1st Level"						"2nd Lev."			"3rd Lev."			

* NOTE. Translation from Portuguese to English creates certain terminological difficulties; also during the period of transition, various pieces of the old and new systems will be functioning at the same time. In addition, various subsystems of both old and new systems employ their own terminology with reference to grades and levels. Essentially, this paper will use the terminology indicated in Table 3.3.B as its basis, principally that applied to the old system. Other terminology will be introduced and defined where necessary, in relation to this basic terminology.

In order to administer the new National Education System (NES), the Ministry of Education and Culture (MEC) is in the process of being restructured, on the following lines:

TABLE 3.3.C Structure of the MEC (from 1983)⁵



Each subsystem of the education system will be administered by its own National Directorate (State Secretariat in the case of Technical Education, given its role as a coordinator and normator of all Professional Training done by the productive and social sectors). Planning management and coordination is undertaken by the Department of Planning and Statistics, and curriculum planning, textbook development and equivalence control by the National Institute for Education Development.

The Provincial and District Directorates of Education and Culture closely resembled the Structure of the MEC (Table 3.2.A) with Services corresponding to each of the Directorates, excepting, no provision for a Technical Education Service. The restructuring of these levels in terms of the MEC's new structure (Table 3.3.C) has not yet been finalized.

Financial control is under the Department of Administration, as is distribution of all school material (textbooks, furniture, equipment inter alia) and coordination of school production, payment of salaries, budgetting, etc. The Department of External Relations deals with all external coopera-

tion and aid, contracting and installing foreign workers, planning and conducting visits from abroad, preparation of visits outside the country, international conferences and the like.

3.4 THE GENERAL AIMS AND OBJECTIVES OF EDUCATION

As has been indicated, the education system operating over the period 1975-1982 was not developed in terms of a network of general and specific objectives; rather, each portion was developed to some extent independently with rather roughly-traced objectives and a general fidelity to FRELIMO's political line, with some reference also to the experience of the liberated zones and to specific Party and Government education directives. An analysis made by the education authorities in 1979¹ indicates that the principal existing objectives could be resumed as "guaranteeing a political, cultural and scientific training as a base for the training of a socialist personality, enabling not only the understanding of the present phase but also its transformation". The analysis indicates the following problems with the system:

- it is an adaptation of the colonial system to new conditions;
- education opportunities are not equal for all students;
- significant differences exist between city and countryside in access, in furnishing and in equipment;
- the current definition of aims is unscientific, not corresponding to reality nor the demands of the learning process;
- a traditional conception that the role of the school is to prepare people for university;
- deficient scientific content, sequence in programmes, and methodological orientation, as well as language teaching;
- an over-theoretical content.

The objectives enunciated for the new NES can be said to distil what were the more desirable guiding principles orienting education work, as well as open some new ground. The major guiding principles and aims of the NES can be resumed as follows:²

FUNDAMENTS:

- The Constitution of the People's Republic of Mozambique
- The FRELIMO party programme and education directives
- The experiences of the Armed Struggle and since Independence
- The universal principles of Marxism-Leninism.

GENERAL PRINCIPLES:

- Education is a right and a duty of every citizen, implying:
 - Equality of access to all levels of education for every citizen
 - Permanent and systematic education for all working people
- Education is an instrument for reinforcing the governing role of the proletariat in alliance with the peasantry
- Education is the principal instrument for the creation of the New (Socialist) Man.

GENERAL AIMS:

- Overridingly, the creation of the New Man, with the following characteristics:
 - free from superstition and a bourgeois mentality
 - imbued with the values of the Socialist Society:
 - national unity, patriotism, proletarian internationalism
 - love of study, work, and collective living
 - a spirit of initiative and sense of responsibility
 - an objective scientific materialist world view
 - an active contributor to constructing Socialism.

GENERAL OBJECTIVES:

- The eradication of illiteracy
- The introduction of universal compulsory schooling
- The training of cadres suited for the economic and social development of the country
- Access for all to professional training
- The transforming of all educational institutions into bases for revolutionary action
- The training of teachers as true educators able to fulfill the educational objectives
- The dynamizing and development of scientific investigation towards the country's development
- The preparation of highly qualified scientists and specialists
- The diffusion of the Portuguese language with a view to consolidating national unity
- The imbuing of the new generations with aesthetic sensibility and love of the arts.

PEDAGOGICAL PRINCIPLES:

- Education should permit the development of capacities and personality qualities in a harmonious, balanced and constant manner
- Integral training is based on the dialectical unity between scientific and ideological education
- The training process should be organized in such a way as to develop creative initiative, independent study and critical assimilation of knowledge
- The whole training process should develop on the basis of the link between theory and practice, especially as regards:
 - the contents and teaching methods in all subjects
 - the polytechnic character of education, preparing students for practical life and productive work
 - the link between the school and the community.

GENERAL OBJECTIVES OF EACH SUBSYSTEM:

The General Education subsystem should:

- assure education access to all young Mozambicans through universal obligatory schooling
- provide basic and unified schooling, based scientifically on the development of intellectual, physical and manual capacities and the acquisition of a politico-ideological education, in order to respond to development needs
- develop in Mozambican youth the basic qualities of the New Man
- encourage the development of special capacities through the promotion of interest circles* and vocational schools
- provide special education for the mentally handicapped and social misfits

When economic development makes sufficient resources available, primary education of seven years' duration will be made obligatory in progressive steps, the age of compulsory entry being seven years.

* Informal pupil work-groups meeting outside of normal school hours to study within a particular area of interest common to the participants such as Mozambican history, mathematics, etc.

The Adult Education subsystem should:

- guarantee educational access to the adult working population, with priority to those who have a fundamental role in the construction of Socialism
- provide the adult worker with a general scientific education creating a scientific materialist world view
- develop in the working population a patriotic and revolutionary

consciousness characteristic of the New Man, through an education which permits him:

- to liberate his creative initiative
- to contribute to national unity, especially through learning Portuguese
- to develop a sound revolutionary moral sense.

"Adult" is defined as being 15 years old or more. Adult education is to be accelerated on the basis of a methodology which takes full advantage of the empirical knowledge acquired by the worker through his life experience. Priority is accorded in terms of class, social function and age, the 15-45 age group being considered most important.

The Technical Education Subsystem should:

- assure the integral and technical-professional training of youth and adult workers, in such a way as to guarantee in quality and in quantity the planning demands for the Qualified Work Force:
 - training qualified workers and technicians for all social and economic sectors
 - continually raising workers' scientific and technical level so as to raise production and productivity
- develop appropriate scientific capacities in the working youth, including scientific work organization and management
- develop the basic qualities of a socialist personality that characterize the New Man, in the youth and the workers; organizing them for direct participation in production and for the management of socialist property, as a means to attaining a solid class consciousness.

Technical education is designed to swell the ranks of the working class with professionally capable and class-conscious skilled workers drawn from the youth and adult population. Each level is intended to be terminal, channelling graduates directly into production. Study continuity should thereafter be provided outside of working hours. Political, ideological and scientific education is a necessary component.

The Teacher Training Subsystem should:

- assure the ideological, scientific, technical, pedagogic and methodological training of the teaching body for the education system
- forge in the teacher a profoundly patriotic and revolutionary consciousness
- create in the teacher a scientific and materialist view of development, of nature, of society and of thought, capacitating him to act in a dynamic way in the transformation of material, social and cultural conditions in the school, the community and the society.

Teachers will be drawn from among the graduates of the General, Technical and Adult Education subsystems, as well as upgraded from the current teaching body.

University Education should:

- assure a political training guaranteeing conscientious integration into the tasks of constructing Socialism
- consolidate a scientific conception of Nature and Society
- impart a profound knowledge about the history and current realities of Mozambique
- develop a critical spirit, investigative and able to study, work collectively and individually, and apply its knowledge creatively.

Students will be drawn from the General, Technical and Adult Education subsystems, especially among vanguard workers in production and services.

Note 1: The above objectives et al. have been abridged and abstracted from the document "Linhas Gerais do Sistema Nacional de Educação", MEC/INDE, December 1981, and can be found there in their (much more) extensive form.

Note 2: It is beyond the scope of this paper to examine in depth the fascinating subject of how Frelimo wishes education institutions to function internally in order to promote both participatory democracy and people's power. The best insight into the question can be obtained from speeches by President Samora Machel (11, 12) and from Chris Searle's book on a secondary school in Nampula (33).

3.5 THE CURRENT OVERALL EDUCATIONAL SITUATION IN MOZAMBIQUE

In 1980, the first post-independence National Census was undertaken, and in 1982, the first general education statistics were published resulting from the analysis of the results. Some important figures are reproduced here, owing to their overall relevance:

TABLE 3.5.A Education Statistics from National Census, 1980¹

- a) Population: 12 130 000

Population over 5 years of age: 9 682 267

- b) Illiteracy: 75 % M: 63,2 % F: 86,1 %

Illiteracy by age group: 5-9 years: 93 % 25-44 years: 76 %

10-14: 60 % 45-64: 87 %

15-24: 57 % 65 + 93 %

- c) Educational qualifications of the population over 5 years of age:

Completed education level	Total	Total %	M	F
Illiterate	7 261 417	75	2 980 783	4 280 634
Literate, without completing primary	1 810 529	18,7	1 264 099	546 430
Primary (4 years)	480 839	5	372 528	108 311
Lower sec (6 years)	79 698	0,8	60 570	19 128
Middle sec (9 years)	8 405	0,09	6 014	2 391
Upper sec (11 years)	2 835	0,03	1 941	894
Elem, tec (7 years)	6 320	0,07	5 170	1 150
Basic tec (9 years)	10 030	0,1	7 504	2 526
Medium tec (12 years)	971	0,01	767	204
University	4 275	0,04	3 028	1 247
Other levels (teacher tr., etc.)	16 948	0,2	10 481	6 107
TOTAL	9 682 267	100	4 713 245	4 969 022

- d) Composition of the student body:

Level at which studying	Total	% total enrolled	M	F
Pre-primary	70 406	3,1	36 390	34 016
Primary, lit. + post-lit.	1 996 442	88,1	1 114 989	881 644
Lower secondary	150 176	6,6	112 040	38 136
Middle secondary	31 688	1,4	24 672	7 016
Upper secondary	1 242	0,05	871	371
Elementary tech.	1 000	0,04	773	227
Basic technical	9 071	0,4	7 245	1 726
Medium technical	1 410	0,06	1 200	210
University	2 031	0,09	1 495	536
Other levels	2 295	0,1	1 660	635
TOTAL	2 265 761	100	1 301 344	964 417

The statistics from the 1980 Census offer an important overview of the composition of the studying population, and indicate important relations, for instance, the extremely pointed nature of the education pyramid, and the increasing decline in women's participation and education through the various levels - from 48 % in pre-primary to 22 % in middle secondary. However, they do not confer exactly with the MEC's own statistical coverage in 1980.²

It is worth noting that a very large part of the educated population indicated by the Census has been educated since Independence. (Compare Table 3. 1.B, noting also that most of those indicated as possessing secondary and higher level qualifications left the country between 1973 and 1976.) The 4th Congress gave the following figures on graduates from various levels over the period 1975-1982:

TABLE 3.5.B Graduates, 1975-1982³

Primary	430 000
Lower secondary	88 000
Middle secondary	7 400
Upper secondary	1 100
University	1 748
Teachers trained for lower middle and upper secondary (technical and general)	3 517
Technical education graduates	9 200
Primary teachers	10 200

3.6 THE GENERAL EDUCATION SUBSYSTEM

As indicated above, the post-independence general education subsystem was composed of a pre-primary (optional) year and 11 subsequent grades, divided as follows:

Primary	Grades 1 - 4
Lower secondary	Grades 5 - 6
Middle secondary	Grades 7 - 9
Upper secondary	Grades 10 - 11

This paper analyses each level in its turn.

3.6.1 Primary Education

1) Structure

The primary level 1975 - 1982 has been composed of two parts:

- one year of pre-primary education
- four years (grades) of primary education

(a) Pre-primary

From 1975 - 1982, efforts were made to set up an optional pre-primary year, especially for the rural areas, with an entry age of 5, no final examination, and a creative play curriculum designed to teach psychomotor skills, introduce Portuguese - the official language and only school medium of instruction - and familiarize children with the school environment. A separate sector of the National Directorate of Education and of the Provincial Education Services was created to control this field. Pre-primary was abolished in 1983 with the introduction of the NES.

TABLE 3.6.A Pre-primary Enrollment, 1975 - 1980¹

1975	1976	1977	1978	1979	1980
351 870	350 853	223 695	213 892	246 000 ²	70 406 ³
					150 000 ⁴

(b) Primary

From 1975 - 1982, the primary level consisted of four grades of study, with entry permitted to children of between 6 and 14 years of age. The curriculum⁵ consisted principally of the subjects Portuguese, Arithmetic, Drawing, Manual Work, Physical Education, Cultural Education and (outside hours) School Production. In 3rd and 4th Grades, History, Geography, and Natural

Science were also introduced. Transition between all grades was regulated by examination, with some attempt to include scores for the year's work in the final result.

The schools functioned in two shifts, 7.00 - 11.30, 13.00 - 17.30, giving each child 25 periods of schooling a week. The school year ran from 16th February - 15th November in three terms.

From 1983, the primary schools have gone over to a semester system and a lengthened school year (about three weeks longer). The new 1st Grade was introduced in 1983, the curricula for the remaining grades to be changed one grade per year thereafter. The subject areas in the 1st Grade remain the same as before. Children aged 7 have been given priority for entry, in preparation for the introduction in the future of compulsory schooling (see 3.6.1 (2)).

2) Primary Access and Enrollment

Independence in 1975 brought about a schooling explosion. At the primary level, enrollment increased 2.2 times from 1973 to 1979.

TABLE 3.6.8 Primary Enrollment 1972 - 1981⁶

	Pre-primary	Primary	Total
1972	-	543 868	543 868
1973	-	-	666 500
1974/5	351 870	344 015	695 885
1976	350 853	926 647	1 276 500
1977	223 695	1 111 047	1 334 742
1978	213 892	1 284 590	1 462 282
1979	246 000	1 248 729	1 494 729
1980	70 406?	1 316 786	1 387 192
1981			1 376 865
1982			1 330 000

In 1980, enrollment was cut back by central planning on directive from the Party and the government in order to reduce school congestion and rationalize use of resources. Teachers ceased to teach two shifts per day on the national ratio of 1:88, going over to one and a half shifts per day on the national ratio of 1:55⁷ (a maximum of 75 per class), on the

rationale that their hours of work were excessive and that they should be given time to prepare their lessons, in order to raise teaching quality. The schools themselves continued to function in two shifts.

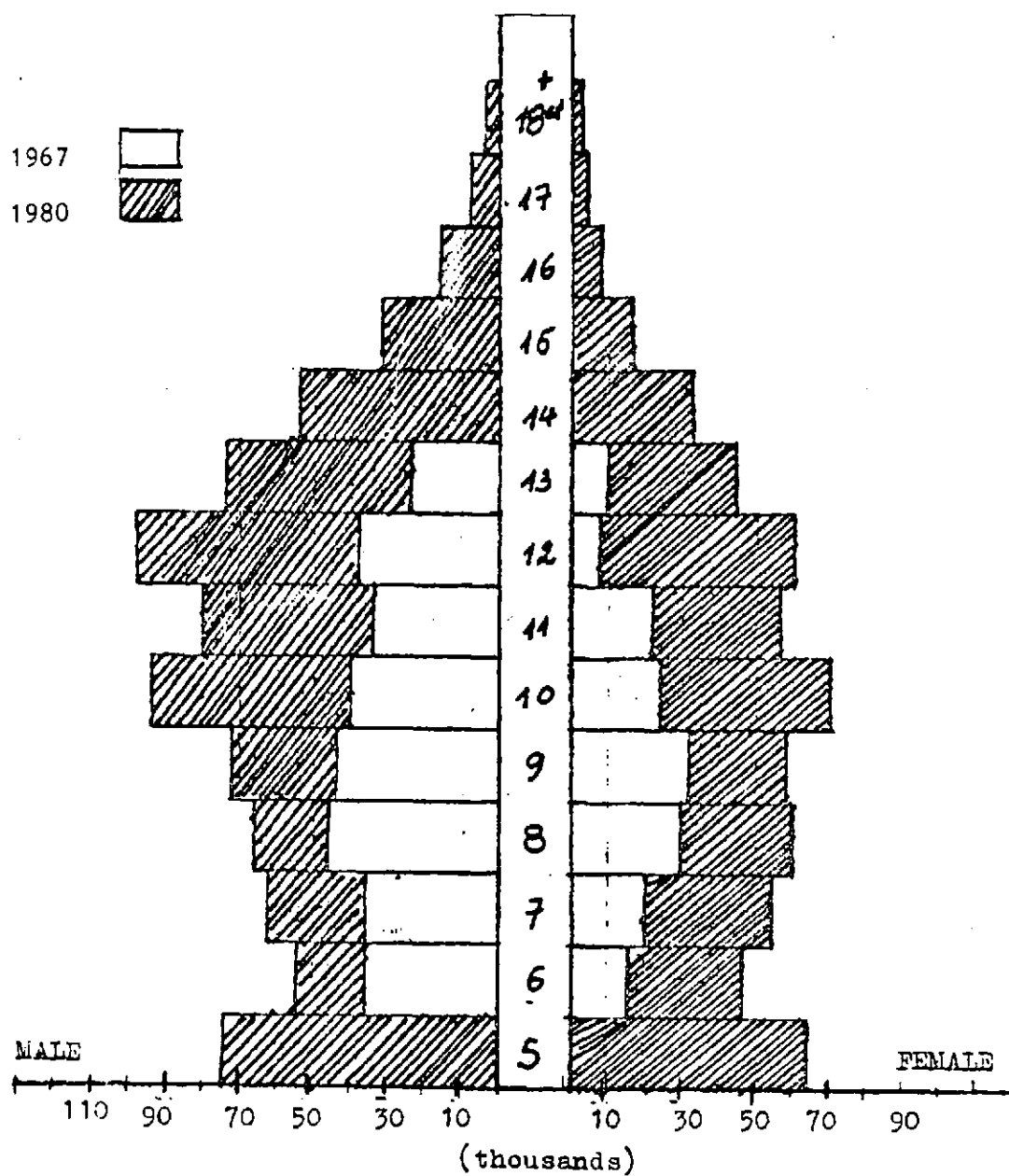
In 1981, standard primary entry age was defined as 7 years, in preparation for the NES introduction in 1983, with the proviso that, if enrollment targets were not met, 6-year olds "whose development is sufficient to meet psychopedagogical demands of learning and education" could also be admitted.

As a result, present coverage of the 7 - 14 age group is about 50%, with about 60% of first grade pupils being 7 years old, according to a consultancy report on distance education.⁸

The major limitations on increased access to schooling are the lack of teachers, the dispersion of the population accompanied by a deficient school network, and the costs.

TABLE 3.6.C School Coverage by Sex and Age Group⁹

Primary School Age Pyramid, 1967 and 1980



Percentage Coverage by Age Group, 1980

Age	5	6	7	8	9	10	11	12	13	14	15
% cover	43,2	33,4	39,9	44,8	47,6	62,8	55,6	65,6	54,8	44,3	31,2

(a) Teachers

The number of teachers also increased dramatically after Independence.

TABLE 3.6.D Primary School Teachers¹⁰

1973	1974/5	1976	1977	1978	1979	1980	1981
11 000	10 281	15 000	16 142	16 308	16 810	17 030	18 751

Many teachers were admitted without proper training, notably in 1976, a practice that was severely curtailed thereafter. In effect, primary school expansion will depend altogether on teacher training capacities.

At the primary level, all teachers are Mozambican. Each teacher teaches all the subjects of the curriculum to his own class, except at the level of the 4th Grade in larger schools.

(b) School Network

The school network was effectively doubled by the adoption of the two-shift system in 1976. In the immediately succeeding years, hundreds of schools were built up by the populace on their own initiative, often containing only one classroom and catering for a small number of children. In line with the rest of the 1980 rationalization of the education explosion, many of these were closed or incorporated into other schools, leading to a 20% reduction in the number of schools.¹¹

TABLE 3.6.E Primary Schools¹²

1973	1974/5	1976	1977	1978	1979	1980	1981
5281	5235	5853	7076	7104	7170	5730	5709

Even so, many primary schools did not offer a complete range of grades.

TABLE 3.6.F School Grade Levels and School Size

1980: ¹³	Schools with only 1st Grade	13%
	Schools with 1st and 2nd Grade	23%
	Schools up to 3rd Grade	28%
	Complete primary schools to 4th Grade	36%
1981: ¹⁴	Schools with 1 - 3 classes	3 524
	Schools with 4 - 6 classes	1 517
	Schools with 7 - 10 classes	405
	Schools with 11 - 20 classes	181
	Schools with more than 20 classes	48

The relative dispersion of the population and the difficulties of managing the school network may easily be inferred from the table. The further expansion of the school network is defined directly in terms of the communal village programme for the socialization of the countryside; new schools to be located, by priority, in the (growing number of) communal villages.

