

THE RATE OF ZAMBIANIZATION OF
THE SECONDARY SCHOOL
TEACHING FORCE

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Abstract

Since Independence, Zambia has made significant steps forward in many areas of development, and the educational system has played a key role in ensuring the future prosperity of the country.

The secondary school teaching force has in the past been dependent on expatriate manpower, however the training of Zambian teachers has now been proceeding for a sufficiently long time for there to be a greater proportion of Zambian teachers within the teaching service than are presently to be found there.

This study, after reviewing previous work on the Zambianization of the teaching force seeks to establish the actual rate at which the Zambianization is progressing.

The rate of attrition of Zambian teachers from the secondary school teaching force is observed to be 18 per cent per year, a rate which if continued, given the present size of the secondary school teacher training programme and the growth of secondary school provision, implies that it would be impossible for the secondary school teaching force to be completely Zambianized.

In order to identify the attitudes of serving Zambian teachers to teaching as their career, so that an assessment could be made as to the likely future attrition rate, a questionnaire survey of all serving Zambian teachers was undertaken during the second term of 1974. This included an analysis of the characteristics of the Zambian secondary school teaching force, their attitudes towards their work and their conditions of service, their intentions regarding remaining in the profession, and their views on certain aspects of the teaching service.

The analysis of this survey attempts to determine those aspects of the work of teaching which may be contributing to the high attrition rate and those which, if reinforced, may help reduce it. The teachers were asked whether they had ever applied for other jobs since they started to teach, and their views on their prospects in other sectors of the economy are discussed.

The probable effects of changes in the differential between teachers' salaries and conditions of service and those of other sectors are discussed, as are those of changes in the administration of the teaching service.

From the evidence of the survey and the statistics abstracted the prediction must be made that while attrition from the teaching service remains at the observed level complete Zambianization of the teaching service will not be achieved. A reduction of the attrition rate as a result of conscious effort, or as a result of complete Zambianization of other sectors thus decreasing their demands, could however result in complete Zambianization of the teaching force within a decade.

CHAPTER ONE

Zambia, its education system and distribution of educational facilities.

The development achievements which have been made in Zambia since the country became independent in 1964 have been very great, both in their quality and in the wide range of aspects which they cover. To appreciate the hard work and dedication which has resulted in these achievements it is necessary to look at some of the difficulties which have had to be overcome.

1. The Physical Position and Economic Background of Zambia

The Nation of Zambia came into being on the 24th October 1964. It is a landlocked state on the central plateau of Africa, extending to the north of the Zambezi river. It is bordered by Rhodesia and Namibia in the south, Angola in the West, Zaire and Tanzania in the north, and by Malawi and Mozambique in the east. The land area amounts to some 750 000 square kilometers.

The 1969 Census of Population and Housing showed a total population of 4 056 995. This is however rapidly increasing with a birth rate that is probably one of the highest in the world and a population growth rate that nears three per cent per annum. Improved medical facilities have succeeded in reducing an infant mortality rate which had been quoted as the highest in the world^{*}. The consequence of this high birth rate and reduced infant mortality is that by 1969 over half the population of the country was under nineteen years of age. The implications of this for the economy and for the educational services are very serious.

The Zambian economy has in the past depended on one vital industry, mining, and on one product, copper. The trade balance as described by M.M.Kaunda in Zambia in Maps (ed. D.H.Davies 1971) shows that in 1968 copper comprised 95 per cent of domestic exports by value. The remaining five per cent was made up mainly of other products of the mining industry, namely zinc and manganese ore, lead and cobalt. This almost total dependence on one commodity inevitably causes many difficulties. Fluctuations in the price quoted for copper on the London Metal Exchange can cause strong repercussions on the economy of a country entirely dependent on the one product. Until a broader based economy can be developed there can be no buffer to absorb the shock of these fluctuations.

An additional major problem results from the length, vulnerability and high cost of external trade routes. This vulnerability has been made especially apparent during the recent political changes and armed struggles in countries through which the trade routes pass. The closure of the historically important route to the south through Rhodesia and the halting

* Guinness Book of Records 1976, referring to the late 1950s.

of transport along the Benguela railway by fighting in Angola have severely reduced the diversification of export routes which is important for any land-locked state. The improvement of routes through Tanzania by means of the Tanzania-Zambia railway and through Mozambique by means of improved roads are attempts to alleviate this situation.

The transportation and communications problem is also apparent within Zambia as well as in its external links. Large tracts of sparsely inhabited land separate the centres of population, making communications costly and difficult.

The major cities lie entirely along the line of the original rail route from Livingstone to the Copperbelt and in 1969 it was found that forty per cent of the country's population lived within forty kilometers of this railway. To the east and west of this line the regional centres of population are separated from the major cities by two sparsely populated areas centring on the Kafue and Luangwa river valleys. These long distances through largely 'blank' areas make transportation of goods very costly and, coupled with the lack of large-scale commercial activity in many rural areas, they have played a part in limiting the development of areas remote from the major centres.

This situation has caused increasing concern and a policy of positive emphasis on rural development has resulted. Improvement of communications, provision of facilities and revitalization of agriculture are all included in this emphasis. The provision of educational facilities plays a large part in this. In the country as a whole there are sufficient Grade One places in the 4 800^{*} primary schools to allow all children attaining school age, seven years, to be enrolled in the first year of formal education.

* Zambia 1964-1974, G.R.Z. p 31.

The places are not however distributed evenly throughout the country. The concentration on providing primary education in all rural areas while migration to urban areas continued has meant that many rural areas have an excess of primary places while a shortage exists in the towns. There are indications that some children born in town are sent to the rural areas to be brought up in their family's home district. Easier access to primary education may well be a contributory factor in this tendency.

2. Communications

The improvement on communications between different areas of the country has been especially important because of the long distances already mentioned. The new railway to Tanzania runs through the northern part of the country on its route to the port of Dar es Salaam. The need for effective telecommunications along the route as well as the carrying capacity of the line itself has greatly increased the ease of communication between the northern areas and the original line of rail centres. The effects of this new rail line, created for external trade, on the internal organization and development of the country are yet to be seen.

The road system has been extensively developed since Zambia gained independence, with the construction of all-weather tarred roads to provincial capitals from the original line of rail areas. A major project was the tarring of the road linking Kapiri Mposhi with the port of Dar es Salaam after the Unilateral Declaration of Independence by Rhodesia in 1965 and the subsequent imposition of sanctions. Later the east road to Chipata and Malawi, and the west road to Mongu were tarred. This has considerably

reduced both the time taken to reach these provincial capitals and the wear on vehicles which resulted from the dusty or sandy pitted roads during the dry season and the deep mud during the rains. Both these factors contribute to a quicker and less expensive transport system.

The development of scheduled air services to rural areas on a reliable and regular basis by Zambia Airways has also reduced the degree of isolation of many areas. The service allows the expertise and, in some cases, materials necessary to development projects in more remote areas to arrive quickly and easily. This can make such projects less taxing as it makes supervision and co-ordination easier.

The extension of telephone services will contribute greatly to reducing the isolation of more remote areas. In the past the police radio network has often been the only means of making rapid contact with some areas. This could of course only be used for messages of great importance and urgency.

The postal services are efficient and reliable, but the time taken for letters to reach their destination obviously depends on the transport routes already mentioned.

Other services which are being extended to rural districts include electricity. The commissioning of the Kafue Hydroelectric scheme, the Victoria Falls power station and the building of the Kariba North development have increased the electrical power available. The grid system can consequently be extended. In addition to these hydroelectrical power stations many smaller communities possess diesel power stations which may act as emergency sources once the grid has been installed.

3. The Education System

At Independence one promise that was made to the people of Zambia by their political leaders was that education would be made available to all children. The lack of educated manpower suffered by the country at that time is well known. Less than 1 000 Zambians had a school certificate* and about one hundred were graduates. Self sufficiency in trained manpower was of prime importance.

The provision of primary education was the first step towards meeting the promise of education for all children. It was considered that four years of formal education would give a child permanent literacy. To provide the full seven years of primary education for all children was economically implausible at that time. The amount of material and financial resources available for development of education was, and still is, limited. The full seven years of primary education was to be made available to approximately 75 per cent of the Grade Four enrolment. The remaining 25 per cent who, through no fault of their own, could not continue in the formal primary school system would have the opportunity through correspondence courses to continue their education if they so wished. In some areas it has been possible to ensure that all children have the opportunity to attend primary school for the full seven years, but in other areas, notably Luapula, Northern and Eastern regions, the progression rate between Grade Four and Grade Five is below 60 per cent.** Increasing the progression rate is a matter of national policy and the expansion of schools to take increasing numbers continues. It must be borne in mind however that population growth continually adds to this problem. Growth in primary education provision has to be at least 3.5 per cent each year simply to maintain the status quo before opportunities can be improved to allow a greater proportion of pupils

*Coombe 1967.

**Ministry of Education statistics.

to completed the full seven years of primary education. In 1969 the Grade One enrolment was 127 163 whilst in 1973 it was 142 312. The corresponding figures for Grade Four enrolment were 100 596 and 127 390.*

A main feature of primary education is now a shift system for the lower primary school (Grades One to Four) ensuring that the greatest number possible are enrolled at each individual school. In some cases there are three separate shifts per day, but double shifts are more common. The introduction of the English Medium Zambia Primary Course and its associated materials will eventually standardize the teaching in primary schools. In 1974 74.7 per cent of all primary school classes in the country used the course.** However in the same year 98.9 per cent of Grade Five classes were using the course as were 82.9 per cent of Grade One classes. This indicates the rapidity with which the course is being adopted. Only the Copperbelt and Lusaka regions have totally completed the transition to the course, other regions will soon follow.** The course was developed at the English Medium Centre, later replaced by the Curriculum Development Centre (C.D.C.) in 1970. By choosing English as the medium of instruction the need for material written in English was pressing and the C.D.C. concentrated on producing this. They have now started to give attention also to secondary school teaching materials, especially in the subject areas of history and civics.

Another major part of the Zambian Government policy in education was that after the provision of sufficient places for all children to have at least four years of primary education an expansion of secondary education would take place. At Independence the Transitional Development Plan called for the building of new secondary schools throughout the country. During the colonial administration secondary education for

* Digest of Statistics, Ministry of Education

**Ministry of Education
Statistics

African pupils was not actively encouraged and for a large part of the colonial period after 1930 only two secondary schools, Munali and Chipembe, were in existence. Secondary education for Africans was however started at Lubwa Mission.

When the reality of independence became inevitable the colonial administration allowed some expansion of African secondary education. It was however not until transfer of power was imminent that a really significant increase took place. In the first ten years of Independence the enrolment in secondary education increased by 450 per cent whilst the number of Form Five pupils (the final year of secondary education) increased by 1 000 per cent during the same period^{*}. In 1964 the Form Five enrolment was 783. The Form One enrolment was however 4 693.^{**} This is indicative of the increase that had taken place immediately prior to Independence. In 1976 the Form One enrolment was planned as 21 727 showing the expansion of the secondary education provision after Independence^{***}.

The expansion of secondary education was compared to the projected demand for manpower, and care was taken to avoid producing more secondary school leavers than there were opportunities in employment and further training. The number of school leavers needed depended on the rate of growth of the economy and the rate at which Zambianization of all sectors would proceed.

Within government administration, most posts have been Zambianized. Those posts not Zambianized are mainly ones requiring particular professional skills in which the country has yet to become self-sufficient, an example being accountancy.

Through the Zambianization of most of the Civil Service the Zambian Government has ensured that the administration of its policies is in the

^{*}Zambia 1964-1974, G.R.Z. p31

^{**}Digest of Statistics, G.R.Z. 1975.

^{***}Ministry of Education files.

hands of people sympathetic with its aims and objectives. The rate of Zambianization in the private sector of the economy has been much slower. Pressure can be brought to bear on this sector through the Zambianization Committee which examines progress and has power to influence the rate.

Whilst it has been a criterion for growth of the secondary school system that the provision of school places should not result in producing an excess of school leavers over appropriate opportunities another opposing factor is the strong parental demand for secondary education for their children. The decision was made to build a secondary school in each of the administrative districts of the country. So far this promise has been met with one exception, Kaputa in Northern Province. It is intended to build a school in that district and also four schools in other areas of the country as soon as finances permit. This has been made clear by the President as well as by the Minister of Education in the National Assembly.

The building programme currently operating is based on the planned expansion of secondary education financed in part by a loan from the International Bank for Reconstruction and Development (I.B.R.D.), often referred to as the World Bank. The expansion of the secondary school system as planned in conjunction with the I.B.R.D. meant the building of nine secondary schools and the expansion and improvement of 56 existing schools. At the time of preliminary planning of this project the desire of the Ministry of Education was to construct new secondary schools in rural areas. This was not accepted by the I.B.R.D. on the grounds that the infrastructure for undertaking such large building projects in rural areas did not exist and that limited financial resources could provide more educational facilities if they were not built in remote areas with difficult access routes. With improvements in communications such considerations are now being lessened.

As the Ministry of Education could not persuade the I.B.R.D. to accept the building of new schools in the rural areas it took on sole responsibility for the construction of the new schools one of which, Chama, won an award for the excellence of its design.

One important decision was taken prior to commencing the building projects in conjunction with the I.B.R.D. concerning the materials and methods of construction to be used. This was the decision to use pre-fabricated sections involving asbestos panels. The decision was based on two factors, the first being that there was a source of such materials within the country, and the second being the lack of skilled craftsmen needed for more orthodox building techniques. As a corollary to this the pre-fabricated technique would make use of locally recruited unskilled manpower. The success of this method unfortunately resulted in an increased demand for similar materials by other contractors who saw its advantages, resulting in a shortage of materials and consequent delays.

With the opening of all new schools built as part of the I.B.R.D. programme and the Ministry of Education's own building programmes the distribution of secondary schools throughout the country in 1976 is as shown in Table 1.1 and in the map on page 12.