In general, primary schools outside of provincial, district and some locality capitals are constructed of wattle and daub or other locally available materials, by the populace. The MEC runs a school construction upgrading scheme, "assisted self-construction",¹⁵ involving standardized classroom plans, advice on more durable construction with local materials and technology, and some investment support, but the scheme is still limited in its reach.

3) Primary School Results

From 1975 to 1982, 430 000 children graduated from the 4th Grade.¹⁶

4) Administration

Primary education is directed through the National Directorate of Education, Primary Education Service, in the MEC. Planning and statistical coverage are under the aegis of the Department of Planning and Statistics.

At the provincial level, the Provincial Education Service within the Provincial Directorate of Education and Culture has a Primary Education Sector; at the district level, the Head of the District Directorate of Education and Culture is responsible for primary education.

On the ground, the primary schools are divided into the so-called "Zonas de Influência Pedagógica" (ZIP) which group up to about ten schools together by area of location within a radius of some 15 km. The ZIP structure has a dual function - to centralize locally, some aspects of education administration such as payment of teachers' salaries, distribution of textbooks, material, examination scripts etc., statistical coverage and the like; and to centralize locally some pedagogical functions, such as teacher upgrading meetings, study weekends, meetings between school directors and so on.

Schools are often very small, especially outside the communal villages in the countryside, with only one or two teachers, offering in these cases only the lowest grade(s) (see Table 3.6.F). All schools over this size

should have a school director who is responsible for administration, organization and results. The larger (often urban) primary schools also have a pedagogical director and a small administrative staff.

5) Quality and Efficiency

Mozambican school quality and efficiency are affected by a set of factors common to most underdeveloped countries:

- pupils' and teachers' social background
- teaching quality and medium of instruction
- material schooling conditions
- drop-out and repetition

(a) Social Background

At present, Mozambique has a 73.4% illiteracy rate,¹⁷ calculated over the population of 5 years of age and over. Around 85% of the population is peasantry. Especially in the rural areas, therefore, pupils come from the background of a completely illiterate peasant family, much under the influence of the traditional society and with no history of formal schooling, reading, etc. Given also the high incidence of endemic disease and the subsistence nature of the family economy, pupils often miss school for health reasons or because they are required for production purposes, especially at peak production periods. Diet is poor, and in bad times pupils are likely to arrive at school hungry, even undernourished. The situation is not much better in the towns, where food shortages persist and wages are quite low. Teachers themselves often have the same problems; many are also marked by the influence of the traditional society and colonial history, evidencing passivity and incorrect behaviour. These social, economic and cultural conditions have a profound effect on schooling quality and efficiency.

Some pilot projects for school meals, milk, etc., have been launched recently with support from the World Food Programme, but generalizing these would seem to be well beyond Mozambique's economic possibilities. The resolution of the cultural difficulties is a dialectical problem, only resolvable over time through educational expansion and economic development.

In the rural areas, it is quite common for children to have grown up in the environment of traditional or Catholic religious practise. It is still also common for parents to remove their children temporarily or permanently

from the schools at the age of puberty, integrating them for some periods in "initiation schools", traditionally designed to inculcate obedience to the elders and the ancestors, teach the rights and duties of adulthood, and prepare the participants for acceptance as full members of the local society. The initiation ceremonies are preceded by varying periods of introductory teaching of correct attitudes, observances and behaviour, which are separate for boys and girls, and have been widely criticized by the Frelimo Party because:

- their conceptual framework is metaphysical;
- their frame of reference demands a severe subordination to a rigid tribal authority structure, dominated by the elders and, therefore, extremely conservative;
- they therefore promote tribalism and superstition, passivity in the face of difficulty and adherence to creeds antagonistic to socialism;
- they are instrumental in promoting the oppression of women.

The ceremonies and their underlying conceptual framework vary quite widely from one area to another, as for instance, some societies are matri- and others patri-lineal, etc. This paper will not attempt a larger analysis of traditional education, only remarking in passing that it has profound effects on its graduates.

Frelimo does, however, insist that the construction of the new society must not simply override the past and attempt to blot it out.¹⁸ Rather, the variety of languages and cultural traditions should be respected and promoted, the combat being designed to oppose negative aspects and to promote positive aspects of traditional culture.

(b) Teaching Quality

The general teaching quality is extremely low. Of the 18 751 primary school teachers working in 1981, 10 016 have only 4th Grade schooling and no formal teacher training. 8 735 have 6th Grade schooling, some 2 000 of whom do not have formal teacher training; giving an overall figure of 64% of the teachers being untrained.¹⁹

Following colonial practices, most teachers teach by exposition, dictation, setting pupils to do copy exercises and choral rote-learning, which results in failure to learn to read, boredom, passivity and school failure on the part of many pupils.

One major difficulty has been the use of the Portuguese language as a teaching medium and a taught subject. A high proportion of children arriving in primary school speak no Portuguese and may have no contact with it in their daily lives, while the teachers have had no consequent second language teaching training - not even the trained ones - and have no established methodology to deal with the problem. This has severely exacerbated the general methodological trend of repetition and rote learning, and contributed significantly to low learning quality.

Many upgrading strategies have been and will be implemented, among them:

- upgrading courses in school holidays of 1 - 3 months;
- weekend seminars in the ZIPs;
- joint lesson planning sessions, where possible;
- distribution of a teachers' magazine, Jornal do Professor, and broadcasting of a half-hour weekly radio programme.

At present, a distance teaching course for primary school teachers with 4th Grade is being prepared, involving upgrading from 4th to 6th Grade by correspondence and including some psychopedagogical and methodological subjects. It is planned to create a whole new National Institute of Distance Education to organize this project and any expansion which may arise from the experience.²⁰

At provincial and national level, small commissions existed (Comissões de Apoio Pedagógico, Pedagogical Support Commissions) made up of a few more experienced and qualified teachers, with the objectives of running in-service upgrading seminars, lesson observation and critique, distribution of stencilled support texts, etc. As they did not function well (due to administrative difficulties as well as to lack of sufficiently trained and experienced personnel) they have largely ceased to operate.

(c) Material Conditions

Most rural schools, and some in the towns, are very small, of thatched wattle and daub, many with inadequate roofing and flooring and (surprisingly) lighting, due to the practice of constructing buildings with very small (or no) windows, and of not orienting them on the ground according to the sun. Many schools are in a very poor state of repair and only have access to unhygienic water sources.

Most primary schools are very lacking in equipment and furniture of all kinds. There are often no desks in rural schools, the deficit made up

(if at all) by reclined tree trunks and cane or wooden benches on which to write. A campaign was launched country-wide in 1982 to try to ensure that in 1983 no pupil should take classes sitting on the floor or in the open air.²¹

Classrooms usually have a teacher's chair and table, and a not particularly satisfactory blackboard, and no other furniture.²²

Pupils now have simple blue uniforms which parents must make, buying the material through the school. Not all children have yet acquired these, but their availability will help to prevent children missing school for lack of clothing.

Basic didactic material (pens, pencils, rubbers, rulers, chalk, exercise books, maps of Mozambique) are distributed by the MEC by quota (see 3.10.3). In the period 1975 - 1979 there was a gross shortage of all this material, but as of 1980 the situation has dramatically improved, although transport delays and difficulties, planning errors, enemy action and other problems often imply late or deficient deliveries. The overwhelming majority of primary schools have no other equipment than this.

With the abolishing of colonial textbooks and programmes in 1975, the lack of textbooks has been a constant factor. Some textbooks were issued as of 1978, but many subjects in various Grades have no textbooks even now. (For a detailed handling, see 3.10.1). The progressive introduction of the NES is planned to be accompanied by a parallel full introduction of textbooks year by year; some higher grades may get "intermediate" books beforehand. Textbooks are distributed along with teachers' handbooks and other didactic material. Some textbooks will become the property of the school, for loan and recovery; others are designed to be written in by the pupils.

(d) Drop-out and Repetition

To all these defects in schooling conditions, and often because of them, is added a high drop-out rate in all classes. Social and economic conditions often cause drop-out -

- in order to support family production;
- because of hunger, disease, lack of clothing;
- in order to undergo traditional initiation rites;
- because of the distance between home and school;
- by girls engaged in premature marriage;

- through removal of children by parents who are suspicious of the results to be expected of schooling - cultural alienation, threats to authority patterns etc. - suspicious of the teacher, disillusioned with their child's progress, etc. In particular, the traditional society sees the schooling of girls as being unimportant.

Drop-out demoralizes the teachers and breaks up learning groups in the classroom, school friendships, etc., and itself contributes to further drop-out.

Given that all four grades are examined, there is large-scale repetition in all. The low teaching quality, language difficulty and deficient learning environment contribute to a high drop-out and failure rate and a re-integration of drop-outs and repeaters in each year, which raises and variegates the ages in each class, increases demoralization and the inefficiency of the system.

As a result, MEC calculates that 12% of 1st Grade entrants complete 4th Grade in four years.

The following data are available to indicate the level of primary school efficiency:

TABLE 3.6.G Distribution of Total Primary Cohort over the Four Primary Grades (in %)²³

<u>Grade</u>	<u>1975 (%)</u>	<u>1979 (%)</u>
1	48,5	44,8
2	26,7	25,7
3	15,3	18,6
4	9,5	10,9

TABLE 3.6.H Primary School Efficiency²⁴

(Survey of a cohort of 6 800 pupils, outlying suburbs of Maputo City, 1982)

<u>Grade</u>	<u>Pass (%)</u>	<u>Repeat (%)</u>	<u>Drop-out (%)</u>
1	48,7	33,1	18,2
2	34,8	41,8	23,4
3	40,7	46,2	13,1
4	57,2	32,7	10,1

TABLE 3.6.I Primary School Repetition Rates²⁵

<u>Grade</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
1	32,4	29,6	31,1
2	28,0	30,2	30,9
3	23,4	27,0	30,7
4	20,2	24,1	25,7

In comparing Tables 3.6.H and 3.6.I, it should be noted that the repetition rates in Maputo City are much higher than the country-wide average.²⁶

In order to counteract the drop-out rate, the local People's Assemblies are specifically charged with the mobilization of parents to send their children, especially girls, to school at the preferred age; to combat absenteeism and drop-out. One of the functions of the school-community link is also to involve the parents in the life of the school and get them to prevent absenteeism and insist on the doing of homework, etc.

6. Equity

(a) By Sex:

Enrollment by sex in the 1st Grade is fairly equitable, but owing to the higher drop-out of girls the overall ratio for primary school pupils was:

1979: 42% girls

1980: 42,5% girls²⁷

It is to be noted that this represents a considerable political victory in comparison with many African societies.

(b) By Region:

Mozambique inherited a warped school network at Independence, which highly favoured the South over the North and the towns and cities over the countryside.

TABLE 3.6.J Primary School Coverage 1973²⁸

Region	Province	School Coverage (%)	% Total Population
North	Niassa	66,9 (x)	4,2
	C. Delgado	52,8 (x)	7,8
	Nampula	31,4	19,8
	Zambezia	25,7	20,6
Centre	Tete	31,7 (x)	6,8
	Manica	28,7	5,3
	Sofala	33,9	8,8
South	Inhambane	34,1	8,2
	Gaza	43,7	8,2
	Maputo	50,3	10,2
TOTAL		36,23	100

These colonial statistics were based on a large under-estimate of the total population and, in the cases marked (x), completely omitted the rural population, all living in areas controlled by FRELIMO (see Section 3.1.1 above).

Much of the current school building takes place in the countryside, specifically in the 1 350 communal villages, 75 - 80% concentrated in the North;²⁹ but regional equity has not yet been established. In absolute terms, school access in the towns is much easier than in the countryside, and in the more economically developed areas, higher than in the less developed ones.

It is difficult to evaluate schooling quality by region. All provinces have high numbers of untrained teachers, including Maputo City. In terms of priorities, provinces allocate trained teachers firstly to communal village schools. Many teachers in the towns are untrained women, married to public servants, who are therefore difficult to send for training or to the rural schools.³⁰ Pregnancy and other domestic demands often cause these teachers to be absent from their classes. The indication in Tables 3.6.H and 3.6.I above also shows the repetition rates in Maputo to be higher than elsewhere, thus schooling quality in the capital can be seen to be lower than the national average. The only other indicator available on possible variation in teaching quality is the distribution of the untrained teachers:

TABLE 3.6.K Distribution per Province of Untrained Teachers, 1982³¹

Province	% of Total Number Untrained Teachers	% of Total Population
Niassa	6,3	4,2
Cabo Delgado	10,2	7,8
Nampula	16,2	19,8
Zambezia	15,3	20,6
Tete	7,6	6,8
Manica	3,9	5,3
Sofala	3,9	8,8
Inhambane	9,5	8,2
Gaza	13,3	8,2
Maputo	6,6	4,0
Maputo City	7,3	6,2

Nampula, Zambezia, Manica and Sofala seem to be relatively favoured vis-a-vis the rest, although in the absence of more complete data, no reliable conclusions can be drawn.

(c) By Social Class:

In terms of the overall political and general educational objectives of the People's Republic of Mozambique, the proletariat and organized peasantry should have priority access to schooling. It follows that primary school network extension is planned in conjunction with the setting up of communal villages. These schools also serve some of the outlying dispersed population within a range of about 10 km, but in general the dispersed peasantry has a very low access to schooling, accounting for most of the uncovered 50% of the school-age group. The 60% (or lower) proportion of 7-year-olds in the 1st Grade is indicative of the tendency of peasant children to start school at a higher age, principally as they have to walk long distances to school. This also accounts in part for male predominance in school enrollment.

7. Relevance

It can safely be said that the overall primary school curriculum 1975 - 1982 was not particularly relevant to the direct (agricultural) needs of the

majority of the population; though in this it certainly compared very favourably with the Portuguese colonial curricula!

In terms of content, primary schooling was general, not directly applied to production or other rural preoccupations, and given in Portuguese.

However, some important relevant aspects had been introduced:

- a concentration of Mozambique as a nation and on its political organization, history and line of development, with special emphasis on the creation of National Unity (hence also, schooling in Portuguese);
- some concentration on teaching about the collective organization of production;
- some efforts in the Arithmetic curricula to apply basic arithmetic to economic and social realities;
- an insistence on some productive work being done in the schools;
- an insistence on a close link between the school and the community.

As to the methodological realization of these contents of the school programme, results are very diverse, principally owing to their dependence on good teaching. For instance, productive work in the schools often translated itself into the setting up of a small plot to grow the same crops as abounded in the area, with the same methods and with even poorer results (owing to the age of the children, abandonment of the plot over the holidays, etc.). The school-community link has also been inadequately interpreted in many cases to a mere demand that parents construct or repair buildings, help in the school plot, etc., rather than the school offering services to the community or the populace assisting in the teaching of their knowledge to the children. In this context, one of the forms of linking which is most widespread is the schools offering literacy or night schooling to the adults, with older pupils in the highest grade as the teachers.

The fact that primary education has not yet achieved one of its most important objectives can be deduced from the large number of 4th Grade graduates who, in contradiction to official policy, leave the countryside for the towns and the large enterprises to seek paid employment, instead of serving as "development dynamizers" where they live.³² It is, of course, very premature to expect the school system to effect so profound and revolutionary a change of consciousness!

8) Future Plans

From 1983, the NES is being introduced, with the 1st Grade already implemented. The 7th Grade will be introduced in 1989, completing the new primary cycle. As such, in 1985 the last 4th Grade school graduates will finish school under the old system.

Somewhere during the 1985-90 period the seven-year cycle should be made universal and compulsory, beginning in one year with the first Grade being made compulsory for all seven-year-olds, in the next with second Grade for all eight-year-olds, and so on. Probably the year in question will depend on communal village development, as resources are not sufficient to extend the network of schools to the dispersed population in the countryside which, in any case, is against policy. Some specific areas may be chosen for compulsory schooling in advance as an experiment on its functioning.

The future 6th and 7th Grades of primary schooling will present severe problems, in teacher training and for the school network, especially if seven years of compulsory schooling is to be attained. At present the (nearly equivalent) 5th and 6th Grade Lower Secondary schools, around 100 in number, function on a centralized basis in provincial and some district capitals, with attached boarding facilities for pupils from outside the towns. Expansion will, therefore, be extremely complex - many thousands of existing primary schools will have to be extended to cover the seven-year programme, other new schools will have to be built, boarding facilities will have to be enormously extended. Given current curriculum plans, these grades will require fairly sophisticated facilities, such as laboratories, which makes local initiative wattle and daub construction rather unsatisfactory. Investment costs will be enormous.

The Minister of Education is recorded as saying:³³

"Around two million pupils will not complete compulsory schooling during this decade, either because they will not yet be reached by it or because the positive effects introduced by the new system will only be felt towards the end of the decade. This high number of young people who will leave school with incomplete schooling could become a social problem." (Graça Machel)

With the introduction of compulsory schooling, problems of equity in access should be resolved. Problems of quality and efficiency will only be resolved by massive transformation of the society, although the teacher training and curriculum planning efforts underway may have a powerful impact. If education

objectives laid down for the NES are realized, the relevance of the schooling process should also be raised, especially in the areas of uniting theory and practice, linking work and study, school and community. It is hard to evaluate the realization of these objectives in the curricula and textbooks, common for the whole country, which have been prepared for the first Grade. The textbooks concentrate on the teaching of Portuguese and Arithmetic, both applied within the existing socio-political reality but offering general education. Five teachers' manuals contain the teaching methodology and the remainder of the programme contents; given the number of manuals, untrained teachers will probably have great difficulty in applying their content. With the introduction of these new textbooks, an improvement in quality will depend very largely on teacher training.

The 4th Congress Party Education Directives for the period to 1985 lay down the bases for education planning for the near future:

"In general education, by defining selection and orientation criteria, we must ensure a correct social (class) composition of the student population at each level and for each type (sub-system) of education.

We must also:

- improve the quality of education and reduce the number of failures and drop-outs; through the patriotic and political education of the youth, improvement of study and living conditions in school and of the teachers' pedagogic capacities;
- strengthen school authorities through the assignment of cadres with experience as educationalists, and exert appropriate control over their work through regular inspections.

In this field, we must increase the number of admissions by some 17,5% and at least double the number who pass between 1982 and 1985."³⁴

Such an increase in enrollment amounts to about 240 000 more students in primary schools by 1985.

3.6.2 General Secondary Education

On completing the primary level, three educational channels exist for the graduate - to continue in the general education subsystem, to enter an elementary-level technical school or to enter the equivalent adult classes at night school.³⁵ This part of the report deals with the first option, general secondary schooling.

The secondary component, over the period 1975 - 1987, is composed of three levels:

- two years of lower secondary education (5th and 6th Grade)
- three years of middle secondary education (7th - 9th Grade)
- two years of upper secondary education (10th and 11th Grade)

This report considers the first two jointly and the third apart.

3.6.3 General Lower and Middle Secondary Education

1) Structure

Entrance to lower secondary is permitted to holders of 4th Grade certificates, selected on the following bases:

- a highly limited ingress by available places
- children of workers and peasants should have priority
- primary school pass grades are taken into consideration
- the youngest 4th Grade graduates have priority

Ingress to middle secondary 7th Grade is permitted to holders of 6th Grade certificates on the same type of criteria as are detailed above.

Transition between all grades is regulated by examination.

The curriculum of lower secondary consists of the usual school subjects - Portuguese, Mathematics, Biology, History, Geography, Political Education, Physical Education, Cultural Education, Manual Work, Drawing. The middle secondary curriculum maintains these subjects and adds English as the second language, Physics and Chemistry.³⁶ (French was dropped from the curriculum in 1975 and replaced by English, on the grounds of the Southern African linguistic configuration).

Many lower secondary schools function in two day shifts and a night shift (for adults); the medium secondary is one day and one night shift. The school year also runs from 16th February - 15th November, with three school terms.

School production is undertaken outside of schooling hours.

2) Secondary Access and Enrollment

Independence in 1975 also brought about a schooling explosion at secondary level, with enrollment increasing 2,8 times from 1973 to 1979.

TABLE 3.6.L Lower + Middle Secondary Enrollment, 1973 - 1981³⁷

1973	33 000
1974/5	23 980
1976	37 255
1977	47 877
1978	67 416
1979	92 815
1980	90 950
1981	89 835
1982	94 400

In 1980, General and Technical secondary school coverage of the 10 - 24 year age group was 6,4%.³⁸ In that year, enrollment was slightly reduced by central planning (see 3.6.1.(2) above). In 1981, all lower and middle secondary places (including technical and adult education) totalled only 10% of primary places. The major limitations on increased access are a lack of teachers, a deficient school network and high costs.

(a) Teachers

TABLE 3.6.M General Lower and Middle Secondary Teachers³⁹

1973/4	1975	1976	1977	1978	1979	1980	1981
1 801	?	?	1 872	1 853	2 479 ^a	2 087	2 211

^aIncludes night-school teachers.

Each teacher teaches two subjects of the curriculum. Lower secondary teachers are almost all Mozambican. Middle secondary is taught by a combination of Mozambican and expatriate teachers. The increase in teachers and planning cuts reduced the teacher/pupil ratio from 1:44 in 1980 to 1:40 in 1981, overall.

(b) School Network

The school network was nearly tripled in 1975 - 1981 by putting lower secondary schools on two day and one night shift, middle secondary on one day and one night shift, and by increasing the number of schools. Schools increase was as follows:

TABLE 3.6.N General Lower and Middle Secondary School Expansion⁴⁰

1973/74	1975	1976	1977	1978	1979	1980	1981	1982
33	33	65	93	95	104 ^a	104 ^a	105 ^a	121

^aTechnical schools with a general course - 7 in 1979, 5 in 1980/1.

School expansion has occurred on a somewhat ad hoc basis, making use of installations which served the purpose. The secondary schools are usually divided into separate lower and middle secondary schools, the large majority offering 5th and 6th Grade, a small number 7 - 9th Grade, and a few, 5th - 9th Grade. This creates a physical pattern of increased centralization, lower secondary schools being situated in a majority of district and all provincial capitals, middle secondary schools in provincial capitals and a very few district capitals. The expansion in the number of schools is principally at lower secondary level, benefitting mainly the rural areas.

TABLE 3.6.O School Distribution in Zambezia, 1979⁴¹

	Lower Sec. School	Middle Sec. School	Lower + Middle Sec. School	Elementary Technical	Basic Technical
Province Capital	2	1	-	-	1
Districts	10	1	1	2	1

(Zambezia: Pop. 2,5 million, 15 districts - 4 without secondary schools)

As a result, most schools have boarding facilities attached to them to house pupils from beyond walking distance. These facilities severely determine access, especially for girls.

3. Secondary School Results

Between 1975 and 1982, 88 000 pupils graduated from 6th Grade, and 7 400 from 9th Grade.⁴²

4. Administration

General secondary education is directed by the National Directorate of Education, Secondary Education Service, in the MEC. Planning and statistical coverage are controlled by the MEC Department of Planning and Statistics.

At the provincial level, the Provincial Education Service within the Provincial Directorate of Education and Culture has a Secondary Education Sector.

At the district level, the Head of the District Education Directorate is responsible for the secondary schools. As most schools are situated in the capitals, contact is direct, although the schools also fall under the ZIP system (see 3.6.1.(3)).

Secondary schools have a general director, a pedagogical director and an administrative director, with an administrative office and staff.

5) Quality and Efficiency

School quality and efficiency continue to be low at this level, affected by many problems similar to those at primary level and compounded by problems inherited from the primary level:

- pupils' and teachers' social background
- teaching quality and medium of instruction
- material school conditions
- drop-out and repetition

(a) Social Background

Pupils (and teachers) continue to suffer from many of the marks of their social background (see 3.6.1.(4a) above). At this level, the majority have generally to live in cramped boarding conditions with an unvaried and (in a few cases) deficient diet. Demands from the family and the traditional society continue to be felt, leading to drop-out and absenteeism, especially at lower secondary level.

The influence of deficient primary schooling is very strong. Apart from a background of rote learning methods and passivity (in spite of all efforts to the contrary by the authorities), pupils often enter lower secondary with very defective Portuguese and in an almost illiterate state.

(b) Teaching Quality at Lower Secondary Level

Teachers of 5th and 6th Grade should have 6th Grade qualifications and two years of training. In practice, while some teachers have this qualification, others are middle secondary school leavers without training.

Teachers at this level are faced with a difficult struggle to remedy primary school defects and to teach a very packed curriculum. The Portuguese language difficulties are still high (Portuguese being the teaching medium

and a taught subject). Teachers are often faced with classes with very differing levels of mastery of the language among the pupils, and comprehension and expression, written and oral, are widespread problems. This has led to heated discussions at all levels as to what criteria are to be used for evaluating and correcting Portuguese in the schools (the Portugal standard is at present demanded).⁴³ Pupils also seem to have great difficulty with the Mathematics syllabus⁴⁴ - it is demanding, they have trouble mastering the Portuguese, and their primary teaching was poor.

Upgrading attempts have also been made at this level, including putting untrained teachers through teacher training, pedagogical seminars, joint lesson planning sessions, distribution of the teachers' magazine, etc. As secondary schools are larger with a higher proportion of trained staff, internal upgrading attempts are more successful. Secondary level Pedagogical Support Commissions (see 3.6.1.(4b) above) are more functional, having better trained staff to reach much fewer schools than in the case of the primary level, with fewer transport and logistical difficulties. Meetings are often held at provincial level between the teachers of a specific subject from all over the province.

(c) Teaching Quality of Middle Secondary Level

Teachers of 7th - 9th Grade should have 9th Grade qualifications and two years of training. In effect, the number of middle secondary teachers is quite small (=800?), so where trained Mozambican teachers are not available, the spaces can be filled by expatriates on a two-year contract; a few under- or un-trained teachers also being employed. This situation creates a somewhat better teaching quality, although methodology is often very diverse and some expatriates speak poor Portuguese. English teachers are in especially short supply - the Portuguese teachers are supposed, in the future, to be trained to teach English as well but their own grasp of English is very poor indeed.

TABLE 3.6.P Secondary Teacher Qualifications (1981)⁴⁵

Lower secondary (6th Grade)	8%
Part of middle secondary (7th or 8th Grade)	35,5%
Middle secondary (9th Grade)	37%
Upper secondary (11th Grade)	9%
University qualifications	2,5%
Other	8%

Note: Figures are approximations.

As to schooling quality, a national meeting in August 1983 demanded a complete revision of the secondary curricula, "as they are not clear as to the type of training that the pupil should get", and "quality improvement at this level depends necessarily on this revision". From the reply of the Minister of Education, it seems that some revision work has been undertaken at once.⁴⁶

(d) Material School Conditions

All secondary schools are housed in installations at least partially constructed in masonry. The quality of the lower secondary schools is somewhat inferior to the middle secondary, generally being in older buildings - sometimes converted missions - with poorer lighting and laboratories etc. Upgraded local construction is being employed to extend some schools, using "traditional" building materials.⁴⁷

The secondary schools are reasonably well furnished with desks, teachers' chair, table and cupboard, blackboard, maps and some additional material (old wallcharts, geometrical material, etc.). Middle secondary schools have some laboratory equipment, rather deficient in quality and quantity. The school has a general office, a staffroom and a few staff offices; sometimes stencilling facilities exist. The boarding conditions are rather less satisfactory, especially as regards quality of beds and mattresses, lack of sheets, towels and blankets, cutlery and crockery. Due to perennial water shortages, toilet facilities are reduced and hard to clean; there is some lack of material with which to repair them.

Basic didactic material is distributed by the MEC according to enrollment quotas (see 3.10.3 below). In general, by 1980 all secondary schools had sufficient material.

However, with the abolishment of colonial textbooks and programmes in 1975, a crisis arose. Teachers were issued with the curriculum and contents for each subject, but even by 1982, only a few textbooks had been produced - Portuguese readers, 9th Grade Biology, History and Geography texts for some grades, the Atlas and an accompanying Guide to its use. Large gaps remain in all subject areas, although 5th and 6th Grade Maths books and a 7th Grade History book were produced in 1982. Without doubt, teaching quality and methodological innovation are seriously hampered by this lack.

Secondary school uniforms of the same material as for the primary schools are now demanded, and most pupils are now acquiring them.

(e) Drop-out and Repetition

Drop-out and repetition rates in lower and middle secondary have improved, although remaining quite high.

TABLE 3.6.Q Secondary School Efficiency (in %)⁴⁸

Grade		5	6	7	8	9
1978	Pass	35	42	56	57	48
	Drop-out	25	14	20	17	28
1980	Pass			68	62	59
	Repeat	30	25	18	13	20
	Drop-out			14	25	21
1981	Repeat	19	29			
1982	Repeat	20	26			

TABLE 3.6.R Pupil Distribution per Secondary Grade⁴⁹

Grade	5	6	7	8	9
1976 (%)	59	29,4	5,2	4	2,5
1978 (%)	69	24,2	4,3	1,4	1,1

The statistics indicate a high rate of repetition and drop-out in each grade, causing an accumulation in the 5th Grade and increasingly smaller numbers in each succeeding grade, making it difficult to find graduates to swell the last two or three grades. Also, the transition rate from 6th to 7th Grade is very low, the relation between those passed in 6th Grade in 1977 and those enrolled in 7th Grade in 1978 being 2,5:1; a still higher ratio, considering un-included 6th Grade graduates from previous years and the 7th Grade repeaters. Secondary school efficiency is still rather low, making a large increase in 9th Grade graduates a difficult and slow process.

6) Equity

(a) By Sex:

Available statistics indicate an overall secondary school sex ratio (in general, technical and adult education) as follows:

TABLE 3.6.S Sex Enrollment Ratios 1977 - 1980⁵⁰

	1977	1978	1979	1980(General Secondary Only)
Male	73%	74%	73%	71%
Female	27%	26%	27%	29%

The Census figures (Table 3.5.A above), showing the situation at the end of the school year 1980, puts the ratio at 75:25 in general secondary, which could indicate a massive female drop-out rate along the school year. For middle secondary, the ratio is 78:22 on the same figures. (Note: the Census figures give a total attendance 5th - 9th Grade in August 1980 as 181 864, while the MEC statistic for enrollment in February 1980 is 90 950. Unless adult attendance is equal to child attendance - which I doubt - some error exists).

The sex imbalance is high in the secondary schools due to the influence of the traditional society on women and its perception of their rôle, compounded by the limited boarding facilities for girls and a parental reluctance to send their girls to boarding school.

(b) By Region:

The imbalanced school network already referred to gives the city dwellers of Maputo, Beira and Nampula (in that order) the highest access to secondary schooling, followed by the other provincial capitals and some district capitals. Existing boarding facilities are the only means of giving the rural population access to secondary school.

In the absence of necessary statistical information, it is not possible to say how large inter-provincial imbalances are, nor whether there is a significant difference in schooling quality by region.

(c) By Social Class:

As mentioned, access to secondary school is regulated by plan, with a few ingress places overall. The 1979 5th Grade had 65% of the 1978 4th Grade

places (this situation has worsened considerably since then), the 1978 7th Grade, 17% of the 1977 6th Grade (which has probably bettered a little since then).⁵¹ In 1981, around 80 000 4th Grade graduates had no access to 5th Grade. Rigorous selection procedures are applied, in age, results and social class (see 3.6.3 (1) above). These criteria can often be contradictory, especially age of graduation and excellence of results as against social class, so children of peasant extraction are probably most disadvantaged on these criteria, as well as requiring boarding facilities at school.

7) Relevance

In line with the general education objectives, the general education subsystem offers general subjects without specific technical or practical application to industry, agriculture, etc. The secondary curricula are marked by continuing preoccupation with Mozambique's literature, history, political organization, and insertion into Africa and the socialist community. School production and community-linked work are insisted upon, function better and are, therefore, more relevant for educational purposes than in the primary schools.

However, 6th and, to a great extent, 9th Grade graduates are still marked by an expressed personal desire to continue their studies, preferably in the "liberal" disciplines - law, medicine, commerce.⁵² In part, this reflects the continuance of colonially-imposed values in the broad society, in part the low success of the schooling system in instilling new values as yet.

8) Special Middle Secondary Alternatives

Apart from the normal middle secondary schools, pupils from the 6th Grade may enter:

- the Centre for Cultural Education, which gives 9th Grade equivalence over three years, as well as developing aptitudes for music, dance and the fine arts;
- the Physical Education School, also giving 9th Grade equivalence and special Physical Education, enabling graduates to teach physical education;
- Technical Education (see 3.8. below);
- Teacher Training (see 3.9. below).

Besides this, Cuba has given Mozambique a middle secondary school, to which some 1 000 6th Grade graduates enter each year, on rigorous political and academic criteria.⁵³ The school has some chosen Mozambican teaching staff and follows the Mozambican curricula. The results are very good. East Germany (GDR) has offered a similar school, to open for the 1983-84 academic year.⁵⁴

9) Future Plans

In step with the general reform of the education system, as of 1987 the "lower secondary" component will become the "upper primary". The present "middle secondary" will be the secondary component, of three years' duration.

A vast expansion of this secondary component is necessary on current plans, to meet projected manpower needs over the next ten years. The major reforms will only operate at this level as of 1989; an intermediate reform being on the cards. As in primary education, relevance should be greatly extended along the lines of the socialist principles of uniting practice and theory, work and study, school and community.

As the progressive reform reaches the middle secondary level so far in the future, some textbooks for key subjects will also be produced for the intermediate period.

In terms of 4th Congress Directives from the Frelimo Party, enrollment in 1985 should be raised by 17,5% (to about 111 000 over 5th - 9th Grade). The Directive to pay more careful attention to the social composition of each level should give special weight to the class origin selection criterion, increasing the proportion of workers' and peasants' children in secondary education (see 3.6.1 (8) above).⁵⁵

3.6.4 General Upper Secondary Education

1) Structure, Access and Enrollment

The upper secondary consists of the 10th and 11th Grades, with extremely limited access, permitted to the holders of 9th Grade certificates. At present, both young people and adults are admitted to the day courses on a complex priority system which considers past performance, social class, economic priorities and various other factors; bearing in mind that this level is officially called "pre-university" with the objectives of graduating university entrants.

Due to the flight of the Portuguese colonists and the consequent lack of teachers (and pupils!) for this level, the upper secondary course was closed in 1977 all over the country, and all participants transferred to Maputo's Eduardo Mondlane University (UEM) where they were placed in "propedeutic" classes, many destined for teacher training.⁵⁶

In 1980, upper secondary was removed from UEM to a secondary school in Maputo, and in 1982 it was extended to Beira and Nampula, in 1983 to some other provincial capitals. The subject range is the same as in middle secondary.

TABLE 3.6.T Estimated Enrollment in General Upper Secondary⁵⁷

<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
600*	600*	1 250*	?	1 915	2 034

* Estimates and incomplete data.

In 1980, 93 teachers were involved, mostly expatriates, and in 1981 157 teachers, giving a 1:13 teacher/pupil ratio.⁵⁸

2) Upper Secondary Results

From 1980 - 1982, 1 100 pupils have graduated from the 11th Grade.⁵⁹

3) Administration

From 1976 to 1979, the pre-university course was administered jointly by the National Directorate of Education and the UEM. As of 1980, the National Directorate and the relevant provincial directorates of education administer the upper secondary level course directly.

4) Quality, Efficiency, Equity and Relevance

In the absence of data, it is only possible to give a few impressions. It seems that the course quality and efficiency should be very high in relation to lower levels, if only due to its extremely selective character. Some textbooks have also been prepared, notably History and Mathematics, of an extremely demanding level. At the August 1983 meeting previously referred to, however, "a day was dedicated to the analysis of questions arising from the weak preparation of the students who enter university

courses from the pre-university schools".⁶⁰ The problems may be arising from the extension of the upper secondary courses to various schools.

In terms of considerations of equity, there are few female students at this level (30% in 1980, according to the Census). Students are selected on the basis of pressing needs, but whether the schools and concomitant boarding facilities are used to cover all regions equitably is not known. It is probable that inequities inherited from colonial times at lower levels of the system maintain inequities at this level.

As to the relevance of the course, the curriculum is a general university entrance preparation, with the national political line reflected, principally in the language and social science subjects.

5) Future Plans

The upper secondary will become the "tertiary" level of the NES, maintaining two years' duration. Reforms in the context of the NES introduction will only be felt in 1993, unless some way is found to implement the reform in some accelerated manner. At present, concentration is on guaranteeing the highest possible numerical output from this level, requiring expansion in teachers and students, and improvement in quality. More textbooks and lecture notes will also be required in the context of the present curricula. As of 1985, a relatively large number of graduates is planned for, destined principally:

- in the case of adults, to continue in university studies relevant to their work;
- in the case of young people, to continue in teachers' courses at university.

3.6.5 University Education

1) Structure

Mozambique has one university, the Eduardo Mondlane University (UEM) in Maputo. It has undergone a whole series of reforms and alterations since Independence, and now consists of the following Faculties:

Education
Science and Engineering
Letters (Arts)
Law

Marxism-Leninism

Economics

Medicine

Workers' and Combatants' Course

Within these Faculties, courses have been opened and closed in rather an unfortunate way, largely because at least 75% of the staff is made up of expatriates on two-year contracts.⁶¹ When staff leave and cannot be replaced, courses have to close. At present (1983) neither the Law nor the Marxism-Leninism Faculties are operating, due to directives from the Party that their programmes and curricula be totally revised.

The Faculty of Education is the largest, with 50% of the students,⁶² and still runs an accelerated upper secondary plus teacher training course as well as a university-level teacher training course.

The Workers' and Combatants' Faculty opened in 1983 to remedy the class composition of the university.⁶³ It takes workers and combatants with 6th Grade qualifications and administers an accelerated course of three years' duration, leading to university entrance qualifications; some of the subjects, selected for their relevance to the participants and the participants' experience in that field, are, however, taught at undergraduate level.

2) Access and Enrollment

In 1973, only 40 of the nearly 2 000 students were black.⁶⁴ Overall enrollment decreased dramatically after Independence due to the flight of staff and students, and has just overtaken pre-Independence levels in 1983.

TABLE 3.6.U University Enrollment⁶⁵

<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1983</u>
1 982	2 433	877	777	750	804	1 722 ⁺	1 852 ⁺	2 100

*Approximately. +Including new Faculty of Education.

Access is limited by staff, boarding facilities, cost, and available 11th Grade graduates. A very high proportion - 66% in 1981⁶⁶ of the students work half-time and study half-time, and the courses are organized accordingly.

3) Administration

The University is a semi-independent structure under the "umbrella" of the MEC, with its own budget, administration, etc.

4) Quality, Efficiency, Equity and Relevance

Between 1975 and 1979, 449 students were graduated in 18 course areas, 221 at "Licenciatura" (Masters') level, 228 at "Bacharel" (Bachelor) level, the largest numbers in Economics, Medicine, Civil Engineering, Law, History, and Electrical Engineering.⁶⁷ Between 1975 and 1982, 1 748 students were graduated in total.⁶⁸ No data are available on the quality of the courses or their efficiency. In 1980, 26% of the students were women.

It is repeatedly stated that the majority of students are from non-working-class backgrounds. The Workers' and Combatants' Faculty is designed to remedy this defect as far and as fast as possible.⁶⁹ In the future, an increasing number of students will come directly from the pre-university level schools in all provincial capitals and study full-time, as is already the case in the Faculty of Education.

The restructuring of the Faculties into those listed above, plus the insistence on revision of many of the courses, already indicate the desire to make the contents of university training as relevant as possible to Mozambican needs.

Many students are sent on scholarships to overseas universities to study in areas and specializations not covered by the UEM.

4th Congress Directives, apart from insisting on a change in the class composition of the student body and increased relevance in the curricula, stipulate "In 1985, increase by a factor of 3 or 3,5 the enrollment and by 75-80% the number of graduates relative to 1982. We must qualify 400 to 470 technicians with higher education during the next three years".⁷⁰

3.7 THE ADULT EDUCATION SUBSYSTEM

The adult education subsystem is designed to provide access to continuous education for adults of 15 years and over. The subsystem serves various objectives:¹

- On the political and social level, it has a fundamental part to play in the eradication of illiteracy and the raising of the educational level of the working population, giving adults access to the education which they were denied by the colonial system. It should combat negative attitudes and behaviour inherited from the past, providing general scientific materialist education and training the Socialist New Man, and consolidating National Unity.
- On the economic level, the subsystem has been accorded priority during the present decade, as it should train cadres politically and scientifically to increase their efficient working participation in the construction of socialism, given that the existing adult working population guarantees the making of the new society. For this reason, cadres and workers in industrial and other collective production are given priority of access. In the first place, adult education should contribute to the raising of production and productivity.

The subsystem, properly speaking, began its introduction in 1978 with the first literacy campaign, which substituted disorganized large scale "voluntarist" literacy activities all over the country (which had great participation but no unified objectives, methods, materials, and gave no level of qualification), as well as 1st and 2nd Grade night schooling.² In 1980, mass follow-up activities were initiated, substituting 3rd and 4th Grade night schooling. Secondary level adult education remains in the form of 6th - 9th Grade night schooling, with a limited reform in 1983 preparatory to the introduction of education courses specifically for adults equivalent to these Grades, within the framework of the introduction of the NES. A number of centres also exist, providing accelerated courses equivalent to literacy, post-literacy, and lower secondary, for vanguard workers, and the University has opened a course for vanguard workers covering 7th to 11th Grade.