Selection to secondary school is by means of the Primary School Leaving Examination. This serves the dual purpose, first, of being a certification examination to test attainment in primary school and, second, of being the basis for secondary school selection. The multiple-choice format examination is marked using an optical reader attached to a computer. This means that the large number (over 600,000) of examination papers can be marked both speedily and accurately. Prior to this examination pupils at primary school are asked to indicate their choice of secondary school. The

computer prints out the candidates by school of choice in rank order of examination result. At the same time the computer gives a cumulative

TABLE 1.1 DISTRIBUTION OF SECONDARY SCHOOLS BY REGION 1976

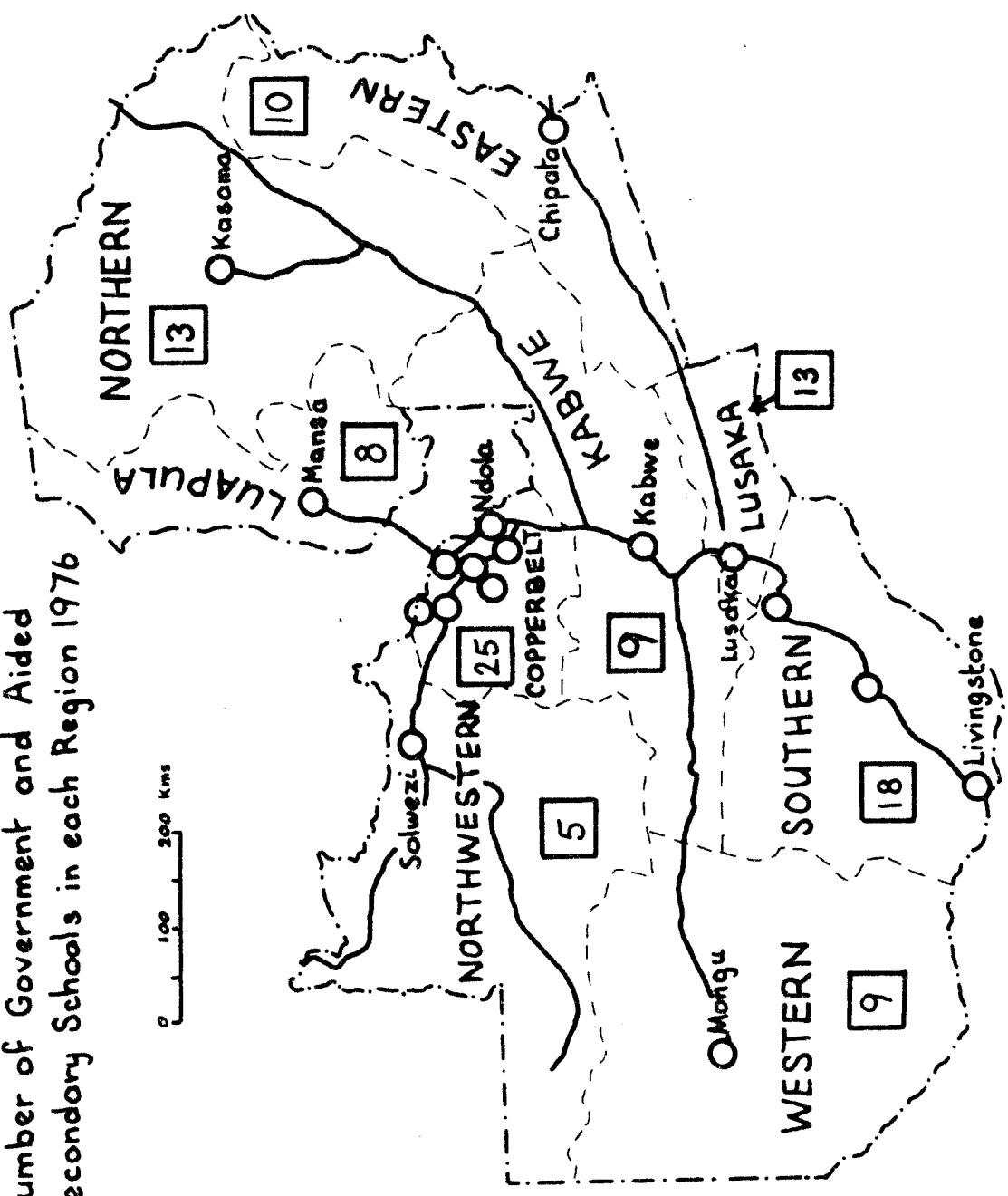
Region	Boarding				Day				Total
	B	G	M	T	B	G	M	T	
Lusaka	5	1	0	6	3	2	2	7	13
Copperbelt	1	2	0	3	5	3	14	22	25
Kabwe	2	1	2	5	0	0	4	4	9
Southern	7	4	5	16	1	0	1	2	18
Northwestern	2	1	2	5	0	0	0	0	5
Luapula	3	2	3	8	0	0	0	0	8
Northern	5	3	4	12	1	0	0	1	13
Eastern	3	1	5	9	0	0	1	1	10
Western	3	1	5	9	0	0	0	0	9

Key: B = Boys G = Girls M = Mixed T = Total.

frequency table for total marks and by using this a national cut-off mark is established. This is the score above which the number of candidates equals the number of secondary school places available. By this apparently crude method the first steps in selecting primary school pupils for secondary school places is undertaken. The method has much to commend it as it is impartial and therefore fair to all, it is quick, and it is perhaps the most practical way of coping with the selection of the twenty per cent (approximately) of primary school children for whom places are available in secondary schools.

Deference to the regional interests in secondary education has resulted in the policy that no more than twenty per cent of secondary school places will be made available to pupils from outside the region in which

Number of Government and Aided
Secondary Schools in each Region 1976



Key

- Major Towns
(regional capitals named)
- Major roads
- 15 Number of secondary
schools in each region.

Boundaries

- National
- - - Regional

the secondary school is situated. This can mean that some children who have scored above the national cut-off mark are not able to find a secondary school place because the schools in some Provinces have to accept local pupils who scored below the cut-off mark to fill the 80 per cent of places reserved for local candidates.

Experience has shown that not all primary children who are offered a secondary school place accept the offer. To allow for this it is customary to offer places to more children than there are actual places available, usually by about ten per cent. Generally speaking this results in most schools being over-enrolled to the extent that the actual numbers in each class are slightly higher than the 35 normally allowed. This can mean that the planned enrolment is some five per cent less than the actual enrolment. In some cases the expected non-appearance of pupils does not occur. This causes severe problems for the schools concerned.

A second factor which affects the degree of over-enrolment is that not all examination papers are marked by the optical reader. The answer sheets may have been incorrectly filled in, or were not clear enough for the optical reader. In these cases, rather than penalise the children, the papers are marked by hand and the scores are tabulated manually. If it is found that pupils have attained a score above the national cut-off mark a secondary school place is found for them. The national cut-off mark was, of course, calculated by the computer without knowledge of the manually prepared marks and these additional offers of school places add to the problem of over-enrolment.

The internal organization of secondary schools is based on a pattern laid down by the Ministry of Education. Each school is expected to work a 40 teaching-period week and each teaching period is expected to last

40 minutes. The subject period allocation is expected, as far as teacher resources allow, to follow the approved timetable.

On the completion of three years of secondary education all pupils enter for the Junior Secondary School Leaving Examination. Whilst the examination is a certification examination to measure attainment it is also used to select the fifty per cent of Form Three pupils who will be offered places in Form Four. The results of the examination are co-ordinated nationally and the best fifty per cent of pupils in Form Three are offered places in Form Four. As far as possible the pupils continue their education in the schools where they studied for the first three years, but if necessary they go to other schools whose results were below average and consequently have insufficient of their own pupils to fill the vacant — places. After a further two years of secondary education pupils are entered for the Cambridge Overseas School Certificate examinations. This signifies the end of formal secondary education.

Pupils who are unable to secure places in secondary school or who were unable to proceed into Form Four may continue their education if they so wish by means of the Correspondence Course Unit and night schools. Radio Zambia has educational broadcasts for such students. External Form Three examinations are set and marked by the Ministry of Education. The Ministry also organizes entry of external candidates for the Cambridge Overseas School Certificate examinations.

The various selection processes are all a part of a process necessitated by the availability of places at each level of education. Hypothetically, the chance of a pupil who enters primary school eventually sitting for the Cambridge examination, in other terms of having had the benefit of twelve years of formal education, is 7.5 per cent. To increase this proportion

would mean that the investment of a vast amount of money and manpower would be necessary, if the present style of education is maintained, or would mean a radically different structuring of the education system. This last approach is being considered in the document on educational reforms.

The development of educational facilities has continued in the field of further and higher education. The establishment and development of the University of Zambia is in itself a major achievement. The expansion of the Department of Technical Education and Vocational Training which undertakes the training of technical manpower for all sectors of the economy is another such achievement. Other services provided by the Ministry of Education such as Adult Education and the Library Services have all made vast steps forward in the relatively short time since independence. Perhaps the only area in which development has not been so rapid is the field of special education for children with physical handicaps. One reason for this is that the number of children needing such education has been declining. The incidence of blindness caused by disease has decreased with improvement of medical facilities, so lessening the demand for education of the blind. There has been a reluctance to spend a great deal of money on the handicapped in preference to the healthy, especially where not all the healthy can be offered school places. This does not mean that nothing has been done for the handicapped children. There are 29 primary schools catering for handicapped children. Six secondary schools have facilities for blind students, and already blind students have graduated from the University of Zambia.

The list of Zambia's achievements during the short period since independence is impressive. The Ministry of Education has worked hard at

increasing the size of its provision and all other Ministries can list equally impressive successes, some of which have been touched on. All achievements have required hard and dedicated work. There may still be difficulties to face, but the foundations for success and stability have generally been well laid.

As mentioned earlier the Zambianization of the civil service is nearly completed and it is only a matter of time before sufficient professional manpower is available to achieve total Zambianization. This will ensure that the administration of government policies is in the hands of the country's nationals.

The teaching of pupils in secondary schools is still however undertaken mainly by expatriate teachers. The rate at which Zambian teachers are being trained is high, but the actual number of Zambian teachers in secondary schools has increased only slowly. As the secondary school teacher is a great influence on his pupils it must surely be important to entrust the teaching of secondary school pupils to teachers fully sympathetic to the hopes of the country. Expatriate teachers have worked hard and their success can be praised, but as their background is different from that of their pupils, their knowledge of the pressures on secondary school pupils is not the same as that of a Zambian teacher. The effectiveness of secondary teaching will only exceed its present high standards when the complete Zambianization of the teaching force takes place, with Zambian teachers dedicated to their work.

CHAPTER TWO

An introduction to the secondary school staffing situation reviewing previous work on this topic and outlining the area to be covered in this study. Analysis of present staffing statistics and prediction of future requirements.

Zambian Manpower (G.R.Z. 1969) states:

"Education must provide the solid basis for Zambia's drive to achieve economic independence. Many jobs, as will be seen, require a university degree or more. A far greater number call for a secondary school education."

One of the major objectives contained in Zambia's First National Development Plan (G.R.Z. 1966) was "to expand secondary education to provide the manpower in the numbers and with the skills required for national development."

It is evident that great importance has been and is attached to the secondary school system as one of the keys to the future prosperity of the country. It is acknowledged that secondary school education will be a prerequisite for employment and further training. The employment prospects of a primary school leaver have diminished to such an extent that it is virtually impossible for him to find employment in the wage earning sector of the economy. Form Three school leavers are also finding that employment prospects are falling. The stage is rapidly approaching where only a school leaver with some qualification obtained in the Cambridge School Certificate

examination will be reasonably hopeful of securing a job or a place in a tertiary level training institution.

Secondary education will therefore provide the route to employment for young Zambians. This in turn will place pressures on the secondary school system to ensure that the raw manpower which they produce is of sufficient quality to ensure the economic future of the country. As stated earlier, the quality of secondary school education will only improve above the present high standard when the teaching force is able to identify fully with the needs of the country and understand the pressures placed on the secondary school pupils. This will only come about with the Zambianization of the teaching force, replacing the expatriate teachers with Zambians with equal professional skills.

1. The Secondary School Staffing Situation - Previous Work

"The Zambianization of the teaching force as soon as possible has been an objective of the Ministry of Education since independence." (Zambia 1964 - 1974 G.R.Z.). On many occasions the political and educational leaders of Zambia have publicly expressed this sentiment. In primary education the Zambianization of the teaching force has been achieved in practical terms. Zambian primary school teachers have comprised over 97 per cent of the total for several years, and the few remaining non-Zambian primary school teachers hold their jobs on local conditions of service. Occasionally new non-Zambian primary school teachers are offered employment, usually when vacancies arise for which no Zambian teacher is immediately available.

In the field of secondary education the degree of success has been significant, but has not yet reached the level achieved in primary schools.

".....26 per cent of the teachers in Government secondary schools being Zambians in 1974. It should be pointed out that in 1965, 13 per cent of the secondary teachers were Zambians and since then the size of the teaching force has increased by four times; the number of Zambians has increased by seven times". (Zambia 1964 - 1974 G.R.Z.).

The rate at which the secondary school teaching force has been Zambianized has been more rapid in the past five years due to the completion of secondary teacher training centres which were not in existence in the immediate post-independence era. These include the Kitwe and Luanshya Teacher Training Colleges. The opening of the University of Zambia in 1966 made possible the training of graduate teachers to augment the number trained as secondary school teachers in other institutions.

The desire for secondary school teaching to be undertaken by nationals of the country for the benefit of the nation is not unique. Many recently independent nations see localization of the teaching force as being of major importance, especially when the degree of reliance placed on teachers of other nationalities is inordinately high.

Various attempts have been made to analyze the secondary school teacher situation with a view to ascertaining the length of time it would take to achieve the complete Zambianization of the secondary school teaching force. Zambian Manpower made a projection of the supply and demand for teachers and attempted to indicate the date by which complete Zambianization of the secondary school teaching force would take place. The University of Zambia was seen as the major training institution of secondary teachers; it being anticipated that by 1975 over 50 per cent of new teachers would be trained by the University. The Report does qualify its projections by saying "Under these rather optimistic assumptions, it is anticipated that full Zambianization can be achieved by 1980". These "rather optimistic"

assumptions included the assumption that the rate of loss of Zambian teachers would be less than five per cent annually, and also the assumption that high output rates would be achieved not only from the University of Zambia but also from the two other teacher training colleges. The expansion of the secondary school system envisaged by Zambian Manpower was based on the estimated output which the secondary school system needed to achieve if the expected demands for manpower were to be met.

The Report was published in 1969 and events have shown that, as far as education is concerned, the projections which it contained tended to be very optimistic. The expansion of the secondary school system envisaged by the Report was followed up to 1974, but the future expansion suggested by the report will not now take place. This should have the effect of making the complete Zambianization of the secondary school teaching force easier to achieve, if the projected outputs of the teacher training institutions are realized. These projections have, however, proved to be excessive.