Technical night schooling for adults also exists, but will be considered in the Chapter on Technical Education (3.8 below).

This chapter will examine, in turn, adult education at primary level and at secondary level. For a more detailed presentation of the objectives of adult education, see 3.4 above; diagrams of the subsystem and its development are to be found in Tables 3.2.B and 3.3.A above.

3.7.1 Mass Campaigns and other Primary Level Activities

1) Strategy, Access, Enrollment and Results

Adult education in Mozambique has been consistently viewed as continual education, a direct counterpart for adults to the general education system.³ Access should be open for an adult to proceed from level to level. At the same time, the exceedingly high rate of illiteracy demanded a strategy which would contribute to lessening it in a significant way - as indicated by the Party, there is no socialism with illiteracy. A factor also to be considered was, the extreme under-development of the country, which in many rural areas meant that the population had had very little previous contact with, let alone use for, literacy skills. It was, therefore, decided to launch a series of mass campaigns, designed to teach illiterates numeracy and to read and write, to be followed up immediately by post-literacy campaigns, to raise new-literates' educational level, consolidate their ability to use the new skills and prevent their relapse into illiteracy. Although the campaigns would have a mass character, reaching adults all over the country, they would also be selective, directing their major attention towards designated priority groups, namely, Party, administration and mass organization cadres, members of the security and defence forces, workers and peasants in industrial, commercial and agricultural enterprises and cooperatives, and in communal suburbs and villages.⁴ After the priorities had been properly covered, other adults would be given a limited access in each campaign. The campaigns would have a planned intake, permitting adequate preparation of the teachers and of sufficient didactic material; they would be relatively small in the first years, and thereafter grow steadily in target numbers, in close coordination with the rhythm of development of the productive sector and of the socialization of the countryside.

The literacy campaigns, over the period 1978 - 1982, were conceived in the form of a 9-month academic year, lasting from February to November with lessons occupying 10 hours a week outside of production time. They would teach literacy in Portuguese, in line with both political and

economic objectives. Students sat a final (nationally devised) test which conferred a certificate equivalent to 2nd Grade. It should be noted that the first campaign had some different characteristics, notably, that it began over the period March to July 1978, July being the official opening,⁵ and terminated in October of the following year (instead of May) as it took on the characteristics of two campaigns in some respects; one from March - November 1978, the other from January to October 1979, incorporating some new students and carrying over some existing students who had started later in 1978 or who had failed the first national test in November 1978.

The follow-up campaigns were planned to have the same organizational characteristics, and to include principally the new literates from the literacy campaign of the preceding year, although adults who already had 2nd Grade qualifications could also be included. The Adult Education campaigns, as they were called, conferred a certificate on the results of the final (nationally devised) test, equivalent to 4th Grade. They were experimented in 1979 over a small group and introduced nationally in 1980.

In line with the reform of the education system and the introduction of the NES, the primary level of the Adult Education subsystem was reorganized and changed. The mass education activities were planned to continue up to the new 5th Grade equivalence level, in three consecutive "campaign years",⁶ which one might describe as Basic Literacy, Functional Literacy and Post-literacy; an adult to be considered literate after completing two years of study. The first two years would maintain the same calendar and number of hours per week, while the third would require twelve hours of classes a week.⁷

The teachers in the campaigns would be volunteers, on the basis of the slogan "those who do not know, learn; those who know, teach".⁸ A minimum of 4th Grade was stipulated for the literacy teachers, and of 6th Grade for the post-literacy teachers; school pupils studying at 4th Grade level or above should provide a major contribution to the teaching staff, and where people with higher than minimum qualifications could be found to teach, they would be mobilized to do so.⁹ In the case of large enterprises, with many illiterates and with difficulties in finding or in contributing minimally-qualified voluntary teachers, the teachers could be employed.

All these provisions were made law in 1981 by Decreto-Lei 1/81, which also put the responsibility for literacy and post-literacy organization on each

economic sector and unit, and created Human Resource Directorates in them to manage this and other adult education work.

TABLE 3.7.A Campaign Results¹⁰

	<u>1978/9</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Literacy: Enrollment Target	110 000	300 000	300 000	300 000
over				
Enrolled	260 000	325 000	310 000	200 000
Passed	140 000	120 000	60 000	40 000
Post-lit.:Enrolled	-	87 000	144 000	
Passed	-	26 000		

In the first campaign, 13 300 literacy teachers were trained over the two years, 6 600 teaching up to the end.¹¹ For succeeding campaigns, principally by new training but also by the continuation of some of the volunteers from one year to the next, 15 000 literacy teachers were found, on the ratio of 1 teacher to 20 students. In the post-literacy campaigns, teachers were mobilized and trained to maintain the ratio of 1:30.

2) Campaign Administration

The campaigns are administered directly by the National Directorate of Literacy and Adult Education (DNAEA), one of the Directorates of the MEC. The Literacy Service planned and administered the literacy campaigns, the Adult Education Service, the post-literacy campaigns. Now, in accordance with the introduction of the NES, the DNAEA is being restructured into a Pedagogical Service and an Organizational Service. Additional services and departments existed at various points in time to administer particular aspects of the campaigns - textbook writing, statistical coverage, material supply, cadre training, audio-visual aids, planning.¹² The first of these functions has now shifted to the INDE, the second and third to the MEC central administration.

A supreme coordinating body was created for the campaigns and other adult education activities, the National Literacy and Adult Education Commission (CNAEA) composed of representatives from the Ministries in the productive sector, from some Ministries which are large employers in the commercial and social sectors, from the Party and Mass Organizations, and from Security and Defence, and presided over by the Minister of Education. This commission

meets to discuss and resolve planning administration and organizational questions about three times a year.¹³

At provincial and district level, the Directorates of Education and Culture incorporate a Literacy and Adult Education Service, comprising a sector charged with teacher training and pedagogical support, and Literacy and Adult Education sectors charged with organizational work. At these two levels there exist Literacy and Adult Education Commissions also, equivalent to the CNAEA but meeting more regularly and often.

Since the forming of Human Resources Directorates in the Ministries and their provincial counterparts, their Directors have become the respective representatives on the CNAEA and CPAEA.

At base level, economic units also have Human Resource Directorates which are responsible for adult education activities in their unit. Other kinds of base unit (cooperative, communal villages, etc.) have coordinating and directing structures varying according to the type and the size of the unit, but generally incorporating the administrative head, party and mass organization secretaries, production directors, and teachers. Each adult education "centre" (school) has its own coordinating structures. The primary and secondary schools also have adult education structures to organize efficient allocation of the pupils to literacy classes and to train them to teach.

The Department of Planning and Statistics in the MEC, supported by the equivalent structures in the Education Directorates at provincial and district level, is in charge of coordinating and directing the planning of the campaigns, in consultation with the parallel adult education structures and the Commission. The Department of Planning and Statistics also deals with statistical coverage. As a result, the DNEEA's functions (and those of the provincial and district Services) are mainly normative of the organization of the campaigns, and pedagogical.

A fundamental aspect of large-scale campaigns, the initial and continuous mobilization of the participants, is the responsibility of the Party and the mass organizations, in coordination with the base-level administrative structures. The DNEEA produces posters and a weekly radio programme designed to contribute to this task.

For the first campaign, the DNAEA undertook the acquisition and distribution of materials itself - textbooks, exercise books, pencils, pens and rubbers, and statistical control charts. Thereafter the task was taken over by the Department of Administration in the MEC, which organized distribution of materials to the provinces according to the enrollment and teacher training targets in each one. This system has functioned rather well, and between 1980 and 1982 a small surplus of literacy material built up in the provinces. The introduction of new books and enemy activities have complicated the distribution in 1983 (see below, 3.10.3).

3) Some Pedagogical Aspects of the Campaigns

Since their inception, the campaigns have been able to rely on some textbooks. For the literacy campaigns, a student's Portuguese reader and a teacher's manual containing orientations for literacy and numeracy teaching were first available, followed in the second campaign by a revised teacher's Portuguese manual, a student's arithmetic book and accompanying teacher's manual, and complemented for the third and fourth campaigns by a book of writing exercises to assist the teacher. The Adult Education campaigns (post-literacy) began with a Portuguese reader for the students and a book on geography and on basic health/hygiene. For the second campaign, a student's arithmetic book and a teacher's manual were added.

In line with the introduction of the new adult education subsystem, new books have been prepared for all three "massified" years; a student's reading, writing and exercise book and arithmetic book, each with its accompanying teacher's manual, for all three years, plus a natural science book and manual for the 3rd Year.

An enormous activity in preparation for each campaign has been the training of the voluntary teachers. Given the size of the task, training was carried out both in the training centre in each province and at district level, and the course duration had necessarily to be short - 15 to 21 days for literacy teachers, 21 to 30 days for post-literacy teachers. In order to complement this initial training, a group of teacher instructors was formed in each province and district to visit the centres and provide in-service pedagogical support. Further, the DNAEA produced one radio programme a week for each of the two campaigns in function (now increased to three a week).

4) Campaign Difficulties and Measures to Overcome Them

The campaigns have struggled with many difficulties, at the level of teacher mobilization, training and quality, of mobilization, of organization, of teaching, and of extraneous disturbance.

(a) External Factors Affecting the Success of the Campaigns

The most overriding problem of the campaigns has been their increasing incidence in successively more illiterate environments, where the use of literacy is hardly known and creates no demand. The great success of the first literacy campaign is possibly due to its inclusion of numbers of semi-literates; once this "reserve" was exhausted, and most workers in productive enterprises in the urban or more developed areas made literate, the campaigns turn to the completely illiterate rural population. There exists almost nothing to read in this environment and it is difficult to be mobilized for the literacy activity which demands sacrifices of time and energy.¹⁴

The succession of natural disasters in many areas (floods and drought) have also made subsistence the absolute priority, and people have little time or energy left to devote to study.

In the very illiterate environment, it is also very difficult to find anyone with minimum schooling levels to teach literacy, and almost impossible to provide teachers for the follow-up.

In the face of these difficulties, some measures have been taken, one being to reduce initial literacy enrollment and to concentrate it totally on the defined priority population, which has more immediate (and obvious) use for literacy, is less affected by the problem of subsistence, and works in areas with a "reserve" of potential teachers. Another will be to train and assign paid post-literacy teachers with 6th Grade qualifications to communal villages, with the additional task of assisting literacy teachers. Another measure will be to flexibilize and coordinate the teaching calendar to fit in with agricultural seasons and the learners' relative availability. Other measures are to be experimented, according to 4th Congress directives.¹⁵

A further difficulty in some areas has been South African backed insurgent activities, often specifically directed against cadres and teachers.

(b) Difficulties with Teacher Mobilization and Quality

The teachers who implement the campaigns have of necessity (given the extremely low number of people with any educational qualification) a low qualification. The use of some teachers with even less than the minimum requirements have not helped. Many teachers have difficulty in reading the materials and doing the exercises, and use methods which they remember from the primary schools (choral repetition, rote learning, etc.). The short training period afforded and the few support visits are not very effective in remedying these basic problems.

Added to this, it has been found extremely difficult to conceive of a means to stimulate and reward teachers, for both organizational and financial reasons. The lengthy period of sacrifice involved, the lack of recognition and the class results combine to demoralize teachers and make them drop out, especially as the campaigns continue year after year. Renewed efforts are being made to reward teachers; and it must also be stated that vast numbers of teachers have put their energies into, and made the efforts required over, one or even several campaigns.

(c) Mobilization Difficulties

Allied to the problem of the illiterate environment, the strategy of successive campaigns has reduced the "general mobilization for combat against illiteracy" atmosphere which accompanied the first campaigns (and has accompanied campaigns in other socialist countries). The activity has become something of a routine.¹⁷ Furthermore, the poor results, repetition and extensive sacrifice connected to the campaigns has demobilized many learners and potential learners. The campaigns do not, of course, create paid employment, nor do they offer much access to it in a country where few employment places exist; this has put off some learners who no longer see their participation as an immediate and direct avenue to a better-rewarded life.

(d) Organizational and Pedagogical Problems

Because the economy cannot afford to dispense workers from their jobs and tasks during working hours, the campaigns incide after¹⁸ - bringing tired adults to the classes. Some types of work, notably shift-work, piece work, and individual cultivation of the family plot, have varied finishing times

or can take place in more or less distant areas. Sudden production demands, peak agricultural periods, etc. can seriously disrupt classes. In some areas, difficulties have been experienced with timely delivery of books or other material. In some cases, the literacy structures do not function efficiently. All of these organizational difficulties create problems for the campaigns, although through experience a number of them have progressively been overcome, and experimentation is being carried out to flexibilize the campaign structure and functioning to accommodate them to local realities and activities.

Teaching problems have contributed to the campaign difficulties. A major problem has been to conduct the literacy and post-literacy campaigns in Portuguese, a second language often not spoken by participants when they start. It has been noted, however, that the chance to learn the official language (and also numeracy, included in the campaigns) has a powerful motivation effect, directly proportional to the degree of contact the population has with the exterior - which is much greater in the priority groups. A further problem has been the difficulty of transition from literacy to post-literacy, as the latter demanded a higher level of Portuguese and literacy/numeracy competence than has usually been achieved in the literacy classes. This difficulty should be resolved by the introduction of the new materials in 1983, which also contain a better method for the teaching of Portuguese as a second language. The content of the new materials is also more directly relevant to the literacy learner, particularly in the communal villages, than was the case with the earlier materials.

A factor which has contributed to the organizational and pedagogical difficulties has been the relatively low qualifications and inadequate training of the provincial and, particularly, of the district literacy and adult education cadres.¹⁹ Their initial training courses were not adequate and since then it has been difficult to remove them from the operation of the campaign "machine" to remedy the defect. This problem reflects in the standard of teacher training and pedagogical support provided, and has also meant that strict organizational patterns have been adhered to as a kind of necessary minimum, where the cadres have not shown much capacity for flexibility and innovative organizational forms. The creation of an Adult Education Institute has been under consideration for some time, and seems to be very necessary in order to provide in-depth practical and theoretical training in the pedagogical and organizational fields.²⁰

The pedagogical support strategy has run into other difficulties, notably the question of efficient transport to make regular visits to widely dispersed centres a feasibility. Support in motor vehicles to the provinces and motorcycles to the districts went some way toward alleviating the problem, but these are often the only vehicles available for all education inspection activities; they become over-used, diverted to other ends, run out of spare parts, etc.²¹ The provision of ordinary bicycles is being undertaken to alleviate the problem.

(e) Consequences of Campaign Difficulties

The consequences of the difficulties listed and discussed above are easy to see. From 1981 to 1982, initial enrollment dropped abruptly. From 1979 onwards, drop-out increased alarmingly, as did the number who did not pass the test, while the numbers passed steadily decreased. A global number of over one million enrollments has been registered in literacy, out of the five million that were to be involved in literacy activities during the present decade, with over 350 000 passed. The country faces a difficult contradiction - if the problems are attacked by limiting the enrollment and concentrating it on priority groups, the efficiency may well increase, but the inroads made on the total illiteracy rate will be quite small. The engagement of women in literacy activities will also be prejudiced. On the other hand, on present experience, even given the massive socialization of the countryside, the extension of the campaigns to include very large numbers will automatically be faced with dramatic inefficiency and waste, difficulties with follow-up and large-scale reversion to illiteracy. Some balance will have to be found between the two extremes.

The language problem remains a difficulty. If new-literates are literate in Portuguese, and they then do not use their language and literacy skills, they will revert more rapidly to illiteracy. It is becoming increasingly necessary to ensure the general reception of radio programmes in Portuguese, and to provide literature which is both interesting and of an accessible reading level. Unfortunately, the range of the radio is very limited (15% of the country),²² the distribution of the national press confined almost entirely to the large towns, even there in insufficient quantity, and its reading level way above the capacities of a new-literate. These considerations apply even to those who finish post-literacy. The DNAEA

produces a newspaper for new-literates, "Estudar Sempre", whose content goes some way towards meeting the need, but whose publication is irregular, in numbers which do not meet the demand, and whose distribution out to the more distant centres is a constant headache.²³ All villages, localities, enterprises, etc., should maintain a blackboard "People's Newspaper" (Jornal do Povo), which can contribute to solving the problem to some degree, if imaginatively used and clearly written. However, there is an urgent need to get around to the founding of rural libraries, in the communal villages in particular, and to supplying them with materials at an accessible reading level.

5) Other Primary Level Adult Education Activities

From the time of the first literacy campaign, accelerated adult literacy courses have been widely organized, usually at provincial level, for Party members and deputies, Women's Organization (OMM) members, village cadres and vanguard workers. The courses have lasted from four to six months, usually in boarding regime, and have often yielded good results. The boarding environment makes the use of Portuguese more general, regular and necessary; the teachers are of a better quality; the problems of absenteeism and drop-out are reduced to a minimum; and, as an added bonanza, adult education cadres can accompany the courses closely, apply pedagogical support in an articulated form, and learn in practice the problems of literacy teaching and learning in great detail. The courses present one difficulty - they are costly. They are sometimes used for testing new methods and materials.

Another important initiative was the founding of a chain of Accelerated Training Centres for Vanguard Workers (CFAT).²⁴ These centres are specifically equipped for such courses with a permanent teaching staff. In addition to teaching activities, the Centres have a practical production activity, growing food to contribute to self-sufficiency and reduce costs (sometimes even making a profit!), and diversifying into other areas such as brickmaking, carpentry, building of centre installations, planting trees, etc. At the time of founding, all the CFAT administered post-literacy courses giving 4th Grade certificates over a six-month period, two courses being run per year per centre. The participants are included in the political and administrative structures of the centre and have direct responsibility for many of the activities. By 1982, 10 CFAT's were operating

in nine of the ten provinces. With the growth of the mass post-literacy campaigns and of primary schooling, courses at primary level have ceased to be of great priority, and so only four of the centres retain 4th Grade level courses, the others having passed successively over to the 6th Grade (lower secondary) courses.

The results of the CFAT courses were generally very good, with over 80% pass rates. The combination of democratic political and administrative participation, fruitful and applied productive work, and theoretical study, has proved exceptionally successful and validates Frelimo's educational policy. It should be mentioned that some of the centres still face some difficulties with dormitory accommodation, and that many of them could be fruitfully amplified.

6) Future Plans

Given the difficult conditions under which the campaigns are operating, the present phase of strategic enrollment reduction may change previous long-term plans. In effect, some five million adults were expected in the PPI to enter literacy training and about 1,3 million to graduate from the NES 3rd year (5th Grade) over the period 1980 - 90.²⁵ The lower secondary component, integrated into NES primary level from 1988, is not planned to be massified for adults within the planning period to 1990 (see 3.7.2 below).

The 4th Congress directives on campaign activities are as follows:

"In literacy and adult education, it is necessary to adopt measures for effective management and control of teaching. Undertake pilot experiments with the objective of adapting the training contents to the demand of social and economic development of each region. Promote the correct insertion and support of the teachers, through a close link with the community and production units.

Undertake concrete actions, defining a programme for the purpose, which significantly increase the number of students and drastically reduce the number of drop-outs and failures, guaranteeing in this way the correct use of the human, material and financial resources destined to this activity".²⁶

3.7.2 Secondary Level Adult Education

1) Night Schooling

Since 1976, large numbers of adults have attended night school at the 5th - 9th Grade level. In 1980, about 30 thousand adults were enrolled in 5th - 9th

Grade.²⁷ Access has been restricted in that the school facilities and teachers were only to be found in the large towns, using available secondary schools located there. (See 3.6.3 (2b), above, for secondary school distribution). Adults at these schools spent five nights a week, five periods a night, studying the same curriculum as given in the day course on slightly reduced numbers of periods per subject. Finding teachers was problematic, often relying on public servants and some foreign workers, who received a small honorarium for the purpose but had no training. The intensity of the night courses proved exhausting for both teachers and students, who often desisted or missed classes.

Administration was under the Secondary Education Service of the National Directorate of Education. Access was open to those who registered first. But from 1981, administration was transferred to the DNEEA, which began by governing access and prioritizing it to workers in the enterprises and the Ministries according to a quota system, each student being required to have his application authorized and submitted by his workplace, which was subsequently responsible for guaranteeing his attendance.²⁸ A specific body of teachers was developed to give the lessons, although with participation by non-professionals as before. For 1983, an intermediate reform was applied, cutting down the number of subjects, the total number of periods, and the number of nights per week from five to four. This prepares the way for the future introduction of the same organizational base, of the 4th - 7th Years of Adult Education (equivalent to the new NES 6th - 10th Grade), with textbooks and methods specifically designed for adults.

Apart from using the available secondary schools, plans are underway to set up school facilities in some of the largest enterprises; indeed, some enterprises with a large workforce and/or with difficulty of access to existing secondary schools, have already set up their own adult secondary schools, staffed by other workers and following the night school programme (as reformed). Plans are also underway to set up teacher training centres to provide adult schools with secondary level trained adult educators, at least as a "core" group for each school. Under these conditions, enrollment can be greatly increased and efficiency vastly improved. Plans are to graduate 135 000 workers at 6th (new 7th) Grade level, 22 700 at 9th (new 10th) Grade level, by 1990.²⁹ The future secondary level (8th - 10th Grade equivalence) will be exceptionally accelerated, occupying only two years at reduced time per year, in relation to the general secondary

programme of three years. The setting up of adult schools at this level may be difficult, especially as regards the provision of laboratory facilities.

On the question of adult access to upper secondary, see 3.6.4 above.

2) Accelerated Secondary Level Adult Education

(a) Accelerated Training Centres for Workers (CFAT's)

As mentioned in 3.7.1.5 above, many of the CFAT's (thus far, six) have gone over to giving lower secondary level courses, the lead having been provided by the Makubulane centre in Maputo Province under direct control of the DNAEA. These courses have extended their time to seven months, but otherwise remain very similar to the primary level courses in organization and methods. The pass rate remains high at this level:

TABLE 3.7.B Makubulane CFAT Results³⁰

	<u>1979</u> (2)	<u>1980</u> (1 & 2)	<u>1981</u> (1 & 2)	<u>1982</u> (1 & 2)*	<u>Total</u>
Enrollment	145	279	260	292	976
Pass	140	264	170	235	809
% Pass Rate	96,6	95,0	65,4 ⁺	80,5	82,9

*Numbers in brackets represent 1st and 2nd half of each year. In 1979, the centre went over to lower secondary from primary in the second half of the year.

⁺One of the 1981 courses covered peasants from communal villages, who did not meet the entrance qualification level in reality, giving correspondingly low results.

The remaining CFAT's will soon be upgraded to lower secondary level, while some are planned to experiment accelerated courses for the (new) 8th - 10th Grade level.

(b) Accelerated University Entrance Courses

In 1980, an experimental accelerated course was undertaken by the University Economics Faculty, taking in a number of carefully selected vanguard workers with 6th Grade qualifications and intended to accelerate their education to 11th Grade level for subsequent entrance to the Faculty, over three years. The course proved very successful and, as a result, the Combatants' and Vanguard Workers' Faculty has opened at the University in 1983, designed to take in 6th Grade level workers, provide University Entrance qualifications in three years, and change rapidly the class composition of higher education.³¹

3.8 THE TECHNICAL EDUCATION SUBSYSTEM

The subsystem was created in the late colonial period, operating principally at lower and middle secondary level, with a couple of upper secondary level technical institutes. It was generally regarded as being of inferior status, suitable for the lower class, the "indígenas" and the academically slow. Around the time of independence many of its teachers, who were army officers, engineers and public servants 'earning a bit on the side' in many cases, left the country. At the same time, a large proportion of the skilled workers, accountants, etc., all colonists, left also. The need to set the country back on its feet economically and upgrade and supply its workforce, led to increasing attention being paid to the subsystem. The agro-industrial permanent workforce numbered about 300 000,¹ many of the workers being illiterate or having low primary qualifications; the rest of the active population was illiterate peasantry.

The demand for skilled workers in all sectors of the society led to a gradual expansion of the sector, made difficult by the lack of technical teachers. With the opening of technical teacher training courses and institutes and the participation of foreign aid, the system has been able to develop competently and rapidly in the past few years. For the 1980 - 90 decade, it was accorded a certain priority, instrumental as it will be in qualifying workers technically for the varied tasks involved in the construction of a socialist society.²

The technical school system covers three levels:

- elementary technical (lower secondary)
- basic technical (middle secondary)
- medium technical (upper secondary)

Technical teacher training is included in the subsystem, operating at medium technical level. Basic and medium technical and teacher training are divided into three major components: industrial, commercial, and agricultural. All courses contain a general education component (Portuguese, Mathematics, Social Sciences) to maintain the dual objectives of training the Whole Man and of permitting direct equivalence between subsystems. Adults have access to basic and medium technical courses at night.³

In parallel with the development of technical schooling, on-the-job worker training courses mushroomed in almost all the enterprises and Ministries, at

various levels, of differing content and duration, and with various objectives. In 1983, the subsystem's administering National Directorate, the DINET, was upgraded to the category of a State Secretariat and entrusted with the task of coordinating, bringing under control and setting of normative patterns for, all the diverse technical courses under way, especially in the productive sector.

TABLE 3.8.A Technical Secondary Schooling (Elementary and Basic)⁴

	<u>1973/4</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1983</u>
Enrol.	15 000	10 297	9 401	9 423	10 676	12 448	12 704	12 506	12 105
Teachers	700	?	?	597	633	673	680	780	
Schools	27	34	34	34	41	32	31	33	32

The following sections consider each level of the subsystem and some of the factors common to the subsystem as a whole. More details about the objectives of the subsystem are indicated in Section 3.4., above, while the structure of the subsystem in 1980 and in the future is laid out in Tables 3.2.B and 3.3.A above.

3.8.1 Elementary Technical Schooling

The schools at this level were divided into two types - the Escolas de Artes e Ofícios, schools for training artisans and craftsmen, and the Elementary Agricultural schools. The former arose in the colonial period to train artisans in carpentry, wood-carving, cabinet-making, elementary mechanics, lathe operation, shoe-making and leatherwork, and so on. Entrance qualifications of 4th Grade gave access to three-year courses, which did not, however, provide 6th Grade equivalence.⁵ Many of the teachers were missionaries.

The schools were continued after Independence, but the courses were upgraded to give 6th Grade equivalence. It was decided also that many of the schools should be further upgraded to permit their transformation into Basic level schools. At present, only ten of the schools are operating at this level, the Elementary level enrollment has steadily been reduced, five of the remaining schools will be upgraded to Basic level and the remaining five transformed into schools for rural development, that is, socialization of the countryside.⁶

TABLE 3.8.B Elementary Technical School Enrollment⁷

	1978	1980	1982	1983
Total	3 533	3 000	2 000	1 975
Elementary Agricultural	1 139			-
Artes e Ofícios	2 394			1 975

After Independence, most of the schools were left in very bad conditions, with equipment, light and water facilities destroyed, and the boarding facilities ruined. The first few years were spent in recuperating the installations. Thereafter, schooling quality has been raised.

In the future, elementary level courses for the integration of new workers in production units will mainly be held in those units or in centres under the tutelage of the Ministry of Industry.

3.8.2 Basic Technical Schooling

As has already been mentioned, at the time of Independence many of these schools were left in a state of ruin. The number has steadily been raised, through the upgrading of Elementary level schools, and a model industrial school has been constructed in Matola, Maputo. The schools have also been recuperated through international cooperation, although many of the buildings are not in very good condition.

TABLE 3.8.C Basic Level Technical Schools (1982)⁸

<u>Industrial</u>	<u>Commercial</u>	<u>Industrial and Commercial</u>	<u>Agricultural</u>	<u>Total</u>
4	2	8	8	22

Entrance level to the Basic level schools is 6th Grade. Courses full-time last three years and give 9th Grade equivalence and a professional diploma. General secondary school subjects occupy about 65% of the 1st year, 50% of the 2nd and 30% of the 3rd. 90% of the graduates are expected to enter directly into the productive sector, while about 10% go on to Medium level institutes or technical teacher training. Workers may follow night courses at the school, lasting 4 years for the unexperienced 6th Grade entrant, less for those with higher entry qualifications or greater experience. The following specializations are provided:⁹

<u>Industrial:</u>	Machine tools (metal-working)	General electricity
	Fitting and turning	Industrial electricians
	Auto mechanics	High current electricians
	Diesel generator mechanics	Low tension electricians
	Refridgeration mechanics	Control instruments
	Construction foreman	General chemistry
	Mining	Laboratory chemistry
	Drilling prospection	Chemical process monitor
<u>Commercial:</u>	Accounting Secretarial	Typing
<u>Agricultural:</u>	Animal husbandry	General agriculture
	Agriculture and livestock	Forestry
	Agricultural mechanization	

Enrollment in the Basic level schools has steadily increased:

TABLE 3.8.D Enrollment in Basic Level Technical Schools¹⁰

<u>Type of School</u>	<u>1978</u>	<u>1983</u>	<u>% Change</u>
Industrial	3 580	5 035	40,6
Commercial	3 010	2 870	-4,7
Agricultural	635	2 225	250,4
Total	7 225	10 130	40,2

In addition, in 1983 about 3 000 adults were registered for the night classes. In 1979, about 600 pupils graduated and in 1980, about 900.¹¹ The significant increase in enrollment in the agricultural schools shows that the subsystem is catering more and more for national realities; the agricultural side of technical education had been almost totally neglected in the colonial period (see Table 3.1.A).

An important gain to note in the field of technical schooling is that in 1981, 21% of Basiclevel students were girls.¹²

3.8.3 Medium Technical Schooling

Four technical institutes and two technical teacher training institutes exist at this level. Some teacher training activities are also undertaken at three of the four normal institutes.¹³ For a discussion of technical teacher training, see 3.9.2 (6), below.

TABLE 3.8.E Medium Level Technical Institutes¹⁴

	Industrial	Commercial	Agricultural	Industrial Teacher Training	Agricultural Teacher Training
1978	1	1	1	-	-
1983	2	1	1	1	1

Entrance level to the Medium level schools is 9th Grade, technical or (excepting the teacher training institutes) general. Full-time courses last three years and give 11th Grade equivalence and a professional diploma. Most graduates are expected to enter directly into the productive sector, (or the teachers into teaching), although some are chosen to continue studies at university level. Workers may follow night courses at the institutes, lasting 4 years for the inexperienced 9th Grade entrant. The following specializations are provided:¹⁵

<u>Industrial:</u>	Auto mechanics	Industrial electronics
	General mechanics	Industrial electric systems
	Civil construction	Laboratory chemistry
	Buildings and bridges	Industrial chemistry
	Hydraulics	
	Road and rail construction	
<u>Commercial:</u>	Expert accountant	Informatics technician
	Expert in customs and excise	
<u>Agricultural:</u>	Agriculture	Forestry
	Animal husbandry	Agricultural mechanization

Technical teaching specializations are indicated in 3.9.2 (6).

Enrollment in the Medium level institutes has also increased significantly:

TABLE 3.8.F Enrollment in Medium Level Technical Institutes¹⁶

<u>Type of Institute</u>	<u>1978</u>	<u>1983</u>	<u>% Change</u>
Industrial	464	749	61,4
Commercial	119	591	396,6
Agricultural	166	309	86,1
Industrial teacher training	-	427	-
Agricultural teacher training	-	175	-
Total	749	2 251	200,5

In addition, in 1982 nearly 1 000 adults were enrolled in night classes. The significant growth in the technical training at this level is a major step towards supplying skilled workers to the productive sectors and achieving better economic organization and growth. It is planned to extend the number of Industrial Institutes so that there is one in each of the ten provinces.¹⁷

3.8.4 Technical Schooling Quality and Results

The period up to 1980 was fundamentally spent in the recuperation of the schools, planning of the network, augmenting and upgrading the equipment, redesigning the curricula of the courses, and preparing the teacher training facilities necessary for a qualitative step forward. In the meantime, some expatriates were contracted to keep the Basic and Medium schools operational.

From 1980, the conditions had been created for improvement in the quality of the teaching, especially of the practical/technical subjects. Teacher upgrading courses and teacher training courses at the Institutes made it possible to staff the Elementary and Basic schools with Mozambican teachers by 1983.¹⁸ Specific teaching material for the subjects of mathematics, physics and chemistry was produced. Youth and adult students' enrollment at higher levels could be increased and the pass rate improved. Growth was oriented specifically towards the increase in the number of industrial specializations available and towards agriculture, catering for Mozambique's most pressing needs and reducing the weight of the commercial component. Numbers of girls were enrolled at all three levels, comprising 18% of the enrollment.¹⁹

Over the period 1975 - 1982, 9 200 students graduated from the three levels of the subsystem, and others graduated in technical schools overseas.²⁰

However, many problems affecting the quality of technical schooling remain.²¹ In Mozambique, there exists an enormous range of machinery, of all kinds and vintage. For example, all kinds of vehicles are to be encountered, from America, East and West Europe, the Soviet Union and China. As the schools and institutes have been equipped each from one or various donor countries, students who enter production and even teachers who graduate from one institute and go to teach in another, may be faced with a large array of unfamiliar machinery. Workshop space is often too small and practical classes too large, making the tool supply inadequate and practical participation insufficient for each student. The problem is compounded by an almost total lack of

textbooks for the technical subjects, often a lack of manuals for equipment and machinery, and lack of visual teaching aids (cross-section diagrams, cut-away motors, etc). (The teachers being trained in the Industrial Teacher Institutes are, however, being taught in practice how to make their own didactic material).²² There is also a scarcity of raw materials for some practical subjects, and of spare parts for school equipment.

Electricity and water supply problems continue to affect many schools, as does the insufficient standard of school buildings and boarding facilities. Further (as is the case for almost all schools in Mozambique), the administrative staff has no specific in-depth training for their tasks. Transport to the schools is a problem which has been recently overcome. Nor are the more outlying schools, especially "Artes e Ofícios" and agricultural schools, immune to insurgents' activities.

Many efforts are being made by the schools themselves to overcome their problems. For example, students manufacture some of the tools and spare parts necessary, assist in construction and repair, and (true to the line of linking school and community), use their facilities to make articles needed by nearby production units, schools, etc. (parts, metal furniture, car repair, etc.), thereby earning some money for the school. In common with general secondary schools, most of the technical students are boarders (see 3.6.2.(2b), above) and the schools try to maintain some agricultural production for self-sufficiency - with much success in the agricultural schools, of course!

No statistical information is available on rate of drop-out and repetition, although it is now probably lower than in other subsystems.

3.8.5 Technical Education Subsystem Administration²³

As previously mentioned, the subsystem up to 1983 was administered at central level by the Technical Education Directorate (DINET) in the MEC. This Directorate is one of the most organized and efficient in the MEC, and has done wonders in recuperating and reforming the subsystem. In addition, the DINET had no specific Provincial and District counterparts in the Directorates of Education and Culture, in part relying on the General Education Services, in part on direct contact with the school principals.

In 1983, the DINET structure was used as a nucleus for the creation of an expanded State Secretariat of Technical and Professional Education (SETEP) with concomitantly expanded responsibilities. Apart from administering the formal school network, it should:

- coordinate and rationalize technical training for workers already in service, organizing efficient use of resources;
- standardize course contents as far as possible, ensuring provision of general subjects and technical subjects of the specified quality, make provision for testing and evaluation, in order to be able to confer technical diplomas and thereby permit the advancement of workers in category and salary.

3.8.6 Special Characteristics and Future Plans

The minimum age of entry to any part of the subsystem is 15. In order to graduate from the subsystem with a diploma, a trial period in production and a presentation of the work done is necessary. For students who enter the subsystem with previous practical experience or with higher than minimum entry qualifications, course time may be shortened accordingly. Each component of the subsystem is designed to be final, graduates leaving directly into production.²⁴

A study will be undertaken to determine occupational profiles of work posts, in the Mozambican economy. On that basis, and in terms also of international labour laws and standards as defined by the ILO, Professional Profiles will be determined for levels and kinds of professionalism for workers (unskilled, semi-skilled, skilled, technicians), which will in their turn serve the reform of course programmes and course curricula and the general reform of the subsystem in line with the NES. The reform should begin implementation now, but will be compatibilized with the main-stream NES from 1990, the year in which the first new 7th Grade leavers will be available to enter Basic technical schooling.²⁵

The 4th Congress directives for this sector state:

"The reinforcement and development of technico-professional education is an objective necessity for the development of the national economy, whereby it is necessary:

- to organize and dynamize adult technical education;
- to improve the quality, level and contents of professional training for the youth and the workers, creating direct links between the schools and the productive sectors;

- to promote the political and ideological training of the country's technicians.

In this field, we must take measures which guarantee the centralized management and control of technical and professional training in our country and overseas, ensuring that it is suited to the real needs of the country.

In 1985, relative to 1982, increase enrollment by about 20% and graduations by 9%".²⁶

44-38861-101

[illegible]

3.9 THE TEACHER TRAINING SUBSYSTEM

3.9.1 Evolution of Teaching Staff, and Teacher Training

TABLE 3.9.A Teaching Staff¹

	1967	1973	1980	1981
Primary	5 822	11 000	17 030	18 751 ⁺
General Lower & Middle Secondary	720	1 801	2 087	2 900 [*]
Gen. Upper Sec.	?	?	93	157
Technical Sec.	807	700	680	750

+ of which 12 000 untrained, 10 000 with 4th Grade and 2 000 with 6th Grade qualifications.

* including night school.

In 1974, only about 100 Mozambican trained secondary school teachers remained in the country.² At this level, many expatriates were recruited to fill in the gaps, while Mozambicans were trained.

At primary level, teacher training began in 1976, and was gradually opened for other levels and other subsystems over the period 1977-1981. At the same time, it was necessary to attempt the upgrading of many under- and un-qualified teachers already in service, through which need various forms of upgrading came into existence:

- short-duration upgrading courses of 1-3 months, which were attended by 11 100 teachers³
- pedagogical seminars, upgrading weekends
- joint lesson planning
- operation of pedagogical support commissions
- distribution of a pedagogical magazine
- broadcast of a teachers' radio programme
- in the future, upgrading by correspondence course.

From 1981, the evolution of the teacher training subsystem(s) will follow roughly the time-schedule and forms shown in Table 3.9.B.⁴

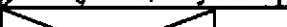
The meteoric rise of the number of teachers from 13 500 in 1973 to about 22 550 in 1981 (not forgetting also that many of the 1973 teachers left the country) has resulted in about 75 % of teachers being aged under 30.⁵

TABLE 3.9.B Teacher Training Development⁴

a) General Education Teacher Training

Year \ Level	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	
Lower Primary	6th Grade + 1 year		6th Grade + 3 years										10th Grade + 3 years			
Upper Primary (prec. lower sec.)	6th Grade + 2 years		9th Grade + 2 years													
Secondary	9th Grade + 2 years				11th Grade + 3 years										12th Grade + 4 years	
Upper Secondary	11th Grade + 2 years															

b) Adult General Education Teacher Training

Level \ Year	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	
Lower Primary		6th Grade + 1/2 year			6th Grade + 1 year			6th Grade + 2 years					?			
Upper Primary				9th Grade + 2 years									10th Grade + 3 years			
Secondary					11th Grade + 3 years										12th G + 4yrs	

c) Technical Education Teacher Training

Year		81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
Secondary	Ind.	Upper	Tech 9th Grade				Tech. 9th Grade + Upper Secondary Tech. Ped. - 4 years									
	Agr.	2ary	+ Upper Second.													
	Com.	Tech.	Tech. Ped.													
		+ 1yr	- 3 years													
Upper Secondary		Tech. 11th Grade + 1 year Tech. 11th Grade + 5 years Tech. Ped. 11th Grade + 5 years														

3.9.2 Levels of Teacher Training

1) Primary level (1st - 4th Grade)

Various centres offering Primary teacher training were opened in 1975, with a course duration of six months. The system gradually evolved until there was a Primary Teachers' Training Centre (CFPP) in each Province, operating on 6th Grade certificate entry and one year of course. Through their operation, some 6 700 of the 8 700 6th Grade certificate holder primary teachers in the system have now been trained. As mentioned above, this leaves 10 016 untrained 4th Grade certificate holders in teaching posts without access to training, unless they are able to upgrade their basic qualifications to 6th Grade. For these, a distance education (correspondence) course is planned, to raise their basic qualification and also to give some psychopedagogical and methodological training.⁶

In the CFPP, all teachers are trained to teach all the subject areas of the primary curriculum.

In line with the general reform of the NES, in 1983 only 6 centres are operating on one-year courses; the remaining 11 have been upgraded to three-year courses. The centres have the capacity to graduate about 3 000 teachers a year.⁷

2) General lower secondary level (5th and 6th Grade)

At one point, two institutions were training teachers for this level:

- the University, through the "propedeutic" course, (see 3.6.41, above), trained 189 teachers for lower secondary, ingress 9th Grade plus 2 years' training, over the period 1977-1978;⁸
- the teacher training school (EFEP) trained teachers for 1st - 6th Grades, ingress 6th - 8th Grade plus two years' training.