An indication of the possible future difficulties in the achievement of the complete Zambianization of the secondary school teaching force was given in a survey carried out by a postgraduate student of the University of Zambia in 1970. Robbins (1970) conducted a survey on "Some aspects of the attitude of undergraduate students in the University of Zambia School of Education towards Teaching as a Career and Profession". The survey was carried out amongst undergraduates who were under training to become teachers.

"No matter what the mother tongue, religion, geo-social background, and all other independent variables presented, the general picture is that education students do not wish to make teaching their career. 65 per cent of fourth year and 74 per cent of second year (students) intend to quit teaching "as soon as they can". Similar percentages gave "to get a degree" as their main reason for accepting a bursary rather than "wanting to become a teacher". " (Robbins 1970)

These were the conclusions to which Robbins came. The high demand for graduates and the good career prospects for newly qualified graduates at that time were major contributory factors in producing this attitude.

It is interesting to note that the undergraduates thought that the Ministry of Education was "not one of the best run government departments".

2. Workshop on Secondary Teacher Requirements, Training and Recruitment 1971

In 1971 the Ministry of Education organized a workshop on Secondary School Teacher Requirements, Training and Recruitment. The timing of the workshop was important as the first effects of the secondary school expansion programmes were being felt and the demands for teachers were mounting. The number of Zambian teachers being trained was high in comparison to previous years and a clear direction for the future supply of teachers and training programmes needed to be mapped out. The programme covered by the workshop was comprehensive and wide ranging. Amongst the papers presented to the workshop was one on the Requirements for Expatriate Teachers in Government and Aided Secondary Schools (Stannard 1971). The attrition rate anticipated for Zambian teachers was ten per cent. The full table is to be found in Appendix A. The projection was made up to 1976, by which time it was anticipated that Zambians would constitute 46.4 per cent of the secondary school staff. Stannard believed that this assumed attrition rate was optimistic.

The problem of retention of secondary school teachers was discussed at the workshop and a paper, Mei (1971), indicated that the major cause of the low rate of retention, and therefore the high rate of attrition, was the dissatisfaction which teachers felt with the Ministry of Education. Mei stated that "some officials are not qualified to handle teachers and are

only too keen to prove that they are the teacher's superiors and leave them disgusted. This situation will not encourage a highly educated person to subject him or herself to humiliation. The term "Get out of my office" and "You may resign now" is heard too often".

Another note of warning that teaching as a career was not attractive to school leavers was given in a paper presented to the workshop by Alnes, Howie and Whiteley (1971). The paper detailed the selection procedures used at Kabwe (now Nkrumah) Teacher's College in 1971. After preliminary selection, undertaken in conjunction with the University of Zambia to avoid duplication, 153 applicants were offered places and a further 65 were notified that they had been put on the reserve list. Of the 153 applicants offered places 90 formally accepted the place, but fewer than 60 actually turned up at the College. Consequently all applicants on the reserve list were contacted and offered places. Additionally some other candidates who had not been offered university places were invited. Of the 80 applicants thus invited less than 30 arrived at the College. Consequently only 90 places at the College were filled, out of a possible 150. Of the 230 applicants offered places less than 40 per cent actually took up the offer.

The College attempted to find out what had happened to the missing applicants and found that some had been offered places at the University of Zambia and others at the Natural Resources Development College. Wood (1975) noted that it was not uncommon for pupils in their last year of secondary school to apply for a number of training programmes, including teacher training. They may accept the first place offered to them, but decide against it later if another offer seems more attractive. In some cases the place was accepted because it was the only offer received, even though the pupil had no interest in the career prospects to which the course led.

This attitude is reflected in the findings of Robbins, mentioned earlier.

Since the workshop was held, in 1971, no comparable exercise has been carried out by the Ministry to review the development of the teacher training programme or to examine the problem of ensuring a correctly balanced supply of teachers for secondary schools. The problem has been one for departmental consideration within the Ministry and the number of Zambian teachers entering the profession has been considered high. Because the posting of new Zambian teachers, as well as teachers from overseas, is handled by one section of the Ministry and the resignation of teachers by another, little monitoring of the rate of Zambianization has been undertaken.

3. The Basis for Future Projections

The workshop was held at the commencement of an era of significant Zambianization in secondary school staff. The hopes for a rapid and complete Zambianization were envisaged as being realizable within ten years. It is interesting to examine, at a point midway between the time of the workshop and the first date set for complete Zambianization, how closely reality has followed the projections.

For a country as dynamic as Zambia attempts to update the projections must be considered risky. The growth of the Zambian economy depends on many factors outside the control of the country, yet each factor can, in some way, affect the pattern of Zambianization which the country has to follow. Policy changes altering the structure of the educational system would throw the projections out. Changes in teacher training programmes, alteration to the pattern of education offered to pupils and the introduction of new methods of teaching would all affect the rate of Zambianization.

The educational reform document* made the proposal that all Zambian

* Education for Development, Ministry of Education, 1976

children should benefit from a ten year programme of formal education. This means the ending of the selection procedures at the Grade Four and Grade Seven stages. It is likely that the increase in pupil numbers will make the issue of the supply of professionally trained Zambian teachers to teach the last three years of this increase an urgent one. If, for example, the Grade Eight (present Form One) enrolment went from its present 22 000 (the 1976 enrolment) to 100 000 (the 1974 Grade Five enrolment) as a consequence of the immediate adoption of the educational reform proposals, the need for more teachers is clear. The proposed dual system for presently existing secondary schools will mean that some 66 000 children will need approximately 1 800 teachers over and above the present level of supply, as well as more teaching facilities. To cope with the increased numbers of pupils some 5 500 extra teachers would be required for the Grade Eight to Ten level as a consequence of adoption of the ten year education programme. On the basis of the average salary of Zambian secondary school teachers in 1974 the cost of providing these 5 500 teachers would be in excess of K11 500 000 per annum. In 1974 the cost of secondary school salaries was K10 830 000.*

The University of Zambia in their comments on the educational reforms have warned strongly that an increase in quantity does not necessarily imply an increase in quality.** The danger that the opposite may be true has also to be faced. One way of guarding against this is by ensuring the standard of professional training for teachers remains high and thorough. Only by employing competent professionally trained teachers will this fear expressed by the University be dispelled.

The adoption of the ten year programme would also affect the demand for primary school teachers for Grades Five to Seven. The number of teachers required would increase by some 4 200, approximately 25 per cent of the

*Ministry of Education statistics.

**Education for Development, A reaction from the University 1976. p2

present number of primary school teachers, at an additional cost of some K7 000 000 per annum.

It is not clear which of the three suggested means of implementing the proposals will be adopted. The first way calls for the removal of the Grade Four selection procedure to have priority, the second for the Grade Seven examination and selection procedure to be removed first, while the third calls for the simultaneous removal of both these selection procedures.

In the short term the easiest selection procedure to remove would appear to be the Grade Four selection point, whilst the Grade Seven selection procedure could be reduced in effect by the introduction of the dual secondary school system. The introduction of this system would mean the doubling of Form One enrolment, and consequently the whole secondary school capacity, without making extra demands on the supply of secondary school teachers. The training of professionally competent secondary school teachers is not likely to proceed as rapidly as that of primary school teachers because of the greater numbers qualified to enter the training institutions catering for primary school teachers. There are sufficient numbers of Form Three school leavers who have the basic qualification necessary to enter primary teacher training programmes whilst there are probably insufficient numbers of Form Five school leavers to support expansion of the secondary school teacher training institutions.

For these reasons it is thought unlikely that there will be any significant deviation from the present plans for secondary education before the 1980's. By then the adoption of the dual system may have allowed an increased number of pupils to complete Form Five and so provide sufficient input for an expanded secondary school teacher training programme. This would in turn provide the teachers required for the removal of the Grade

Seven selection procedure. By then the additional facilities needed to accommodate the increased numbers of pupils could be completed.

It has been necessary to assume, for the purposes of this dissertation, that the provision of secondary education facilities will continue on the present proposed lines for the time under consideration (until 1981). It is accepted that there may well be significant changes in the content of the curriculum and that enrolment in secondary schools may well double as a result of the adoption of the dual system for secondary schools. These changes could result in an increase in the presently planned number of teachers by twenty per cent.

Prediction of the date at which the complete Zambianization of the secondary school teaching force is likely to occur requires a knowledge of several factors. The first and most important of these is the total number of teachers required. This can be compared to the present stock of Zambian teachers, the output of newly qualified teachers, and the rate of attrition from the teaching force.

4. Required number of secondary school teachers

The Ministry of Education has considered several ways in which an accurate estimate can be made of the total number of teachers required at any school and has chosen a reasonable rule-of-thumb formula which gives acceptable results for the majority of schools.

This formula is:

$$T = 1.5 \times C + 1.5$$

(T = total number of teachers, C = number of classes in the school, + 1.5 is a factor which takes into account the normally non-teaching Head and part-teaching Deputy Head).

As a check on this the more accurate, but more tedious, calculation is sometimes considered:

$$T = P/28.5 + 1.5$$

(T = total number of teachers, P = total number of periods taught in the school, 1.5 is as before).

It is the Ministry of Education policy that a fair teaching load is thirty forty-minute periods per week per teacher, but that the Head of department should have a slightly lower load. This allows for the extra duties which the Head of department is expected to perform in the school during teaching hours. There is considerable variation in thought amongst the Inspectorate over the figure of thirty periods per week. The opinion ranged from one Inspector's statement that 24 periods should be the maximum for any teacher of his subject to another's belief that 33 periods should be the absolute minimum. An examination of the staffing returns (these are discussed in detail later in this chapter) shows that teaching loads can vary greatly both between and within schools. The consideration given by the Ministry of Education to Heads of department is not always followed in schools. One reason for this is that the Head of department is probably the most competent teacher of the subject in the school, and is therefore most likely to be asked to teach examination classes. This can result in an above-average teaching load.

Most schools work to a 40-period week. The average number of periods per class is, however, in the region of 43 periods. The reason for this is that some subjects such as homecraft, industrial arts, science and languages require a class to be split into two groups necessitating two teachers. The most extreme example of this is David Kaunda Secondary Technical School which works to a 41-period week but averages over 50 periods per class.

There are, however, several schools which teach to a 40-period week and which have an average of only 40 periods per class.

For a school with an average of 42.75 periods per class the calculation of the numbers of teachers required gives identical results using both formulas stated above.

By the time that all the recently built or extended secondary schools are at their full enrolment, which will be in 1981, the total enrolment in secondary schools will be slightly under 85 000 pupils, and the total number of classes will be 2 222.* The number of teachers needed, calculated by use of the first formula given above, will be 3 501. It should be noted that the expected number of pupils, 84 905, has been calculated assuming no over-enrolment. In actual fact the number of pupils who will be enrolled may be higher, by as much as ten per cent, due to the common practice of over-enrolment already mentioned in Chapter One. This will not however affect the number of classes which remains the key figure.

The introduction of the dual system for secondary schools would increase the number of teachers required to a total of 4 201 by 1981, if the scheme is introduced before 1978, but no decision on the introduction of the scheme has yet been made.

5. Stock of Zambian Secondary School Teachers

Having established the number of teachers needed, the second factor to consider is the number of teachers presently in secondary school, i.e. the present stock. To this salient question there is more than one answer. The reason for this is that the total obtained depends on precisely when the teachers are counted. The Ministry of Education Digest of Statistics produced annually by the statistical section of the Development and Planning

* Ministry of Education statistics.

Unit, uses as its source the more important staffing return ME/Stat/1. This is an annual return, completed by Heads of schools, used solely by the statistical section. Data on the age structure of the pupils are collected by means of this return, as well as information on the nationality of teachers, their qualifications, sex, and age. The form is designed for ease of data processing by computer should this become possible, but is presently abstracted by hand. The schools are directed to complete this return during the second week of the first term of the school year. The majority of first year pupils have not however reported to their schools by that time so it is more usual for pupil data to be completed before half-term. In a few cases the return is completed very much later than this and, in practice, it is not uncommon for returns to be sent back to the Ministry during the second term.

The second source of information which the Ministry of Education uses is the termly staffing return ME/Staffing/Stat./1. This return gives basic information for use by three sections of the Ministry, these being the Inspectorate, the Staffing Section, and the Development and Planning Unit. More detailed information on individual teachers is required by this return. Besides asking the name, nationality, file number, qualification, teaching subjects, positions of responsibility, date of first appointment and teaching load, it also requires an indication of the likely date of termination of contract of expatriate teachers as well as summary details of the enrolment of the school and an indication of future staffing requirements anticipated by the Head. An analysis of this return should give the number of Zambian teachers term by term, but it must be noted that this return also suffers from a certain amount of laxity in response. Not all schools complete the return every term in spite of frequent reminders.

Lack of co-operation between the three Ministry sections using the return increases the difficulty. One section may receive all three copies of the return from a particular school and take no action to ensure that the other two sections receive their copies. Co-ordination of the records kept by the sections is not undertaken.

Despite these difficulties the detail contained on this return necessitates that the maximum use be made of it. Selective use of data from other sources to fill the lacunae enables it to be taken into full consideration.

It would be expected that the number of Zambian teachers given by the annual and the termly returns for the first term of the year would be the same. For several reasons this is not so, though the differences are small. The possibility of simple error in completion of the returns exists, but is unlikely to be of major importance. At the beginning of the year newly-trained teachers from the training colleges are expected to report to their schools. The schools are informed in advance of the pending arrival of the new teachers, and have sufficient information to include them in the annual return. However it is not unknown for the teacher to fail to take up the appointment, or for the appointment to be changed at the last minute. Both these eventualities may result in the wrongful inclusion of teachers in the school's return. A comparison of the two returns shows that the annual return has slightly more Zambian teachers included on it than on the corresponding termly return.

The preliminary research necessary for this study was carried out during the second term of 1974. The datum point for enumeration of teachers is therefore taken as the second term, and consequently the termly staffing return was used.

TABLE 2.1 TOTAL NUMBER OF ZAMBIAN TEACHERS IN SECONDARY SCHOOLS DURING
THE SECOND TERM OF EACH YEAR

Year	Total Zambian teachers	Percentage of the 1981 requirement of 3 501
1970	253	7.2
1971	291	8.3
1972	370	10.6
1973	478	13.6
1974	688	19.6

Source: Ministry of Education Termly Staffing Return ME/Staffing/Stat/1.

Zambian Manpower had anticipated that by 1974 there would be 1 081 Zambian secondary school teachers, the actual number 688 shows the amount by which the actual has fallen below the prediction.

6. Output of Newly Qualified Teachers

The third factor which needs consideration is the rate at which secondary teachers are being trained and, from this, the number of new teachers likely to enter the secondary school system. At present there are five sources of qualified secondary school teachers: The University of Zambia; Nkrumah Teachers College; The Natural Resources Development College; Luanshya Technical Teachers Training College; and the Copperbelt Teachers College. Teachers have been trained by other colleges such as Evelyn Hone College and the Technical Training Institutions, but there is no accurate record of the numbers so trained who entered secondary schools as opposed to the more normal course of becoming instructors in Technical Training Institutions. Research into the training of teachers has been undertaken by the Tracer Project of the University of Zambia. Their findings

on the output of trained teachers from these four sources are as follows:

TABLE 2.2 OUTPUT OF TRAINED TEACHERS BY INSTITUTION

Year	University of Zambia	Nkrumah Teachers College	Natural Resources Development College	Copperbelt Teachers College	Total
Up to 1969	9	73	0	0	82
1970	14	35	0	0	49
1971	47	60	12	0	119
1972	54	90	12	0	156
1973	80	133	20	0	233
1974	135	202	16	0	353
1975	139	154	10	97	400

Source: Tracer Project, University of Zambia

The date at which new teachers become available for employment varies from institution to institution. The University of Zambia used to have its final examinations at the end of the calendar year, like the colleges which still have their examinations at that time. However as a result of changes, caused in part by disturbances at the University, the examination date is now in the middle of the year. This means that the new graduate enters teaching during the school year while college-trained teachers enter at the beginning of the first term.

The number of new teachers that would be expected to be in schools during the second term of each year is therefore as shown in Table 2.3. It will be seen that the output has quadrupled over a five-year period. The table shows the total output of the various institutions. The actual numbers available may be slightly less due to non-Zambian students or those privately sponsored who may not be available to Zambian schools.

TABLE 2.3 NUMBER OF NEW TEACHERS AVAILABLE TO THE TEACHING FORCE
BY THE SECOND TERM OF EACH YEAR.

Year	Number of new teachers available
1970	87
1971	82
1972	126
1973	182
1974	288
1975	357

Source: Abstraction from Tracer Project, University of Zambia

7. Attrition from the teaching force

The final factor which needs to be ascertained in order to gauge the rate of Zambianization is the attrition rate, the number of Zambian teachers who leave the school situation each year. It must be pointed out that there are a large number of reasons why teachers leave the school situation. These include acceptance of promotion to non-teaching posts, study leave, resignation, retirement, illness and death.

Careful investigation produced no evidence of previous attempts to ascertain the attrition rate from the secondary school teaching force. All other work included estimates of the attrition rate based on informed opinion, but not on actual study of the situation. This is not surprising as there was no basis at that time for undertaking a study of attrition rate. The teacher training programme was just about to produce its first graduates when Zambian Manpower incorporated a five per cent attrition rate in its projections of Zambian secondary school teachers, and in 1971, when Stannard incorporated a ten per cent attrition rate in his projections, the teacher training programmes had started to produce significant numbers of teachers but the

majority of these teachers were still under bonding to the Zambian Government and so were legally obliged to continue teaching until the end of their bonding period of two years.

From his position, as a senior lecturer at the University of Zambia in the School of Education, Stannard was able to maintain contact with university students and was aware of their opinions as to their future within teaching. It is suggested that Stannard was aware that a higher proportion than ten per cent of Zambian teachers intended to leave teaching but could not at that time ascertain just how many would actually leave. Stannard commented on his estimate of a ten per cent attrition rate by saying that it was an optimistic one.

It has only been possible to establish the actual attrition rate after a period of time has passed for which it is possible to examine in detail the career pattern of all Zambian secondary school teachers.

To determine the actual numbers of teachers who have left the classroom a survey has been conducted of all teachers in Zambian secondary schools during the second term of each year during the five-year period 1969 - 1974. As mentioned earlier the termly staffing return gives information on teachers which includes their nationality and their file number. The file number was chosen as being the most appropriate coding element. On appointment as a teacher the Ministry of Education ascribes a unique number, the file number, to the teacher. This file number is never altered and the importance of file numbers to the smooth handling of administrative procedures ensures that special care is usually taken to ensure that they are quoted accurately by the teacher, the school and the Ministry of Education. From the termly staffing returns the file number of every Zambian teacher was noted for the second term of each year.

Where the termly return was not available for a school a process of extrapolation was utilized using as a base the nearest available return to that under consideration.

Once the complete set of file numbers of Zambian teachers for the second term of each year had been obtained a comparison of the elements of the sets became possible. All file numbers present in a certain year were checked against those present in the succeeding year. If the file number could not be found in the following year it was assumed that the teacher was no longer in the classroom. The results of this exercise are shown in Table 2.4.

TABLE 2.4 RATE OF ATTRITION FROM THE TEACHING FORCE 1970 - 1974

Between years	Number of teachers lost	Percent attrition
1970-1971	55	21.7
1971-1972	71	24.4
1972-1973	104	28.1
1973-1974	91	19.0
(average 23.1%)		

Source: Data abstracted from Ministry of Education termly staffing return ME/Staffing/Stat/1.

It must be considered little short of disastrous for a profession such as teaching to lose practically one quarter of its trained manpower each year.

An attempt was made to find the reason why the teachers were no longer in the classroom but this was not as successful. It was hoped that the Ministry of Education files on these teachers would yield some indication of why they had left or where they had moved to. However no more than ten per cent of the files could be located, the remainder were not traceable by

the registry. Those files which were located showed that the teachers had left Ministry of Education employment.

A simple formula for calculating the number of teachers available in any one year is as follows:

$$T_y = T_{y-1} \frac{(100-A)}{100} + NT$$

(where T_y is the number of teachers available in year y , T_{y-1} is the number of teachers in year $y-1$, A is the percentage attrition, and NT is the number of newly qualified teachers graduating in year $y-1$. It being assumed that newly qualified teachers of year $y-1$ will be in schools at the start of year y .)

Table 2.5 shows how the figures obtained so far fit into this formula.

TABLE 2.5 NUMBER OF ZAMBIAN TEACHERS AVAILABLE PER YEAR

Year	Number of teachers	Number of teachers lost	Newly qualified teachers	Total stock
1970	253	55	88	286
1971	291	71	126	346
1972	370	104	182	449
1973	478	91	288	675
1974	688			

In Table 2.5 the difference between the number of teachers expected and the actual number of teachers observed can be explained by the return of teachers to the classroom after a period of absence. Examples of situations which could cause this are study leave, pregnancy and secondment to other duties. Incorporation of this 'drop-in' factor into the calculation results in the average rate of attrition dropping to 18.0 per cent.

Using this observed rate of attrition and the projected output of teacher training institutions as tabulated by Tracer Project, University of Zambia, the predicted number of Zambian secondary school teachers up to the second term of 1981 can be calculated (Table 2.6). Tracer Project, in compiling their predictions, gave three possible levels of output that could be expected, based on the various assumptions as to the growth of the teacher training institutions and the input into these institutions. In this study the middle or medium level of output as predicted by the Tracer Project is used.

TABLE 2.6 PREDICTION OF NUMBER OF ZAMBIAN TEACHERS IN SCHOOL UP TO 1981
USING AVERAGE ACTUAL ATTRITION RATE

Year	Stock of teachers	-	Teachers lost	+	New teachers	=	Total (stock for next year)
1974	688		124		357		921
1975	921		165		361		1117
1976	1117		201		441		1357
1977	1357		244		473		1586
1978	1586		285		320		1621
1979	1621		291		362		1692
1980	1692		304		429		1817
1981	1817	(51.9% of total number required in that year)					

Tables 2.7 and 2.8 below show the effect of reducing the observed attrition rate to ten per cent (Table 2.7) and to five per cent (Table 2.8). Comparison of these with Table 2.6 above shows very clearly the crippling effect of the high attrition rate. The three sets of figures are plotted in Fig. 2.1.

FIGURE 2.1 PREDICTION OF NUMBER OF ZAMBIAN TEACHERS IN SCHOOL UP TO 1981 USING (a) AVERAGE ACTUAL, (b) TEN PER CENT and (c) FIVE PER CENT ATTRITION RATES

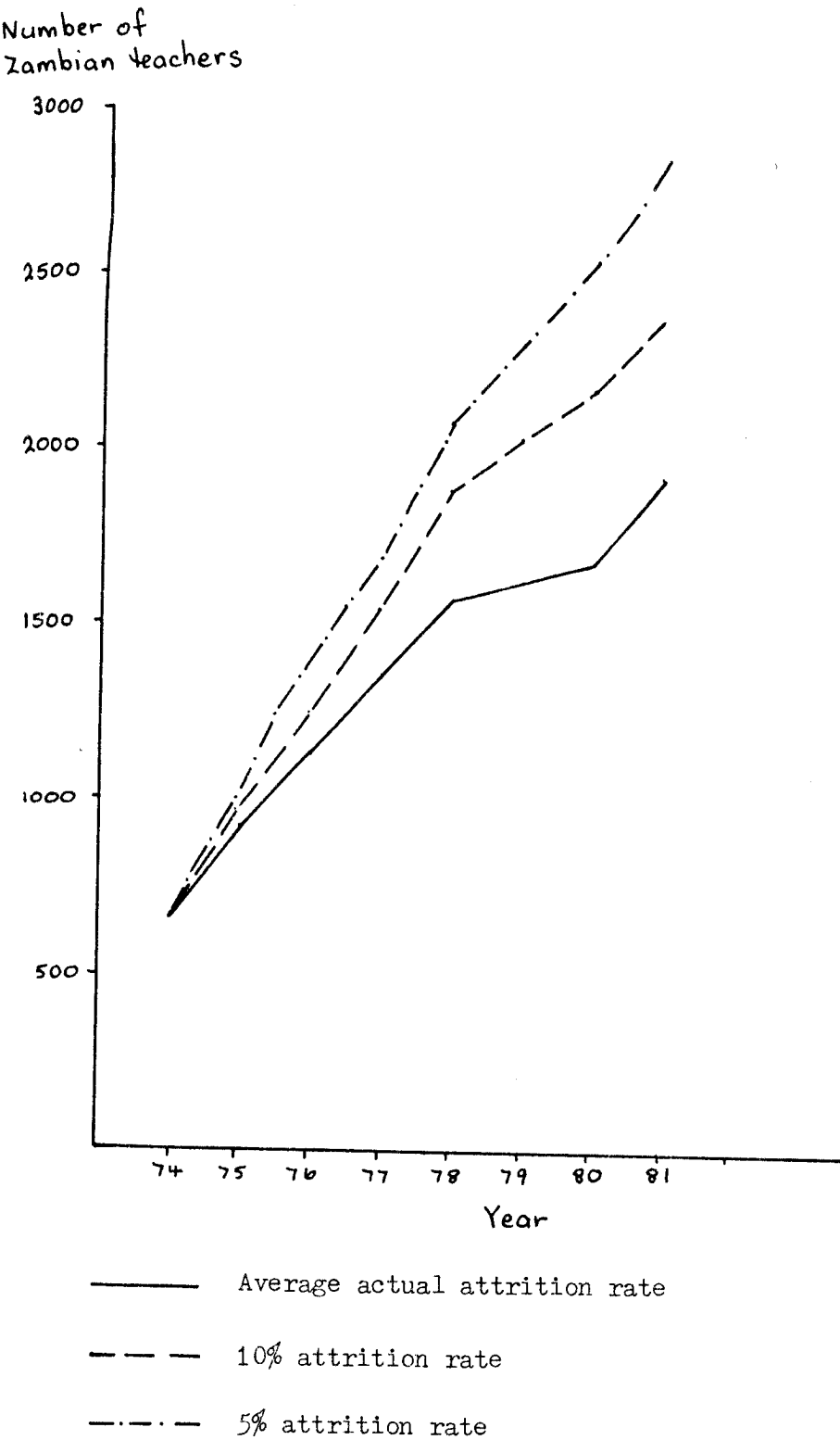


TABLE 2.7 PREDICTION OF NUMBER OF ZAMBIAN TEACHERS IN SCHOOL UP TO 1981
USING TEN PER CENT ATTRITION RATE

Year	Stock of teachers	-	Teachers lost	+	New teachers	=	Total (stock for next year)
1974	688		69		357		976
1975	976		98		361		1239
1976	1239		124		441		1556
1977	1556		156		473		1873
1978	1873		187		320		2006
1979	2006		201		362		2167
1980	2167		217		429		2379
1981	2374		(67.8 per cent of total required in that year)				

TABLE 2.8 PREDICTION OF NUMBER OF ZAMBIAN TEACHERS IN SCHOOL UP TO 1981
USING FIVE PER CENT ATTRITION RATE

Year	Stock of teachers	-	Teachers lost	+	New teachers	=	Total (stock for next year)
1974	688		34		357		1011
1975	1011		51		361		1321
1976	1321		66		441		1696
1977	1696		85		473		2084
1978	2084		104		320		2300
1979	2300		115		362		2547
1980	2547		127		429		2849
1981	2849		(81.4 per cent of total required in that year)				

These tables indicate that if a lower rate of attrition was possible the complete localization of the secondary school teaching force would soon become a reality. As it is, if the attrition rate remains at 18 per cent per year and the output of newly qualified teachers stabilizes at 500 per year, the number of Zambian secondary school teachers will never exceed 2780.

If the attrition rate was cut to ten per cent the number of Zambian teachers would stabilize at 5 000.

It is therefore imperative that, if Zambia wishes to achieve the complete localization of its secondary school teaching force, the rate of attrition must be considerably reduced.

The desirability of reducing the attrition rate however revealed a dearth of information the reasons why it is presently so high, and on factors which may affect it. Conjecture on these factors included the higher salaries commanded by trained personnel in other lines of employment, but basic information on the attitudes of serving teachers to their work and to their conditions of service was obviously needed. For this reason the following survey was undertaken.

CHAPTER THREE

The survey methodology, validation and analysis. General characteristics of the Zambian teaching force.

The study of available statistics undertaken in Chapter Two showed that the Zambianization of the secondary school teaching force is proceeding more slowly than could be achieved. This proved to be almost entirely due to an exceptionally high rate of attrition from the teaching force. The rate is far in excess of that expected from the 'natural causes' of promotion, retirement and illness, and must represent an active choice by teachers to leave teaching. If the rate could be reduced to one more nearly reflecting a natural pattern, Zambianization of secondary school staff could be almost complete within less than a decade. Information on the factors affecting the attrition rate is however needed if the loss from the profession is to be reduced.