Through these training efforts, by the end of 1982 about 2 550 teachers had been trained for lower secondary level.⁹ This level has now been removed from the university, and functions in some 4 centres (EFEP), as next year offering two-year (11th Grade equivalence) courses to entrants with 9th Grade certificates.¹⁰

Teachers at this level are trained to teach one or two subjects each of the curriculum.

3) General middle secondary level (7th - 9th Grade)¹¹

As of 1980, the UEM started training teachers for this level, ingressing 9th Grade graduates to a two-year course giving teacher training and 11th Grade equivalence. The courses are very accelerated and may therefore be extended to 3 years in the near future.

In 1981 and 1982, 310 teachers were graduated. In 1983, 638 trainees were participating in the 2 years. The numbers in training are weighted to the exact and natural sciences, as against languages and social sciences at the ratio of 8:5. The pass level is around 60 %, given the accelerated nature of the course and the reluctance of some of the trainees assigned to the course to become teachers.

Each teacher is trained to teach two subjects:

- | | |
|--------------------------|---------------------------|
| - Portuguese and English | - Mathematics and Physics |
| - History and Geography | - Chemistry and Biology |

Within the curriculum, 1½ months are dedicated to practical teaching in the schools.

4) General upper secondary level (11th and 12th Grade)¹²

As of 1980, entrants with 11th Grade certificate are admitted to the university's Education Faculty and follow a two-year course at bachelor degree level. In 1981 and 1982, 106 teachers were graduated. In 1983, 140 teachers were participating over the 2 years. The numbers are also weighted to the exact and natural sciences, as against the languages and social sciences, in the ratio of 3:2.

On the same division as for middle secondary, the teachers are trained to teach two subjects, just as shown above.

From 1986, it is intended to train all secondary teachers at bachelor degree level with a three-year course curriculum.

5) Adult educator training

Until 1982, adult educators for (post-literacy) primary level were trained in short-duration courses of 15-30 days' duration, and worked as volunteers. Over the next few years, those teaching at the adult literacy level (roughly, 1st-3rd Grade NES) will generally continue to be volunteers, earning, if anything, only performance rewards.

However, for the other grades (4th - 10th) covered by the adult education subsystem, a complex arrangement of voluntary and professional teachers will come into play, designed over the short term to give a quality impulse to adult education at higher levels, to respond more efficiently to manpower needs in the economy. Some professionals will also be needed for placement in the rural areas, where otherwise sufficiently schooled peasants are not to be found to teach as volunteers.

Thus in 1982, the first course for professional educators was opened, entrance on a 6th Grade certificate to a six months' curriculum. Graduates are considered to be equivalent to (and are paid as) trained primary school teachers. In the future, this course will be upgraded, and courses to train educators for the new upper primary and secondary levels will be opened, as indicated in Table 3.9.B. The 1982 course graduated about 180 educators,¹³ to teach 3rd year (4th and 5th Grade NES) and give pedagogical support to literacy teachers.

6) Technical teacher training¹⁴

Five institutes now train technical teachers, three as an adjunct to normal upper secondary ("Medium") technical courses, two as their sole function. Entrance, on the basis of a 9th Grade Technical Diploma, is to a three-year upper secondary level course giving an 11th Grade equivalence diploma, to teach at middle secondary ("Basic") level.

Technical teacher training began with accelerated courses in 1977, as of 1981 moving over to the longer duration courses just described. Over the period 1978-1982, the following number of teachers were graduated in one-year (accelerated) and three-year courses:

TABLE 3.9.C Technical Teacher Training 1978-1982¹⁵

Industrial technical teachers	288
Agricultural technical teachers	158
Commercial technical teachers	76
Industrial + commercial (unknown distrib.)	131
TOTAL	653

A further 39 were upgraded in a 1977 3month course. In 1983, 731 teachers are in training courses.

Teachers are trained for the following specializations:

Agricultural: Agriculture, animal husbandry, agricultural mechanization, forestry

Industrial; Auto mechanics, machine tools, welding, electricity, electronics, civil construction, industrial chemistry, analytical chemistry

Commercial: Books and accounts, informatics, secretariat, planning and statistics, customs and excise.

The pass rates at the technical teacher training institutes are over 90 %, due to careful selection of trainees, good material and pedagogical conditions, and good staff at the institutes.

Trainees have 2½ months practice teaching in schools during their course.

The technical teacher training institutes do not prepare upper secondary level technical teachers. Some 60 middle secondary level teacher graduates have been sent to the UEM or to overseas universities for degree level training, fulfilling this need.

7) Cultural and physical education teachers¹⁶

At the Centre for Cultural Studies (CEC), 6th Grade entrants are trained in various fields (design, music, dance, theatre) in courses of 2-4 years duration, giving 8th or 9th Grade equivalence. Some of these become teachers in cultural subjects at secondary schools.

There also existed a Physical Education School (6th Grade entrance + 1 year course for PE teachers) and a Physical Education Institute (6th Grade entrance + 5 years course, 9th Grade equivalence diploma), whose graduates (353 by 1979) in most cases would become teachers at secondary level in Physical Education. The PE School was subsequently closed.

At present, it is not clear how Cultural or PE teachers are going to be found or trained in sufficient numbers for the primary schools, where these two disciplines occupy an important part of the curriculum and are taught along with all other subjects by the same grade teacher, who may be untrained and/or ungifted in these respects.

8) Teacher educators¹⁷

At primary and lower secondary teacher training schools, most of the

educators are Mozambican ex-teachers with long experience, or, in the former case, teachers trained at lower secondary level. In fact, their specific preparation as educators is not very good. At higher levels, there is a high percentage of expatriates (80 % in the UEM Education Faculty, 60 % in the technical teacher training institutes).

In order to train more teacher educators for secondary level teachers, some Mozambicans work as expatriate counterparts, others are sent overseas to specialized university courses.

3.9.3 Teacher Training Problems¹⁸

A major problem for teacher training is, the lack of all kinds of textbooks, for general and for specialized subjects, in all courses at all levels. Often the pupils themselves at the level where the trainee will teach, also have no textbooks, so the the training has no instruments on which to focus apart from general course outlines.

A second major problem is the recruitment of teachers for training courses. The MEC compulsorily allocates school graduates at the 6th, 9th and 11th Grade levels to teacher training, but some do not turn up and others do not apply themselves. The motives for this are varied, but include:

- teacher training before 1982/83 not offering higher level equivalence diplomas;
- a social lack of prestige for the teacher;
- a desire to follow a "liberal" profession (medicine, law, economics) or to enter an economic sector offering higher salaries and/or more relaxed working conditions.

In 1982, a national teachers' organization (ONP) was formed, teachers' salaries were raised and work demands more clearly regulated. With the introduction of the NES, all teacher training will be accompanied by the issue of higher level diplomas, guaranteeing access to study at higher levels.

The problem of training quality and coherence has been mentioned above, in relation to teacher educators. Expatriate educators use differing methods, speak Portuguese of varying competence, come from diverse education systems of different quality and style. The Mozambican educators are often underqualified for their role.

3.9.4 Future Perspectives

Table 3.9.B above gives the clearest indication of the tendency in teacher training - higher qualified entrants to the courses, longer duration and quality of the courses. At the same time, in order to implement the NES in quantity and quality and attain its objectives, it will be necessary to train, retrain or upgrade vast numbers of teachers. At primary level, the demand will depend on the programme for the introduction of compulsory schooling, but by 1990 at least 20 000, but possibly over 30 000, new primary teachers would be needed for this, not to mention the upgrading of some 12 000 untrained teachers in service.¹⁹ At higher levels, any expansion will also require more teachers; as is also the case for the expansion of the other subsystems. It is costly for Mozambique to retain expatriate secondary teachers, which means that their substitution by Mozambicans is a necessity. As a result, the majority of 6th, 9th and 11th Grade graduates will be put into teacher training over this period, representing an enormous sacrifice by the productive sector and necessitating enormous investment in centre construction and course maintenance.

The Fourth Congress Directives in the area of teacher training are:

"In 1985, between 2 900 and 3 100 students must enter the different teacher training centres, and we must qualify between 2 600 and 2 800 teachers. We must qualify 6 600 to 7 000 new teachers during the next three years (1983-1985), representing an increase of 30 % in comparison with the national teaching staff in 1982."²⁰

3.10 CURRICULUM DEVELOPMENT AND TEXTBOOK PRODUCTION AND DISTRIBUTION¹

3.10.1 Curriculum and textbook development

1) 1975 - 1979

In 1975, all colonial curricula and textbooks were suppressed and replaced by new curricula, drawn up over the following two years by the respective National Directorates of the MEC (General, Adult, and Technical Education); without, however, accompanying textbooks in the initial stages. In 1977, the full primary course programmes were printed in three volumes and distributed. For higher levels, each teacher received a stencilled document containing the programme for his subject at his level.

By 1978, the General Education Directorate (DNE) had produced Portuguese readers for the primary and lower secondary level, followed by readers for the middle secondary level. It is to be noted that prior to this, there had been no experience of editing schoolbooks in Mozambique, the work having been done in Portugal before Independence.

In 1978, with the beginning of the planned literacy campaigns, a Portuguese reader and a literacy teachers' manual were produced by the Adult Education Directorate (DNAEA).

In both cases, small groups of the available people with some experience in the fields concerned, wrote the programmes and textbooks.

On the same lines, between 1979 and 1980, books were produced for the Adult Education post-literacy campaigns (Portuguese reader, teachers' methodology manual, Geography and Health Education, and finally a Maths book) while the literacy service produced a revised teachers' manual, a mathematics book and manual, and a supplementary Portuguese exercises book.

In 1978, with the founding of the National Institute for Education Development (INDE), the task of producing textbooks was passed over to it; the INDE, however, could only take on General Education textbooks.

Through the period 1978-1982, new 1st Grade Portuguese and Mathematics textbooks and teachers' manuals were prepared, as well as 5th and 6th Grade Geography and Mathematics books, a 7th Grade History book, a 9th Grade Biology book, the Atlas of Mozambique and an accompanying guide to its use, four books on racism and apartheid for all schools (after the 1981 Matola Raid), and a physical education manual. (See 3.10.B)

The period indicated is characterized by the rapid production of some essential textbooks by dispersed groups, often without sufficient experience and with few guidelines as to what learning rates and teaching methods were possible to demand under prevailing circumstances.

The results were:

- often overambitious curricula, especially as regards content and methodology
- an absence of a method for the teaching of Portuguese (and in Portuguese) as a second language
- the development of serious gaps and imbalance between and within subsystems, grades and subject areas
- a continuing absence of textbooks for many grades and subjects; most importantly, primary level mathematical textbooks.

2) 1980 - 1983

In 1980, the INDE was charged with coordinating the planning, development and introduction of the new National Education System, on the basis of acquired experience and with a tight timetable. The INDE convened an Education System Board (GSE), composed of representatives of all the National Directorates of MEC, to undertake this work. It selected the following work method:

- (a) definition by the GSE of the general aims of the NES;
- (b) proposal of the general objectives of each subsystem by the respective Directorates on the GSE, followed by compatibilization;
- (c) composition of subject groups in the general and adult education areas, to define the general objectives per level, and per subject area, for compatibilization (between subjects, levels and subsystems) and subsequent approval by the GSE;
- (d) continuation by the subject groups of the definition of the specific educational objectives per grade and the planning, drafting and writing of the objectives, contents, means and methods to be applied;
- (e) practical testing and subsequent revision of the instruments produced, approval by the GSE and the Minister, and finally, production of definitive textbooks and teachers' guides for each grade, on

schedule in accordance with the demands of the progressive timetable for the introduction of each stage of the NES.

In practice, step (c) above was covered in a fairly general way and left for revision according to the progress of steps (d) and (e); while the testing and revision under (e) have not been thoroughly done due to lack of time. The adult education and general education subject groups undertook steps (c), (d), (e) rather separately over the period 1980-1982. Overall, the adult education subsystem's accelerated introduction timetable has created problems for the maintenance of equivalence with the general education subsystem (for example, in 1983 the subject groups were working on 2nd Grade general education and 5th Grade adult education).

Through these developments, in 1981-1982, eight adult education textbooks for the literacy phase were prepared and printed (two Portuguese and two Mathematics textbooks and four accompanying teachers' manuals), and in 1983, another ten books (Portuguese: two books and two manuals; Mathematics: two books and two manuals; Natural Sciences: one book and one manual). At the same time the General Education subject groups prepared in 1981-1982 two Portuguese and two Mathematics books and five teachers' manuals for 1st Grade, and in 1983 are preparing a similar number of books for the 2nd Grade.

Some other previously prepared books were to be published in 1983 to cover lacunae in the existing education system, as well as some ten books for the adult education 4th Year, bringing the planned total up to some 39 new books for publishing in 1983.

3) 1984 - 1990

Textbook production is planned to follow the timetable for the introduction of the NES, at each step the required programmes and textbooks being finished and produced at least one year before the introduction of each grade or level. This implies a steady rise in the number of books on order each year (see 3.10.C), rising to around 50 new books in 1985 and to nearly 100 in 1990. At this stage, not only will books be needed for the general and adult education subsystems, but also for the technical subsystem. Publishing of new textbooks for parts of the old system and for the proposed distance education will be needed, as well as the substitution of textbooks produced for the NES, and the reprinting (often with revisions)

of other books. On this basis, the INDE has proposed the establishment of a publishing house (see below).

In terms of the manpower needed for all this work, it must be stated that a lack of curriculum planners and textbook writers with due experience, has been felt from the very beginning of the process detailed above, that is, even for the initial levels. As the NES introduction reaches higher levels and grades, the existing subgroups will have difficulty in meeting the capacity required. For curriculum development to follow the desired timetable, extensive reinforcement in quality and quantity will be needed, with trained and experienced personnel in all subject areas for all subsystems.

3.10.2 Textbook layout, publishing and printing

As mentioned, prior to Independence textbooks were prepared and printed in Portugal. Since Independence, the overwhelming majority of textbooks have been published and printed in Mozambique.

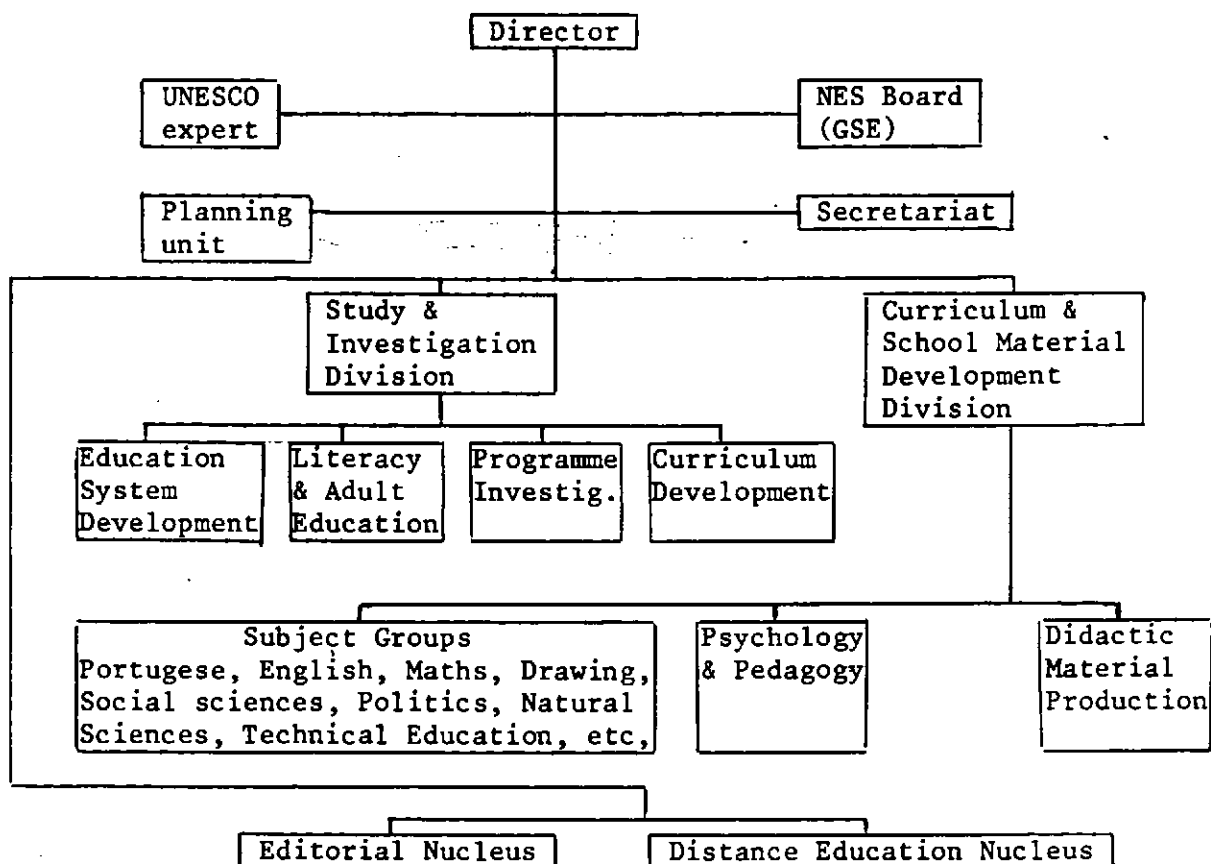
In 1980, an Editorial Nucleus was created in the INDE in order to edit, lay out and publish textbooks. Currently the Nucleus has a staff of 12, including editors, layout personnel, illustrators, photographers and typists. The EN receives the drafted material from the subject groups after it has been approved by the Ministry, lays it out, does the illustrating, type-sets the originals, edits and prepares the finished pages for photo-litho in the printing houses. At present, the EN has inadequate installations in the INDE building; an existing building is being converted for it, on the basis that the EN be transformed into a full-scale publishing house able to undertake all MEC publishing. The EN staff is numerically insufficient and some of it is underqualified, which has resulted in the past in some layout and editing errors, inadequate illustration and difficulties in setting up photographs. The extremely increased demands 1983-1990 and beyond, urgently require staff upgrading and expansion. (See Development Plan, 3.10.C.)

As far as equipment is concerned, the EN possesses a fair quantity of the most necessary hardware (typewriters, cameras, developing room, drawing tables and equipment, etc.), though a staff increase and the development of a publishing house will require more of the same and some more advanced equipment (see 3.10.C). However, the functioning

of the EN has been continuously plagued by shortages of the most basic equipment (inks, drawing instruments, typewriter ribbons, photographic chemicals, glue, corrector fluid, stencils and the like). Some problems with equipment repair have also been registered (e.g. photocopy machines in particular).

After book originals have been prepared, they are distributed among the ten or so printing houses in Maputo, on the basis of a plan agreed between the INDE and the INLD (Institute for Books and Records of the Ministry of Information). In 1980 and again in 1981, over 3½ million schoolbooks were printed² (new books and reprints), which total amount will rise higher in 1983 and beyond. According to the SIDA expert editor working for the EN, future printing demands will require further extension of the printing and layout facilities available. In 1982, two 1st Grade

TABLE 3.10.A The National Institute for Education Development³



The INDE should do both research and development of education.

textbooks had to be printed in Portugal (at foreign exchange cost) due to lack of local printing capacity, and behind-schedule production of the material.

It is to be noted that, to reduce printing demands and costs, many textbooks will become the property of the schools, for redistribution to pupils each year. However, adult education and first grades material is so designed that each student should write in (and therefore keep) his own books. Furthermore, the printing industry itself produces numerous books (386 000 in 1981) for other structures - the Party, other ministries, etc. - and newspapers and magazines (26 million in 1981).⁴ As a result, existing facilities can not cope well with delayed delivery of originals, unplanned demands, urgent timetables, or any kind of equipment breakdown. Given that most new textbooks are able to be produced only during the year before they are needed, publishing and printing delays have serious effects on distribution to schedule.

3.10.3 Distribution of Textbooks and Other Didactic Material

Printed textbooks, and other material like pencils and pens, rulers, rubbers, exercise books etc., are delivered to the MEC Maputo warehouse for countrywide distribution according to a centrally elaborated plan on numbers per province, relative time priority for arrival etc. The DAG has the responsibility for ensuring delivery on time and the recovery of material sales money, though a School Materials Company is now being formed to take over materials production, acquisition, distribution and sale.

At present, various delivery methods are used:

- (a) Books and material are delivered (as soon as they are received by the MEC, if possible), firstly to the North, then to the Centre, and lastly to the South of the country.
- (b) The major line of supply is by boat to coastal ports (Beira and Nacala in the first instance, sometimes also Quelimane and Pemba). Beira serves Sofala, Manica, Tete (and Zambézia, if Quelimane is not used). Nacala serves Nampula and Niassa (and Cabo Delgado if Pemba is not used).
- (c) Where exceptional circumstances warrant the cost, some books are delivered to provincial capitals by air.