A primary objective of this study is to identify factors that may affect the rate of attrition. In order to do this it was considered necessary to determine the attitudes of Zambian teachers to their work, to their conditions of service and to their future. A survey of

currently serving teachers was thus envisaged.

1. The Survey

Several methods by which such a survey could be conducted were considered. A personal interview approach had to be discarded as impractical due to the difficulties in physically reaching a suitable number of teachers in schools throughout the country. Use of a questionnaire had therefore to be considered. Sampling techniques had also to be discarded as it was not possible to determine the precise current total population with any exactitude, due to problems, already outlined in Chapter Two, of differing times of inputs from the institutions. It was therefore decided that an approach by postal questionnaire would be made to all serving Zambian teachers, distributing the questionnaires through the offices of all schools. By this method the survey would attempt to take in the complete cohort of Zambian secondary school teachers at that time (second term, 1974). The respondent group could then be compared to the total population when that information became available through the medium of the second term staffing returns (ME/Staffing/Stat/1).

The decision to use a postal questionnaire approach raised several problems. If an adequate response was to be achieved it had to be ensured that the questionnaires sent to the schools were actually distributed to Zambian members of the teaching staff, and that these teachers were not inhibited in their response by any qualms on the confidentiality of their answers, or indeed by the questionnaire appearing too complex to bother with. The most desirable situation would be for the teachers to wish to make their contribution to the survey and to feel secure in doing so. To achieve this a general feeling of goodwill had to be generated through the

rather impersonal medium of the postal services. This was attempted by several means. The questionnaire was designed so that no separate list of instructions was necessary for its completion, as it was considered that this might make it appear too complicated and hence prejudice return. A personal letter (Appendix B) was included with each questionnaire asking for the teacher's assistance and assuring the teacher of the confidentiality of his/her response. A method by which the questionnaire could be easily returned without cost to the teacher was employed. A letter was sent to the Heads of schools (Appendix C) explaining the survey and asking for their assistance in distributing the questionnaires. Though the permission of the Ministry of Education was obligatory a covering circular was requested to make it obvious that the survey was being conducted with their permission and support, but that they would not prejudice the confidentiality of the responses (Appendix D). This was sent with the covering letter to all Headmasters/Headmistresses.

A. Questionnaire Design

The questionnaire was designed and was pretested prior to finalization. Lack of information on the thoughts and attitudes of serving teachers immediately caused problems. Several pertinent topics were defined, but direct questions on these topics could very easily introduce an unacceptable bias to the response by encouraging teachers to express specific attitudes. For this reason it was considered that, despite the lengthy and difficult work involved in content-analysis of the answers, an area of free-response to wide, open-ended questions must be allowed. It was also necessary that the questionnaire include basic questions on the teacher's qualifications and subjects so that the respondent group

could be compared to the total population as determined from the staffing returns. The questionnaire was therefore designed in three sections (Appendix E).

The first section of the questionnaire asked for factual information on the teacher. This included age, sex, marital status, academic and professional qualifications, length of service, number of schools taught in, subjects taught, posts of responsibility, salary and contact with the Inspectorate. A basic structure of the respondent group was thus built up which could be compared with the structure of the total population of Zambian secondary school teachers and with the total secondary teacher cohort. It also provided a framework against which the responses to the other sections of the questionnaire could be evaluated.

The second section attempted to give some indication of the attitudes of teachers to various issues connected with teaching. Issues covered in this section included the actual work of classroom teaching, the role of the Ministry of Education, conditions of service, relationship with the Inspectorate, and identification with the public and national aspirations. In order to reduce as far as possible the risk of suggesting responses to the participants a graded response to specific statements was chosen as the form of questioning. In this a statement was made and the respondents were asked to grade their reaction to it under the headings of Yes, Maybe, Neutral, Maybe Not, and No. In order to prevent confusion all statements were made in positive terms so that no double negatives could occur. Care was taken that the 'Yes' answer was not always the one which the respondent might think a 'good' teacher should give, and that the more positive and more negative statements were randomly distributed throughout the list. This form of questioning had the

advantage that, after the initial care in design and pretesting, tabulation of the responses was relatively simple.

The third section afforded the teachers the opportunity to express their views freely on major areas of their personal involvement in aspects of teaching. This type of questioning and the wide area covered by the question meant that much time and care would be needed to evaluate the responses. However it was considered that, even if the actual use of the responses had to be limited during the content analysis, this type of question should be present in the questionnaire. A major reason for this, as outlined earlier, is that it allows the teacher to mention the factors which seem most important to him. This, besides providing information which may otherwise be missed or misrepresented, could have an influence on the questionnaire return rate. A teacher who feels that he has been given the opportunity to express his own opinions may be more likely to co-operate with the survey and to return the questionnaire than one who feels that the survey does not consider his specific attitudes. The stereotyped method by which free-responses may have to be treated when being processed does not affect the teacher who is responding. This section covers the attitudes to the work of teaching, thoughts on leaving teaching, and attitudes to teacher-support and administrative services.

B. Pretesting the Questionnaire

After the general format had been decided a number of questions were drafted for each section. The final data required and the method of use were considered and a preliminary questionnaire, designed as far as possible to produce the required result, was drawn up. The pretest

included ten teachers from two Lusaka schools and one rural Central Province boarding school. These teachers completed the draft questionnaire and were interviewed. Two main points were considered to be important. The first was the clarity of the instructions and hence the ease with which the questionnaire could be correctly completed. The second was the degree of confidence that the written response elicited actually matched the opinion of the teacher as expressed verbally at the interview.

In general many teachers wanted change within their working environment and within their terms and conditions of employment, and hence were more than willing to assist, believing that a properly conducted survey on their views could only do good. Whilst it soon became apparent that it was easy to collect complaints it was important to also identify those things which were considered good and which teaching, as a career, offered to teachers.

During the pretest one particular aspect of the structure of the educational system stood out as being unknown to or misunderstood by the teachers, this was the role of the Inspectorate. Questions on this subject were therefore included in both sections two and three of the questionnaire.

In view of the statement by the Minister of Education of the intention to Zambianize the Headships and Deputy Headships of schools as rapidly as possible a question was included to determine whether this would meet the often expressed demands for increased promotional opportunities within the teaching service.

These changes having been made to the questionnaire this was finalized and duplicated ready for distribution.

C. Distribution and Return of the Questionnaire

Due to the difficulty in determining the exact population of current Zambian secondary school teachers it was decided that the questionnaire should be distributed through the administrative office of all secondary schools. With the assistance of the Heads of the schools this should mean that all Zambian teachers would be given the opportunity to participate in the survey.

Thanks must be given to the Ministry of Education for the assistance and support given throughout this exercise.

The questionnaires were sent out in official envelopes to all Heads of secondary schools. The covering circular supplied by the Ministry (Appendix D) was undoubtedly beneficial in this respect. All secondary schools were included even though some had shown no Zambian teachers in their latest staffing returns. Sufficient copies of the questionnaire were sent to cover an increase in the numbers over those known to be at each school.

The Heads were asked to distribute the questionnaires to all Zambian members of their teaching staff, and thanks are again due to them for co-operating in this way.

The 'package' which the Zambian teacher received included the questionnaire, the covering letter (Appendix B) and an official envelope pre-addressed for return of the questionnaire. Teachers were requested to seal their completed questionnaire in the envelope and to have this rubber-stamped at the school office (the school stamp on an official envelope ensured that the letter would be sent on Government Service at no charge to the teacher).

On receipt of the returned questionnaire the school at which it had

been stamped was noted. This enabled a study to be made of the geographical distribution of respondents, to ensure that no regional bias was present in the group.

2. Validation of the Respondent Group

In processing the results of the survey it was necessary, first, to discover the extent to which the respondent group was representative of the total Zambian teaching force. This would determine whether the answers given could be taken to represent the attitudes of the whole. The validation entails a comparison between the responses recorded in Section One of the questionnaire and the known characteristics of the total Zambian teaching force. In total 278 questionnaires were returned.

The termly staffing return was used as a source of base data. Though not all returns were available it was possible, by use of previous and later staffing returns, to make an accurate estimate of the number of teachers at the missing schools, though not of their subjects, age or qualifications.

A) Geographical Distribution

The first factor to be considered was the geographical nature of the response. The method of posting, utilizing the official seal of the school, provided the name of the school at which the respondent taught. Two responses had to be disregarded in this exercise because one teacher used his own envelope, and on another the seal of the school was undecipherable. For the purpose of comparison schools were grouped by education region and the degree of similarity of distribution

was determined using a Chi square test:

TABLE 3.1 NUMBER OF ZAMBIAN TEACHERS RESPONDING FROM EACH EDUCATION REGION

Education Region	Total number of Zambian Teachers	Number of Teachers Responding
Copperbelt	174	71
Kabwe	69	37
Lusaka	93	38
Southern	109	38
Luapula	26	11
Northern	75	25
Eastern	29	13
Northwestern	39	14
Western	73	29
Chi square 3.62 df 8		

The hypothesis that there is no correspondence between the two distributions can be rejected with over eighty per cent confidence, i.e. the probability that the two distributions are the same is greater than 0.8, or better than four in five.

B) Sex

When comparing the sex distribution of the respondent group with that of the total Zambian teacher population (Table 3.2) a significant difference is found:

TABLE 3.2 SEX OF RESPONDENT GROUP AND TOTAL ZAMBIAN TEACHER POPULATION

	Respondent Group	Total Population
Male	222	468
Female *	55	170
Chi square 4.8 df 1		

* One respondent sex unknown.

The hypothesis that the distribution of sexes is not the same in these two cases can be accepted with over 95 per cent confidence.

C) Qualification

The relationship between the distribution of the teachers by qualification is similar (Table 3.3).

TABLE 3.3 QUALIFICATION HELD BY RESPONDENT GROUP AND TOTAL POPULATION

	Respondent Group	Total Population
Graduate	40	119
Non-graduate*	235	519
Chi square 2.3 df 1		

* Three respondents qualification unknown.

The hypothesis that there is a correspondence between the two distributions can be rejected with eighty per cent confidence.

D) Positions of Responsibility

The responding teachers were classified into three groups according to their positions of responsibility. Heads and Deputy Heads of schools comprised the first group; Housemasters and Heads of department comprised the second; the remaining teachers, those with no positions of responsibility, form the third group.

For this comparison (Table 3.4) the information for the total population was obtained, as previously, from the termly staffing return. The data in this case cannot be considered reliable, especially for the second group. Some schools gave incomplete information about posts of responsibility by listing only those posts which carried a salary allowance. In some cases even this information was not complete. In the respondent

group if the responding teacher said that he/she was, for example, the Head of the commerce department he/she was counted as a Head of department, even though only the Heads of mathematics, English and science departments were given a salary allowance. For this reason it is believed that the second group is lower than it should be for the total Zambian teacher population.

TABLE 3.4 POSITIONS OF RESPONSIBILITY HELD BY THE RESPONDENT GROUP
AND THE TOTAL POPULATION

	Respondent Group	Total Population
Head/Deputy Head of school	18	45
Other post of responsibility	111	173
No post of responsibility*	146	420
Chi square 15.9 df 2		

* Three respondents level of responsibility unclear.

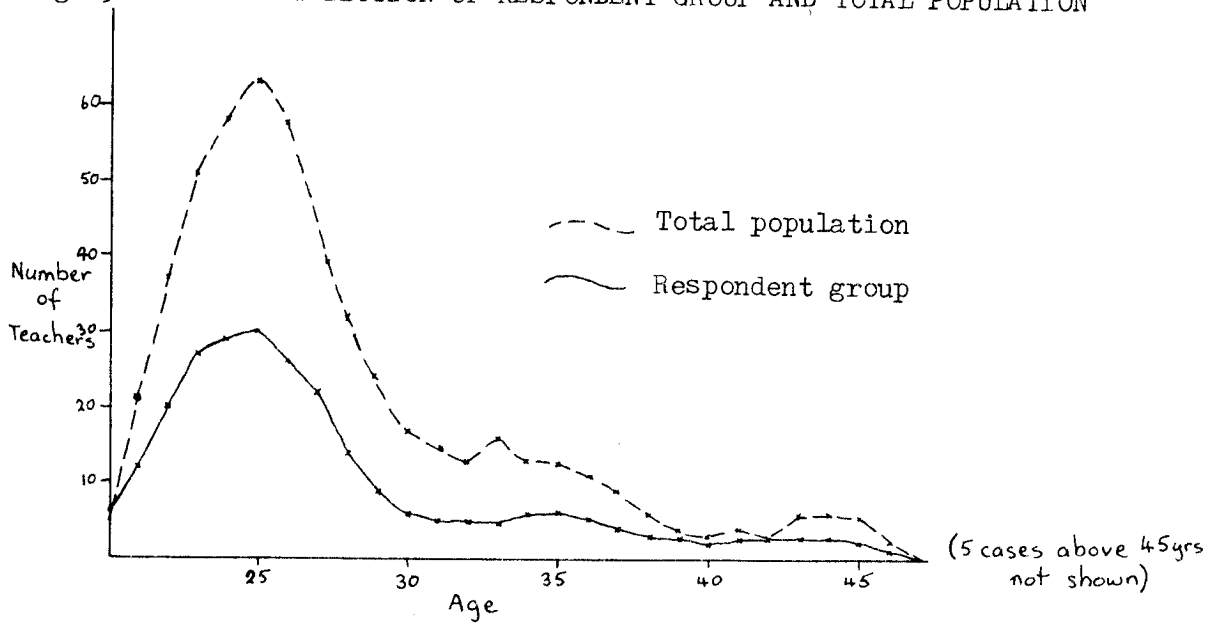
The hypothesis that the two distributions are the same can be rejected with 99 per cent confidence.

E) Age

The average age of teachers was calculated for both the respondent group and the total Zambian teacher population, though by different methods. For the respondent group the age stated by the teachers was used, while the year of birth as given by the termly staffing return was used for the total population. The average age for the respondent group was 28.02 whilst that for the total population of Zambian teachers was 28.47 years. If a correction factor is incorporated to allow for the fact that the datum point for the total population was effectively 31st December, 1974 whilst that for the responding teachers was during May, 1974 the average age of

the total population becomes 28.09. Examination of the age distribution of the two groups shows a marked similarity. (Data smoothed by taking three-year running means).

Fig. 3.1 AGE DISTRIBUTION OF RESPONDENT GROUP AND TOTAL POPULATION



F) Subjects Taught

The final comparison between the respondent group and the total population was undertaken between the subjects being taught. Information was available from the staffing returns and from the questionnaire as to what subjects a teacher was teaching.

The hypothesis that the total group is the same as the total population can be accepted with over 70 per cent confidence. The subjects being taught may not however be those which the teacher was trained to teach. Information was available from the questionnaire on the subjects the respondent group were trained to teach, and the termly return states which two subjects a teacher "by qualification and ability is most competent to teach".

TABLE 3.5 SUBJECTS TAUGHT BY RESPONDENT GROUP AND TOTAL POPULATION

	Total number of teachers teaching the subject	Number of respondent teachers teaching the subject
English	165	73
Mathematics	75	35
Science	66	31
Agricultural science, Biology	45	26
Geography	104	52
Civics	114	58
History	122	53
Industrial arts	33	9
Homecraft	52	15
Commerce	49	30
French	34	15
Zambian languages	105	46
Art	8	4
Physical education	7	5

Although these distributions are the same, with 70 per cent confidence, the danger exists that Heads of schools, to avoid the possibility of queries from Headquarters, may put down on the staffing return the subjects which a teacher is teaching rather than the subjects he/she is trained to teach, when these are different. There may also be genuine differences between the subjects a teacher was trained to teach and those he/she is considered by the Head to be most competent to teach.

G) Summary of Validation

The respondent group is representative of the total population in the major areas of geographical distribution, age, and subjects taught. It would however appear to be biased towards male teachers, slightly less



biased towards non-graduates, and is believed to be biased towards teachers holding posts of responsibility. Whether this will adversely affect the validity of any conclusions drawn from the responses to the questions must be considered. Where bias does exist it is towards the key group of teachers, those who are more likely to become future leaders within the profession because they are specially trained for the job, are already experiencing a degree of responsibility, and are not likely to have interruptions to their career for family reasons. Thus conclusions drawn from the responses may be more relevant because they are elicited from those people on whom much will depend for the future teaching force.

3. Other Characteristics of the Zambian Teaching Force.

To aid the processing of the information given in Section One of the questionnaire use was made of the University of Zambia's computer. The IBM 1130 was programmed using Fortran and the data was transferred to punch cards for use by the computer. The speed with which the data could be handled by the computer more than compensated for the time spent programming the machine and verifying the data on the cards.

A) Length of Service and Professional Experience

The first major fact of importance is the relative inexperience of the teachers as represented by the respondent group. Teachers were asked for how long they had taught in primary and secondary schools. Of the group 31.7 per cent had primary school experience, averaging 6.6 years. It has been the policy of the Ministry of Education to retrain teachers in subjects such as homecraft if they have suitable academic qualifications and successful primary school teaching experience. The average length of

secondary school service was 2.4 years. The length of secondary school teaching experience is given in Table 3.6:

TABLE 3.6 LENGTH OF SECONDARY SCHOOL TEACHING EXPERIENCE

Number of years experience	Number of respondent teachers
Up to 1	108
2	59
3	40
4	13
5	28
6	8
7	3
8	4
9	5
10	5
More than 10	5

The relative inexperience of the teachers is also indicated by the number of secondary schools in which they have taught (Table 3.7).

TABLE 3.7 NUMBER OF SCHOOLS IN WHICH TEACHERS HAVE TAUGHT

Number of schools taught in	Number of respondent teachers
1	200
2	58
3	11
4	5
5	3
6	1

The average number of schools in which a teacher had taught was 1.4.

At this time 71.9 per cent of teachers had only taught in one school. This

does not include practice undertaken during training.

The marital status of teachers was another indicator of their relative youth. Of the total 37.1 per cent of the respondents were single. Married teachers had, on average, 2.8 children.

B) Qualification and Subjects Taught

The majority of the teachers were trained at Nkrumah Teachers College, in all 57.2 per cent. 8.7 per cent had a primary school teaching certificate as their highest qualification. Of the university graduates who comprised 14.4 per cent of the respondent group one eighth were trained at universities other than the University of Zambia.

Perhaps the most interesting of the results obtained from this section of the questionnaire was the comparison of the subjects taught by respondents, those they were trained to teach, and those they wished to teach. To the table of these results (see Table 3.8) three other sets of figures have been added for comparison. The first, the actual number of teachers of each subject, had already been met. The second is the number of teachers of each subject needed in 1981. This was calculated on the following basis: (a) in 1981 the present timetable on which planning for the World Bank Project was based is still in force, (b) every teacher will be able to teach two subjects, (c) non-teaching Heads of schools and part-teaching Deputy Heads will not be selected from any particular teaching subject. The third set of figures, teachers needed in 1974, is based on a report* on the supply of teachers of all nationalities prepared by the sub-committee for secondary school staffing of the Ministry of Education. The report gives the number of teachers teaching each subject and the number of periods for which each subject is taught. The report was

* Ministry of Education Report No. 101/22/18CONF

limited to Government schools only. The figures suffer the same limitations regarding the subjects which a teacher is competent to teach as made it inadvisable to use this data previously. The figures given in the table have been derived from the number of periods for which each subject is taught, and consequently the number of teachers required for the subject in 1974 is calculated.

TABLE 3.8 NUMBER OF TEACHERS OF EACH SUBJECT

	Trained to teach (survey)	Want to teach (survey)	Teaching (survey)	Teaching (total)	Needed in 1981	Needed in 1974
English	97	56	73	165	1276	760
Mathematics	44	38	35	75	1068	637
Science	51	29	31	66	1094	533
Agrucultural science) Biology	27	26	26	45	159	258
Geography	81	68	52	104	483	313
Civics	32	43	58	114	290	181
History	81	57	53	122	483	294
Industrial arts	13	9	9	33	616	146
Homecraft	15	15	15	52	328	147
Commerce	30	30	30	49	230	173
French	21	17	15	34	159	129
Zambian languages	5	16	46	105	473	59
Art	8	4	4	8	186	62
Physical education	4	4	5	7	157	53

In all cases the teaching of religious knowledge has been omitted on the grounds that the vast majority of teachers of this subject are unpaid voluntary teachers from local missionary agencies. It is unlikely that the use of such teachers will diminish.

As already stated there is over 70 per cent confidence that the distribution of the subjects taught by all Zambian teachers is the same as those taught by the respondent group. No two other distributions given on Table 3.8 are similar. In fact all other possible comparisons show, with over 95 per cent confidence, that the distributions are not the same.

These figures indicate a possible crisis in the supply of teachers if the development of secondary education continues on its present course. The teaching of Zambian languages has been predominantly undertaken by Zambians because of the very nature of the subject. However up to 1974 there has been no teacher-training programme in Zambian languages, nor has there been an Inspector of Zambian languages appointed. An Inspector has had charge of the interests of the subject in addition to his duties in his own field of specialization. The subject has become popular in schools and it has often fallen to the lot of the Zambian teacher to teach it without prior training. It also appears that a dangerous tradition may be emerging whereby the newest Zambian member of staff is expected to teach Zambian languages. There are indications that this is not popular amongst newly qualified teachers but their position is such that they feel they can do little about it. A comparison of the numbers of teachers teaching the subject and the number of teachers who stated that they wanted to teach it indicates that nearly two-thirds of those teaching Zambian languages would prefer to teach other subjects.

Industrial arts will, if the planned streaming patterns envisaged by the World Bank Project are followed, require the fourth largest number of teachers of any subject. The number of Zambian teachers of this subject ranked twelfth in 1974. Industrial arts requires more capital investment in rooms and materials than any other subject presently taught

in schools. Without teachers the subject cannot be taught but the workshops are not suitable for use as classrooms for other subjects, already reports have reached the Ministry headquarters of equipment disappearing from unused workshops.

There are indications that the supply of Zambian teachers of individual subjects is becoming out of balance with the general pattern of demand. It will soon be necessary for teacher training institutions to keep careful watch on the situation so as not to produce too many teachers of subjects for which there is little demand, especially while teachers of other subjects are urgently needed. The limited resources at Zambia's disposal in terms of manpower and facilities cannot afford the waste of training teachers who will not be needed.

C) Salary

The distribution of the monthly salary received by teachers is again indicative of the short time for which most have been working.

TABLE 3.9 MONTHLY SALARY OF TEACHERS

Salary range	K 0-150	K 151-200	K 201-250	K 251-300	Over K300
Number of teachers	98	114	43	8	13

The average salary of teachers froming the respondent group is K 180.50. When asked what salary they thought they would receive if they were not teachers the respondents answered as shown in Table 3.10.

The Tracer Project of the University of Zambia, in their survey of graduates, found that those graduates who had been trained as teachers but

TABLE 3.10 EXPECTED MONTHLY SALARY IF NOT TEACHING

Salary range	K 0-150	K151-200	K 201-150	K 251-300	Over K300
Number of teachers responding	27	55	48	46	47
Average K278.6					

had left the service were earning, on average, K100 per month more than those still teaching. It would appear that teachers are well aware of and are accurately informed about these higher financial rewards in jobs outside teaching.

D) District of Birth and Place of Attainment of Highest Qualification

These questions from the first part of the questionnaire had to be ignored as the results obtained could not be considered reliable. Information on the District of birth was incomplete and therefore unusable. The hypothesis that was to be investigated was that children from rural backgrounds are more likely to become teachers than children from urban backgrounds. Information on the District of birth does not however give any help in investigating this hypothesis. The fact that a child was born in a certain District does not mean that he/she spent childhood in that area. It is therefore impossible to use this information as evidence on the question of career preference being linked to the type of background in which a child is brought up.

The second point was the place of attainment of the teacher's highest qualification. The responses included the secondary school attended, the teacher training institution attended, and the correspondence school tutored by. These difficulties had not become apparent during the pretest when all participants answered in the same manner.

4. Summary

The general picture of the Zambian teaching force is one of youthful married teachers who are still at their first school, have just crossed the threshold of their career and could have before them many years of service in teaching. The teachers are being given some positions of responsibility which they are taking seriously even though no financial reward is given for most of the extra duties. Zambian teachers presently are outnumbered in the ratio of four to one by teachers of other nationalities, mainly by British, Indian and Pakistani nationals who account for over fifty per cent of the teaching force.

As the Zambian teachers are, in the main, at the start of their careers it is of interest to see how they regard their work and how they view their future within the teaching service.

CHAPTER FOUR

The attitudes of serving teachers to their work as determined through
Section Two of the questionnaire.

1. Processing of the Responses to Section Two of the Questionnaire

As stated in Chapter Three the method of response to the second section of the questionnaire was such that analysis of the responses could be simply and easily carried out by use of a computer. Frequency counts of the responses, means, and second moments about the mean could all be calculated rapidly, as well as the calculation of cross-correlation coefficients. The use of cross-correlation coefficients enabled a study to be undertaken of the inter-relationship which may exist between areas of opinion on issues surveyed.

To enable the analysis to be undertaken the answers were ranked from one to five, a "Yes" response being ranked one, and a "No" response being ranked five. "Neutral" was ranked three. For ease of processing "Maybe" was ranked as two and "Maybe not" was ranked four. In doing so it was assumed that the midway response between a firm, definite response and the neutral response was represented by the 'maybe' answer. Other

authorities recommend a sine formula approach by which the "Maybe" response is graded numerically closer to the definite response than to the neutral response. It is also possible to grade the "Maybe" response closer to the neutral. One of the principal reasons for assigning such values for the "Maybe" responses is that a greater degree of correlation can be measured between the responses to the individual questions.

The word "maybe" is defined in the Oxford Dictionary by the use of the two synonyms, "possible" and "probably". It is suggested that the two synonyms imply varying degrees of certainty and that the word "maybe" falls between the two.

It is accepted that the process of grading a subjective opinion in an objective manner is open to criticism, no matter how it is done.

The mean, frequency count and second moment about the mean as measured using the five-point scale for responses to individual questions in Section Two are shown in Table 4.1. Of all the completed questionnaires only three had to be omitted from the analysis of Section Two because of the manner in which the answers had been given.

2. Responses Recorded in Section Two of the Questionnaire

a) Attitudes towards the work of teaching

In general terms over 90 per cent of responding teachers believed that there was a challenge in teaching, over 85 per cent found going into a classroom enjoyable, over 55 per cent liked the start of a new term, over 65 per cent did not believe that teaching was monotonous, and over 75 per cent believed that their pupils were interested in what was taught to them.

TABLE 4.1 THE MEAN, FREQUENCY COUNT, AND SECOND MOMENT ABOUT THE MEAN AS MEASURED USING A FIVE-POINT SCALE FOR THE RESPONSES TO INDIVIDUAL QUESTIONS IN SECTION TWO OF THE QUESTIONNAIRE

Question	Frequency of response					Second	
	1	2	3	4	5	Mean	Moment
1	226	28	7	2	12	1.3	0.92
2	185	58	15	13	4	1.5	0.90
3	54	32	33	15	141	3.6	1.64
4	27	36	28	27	157	3.9	1.44
5	12	31	22	36	174	4.2	1.23
6	23	49	33	32	138	3.7	1.43
7	28	64	28	53	102	3.5	1.44
8	220	15	11	8	21	1.5	1.19
9	123	34	22	17	79	2.6	1.72
10	98	36	26	17	98	2.9	1.74
11	50	68	43	29	85	3.1	1.52
12	226	29	10	6	4	1.3	0.77
13	246	15	6	3	5	1.2	0.70
14	23	30	18	33	171	4.1	1.37
15	19	76	32	65	83	3.4	1.34
16	187	20	13	5	50	2.0	1.56
17	267	4	4	0	0	1.0	0.27
18	68	83	52	29	43	2.6	1.37
19	163	36	32	15	29	2.0	1.37
20	21	6	19	15	214	4.4	1.20

Less than seven per cent found no challenge in teaching and did not like going into a classroom. Under 15 per cent did not believe that their pupils were interested in what was taught to them, and 30 per cent stated that they did not like the start of a new term. However as no reason was asked as to what it may be that teachers did not like about the start of a new term no specific complaint can be pin-pointed. There could

be a variety of reasons, ranging from the preference for holidays to nervousness of facing new classes for the first time.

It is interesting to note that less than six per cent showed a dislike for the activities involved in teaching as stated by the first five questions. If this is representative of the whole of the Zambian teaching force then dislike of the actual work does not seem likely to account for the high rate of attrition already noted.

b) Attitudes towards the Ministry of Education and Conditions of Service

The responses of the surveyed teachers to the questions concerning the Ministry of Education and conditions of service are quite severe. Over 60 per cent indicated that they doubted the efficiency of the Ministry and over 55 per cent stated that the Ministry was not interested in the teachers' problems.