- (d) The three southern provinces (Maputo, Gaza, Inhambane) receive material by truck from the MEC warehouse;
- (e) The port warehouses distribute books and material to the respective provinces served, by truck or train.
- (f) Once each province has its books and material, it is responsible for delivering them, in adequate time and quantity, to each district capital, almost always by truck.
- (g) Each district distributes the books and material to the base, by direct sale, as far as possible making use of any district means of transport available; otherwise, the acquirers go on foot.

Some breakdowns often occur in the system:

- delays in initial delivery of material to the MEC warehouse;
- delays in boat departures and arrivals;
- damage to books en route;
- enemy action preventing transport of, or destroying, books and material;
- lack of access to inland provinces and various districts, due to enemy activity, to the weather destroying roads and bridges or to lack of land transport, truck breakdown, etc.;
- the sale of books to the base always runs into problems of providing (or not) credit to the impecunious, distributing to distant parts of the district on foot, recuperating the selling price.

Given all of these problems, the system works surprisingly well since 1980, though recently enemy action has caused a relapse. Transport at district level has always been a very severe problem - the state of the roads demands distribution before the rainy season starts in October, especially in the North. The land transport fleet is always in a precarious state, due to some absolute lack of vehicles, and an even more pronounced lack of all spare parts and accessories. The state of the roads and enemy destruction of vehicles has highly exacerbated the situation.

TABLE 3.10.B Titles Edited by INDE⁵

ENSINO GERAL

Brincar Aprender 1 ^a classe	1980
Fichas de Leitura e Escrita 1 ^a classe	1980
Matemática 1 ^a classe	1980
Caderno de Exercícios de Matemática 1 ^a classe.....	1980
Biologia 9 ^a classe	1980

ALFABETIZACAO E EDUCACAO DE ADULTOS

Matemática Ed. Adultos	1980
Caderno de Apoio Pedagógico - Alfabetização	1980
Matemática - Guia do Alfabetizador	1980

ENSINO GERAL

Manual do Professor - Brincar e Aprender 1 ^a classe	1981
Manual do Professor - Fichas de Leitura e Escrita 1 ^a classe	1981
Manual do Professor - Matemática 1 ^a classe	1981
Egipto Antigo - 5 ^a classe	1981
Auxiliar do Atlas Vol. 1	1981
A Ciencia Matemática	1981
Racismo	1981
ANC	1981
Apartheid	1981
Os Boers atacam	1981
Apartheid (cartazes)	1981
Manual de Ed. Física para o Ensino Primário	1982
Matemática 5 ^a classe Vol. 1	1982
Matemática 5 ^a classe Vol. 2	1982
Matemática 6 ^a classe	1982
Apêndice de Matemática 6 ^a classe	1982
História 7 ^a classe	1982

SISTEMA NACIONAL DE EDUCACAO

ENSINO GERAL

Português 1 ^a classe Vol. 1	1982	(Imp em Portu
Português 1 ^a classe Vol. 2	1982	
Matemática 1 ^a classe Vol. 1	1982	(Imp em Portu
Matemática 1 ^a classe Vol. 2	1982	
Manual do Professor 1 ^a classe	1982	

EDUCAÇÃO DE ADULTOS

Português 1 ^o ano	1982
Português 2 ^o ano	1982
Matemática 1 ^o ano	1982
Matemática 2 ^o ano	1982
Manual do Professor Port. 1 ^o ano	1982
Manual do Professor Port. 2 ^o ano	1982
Manual do Professor Matem. 1 ^o ano	1982
Manual do professor Matem. 2 ^o ano	1982

TABLE 3.10.C Development Plan for the Editorial Nucleus of INDE,
1982-1990⁶

Year	1982	1983	1984	1985	1986	1987	1988	1989	1990
Titles to be edited	22	39	54	50	60	70	80	90	100
Staff:									
management	3	3	3	3	4	4	4	4	5
planning editors	-	2	4	4	5	6	6	7	7
illustration	3	5	6	6	7	7	8	8	8
lay-out	1	3	4	4	4	4	5	5	5
mounting	-	1	3	3	3	4	4	4	5
photogr.	1	2	2	2	3	3	3	3	3
typing	2	3	3	3	4	4	4	5	5
composition	-	1	2	2	3	3	3	3	3
techn.	-	2	2	2	2	4	4	4	4
TOTAL	10(4)	22(12)	30(8)	30(-)	36(6)	39(3)	41(2)	43(2)	45(2)

Note: figures in brackets indicate increase over previous year.

Important equipment

needed:	Composer	Furni-	Photo-
	Typewr.	ture	comp.
	Repro-	Office	machine
	camera	equipm.	
	Print.-	Car	
	machine	Copying	
		machine	
		Print.-	
		machine	

Costs,

equipment	200	500	400	400
cooperants	200	500	500	500

TOTAL				
(1982-1985)	400	1 000	900	900

(thousand SEK)

3.11 EDUCATION COSTS AND FINANCING

The rise in the education budget has been nearly as spectacular as the expansion and diversification of the education system. In 1970, 0,9 % of the colonial budget was spent on education (the source does not indicate its distribution or any supplementation from other areas).¹ In 1977, the education budget totalled \$US 48,65 million; it grew to \$US 100 million in 1982, that is, 20 % of the current state budget, or 4,75 % of the GSP.² In 1983, the education sector share of the current state budget has been set at 30 %, ⁴ i.e. somewhere near \$US 150 million. The state has only been able to provide a very low proportion of the capital investment budget to education, however - in 1981, only 1,3 %.³ Many of the capital budget needs are met through international support in funds and equipment. SIDA has since 1981 provided \$US 1,3 million per year,⁵ and other substantial support is received from UNESCO (aid to INDE and other smaller projects) and the socialist countries, as well as from other western countries and international agencies.

Students have in most cases (some exceptions existing) to pay a small fee each to enroll at school, but this sum reverts directly to the state treasury.

Most of the education budget is spent on:

- salaries
- boarding costs at schools and other courses
- transport costs (vehicle running costs, airfares, freight).

The MEC calculated the cost in 1981 per graduated student at different levels, excluding capital investment costs, to be:

TABLE 3.11.A Average Costs per Student Graduated per Level⁶

(Total recurrent costs over each course indicated, divided by the number of graduates) (in \$US)

Primary (4th Grade)	500
Lower secondary (6th Grade)	1 200
Middle secondary (9th Grade)	2 725
Agricultural Institute (9th Grade + 3 yrs)	12 450
University (Bachelor degree)	27 400
Middle secondary teacher (11th Grade)	12 440
Upper secondary teacher (2 years university)	23 330
Technical middle secondary teacher (9th + 3 yrs)	9 000

Some SADCC country statistics on costs per student per year at some levels are available.⁷ They are not reproduced here as absolute comparisons are misleading, given underlying differences in calculation bases:

- education system differences (course lengths, numbers per class, etc.);
- the artificial nature of international exchange rates;
- lack of indication as to whether the calculations refer to costs per student enrolled or per student graduated.

However, Mozambique's unit costs appear to be among the highest in the region, for all levels indicated (primary, secondary, university, secondary teacher training).

Analysing the reasons for this cost level, two common difficulties can be isolated:

- education inefficiency (high drop-out and repetition rates);
- boarding regime costs after primary level.

The analysis quoted in Table 3.11.A in fact indicates that the cost per student enrolled at primary level is only \$US 135, in relation to the cost per graduate of \$US 500.⁸

Attacking the boarding costs problem is enormously difficult. Reducing available boarding facilities alone would render parts of the system extremely inequitable and in contradiction to educational objectives, while other parts (teacher training) would simply cease to function. Extending secondary schools and teacher training colleges further, (certain to be done in any case, for reasons aside from costs), will involve massive capital investment and an enormous demand on Mozambique's construction capacities which probably could not be met. Expansion of this sort could reduce overall net costs per student, but would probably require a higher gross expenditure overall. Efforts at self-sufficiency of boarding centres through agricultural production are thus very important (even apart from their educational value), and should be supported. Nonetheless, there is a definite limit to this production, as the pupils have to attend classes and study also!

Thus the major thrust has to be, improving course efficiency at all levels. Fundamental to this is the improvement first of all of primary schooling quality - often it is the lack of a secure background at this level which creates problems higher up in the system. Thus all efforts to improve primary teacher and teacher training quality need priority

support. Obviously, better teacher training quality and better teachers at higher levels, is also important. It should be noted that the increase of teacher training and its efficiency at these levels will bring other cost reductions, notably the possibility of replacing foreign workers and teachers with Mozambican ones, saving on total salary and on foreign exchange.

Other schemes have been tried in other parts of the world to increase primary school efficiency and save money. Some suggested cost-saving methods⁹ are already applied in Mozambique - building of schools by the local population with local materials, using a "nuclear" system with widely-spread primary and centralized upper-primary and secondary schools, network planning to situate schools where the population is more concentrated, high student-teacher ratios, curriculum reform, literacy campaigns for the parents, textbook production... Other strategies that may deserve consideration are:

- automatic promotion between some grades (notably, from 1st to 2nd, and possibly, from 3rd to 4th)
- alternate-day schooling, for pupils who live far from school
- alternate-year schooling intake for low-population areas, to reduce the number of teachers needed and to raise the numbers per grade.
(This would interfere with the strategy for compulsory education introduction by defining obligatory entrance for all 7-year olds.)

Some suggested strategies for increasing primary school efficiency seem to be less applicable in the Mozambican context, though still worthy of some consideration. These are multi-grade classes, the replacement of teachers by technology, and the increasing of informal or non-formal contributions to the system. The first may go against education objectives, the second be unworkable where the need is most felt (in the rural areas), and the third both compete with the existing adult education activities and fall foul of the lack of educated adults in the country.

At higher levels, distance education is an interesting alternative and one that the Party has demanded. It will be experimented for upgrading untrained and underqualified primary teachers, and could be extended later if it proves a success - though the logistics of communication and distribution in Mozambique are quite daunting.

3.12 CONCLUSIONS

a) General Overview

The period 1975-1982 has seen an enormous increase in the number of Mozambicans at school, the opening for the first time of educational access to adults, the wide diversification of the education system giving access to technical courses that were not available before, a meteoric increase in teacher training facilities and courses, and a great increase in the access of Mozambicans to university. Primary school enrolment has more than doubled, secondary school access tripled. Each year, more than 300 000 adults are enrolled at all levels of the education system, with courses specially designed for them at primary level and with an accelerated access for some to the university. The slogan "Let's make our country into a school where everyone learns and everyone teaches" has been implemented to a considerable degree - 23,5 % of the population over 5 was studying in 1980.

Accompanying the quantitative increases, there has been general "rolling" reform of the education system, changing it definitively from its colonial precursor. The most wide-ranging reforms are presently in the process of implementation, but previous reforms, including the nationalization of all education and the replacement of all curricula, were also of very considerable effect. The planning of the education system has also contributed to its rationalization, smoother and more directed functioning, and efficiency.

However, the quantitative increase has not been sufficient as yet to provide universal primary schooling, and achieving this goal represents a struggle at least as broad and complex as the struggles so far undertaken. Not only does the achievement of this goal require further immense expansion of the school network and of teacher training, accompanied by further immense costs, but also the complete reorganization of the rural society into collective living and work patterns.

Nor, given the colonial heritage and the natural demands of a socialist society, has the increase in access at higher levels and to a wider range of courses been sufficient. Mozambique still faces an enormous shortage of trained manpower, and there is an enormous demand for every graduate the system can provide. Merely to undertake further expansion at all

levels of the education system requires the use of a very high proportion of its own graduates.

The Constitution of the Republic stipulates the right of all to education, and the equal rights of men and women. Notable advances have been made in both respects at primary level, but enormous social changes are still necessary to guarantee an equitable proportion of women in the education system. That at least 20 % of enrolment on all courses consists of women is a huge advance, but requires even further efforts to raise it still further. In similar fashion, the access of workers and peasants and their children to education has risen immensely since Independence, and is further guaranteed by Party directives; but peasants and their children still have lesser access to education than other classes and groups, and more difficulties in advancing from level to level. The socialization of the countryside and the extension of adult education to the parents will offset some of the advantages currently enjoyed by other classes, though their effect cannot be immediate; so a system of preferential access for peasants (and workers, in some cases) will have to be maintained.

A major problem of the advances in quantity made, has been the overall internal and external efficiency of the system. It is often a subject of complaint in Mozambique that the quality of schooling is low. Given its massification, this is a fairly inevitable result, at least on the short term. Nevertheless, the drafting and introduction of new textbooks and curricula and the training of teachers have helped improve quality. In comparing the situation with colonial education, it seems probable that education for Mozambicans (as against colonists and "assimilados") has not declined substantially in quality. At mission primary schools, the teachers were less trained than now, the curricula were highly irrelevant, oriented towards Portugal, designed for converting the "native" and inculcating a work ethic, and taught (as now, though with different objectives) in Portuguese. Teaching methods were more expository and more repressive (corporal punishment being widely used), one can say partly by design (to inculcate respect for colonial authority, submission and passivity) and partly by omission (very little teacher training existing at all). At higher levels, the graduates from mission schools hardly intruded at all - colonist teachers taught colonist children according to metropolitan curricula,

with a sprinkling of "assimilado" children around. Indeed, it seems probable that school quality for Mozambicans is much improved!

b) Primary Level Education

However, inefficiency is high. Improvement in schooling quality and efficiency is a constant and essential struggle, both to reduce unit costs and to open up more places, as well as to attain educational objectives. Improvement of primary schooling quality would seem to be the sine qua non for improvements across the whole system. Part of the goal should be attained by improving curricula, increasing relevance, and producing suitable textbooks, all procedures contemplated in the NES reform under way. However, improvement of teacher quality and qualification is an essential step, in particular, as regards the ten thousand untrained teachers with 4th Grade qualifications already in service. The concept of upgrading by distance education courses remains to be proved in practice, but seems to be the only viable strategy at the present stage. Improvement in material school conditions could also contribute to better results - requiring the provision of school furniture, more teaching aids (notably, better blackboards!), and improved water supply, as well as upgrading of "traditional" school building techniques. Other cost-reducing and efficiency-promoting strategies might also be considered.

Adult education at the primary level, almost nonexistent in colonial days, has become a prominent feature of the education system across the country. While principally directed at priority groups, defined in terms of the country's most pressing needs, some access has also been open for other adults. The strategy of limited national campaigns, intended to reach those most in need of literacy and to give some guarantee of post-literacy follow-up for all new literates, has run into some difficulties, some of them due to factors outside of the literary campaigns' control, some of them due to difficulties with insufficiently prepared and motivated voluntary teachers and insufficiently trained staff, and some of them probably due to too low-key mobilization tactics, resulting from the decision to limit campaign enrolment. Recent Party directives indicate a period of experimentation to be followed by higher enrolment, itself rather dependent on the success of the programme

for socialization of the countryside. Up to the present, none the less, the campaigns have advanced very far towards the eradication of illiteracy amongst the proletariat and the creation of "literate nuclei" in the existing communal villages.

Apart from the need to resolve problems related to teacher motivation, staff upgrading, and general mobilization, a thorny problem still remains to be tackled - that of creating a literate environment. In the countryside in particular, the increase in primary school success and the literacy of parents are dialectically related factors contributing towards a literate society, but both of these are themselves related to the accessibility of suitable reading material within that environment. More attention needs to be paid to the writing of useful reading material at an accessible level, and its distribution and circulation in the countryside. Perhaps a programme to establish rural presses and communal village libraries should be considered, as well as an increase in the frequency and quantity of editions of the newspaper for new literates.

On the basis of other countries' experience, it would also seem important to consider the extension of the campaigns, accompanied by general mobilization through all possible means and media, as the most effective way of significantly reducing the overall illiteracy rate, even if the "wastage" is high and the problem of higher level follow-up large.

c) Higher Education Levels

As has been argued, the higher levels of the education system are dialectically related to the lower levels. Without sufficient graduates at higher levels, it is difficult to see how teachers will be found to man the levels below. But the expansion of the higher levels to a great extent depends on the improvement of the lower levels' efficiency.

There has been substantial expansion of general secondary schooling, accompanied by the concomitant problems of quality. Many teachers left the country at Independence. The school network was totally designed to cater for the colonists in the towns. Network planning has extended its reach quite considerably, though access for the rural population is still very dependant on available boarding facilities. Also, far fewer girls make it into secondary school- about 27 % of the pupils are girls. Efforts have been made to train teachers for

secondary level, permitting a fairly constant expansion of access and a slight reduction in teacher-pupil ratios. The introduction of the NES will include present "lower secondary" into the primary component of the system, which will demand a huge expansion of the present school network, perhaps as much as by a factor of 9, given that it is to be part of the compulsory schooling.

Secondary school efficiency is also rather low, often because of problems inherited from poor primary schooling, otherwise, from insufficient teacher quality and other societal factors.

As regards technical schooling, the first few years after Independence were mainly dedicated to recuperating or replacing and augmenting the equipment, repairing the schools and preparing technical teachers. A number of schools were also upgraded from "lower" to "middle" secondary level. In consequence, lower secondary (elementary) technical enrolment has dropped, while enrolment at middle and upper secondary (basic and medium) levels has started to increase considerably. Technical teacher training institutes have also been opened for the first time.

It is sometimes said that the "tracking" of the education system, between academic schooling and diverse alternative technical lines, begins too soon in Mozambique. However, the demand for skilled manpower is so high that early level tracking seems essential. To compensate, technical school courses include a large "general" component of taught subjects, designed to retain equivalence between the two tracks.

A major breakthrough has been, the increase in the number of industrial specializations in accordance with the needs of the country, coupled with the large expansion of the agricultural technical track. These improvements have made technical schooling very relevant to Mozambique's economic needs, and paved the way for great future expansion of technical schooling (in addition to, and, to some extent, instead of, general secondary expansion). It is also significant that about 20 % of technical school pupils are girls.

Technical schools also face some problems of quality and efficiency, and they are sometimes overloaded in relation to workshop facilities, resulting in a not sufficiently practiced practical training. There are also problems of a very large variety of machinery from different countries, leading to difficulties in adaptation from one machine to another.

Up to now, secondary education for adults has been provided through night classes at general and technical secondary schools, though a few large enterprises have recently set up their own secondary schools, some lower secondary level boarding centres for accelerated adult education have been organized, and the university has just opened an accelerated 7th - 11th Grade course for adults. Large numbers of adults have passed through the night schooling, though the efficiency has been very low as the demands on time and effort were very high, for both teachers and students, and the teachers had often no teacher training. Recent reforms have reduced the number of hours per day and days per week, while in the future a nucleus of trained adult educators should be assigned to each night school. In the near future, special curricula and textbooks will be developed specifically for adults studying in general secondary courses. The accelerated training centres, though expensive to run, have proved to be rather efficient.

d) Teacher Training

Crucial to the system is the training of teachers, both to raise the quality and to permit further expansion. Since Independence, the field of teacher training has been opened up from almost nothing, passing through a phase of urgent short-period training courses to fill up as many gaps as possible, to the present rationalization, upgrading and extending of all teacher training. The going has not been completely smooth, as facilities were underequipped or lacking, recruits were not very keen on becoming teachers, and teacher educators were extremely hard to find. However, Mozambique now possesses an impressive number of training courses for teachers for all levels and subsystems, while the founding of the National Teachers' Organization and the increase of teachers' salaries have improved the attractiveness of the profession,

e) Textbooks and Material

Also crucial to the system has been the provision of textbooks. Whereas before Independence no textbooks were produced in Mozambique, since then an impressive number have been written, printed and distributed. However, some have been replaced, others need revision or replacing, and numerous subjects and levels have few or no textbooks. While an essential component of the NES introduction is the introduction of textbooks for all subjects at all levels as the reform is implemented,

and while some subjects at higher levels will require textbooks before the reform "reaches" them, the writing, editing and publishing of textbooks is a complex task for which insufficient resources have been found, especially considering the number of textbooks which would need to be produced every year to keep the NES fully provided. Plans to develop a publishing house exist, but the problem of where to find the writers for the textbooks is far from resolved. The publishing house itself will also probably be required to do much more than the preparation of NES textbooks (magazines, new literates' newspaper, complementary texts, distance education texts ...?), requiring a much larger and more qualified staff and some sophisticated equipment.

In the area of textbooks, there also exist deficiencies which it seems unlikely that Mozambique could resolve internally in a cost-effective way. Technical courses, teacher training courses and university courses are all hampered by lack of textbooks. It is not at all clear what to do about the situation, though perhaps cooperation agreements with other "Lusophone" countries and/or other socialist countries might help out to some extent.