On the subject of transfers there was a strong indication that teachers felt they should be consulted before they were transferred, but there was not such a strong feeling that they should be transferred to schools of their own choice. Only 55 per cent subscribed to the latter view while over 85 per cent subscribed to the former. Transfers are normally of a promotional nature, either to positions of responsibility or to posts outside the classroom such as to teacher-training institutions. It is not uncommon for the teacher to find out about his/her impending transfer for the first time when he/she receives the letter directing him/her to take up the new position as soon as possible. Because most transfers are promotional the most common reaction is one of pleasant surprise. However teachers obviously would like some advanced notice of their impending transfer and

it may be possible for the Ministry to devise a procedure of which prior consultation with the teacher is a major feature.

Questions 10 and 11 concerning housing and the respect received by teachers produced practically even splits of the responding teachers. Approximately the same number of teachers thought their housing was bad as thought that it was good. The same applies to the question of respect for teachers, as many believing that they are not respected because they are teachers as believing that they are respected.

Reaction to the statements that teachers are underpaid, that the Government could not afford to pay teachers more, and that people with the same qualifications got a better job outside teaching (questions 12, 13 and 14) were similar. Over 90 per cent believed that people with the same qualification can get a better job outside teaching, and nearly 95 per cent believed that teachers were underpaid. As noted earlier teachers earn, on average, K100 per month less than those with the same qualification in other jobs (Sanyal et. al. 1976). As the responses noted in Section One show, the teachers are aware of this fact. This evidences a degree of identification with their peers, those with whom they attended school, their fellow students at the University or Teachers College, or those who entered other types of training. The accurate knowledge of salary differentials probably indicates that they are aware of the varying conditions of service, allowances, and perceived status of those who took a different career pathway from their own. What the teachers consider to be better jobs will be looked at more closely when studying the responses given to question 4 of Section Three.

Less teachers however believed that the Government could afford to pay them more, only 70 per cent subscribing to this view. This could indicate that there is a degree of sympathy for the Government's priorities

in economic development, and that the money should be spent on other development projects as well as on salaries.

Only just over half the teachers rejected the view that bad examination results are the result of bad teaching. This attitude is sometimes adopted by pupils to explain their poor performance, to the exclusion of all other, equally probable, explanations. Just under 35 per cent of the responding teachers subscribed to this view. The effect of this view being held by a teacher may be to make the teacher work harder so that the accusation cannot be levelled against him.

c) Attitudes towards the probationary period for new teachers

The probationary period for new teachers is two years. During this period several rights of teachers, especially in the field of finance, may be withheld. There have been instances where a teacher has been refused a car loan because he is on probation, when in fact he is entitled to one. Such difficulties are probably due to regional offices being unused to dealing with probationary teachers, and should therefore improve with experience. Whilst on probation the teacher may not resign without financial penalty, or apply for other posts advertised by the Teaching Service Commission.

Confirmation of teacher status should follow after the completion of the two years, provided that the teacher is considered suitable. Regrettably, confirmation is not always promptly processed by the Ministry and the Teaching Service Commission, mainly due to delays within the administrative process.

75 per cent of the teachers indicated that they felt the probationary period was too long. The reasons behind this could be based on the factors

given above, or on the belief that it should be possible to ascertain more rapidly the suitability of a new teacher.

Question 17 had the most definite positive response of any question in this section. The teachers agree that they are vital to the development of the nation.

d) Attitudes to the Inspectorate

There is no strong consensus of opinion amongst teachers towards the Inspectorate. Just under 55 per cent stated that they believed that Inspectors try to help teachers, and nearly 20 per cent have no comment on this issue. Over 70 per cent believed that schools should be inspected more often and over 80 per cent did not agree that the Inspectorate should be disbanded. Further information on attitudes to the Inspectorate are to be found in the responses to question 9 of Section Three. Discussion of the attitudes of teachers to the Inspectorate will therefore be expanded when analysing the responses to that question. One factor which may however help to explain the above pattern of response is the fact that because of the lack of resources which limits the number of visits made by Inspectors to schools, and because of the short time for which the teachers had been serving, many of the responding teachers may not have had any personal contact with members of the Inspectorate.

3. Correlation of the Responses to Various Questions

In considering the correlation that exists between the various responses to the questions it must be remembered that the responses to some questions are highly biased towards one particular attitude. An example of this is question 17 where teachers agreed that they are vital to

the development of the nation, and no teacher expressed a negative attitude. With such questions little or no correlation can be expected with other issues because, whatever the response to the other issues, practically all respondents thought the same way on the original question. Because of this those questions where frequency counts indicate that over 77 per cent of all teachers expressed the same feeling on the issue raised cannot warrant correlation. Such questions are numbers 1, 8, 12, 13, 17 and 20.

Two questions do not correlate significantly with any other question. These are the question on respect for teachers and the question on poor examination results being the result of poor teaching. With regard to the respect given to teachers the implication is that the amount of respect which a teacher feels he is given is not affected by his enjoyment of his job, his attitude towards the Ministry of Education, his pay, or by any other of the factors listed in this section. It may be that the teacher feels that respect relates to his own personality and abilities rather than to his position as a teacher. The teachers' views on the source of blame for poor examination results is also unaffected by any of the other listed factors. These views must be affected by other factors which may include the teacher's own experiences when a pupil in school.

Questions 2 and 3 have a strong negative correlation which implies that the more a teacher enjoys going into a classroom the more he likes the start of a new term. If a teacher states that he does not like the start of a new term he is more likely to state that he dislikes going into a classroom.

Between questions 4 and 7 there is a negative correlation which suggests that if a teacher finds his work monotonous he is more likely to state that the Ministry of Education is not interested in his problems. He

could blame his employer for the lack of enjoyment which he gets from his job. The converse is that a teacher who does not find his work monotonous is more likely to state that his employer is interested in his problems. This could be because he has fewer problems in his work, or because he has a more positive relationship with his employer.

There is a strong positive correlation between the responses to question 5 and question 14 which produces a similar type of situation to that described above. The teachers who state that their pupils are interested in what is being taught are more likely to accept the pay which they receive. The teachers believe that their pay is low, but if the pupils seem to show a positive interest in what is being taught the teacher is more likely to accept that the low pay is unavoidable.

Some correlation, though weaker than those described above, exists between questions 2 and 6. Again the inference which can be drawn from this correlation is that a teacher who enjoys his job is more likely to think of his employer in favourable terms. The correlation between questions 6 and 7 is positive, inferring that the teachers measure the efficiency of the Ministry of Education by the amount of interest which it appears to take in teachers' problems.

Between questions 6 and 9 the correlation is negative. This implies that the greater the belief in the efficiency of the Ministry of Education the more trust the teachers are prepared to place in the Ministry's choice of schools to which teachers are posted. It is possible that the converse attitude may be more responsible for the correlation, i.e. if teachers have been posted to schools at which they find they are superfluous, or at which they are unhappy, there could be a tendency to blame the Ministry and therefore doubt its efficiency.

The weak positive correlation between questions 6 and 10 again reinforces the pattern of opinion noted so far. In this case housing is the issue and the happier the teacher is with his/her housing the more efficient the Ministry of Education is considered. Conversely the poorer the housing is considered the lower the opinion of the teacher on the Ministry of Education.

The same pattern can be inferred from the negative correlation between questions 6 and 16. If the teacher considers that the probationary period is too long he/she expresses doubts as to the efficiency of the Ministry. If the Ministry is considered to be efficient then the length of probation is accepted, possibly on the basis of trust that the Ministry would know best.

When considering the Inspectorate the positive correlation between questions 6 and 18 again indicates this recurring pattern. The more helpful the Inspectors are considered to be, the more faith the teacher has in the efficiency of the Ministry of Education. It is suggested that teachers may view Inspectors as the roving ambassadors of the Ministry, and are prepared to formulate their views of the Ministry on their experiences of Inspectors. The element of trust in the Ministry is further reinforced by the fact that the view that schools should be inspected more often correlates positively with the view that the Ministry of Education is inefficient, questions 6 and 19.

It is interesting to note that questions 18 and 19 have no significant correlation between them, implying that the helpfulness or otherwise of Inspectors has no effect on the wish for the school to be inspected at a different rate than hitherto.

A complex pattern can be built up as a result of this analysis but there remains the element of doubt as to the identification of the cause when considering a cause and effect situation, e.g. whether it is the inefficiency of the ministry of Education which has caused dissatisfaction over housing, or dissatisfaction over housing which has led to belief that the Ministry is not efficient. If all goes well then the employer is viewed favourably, but if things go wrong then the employer is blamed. It would appear in the case mentioned above that belief that the Ministry of Education is not efficient is an effect, rather than a cause. The factors which correlate with this view are more likely to represent the causes.

A similar situation can be seen when considering the basis for the significant correlation between question 7 "The Ministry of Education is interested in teacher's problems", and other questions. As mentioned earlier there is a significant correlation between questions 6 and 7, this would tend to support the belief that discontent with some personal aspect of the job leads to discontent with the employer.

Question 9 "Teachers should be transferred to schools of their own choosing" correlates with questions 14 and 16. The negative correlation with question 14 "The Government cannot afford to pay teachers more" could be symptomatic of the pattern already described, but this time turning discontent into dissatisfaction with the financial aspects of the job, whilst the positive correlation with question 7 "The probation period is too long" indicated a link between dissatisfaction with the school where the teacher has been posted and the length of the probationary period, i.e. the possible length of time to be spent at that school.

4. Summary

It would appear that there is no widespread discontent amongst teachers as far as their enjoyment of their work is concerned. They strongly believe that their work is vital to the development of the nation and the vast majority enjoy their work, responding to the questions in a manner which indicates their interest, enjoyment and concern. Any grounds for discontent that they identify appear to centre on the pay, housing, the schools to which they were posted, the probationary period, and the attitudes which they attribute to the Inspectorate. This has led them to express distrust of the Ministry of Education and doubt as to its efficiency and concern for their welfare. This discontent must also be seen in light of their knowledge of the pay and conditions of service experienced by those of similar qualifications working within other sectors of the economy.

From the responses to this section of the questionnaire it would seem unlikely that the high rate of attrition from the teaching force can be explained by any basic lack of enjoyment of teaching, or by dissatisfaction with the work of being a teacher. Attention must therefore be paid to other factors including the conditions of service of the teaching force and the comparability of these with those of other sectors of the economy and of other employers.

CHAPTER FIVE

The results obtained through Section Three of the questionnaire.

The third section of the questionnaire was of a free-response nature. Teachers were asked their opinions on several issues that could have a bearing on the likelihood of their remaining in the classroom situation.

Teachers were first asked what they liked most about teaching, and were then asked what they disliked most about it. These questions were designed to attempt to determine those aspects of teaching which should be more strongly emphasized, and to determine any factors whose elimination could make the work of teaching more enjoyable, in order to effect a reduction in the rate of attrition from the teaching force.

The third question, "Have you ever thought seriously about leaving teaching?" was subdivided into two further questions for those giving an affirmative response. It attempted to ascertain the cause of the desire to leave teaching, whether the attraction of work in other sectors was the major cause or whether dissatisfaction with the work of teaching had led to thoughts of leaving. The question continued by asking why the teachers had not in fact left teaching, though they admitted having thought of it.

The fourth question, "Have you ever applied for a job outside teaching since you started to teach?" attempted to determine how many of the participants had actually taken positive steps towards leaving, and what jobs outside teaching offered that teaching did not.

Ascertaining the long-term intentions of teachers and the reasons behind these intentions was the basis for question five.

The sixth and seventh questions gave teachers the opportunity to indicate whether there were any changes which they felt could be made which could alter their intention regarding their future in teaching.

The penultimate question was included to find out how teachers had responded to the Ministry of Education's press statement stating that a rapid Zambianization programme for secondary school headships was being immediately implemented, and that all Headships would be Zambianized within three years.

The final question was included as a result of the pretest of the questionnaire. Teachers on whom the questionnaire was pretested showed a degree of apathy towards the Inspectorate and appeared to believe that members of the Inspectorate, when visiting schools, were more concerned with telling teachers what they were doing wrong than giving praise where praise was due. In view of this it was felt necessary to determine whether this attitude was held universally by teachers, because the Inspectorate is a major unit through which the Ministry of Education guides and controls the quality of education given to pupils.

1. Method of analysis

Because of the free, open-ended nature of the questions in this section a method on content-analysis had to be devised in order to analyze

the responses. A framework had also to be constructed against which the analysis could be evaluated. This framework included the sex and marital status of the respondents, their type of qualification and position in the school, the subject taught and whether they had previous taught in primary schools.

The framework was constructed by coding comprising three letters. The first letter identified the sex and marital status of the teacher, the second letter identified the teacher's qualification and level of responsibility within the school and the third letter identified whether the teacher had previous primary school teaching experience and the type of subject he/she was trained to teach.

<u>FIRST LETTER</u>	Single	Married	Divorced
Male	A	B	C
Female	D	E	F
.....			
<u>SECOND LETTER</u>	Head/Deputy	Head of Dept./ Housemaster	No post of responsibility
Graduate	A	B	C
Non-graduate	D	E	F
.....			
<u>THIRD LETTER</u>	arts subjects	science subjects	practical subjects
With primary teaching experience	A	B	C
Without primary teaching experience	D	E	F

For example a questionnaire coded BED indicated that the respondent was married, male, held some position of responsibility in the school, was not

a university graduate, had not taught in primary school, and had been trained to teach arts subjects.

The total numbers in each category are given in Table 5.1

TABLE 5.1 NUMBERS OF RESPONDENTS IN EACH CODING CATEGORY

	First letter	Second letter	Third letter
A	79	6	56
B	137	17	7
C	0	17	20
D	24	12	101
E	25	94	47
F	3	129	45
? *	10	3	2

* In the few cases where one piece of information was not known, so only two code letter could be assigned instead of the full number of three, a dummy code ? was utilized, rather than reject the questionnaire from analysis.

When all questionnaires had been coded according to the above system a content analysis of the responses to each individual question was undertaken. Each response was studied and an identifying number was assigned to each point raised. The same identifying number was assigned to the same point when raised by other respondents. Random checks were carried out to ensure that consistency was achieved. Thus for each question a complete list of all points raised by the answers, the number of respondents raising each of the points, and type characteristics (from the letter code) of the respondents raising each point, was the final result of the exercise.

The assigning of the identifying number to each point raised was intrinsically more subjective than any technique used elsewhere in this study.