Up to 1980, serious shortages of basic didactic materials were felt, due to acquisition and distribution problems. Careful planning has helped to minimize the problem since then, though distribution at base level remains a headache.

f) Administration, Planning and Evaluation

The field of planning and administration is almost always problematic in developing countries. In Mozambique, especially at the level of the provinces, districts and educational institutions, very few cadres have administrative training, though central extension of control and inspection, allied to experience, have improved the situation considerably since the immediate post-Independence period. Central planning has achieved quite firm control and direction over the whole education system. The allocation of planning cadres to Provincial Education Directorates has increased planning efficiency and makes possible some decentralization of planning functions. Statistical control channels have been much improved, though difficulties still exist at the base, both of underqualified cadres and of communication.

Evaluation of the system is still in its infancy. The education inspectorate is new, with little staff, which also has little specific training for the purpose. Statistical analysis is not yet adequately used for problem identification and control. Pedagogical research is being undertaken by the INDE, but few researchers are Mozambican and all researchers are also involved in other tasks. The Education Faculty of the University is also mainly oriented towards the training of teachers and has not involved itself in the field of research to any great extent. In effect, the overall evaluation of the education system and its components will require a large amount of manpower and attention in the future.

g) Financing

The Frelimo Party and the Mozambican Government have given great priority to education in terms of human and financial resources. The education sector in 1983 received 30 % of the current state budget. International cooperation agreements play an important role in the capital budget and for the acquisition of equipment from abroad.

The projected growth of the education system, extending mass primary education from four to seven grades and making this component universal and compulsory, as well as extending all other components of the education system, will require further enormous expansion of the current and capital budgets. This means further sacrifices in all other sectors of the Mozambican economy and an increasing need for alternative sources of finance and for more cost-saving strategies to be applied to the functioning of the education system. In particular, greater efficiency in the flow through the system is essential.

h) Concluding Remarks

In conclusion, it is important to say that many advances have been made in Mozambique towards the establishing of a functional national education system which provides mass primary schooling and adult education and extends access to education at higher levels. Vast quantitative gains and some qualitative improvements have been made, and the education authorities, on the basis of a fixed and clear educational policy dedicated to socialist construction, have consistently attacked and made

inroads upon the problems which face the education system. The quantitative and qualitative objectives have been set very high, and an enormous amount of work remains to see them being reached in practice. As the Frelimo Party always says:- The Struggle Continues!

4.1 BIBLIOGRAPHY

a) Mozambican Publications

- 1) FRELIMO
1983a
Relatório do Comité Central ao 4^o Congresso
INLD, Maputo.
- 2) FRELIMO
1983b
Directivas Económicas e Sociais do 4^o Congresso
INLD, Maputo.
- 3) FRELIMO
1982
A Situação Actual no Nosso País.
INLD, Maputo.
- 4) Frelimo
1977
Directivas Económicas e Sociais do 3^o Congresso
Tempográfica, Maputo.
- 5) CNP
1982
Moçambique - Informação Estatística 1980/1981
Comissão Nacional do Plano, Maputo.
- 6) UEM
1981
História 10^a Classe
Universidade Eduardo Mondlane, Maputo.
- 7) TEMPO/UEM
1982/83
História de Moçambique Vols I & II
Tempográfica, Maputo.
- 8) Notícias
1977
Noções sobre a Geografia de Moçambique
Notícias, Maputo.
- 9) Governo RPM
1975
Lei das Nacionalizações.
- 10) MEC
1983
Apontamentos de Planificação da Educação
MEC/DPE, Maputo.
- 11) Machel, Pres. S.
1974
Fazer da Escola uma Base para o Povo Tomar o Poder
Imprensa Nacional, Maputo, 1979.
- 12) Machel, Pres. S.
1977
Discurso de 8 de Março "Empenhar toda a capacidade de trabalho para a vitória na frente educacional" - Notícias, Maputo.
- 13) Machel, Pres. S.
1978
Discurso da abertura de 1^a Campanha Nacional de Alfabetização "Fa çamos do País inteiro uma escola onde todos aprendemos e todos ensinamos"
DNAEA/Notícias, Maputo.
- 14) MEC
1982
Linhas Gerais do Sistema Nacional de Educação
MEC/INDE, Maputo.
- 15) MEC/GSE
1980
Sistemas de Educação em Moçambique
GSE/INDE.
- 16) INDE
1983
Português 3^o Ano - Manual do Educador.
INDE/INLD, Maputo.
- 17) Fonseca, R.
1983
Information on the Development of Literacy Programmes in Moçambique
DSE/ICAE Seminar, "Cooperating for Literacy", Berlin.

- 18) Assembleia Popular 1981 Decreto/Lei 1/81 and Decreto/Lei 16/81.
- 19) Fumo, C.A. 1983 Accelerated Training for Workers in the P.R. Mozambique - Paper for W83 Workshop, Arusha, Tanzania.
- 20) DINET 1982 Table of Technical School Subject Lines, Map of Technical School Distribution. (SIDA)
- 21) TEMPO Weekly newsmagazine published by TEMPOGRÁFICA, Maputo.
- 22) Notícias Daily newspaper, Maputo.
- b) SIDA Documents
- 23) SIDA Consultancy 1982 Reports on visit to Mozambique, 1982:
 - a) Economic Development
 - b) The Literacy and Adult Education Sector
 - c) Vocational Training and Technical Education
 - d) Production and Distribution of School Material
 - e) The Education Sector
- 24) Lind, A. 1983 Vocational and Technical Training in Moçambique Background paper, SIDA Education Division, 8/1983
- 25) SIDA/MEC 1981 Moçambique - 1981 Education Sector Review. SIDA/MEC, November 1981.
- 26) Flinck, R. & A.W. Distance Education in the P.R. Moçambique Report on a planning visit, May 1983.
- 27) Westman, Bo 1978 Moçambique - Landanalys SIDA.
- 28) Duberg, R. & Gorham, A., 1983 Teacher Training and Teacher Educators in Southern Africa - SIDA.
- c) Other Publications
- 29) Mondlane, E.C. 1967 The Struggle for Mozambique Penguin African Library, Harmondsworth, 1969.
- 30) Munslow, B. 1983 Mozambique: The Revolution and its Origins. Longmans, Essex.
- 31) World Bank 1977 World Development Report 1977 World Bank.
- 32) World Bank 1980 Education Sector Policy Paper World Bank.
- 33) Searle, C. 1981 We're Building the New School Zed Press, London.
- 34) Nhavoto, A. 1982 Le Système d'Education au Mozambique IIEP paper, (UNESCO), Paris.
- 35) Dagens Nyheter Swedish Daily Newspaper, Stockholm.

4.2 REFERENCES AND SOURCES

<u>Chapter</u>	<u>No.</u>	<u>Reference</u>
1	1	Informação Estatística (5) pg 13-25
	2	The Struggle for Mocambique (29) pg 93
	3	História de Mocambique, Vol.I (6) pg 84ff
	4	SIDA Consultancy (23a) pg 4
	5	Sistemas de Educação (15) pg 22
	6	Directivas 3 ^o Congresso (4)
	7	Directivas 4 ^o Congresso (2) pg 11-14
2.1	1	The Struggle for Mozambique (29) pg 82
	2	História 10 ^a Classe (6) pg 3 ff
	3	Geografia (8) pg
	4	SIDA Consultancy (23a) pg 2
	5	História 10 ^a Classe (6) pg 16-17
	6	Derived from The Struggle for Mozambique (29), Informação Estatística (5) and Relatório ao 4 ^o Congresso (1)
	7	Sérgio Vieira, in L'Unita (Italy), 20/7/82
	8	World Bank (31)
	9	SIDA Consultancy (23a) pg 2
	10	Relatório ao 4 ^o Congresso (1) pg 55
	11	Teacher Educators (28) II 5 pg 5
2.2	1	Directivas 4 ^o Congresso (2) pg 15
	2	História 10 ^a Classe (6) pg 16
	3	Fixed gold price about \$US 36/oz., "free market" \$300 - 600
	4	Directivas 4 ^o Congresso (2) pg 16
	5	Relatório 4 ^o Congresso (1) pg 15
	6	Lei das Nacionalizações, 1975 (9)
	7	Directivas 3 ^o Congresso (4)
	8	A Situação Actual (3) pg 16-17
	9	Directivas 4 ^o Congresso (2) pg 15-17
	10	Informação Estatística (5) pg 62
	11	Directivas 4 ^o Congresso (2) pg 11
	12	Ibid., pg 15
	13	Ibid.
2.3	1	Mostly derived from SIDA Consultancy (23a) and Directivas 4 ^o Congresso (2). Other sources referred separately.
	2	Relatório ao 4 ^o Congresso (1) pg 23
	3	Ibid., pg 32
	4	Ibid., pg 32

<u>Chapter</u>	<u>No.</u>	<u>Reference</u>
2.3	5	Technical Education (24) pg 4
(Cont.)	6	Fazer da Escola... (11)
	7	Notícias, Feb. 83 (22)
3	1	História de Moçambique, Vol.2 (7) pg 60-61
	2	A Constituição da República
3.1	1	The Struggle for Mozambique (29) pg 61
	2	Ibid., pg 60
	3	Quoted ibid., pg 60
	4	Derived from Sistemas de Educação, (15) Table 1 pg 20
	5	Quoted, ibid., pg 21
	6	A Planificação de Educação (10) pg III - 6
	7	Ibid., pg III - 15
	8	Ibid., pg III - 12 (derivation)
	9	Sistemas de Educação (15) pg 19
	10	Relatório ao 4 ^o Congresso (1) pg 16
	11	Sector Review (25) App.7
	12	Mozambique: The Revolution...(30) pg 144
	13	Director, DNEA
	14	Sistemas de Educação (15) pg 33-37
3.2	1	Linhas Gerais (14) pg 23 (adapted)
	2	Ibid., pg 81
3.3	1	Ibid., pg 16
	2	Ibid., pg 8
	3	Ibid., pg 24 (adapted)
	4	Teacher Educators (28) II 5 pg 8b
	5	SIDA Consultancy (23e) pg 8
3.4	1	Sistemas de Educação (15) pg 57
	2	Linhas Gerais (14) pgs 10 ff, passim
3.5	1	TEMPO (21) 3/10/1982 pg 18-23
	2	See Sections 3.6.1.a, 3.6.1.2 and 3.6.3.6
	3	Directivas 4 ^o Congresso (2) pg 18, Relatório ao 4 ^o C (1)pg 5
3.6	1	Sistemas de Educação (15) pg 59
	2	Estimated in ibid.
	3	Census, 1980
	4	Nhavoto (34), pg 34 (number of 5-year olds enrolled)
	5	Sistemas de Educação (15) pg 60

<u>Chapter</u>	<u>No.</u>	<u>Reference</u>
3.6 (Cont.)	6	Ibid., pg 59; Sector Review (25) App. 7; Relatório ao 4 ^o Congresso (1) pg 51; Column 2 calculated on C.3 - C.1. Figures in C.3 differ slightly across sources for 1976-8.
	7	Planificação de Educação (10) pg V - 27
	8	Distance Education (26)
	9	Nhavoto (34) pg 34
	10	Sector Review (25) App. 7 (Figures for 1981 differ slightly)
	11	Planificação da Educação (10) pg III - 23
	12	Sector Review (25) App. 7
	13	Linhas Gerais (14) pg 26
	14	Planificação da Educação
	15	Sector Review (25) App.7
	16	Directivas 4 ^o Congresso (2) pg 18
	17	Teacher Educators (28) II 5 pg 7
	18	Sistemas de Educação (15) pg 5 - 10
	19	Distance Education (26) pg 9
	20	Ibid., esp. pg 25
	21	Planificação da Educação (10) pg V - 28
	22	Ibid., pg V - 28
	23	Sistemas de Educação (15) pg 59
	24	Planificação da Educação (10) pg V - 22
	25	Ibid., pg V - 9
	26	Ibid., pg V - 10
	27	Landanalys (27) pg 5
	28	Teacher Educators (28)
	29	Relatório ao 4 ^o Congresso (1) pg 23
	30	Distance Education (26) App. I
	31	Ibid., and Planificação da Educação III
	32	SIDA Consultancy (23e) pg 8
	33	Quoted Ibid., pg 9
	34	Directivas 4 ^o Congresso (2) pg 62
	35	Linhas Gerais (14) pg 23
	36	Sistemas de Educação (15) pg 60
	37	Sector Review (25) App.7; Relatório ao 4 ^o Congresso (1)pg 52
	38	Nhavoto (34) pg 31
	39	Sector Review (25) App.7
	40	Ibid., App. 7; Relatório ao 4 ^o Congresso (1) pg 52
	41	Editor; Sistemas de Educação (15) pg 81-83; Tech. School Map (20)

<u>Chapter</u>	<u>No.</u>	<u>Reference</u>
3.6 (Cont.)	42	Directivas 4 ^o Congresso (2) pg 18
	43	Notícias, 9/11/1983 (22); Seminário da Língua Portuguesa (1980)
	44	Planificação da Educação (10) pg IV Annex 1.1
	45	Ibid., pg IV - 9 (derivation)
	46	Notícias, 13/8/83 (22)
	47	Planificação da Educação (10) pg V - 32
	48	Ibid., pg V 9, 18; Sistemas de Educação (15) pg 58
	49	Sistemas de Educação (15) pg 58
	50	Landanalys (27) pg 6; Nhavoto (34) pg 51
	51	Sistemas de Educação (15) pg 58-9
	52	Relatório ao 4 ^o Congresso (1) pg 59
	53	Dagens Nyheter Sept. 1983 (35)
	54	Directivas 4 ^o Congresso (2) pg 18
	55	Ibid., pg 62
	56	Discurso 8 de Março (12)
	57	Informação Estatística (5) pg 72; Landanalys (27) pg 7
	58	Informação Estatística (5) pg 72
	59	Relatório ao 4 ^o Congresso (1) pg 52
	60	Notícias, 12/8/83 (22)
	61	Teacher Educators (28) II 5 pg 16
	62	Relatório ao 4 ^o Congresso (1) pg 52
	63	Ibid., pg 53
	64	Ibid., pg 16
	65	Sistemas de Educação (15) pg 84; Informação Estat.(5) pg 72
	66	Relatório ao 4 ^o Congresso (1) pg 52
	67	Sistemas de Educação (15)pg 86
	68	Directivas 4 ^o Congresso (2) pg 18
	69	Relatório ao 4 ^o Congresso (1) pg 53
	70	Directivas 4 ^o Congresso (2) pg 63
3.7	1	Linhas Gerais (14) pg 46 - 48
	2	Ibid., pg 39
	3	Ibid., pg 46
	4	Ibid., pg 39
	5	Façamos do País (13)
	6	Linhas Gerais (14) pg 49
	7	Manual do Educador (16)

<u>Chapter</u>	<u>No.</u>	<u>Reference</u>
3.7	8	Façamos do País (13)
(Cont.)	9	Decreto-Lei 1/81 (18)
	10	R. Fonseca (17) pg 4; SIDA Consultancy (23b) pg 7
	11	Ibid., pg 6
	12	Ibid., diag. 6.1.1
	13	Ibid., pg 1
	14	Ibid., pg 9
	15	Directivas 4 ^o Congresso (2) pg 61
	16	SIDA Consultancy (23b) pg 11
	17	Ibid., pg 10
	18	Decreto-Lei 1/81 (18)
	19	SIDA Consultancy (23b) pg 11
	20	Ibid., pg 12
	21	Ibid., pg 11
	22	Distance Education (26) App. III
	23	SIDA Consultancy (23b) pg 5
	24	Accelerated Training (19) source to end of section 5
	25	SIDA Consultancy (23b) pg 7
	26	Directivas 4 ^o Congresso (2) pg 51
	27	Informação Estatística pg 72; Table 3.6.L and 3.8.A (Total Secondary minus General and Technical)
	28	Decreto 16/81 (18)
	29	SIDA Consultancy (23b) pg 8
	30	Accelerated Training (19) Annex III
	31	Relatório ao 4 ^o Congresso (1) pg 53
3.8	1	Technical Education (24) pg 4
	2	Relatório ao 4 ^o Congresso (1) pg 52
	3	Linhas Gerais (14) pg 62 (whole para.)
	4	Sector Review (25) App.7; SIDA Consultancy (23c)
	5	Sistemas de Educação (15) pg 32
	6	Technical Education (24) pg 5
	7	Ibid., pg 5; Landanalys (27) pg 7
	8	DINET (20) (Annexed at end of Chapter 3.7)
	9	Ibid.
	10	Technical Education (24) pg 8
	11	Landanalys (27) pg 7
	12	SIDA Consultancy (23c) pg 13
	13	Teacher Educators (28) II 5 pg 10

<u>Chapter</u>	<u>No.</u>	<u>Reference</u>
3.8 (Cont.)	14	Landanalys (27) pg 7; DINET (20)
	15	Ibid.
	16	SIDA Consultancy (23c) Annex.
	17	Technical Education (24) pg 5
	18	Teacher Educators (28) II 5 pg 12
	19	SIDA Consultancy (23c) pg 4
	20	Directivas 4 ^o Congresso (2) pg 18
	21	Technical Education (24) (basis for rest of section)
	22	Teacher Educators (28) II 5 pg 18
	23	Technical Education (24) pg 4
	24	Linhas Gerais (14) pg 65
	25	Ibid., pg 79
	26	Directivas 4 ^o Congresso (2) pg 62
3.9	1	Composite Table derived from preceding chapters
	2	SIDA Consultancy (23e) pg 10
	3	Relatório ao 4 ^o Congresso (1) pg 53
	4	Linhas Gerais (14) pg 92
	5	Planificação da Educação (10) pg IV - 2
	6	Distance Education (26) pg 12
	7	Notícias 18/7/83 (22)
	8	Sistemas de Educação (15) pg 74
	9	From Relatório ao 4 ^o Congresso (1) and Table 3.9.A
	10	Notícias 18/7/83 (22)
	11	Teacher Educators (28) II pg 15 - 19
	12	Ibid.
	13	Editor
	14	Teacher Educators (28) II 5 pg 9 - 14
	15	Ibid., pg 11 - 12
	16	Sistemas de Educação (15) pg 70-73
	17	Teacher Educators (28) II 5 pg 11-22
	18	Ibid., pg 14, 17-22
	19	Distance Education (26) pg 19
	20	Directivas 4 ^o Congresso (2) pg 63
3.10	1	Editor's experience and SIDA Consultancy (23d)
	2	Informação Estatística (5) pg 73
	3	SIDA Consultancy (23d) pg 2
	4	Ibid., pg 73
	5	Annex to SIDA Consultancy (23d)
	6	Ibid.

<u>Chapter</u>	<u>No.</u>	<u>Reference</u>
3.11	1	Tempo (21)
	2	Directivas 4 ^o Congresso (2) pg 17
	3	Informação Estatística (5) pg 62
	4	Teacher Educators (28) II 5 pg 8a
	5	SIDA information
	6	Teacher Educators (28) II 5 pg 8a; A Situação Actual (3) pg 20
	7	Teacher Educators (28) I 7,9, pgs 7, 13
	8	A Situação Actual (3) pg 20
	9	World Bank Education Policy (32) pgs 25, 35-40

SIDA Bibl.
Kursgård Uppsala

The Education Division at SIDA initiates and implements a large number of studies regarding education and training, especially in SIDA's programme countries.

In order to make these studies more readily available, they will be published in a series called "Education Division Documents".

Included in this series:

No.1: "Education and Training in Sri Lanka" by O.Engquist, L.Jivén, K.Nyström

No.2: "Education and Training in Botswana 1974-80" by J.O.Agrell, I.Fägerlind, I.Gustafsson

No.3: "The Indian Non-Formal Education Programme" by O.Österling, J.Persson

No.4: "Education and Training in Bangladesh" by A.Gorham, J.I.Löfstedt

No.5: "Education in Guinea-Bissau 1978-81" by R.Carr-Hill, G.Rosengart

No.6: "Institutional Co-operation between The University of Zambia and The University of Luleå 1976-82" by K.Chitumbo, S.Ray

No.7: "Mobile Vocational Training Units" by K.Larsson

No.8: "Technical and Vocational Teachers College, Luanshya, Zambia" by O.Eklöf, M. de Beer, J.Fisher, K.Ruuth-Bäcker

No.9: "Adult Education in Tanzania" by A.I.Johnsson, K.Nyström, R.Sundén

No.10: "Evaluation of the Activities of the Southern African Team for Employment Promotion (SATEP)" by B.Karlström, A.Read

No.11: "Education in Ethiopia 1974-82" by P.Gumbel, K.Nyström, R.Samuelsson

No.12: "Education in Zambia. Past Achievements and Future Trends." by I.Fägerlind and J.Valdelin

**No. 13: "Non-Formal Training Programmes for Rural Skill-Development", by Alex Gorham
First published November 1980**

**No. 14: "The Indian Non-Formal Education Programme."
An evaluation.By G. Mellbring.**