Consistency of coding was maintained by trying to code as many questionnaires as possible at one session, and each session began by looking through previously coded questionnaires. To end each session several questionnaires were recoded to check consistency.

When interpreting the results of this exercise it must be remembered that the answers which teachers gave to individual questions were similar to a rank ordering. If a certain point was not mentioned by an individual teacher it does not mean that he did not consider that point to be important, but he considered other points to be more important when answering the question.

2. Responses to Question One "What do you like most about teaching?"

The most popular response to this question was (as shown by Table 5.2) "working amongst young people". This was mentioned by more graduates than

TABLE 5.2 RESPONSES TO "WHAT DO YOU LIKE MOST ABOUT TEACHING?"

Response	Number of times mentioned
1. Working amongst young people	85
2. Increasing or gaining personal knowledge	76
3. Imparting knowledge	64
4. School holidays	39
5. Patriotism, developing the country	34
6. The job itself	27
7. Learning about human behaviour	21
8. The challenge of the job	10
9. Independence in the classroom	9
10. Nothing	6
11. Respect given to the position	5

(continued overleaf)

Table 5.2 continued

Response	Number of times mentioned
12. Working with other nationalities	5
13. Job security	4
14. Increases knowledge of own children	2
15. Good housing	2
16. Keeping fit	2
17. Marking	1
18. Discipline	1

other teachers. This could be a result of the fact that non-graduates are more likely to have been trained in an institution solely designed to produce teachers, people who work amongst young people, whilst the graduates were trained at institutions with a much wider purpose and whose students have a variety of aspirations.

The acquiring of knowledge, or keeping up with changes in the subject content of ones field of specialization, was mentioned by more science teachers than teachers of other subjects. The nature of the subject is the probable reason for this, with scientific knowledge increasing rapidly and with relatively short delays before this knowledge is introduced into the classroom.

The imparting of knowledge, the third most frequent response, was given by a greater proportion of Housemaster and Heads of Department than by any other group. This shows that those who have a position of responsibility not only take this aspect of teaching, the imparting of knowledge, seriously, but that they find it rewarding.

The attraction of holidays was most evident amongst female teachers, both married and single, and amongst teachers with no position of

responsibility.

The large number of teachers who gave "serving the Nation" and "the country needs teachers" as the thing they liked most about teaching was biased towards graduates and teachers of arts teachers. It is another indication of the degree of commitment on the part of these teachers to the wellbeing of the Nation. A strong sense of pride in the country and its future development is something which all leaders in Zambia wish to see manifest in the post-Independence era.

3. Responses to Question Two "What do you dislike most about teaching?"

The responses to this question are shown in Table 5.3. Two points should be made regarding the way in which responses to the question were coded. "Conditions of service" is a term which covers a large number of different issues. Salary, housing, loans, leave, method of promotion, discipline, method of communication with employer, are all major items that can be considered part of the conditions of service to which teachers are bound. Teachers who mentioned three or more of these in their response have been coded as giving "conditions of service", while those who mentioned only one or two have been coded in the separate areas.

The questionnaire had been circulated to schools shortly after the Mwanakatwe Commission had been appointed to review the salaries and Conditions of Service for the Civil Service, the Teaching Service and the Zambia Police Force and Defence Forces. The appointment of the Commission had been widely publicised. It could be suggested that when someone is aware that there is a possibility that his salary may be increased he is very likely to express dissatisfaction with his present salary. Knowledge

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that the Commission had been set up may therefore have stimulated some of the dissatisfaction expressed in these responses.

TABLE 5.3 RESPONSES TO "WHAT DO YOU DISLIKE MOST ABOUT TEACHING?"

Response	Number of times mentioned
1. Low pay	77
2. No spare time, endless work	56
3. Lazy and undisciplined pupils	48
4. Conditions of service	27
5. Poor administration	26
6. Housing	23
7. Am teaching the wrong subjects	19
8. Expectations of the public	18
9. Nothing	18
10. Slow rate of promotion	15
11. Preference given to expatriates	14
12. Transfers and postings	12
13. Headmasters	7
14. Other colleagues	7
15. Poor teaching facilities	6
16. Car loan regulations	6
17. Preparation of schemes of work	4
18. Inexperienced Inspectors	2
19. Everything	1
20. The blackboard	1
21. Not allowed to leave school in free periods	1

The response "low pay" was uniformly high from all sections of the responding teachers. It can be suggested with a high degree of certainty that teachers of all types were dissatisfied with their earnings, at the time of administration of the questionnaire. Part of this may be due to the relative inexperience of respondents. For a new teacher unfamiliar with earnings

a salary the first pay slip can come as a surprise. Rent is deducted at source, as are the 12.5 per cent pension contribution and approximately six per cent income tax. The teacher may also have to repay a car loan of about K25 per month, and electricity and water bills of about K10 per month. If an advance of salary has been given this also has to be repaid and the basic salary of K147 per month is quickly reduced to only about K50 which the teacher has to spend as he wishes. To add to his/her difficulties the teacher may have family commitments to those relatives who have helped him/her during the time spent as a student. Such commitments may involve the paying-back of loans or taking over the care of other members of the family. The new teacher is therefore often faced very quickly with the harsh realities of the money economy which he/she had only previously observed from the outside.

New entrants to work in other sectors of the economy, especially the parastatal sector, may not only receive a higher starting salary but may receive other perquisites such as rent-free housing and possibly a car or car allowance. It has already become evident that teachers are well aware of the conditions of service pertaining in other sectors and the style of living of their peers who possess similar qualifications but work in other fields. Dissatisfaction with pay may therefore reflect the teachers feeling about these differences and their lack of understanding as to why they exist.

The response "no spare time, endless work" was given more by practical teachers than other groups. The requirements of the subject are probably the cause of this, practical subjects involving care of equipment and material preparation which can be time-consuming. The total large number of teachers giving this response shows however that

this constitutes a difficulty for many teachers. The relatively short time for which the teachers had been teaching may contribute to this. At the start of his/her career a teacher has to plan each new lesson and does not have the experience of previous years teaching to fall back on. As he/she gains more experience this preparation can become easier.

The feeling that pupils were lazy or indisciplined was mentioned by more science teachers than by other groups. This could be linked to the attitude noted in response to the first question, where science teachers mentioned the acquisition of knowledge as being what they liked most about teaching. Teachers who are very aware of increasing their own knowledge of their subject may question the rate of learning of their pupils, and may blame what appear to be a slow rate on the pupils' lack of effort.

Some comments on the next most frequent response "conditions of service" have already been made. The response was biased towards married teachers, Heads of departments and Housemasters, and teachers of the practical subjects. As was stated earlier this response was attributed to those who mentioned three or more factors which can be considered under the heading "conditions of service". The response must therefore be considered in relation to the other factors mentioned separately. If this group is combined with those giving "low salary" as their response then nearly 40 per cent of teachers said that the thing they disliked most about teaching included the financial remuneration they received.

The final response numerically sufficient for consideration is that of "housing". This was biased in response towards those having no position of responsibility. The policy on housing is fairly well defined. In rural schools housing is provided in the form of medium cost, low

density houses. In urban areas houses are allocated from the pool of government houses available. Houses are allocated from this pool to all civil servants in the town, including teachers, on a mixture of first come, first served, and of priority of individual needs, the seniority of the person concerned, and the types of houses available. Many towns have severe pressure on the housing pool and new applicants may have to spend some time in temporary accommodation, either in a hostel or hotel. Such delays obviously cause some frustration to teachers starting work at a new school.

In the rural areas the teacher is not normally posted to a school unless there is housing available. However a single teacher may be expected to share a house with another single teacher. Some find this difficult, especially if they have commitments to look after other relatives. One situation noted is the case of two bachelors sharing a three-bedroomed house. On the surface it would seem that this should not be a problem. In reality however nine other people live in the house, all relatives of the two bachelors. The young teacher has probably lived with several relatives during his training and now, as a house-occupier, he is duty-bound to reciprocate.

Whilst the situation is by no means unique to teachers it may help explain why the dislike of housing was biased towards teacher with no post of responsibility, a category more likely to contain new teachers setting up their first house.

The list of items which teachers stated they disliked about teaching is quite long but it is interesting to note that over 60 per cent of them had little or nothing to do with the actual job of teaching, they concerned the external pressure to which teachers feel they are subjected.

4. Question Three "Have you ever thought seriously about leaving teaching? If so, Why did you want to leave teaching? What made you decide not to leave teaching?"

Of the total sample 34 per cent said that they had never thought seriously about leaving teaching, 66 per cent said that they had, at some time, thought seriously about leaving.

TABLE 5.4 RESPONSES TO " WHY DID YOU WANT TO LEAVE TEACHING? "

Responses	Number of times mentioned
1. Salary low	98
2. Conditions of service	42
3. Difficult communication with employer	34
4. Housing	31
5. No promotion	22
6. General frustration	18
7. Salary mistake	8
8. Public attitudes	5
9. Preference given to expatriates	5
10. Teaching wrong subjects	4
11. For a change	3
12. Prejudice against non-graduates	2
13. Offered another job.	1

The fact that 66 per cent of responding teachers said that they had thought seriously about leaving teaching must be regarded as of grave importance, especially as the majority of these teachers were only at the start of their careers. The reasons given for these thoughts of leaving again gave salary and conditions of service as major considerations. The method of dealing with the response "conditions of service" is the

same as was used when considering Question Two. This means that salary forms a part of over 50 per cent of the responses. Again it must be recognised that the setting up of the Mwanakatwe Commission may have been a stimulus to teachers to express dissatisfaction with their salary at that time.

The salary was mentioned more by graduates than by other groups. This again may indicate that graduates compare their earnings and conditions with those of people who were their fellow students at the University and later followed other career pathways. The high demand for graduates in all sectors of the economy meant that companies in industry and commerce were often prepared to offer high salaries and excellent conditions of service in order to attract graduates.

The third most frequent response "difficult communications with employer" was mentioned more by married teachers and teachers holding a post of responsibility. The normal channel of communication is that any problem should first be mentioned to the Head of the school. If the Head feels that it is necessary he refers the matter to the region office, which, if necessary, refers the matter to Ministry headquarters. Most matters which affect the conditions of service of a teacher have to be passed through to Ministry headquarters. When writing to the Ministry a letter has to be sent 'under flying seal' through the Head of school and the regional office. At each stage the officer handling the letter may express comments on the issue involved. Replies are subject to the same procedure. Such communication obviously takes some time and it is apparent that teachers do not appreciate the reasons for what appear to them to be delays. Teachers are often not aware that the comments made by the Head and by the regional office can often be vital to the

determination of the best solution, as they often give insights into relevant local factors which should be taken into consideration.

Teachers who have had to deal with the Ministry on a personal problem are more likely to be those who have been teaching for some time and this may explain the bias towards married teachers and those who hold posts of responsibility.

The housing problem has been discussed when considering the responses to Question Three (a). In this question again the problem of housing was mentioned more by male, single teachers than by others.

It is again significant the most of the reasons given by teachers for their thoughts about leaving teaching are not concerned with the job of teaching but are more concerned with the other conditions which apply to their employment. This is especially important in relation to the responses given to the next part of the question "What made you decide not to leave teaching?". Here the major reasons given imply an enjoyment of the work and a commitment to serving the nation through their work.

The most popular response "enjoy teaching" was given more by female teachers, non-graduates, teachers who had taught in primary schools and by teachers of practical subjects. It could be suggested that these groups are those who are less likely to have a high personal ambition for material gain. A female teacher may look on teaching as a career that is likely to fit in with her domestic situation. Teachers who have taught in primary schools may consider their transfer to secondary schools as a form of promotion, and therefore tend to be happier in their work. The bias towards teachers of practical subjects may be a result of the two above-mentioned factors, as the practical subject teacher group includes

a large proportion of female teachers with primary school teaching experience.

The second most frequent response "Hope that conditions improve" may again be a reflection of the fact that a commission had been set up to review salaries and conditions of service, and that teachers were prepared to wait for the findings of this commission.

TABLE 5.5 RESPONSES TO "WHAT MADE YOU DECIDE NOT TO LEAVE TEACHING?"

Response	Number of times mentioned
1. Enjoy teaching	48
2. Hope that conditions improve	28
3. Still on probation	27
4. Nation needs teachers	24
5. Still intend to leave	18
6. Completing course of study	16
7. Fear of losing security	12
8. Difficult to get another job	12
9. Mind not made up yet	10
10. Previous mistake corrected	8
11. Long service in teaching	3
12. Holidays	3
13. Near retirement	1
14. Money not important	1

Perhaps the most depressing response is the third most frequent, "Still on probation". Teachers on probation are bonded to the Government for the first two years and may only leave if they are prepared to repay the money spent on their training. This response effectively indicates that they are only still in teaching because they are not allowed to leave. It may however represent a slightly false picture in that those who are

still in their first two years of teaching may not have considered all the implication inherent in a change of career, which they would have considered if they knew they were free to leave. The response was given mainly by single teachers, graduates, teachers holding no position of responsibility, teachers of practical subjects and teachers who had no primary school teaching experience. That this intention was expressed by young graduates so early in their career could indicate that their training had not given them any strong desire to teach. It is probable that some university students accept education bursaries in order to get a degree, but do not feel any great commitment to teaching. The bias towards practical subject teachers here seems to stem from the male teachers of engineering-based subjects, and could indicate that they are aware of the higher salaries paid to skilled workers in the trades which they are teaching.

The fourth reason given for still being in teaching was that the nation needs teachers. It is again evidence of the strong commitment of the young and qualified Zambians to the development of their country and to its future development.

However it must be noted that in answering this question over 90 of the teachers expressed an attitude which could indicate that they are not personally dedicated to the teaching service and over 30 per cent said that they were prepared to leave it.

5. Question Four "Have you ever applied for a job outside teaching since you started to teach? If YES, in what way was the last job you applied for better than teaching?"

This question was intended to separate those who had simply used Question Three as a method of expressing their discontent from those who

had actually made some concrete attempt to leave the profession. 99 of the responding teachers indicated that they had applied for other jobs. This is 35 per cent of all respondents.

Those who had indicated that they had applied for other jobs were asked in what way these jobs were better than teaching (Table 5.6).

TABLE 5.6 RESPONSES TO "IN WHAT WAY WAS THE LAST JOB YOU APPLIED FOR BETTER THAN TEACHING?"

Response	Number of times mentioned
1. Better salary	55
2. Better conditions of service	25
3. No details given	15
4. Promotion prospects better	14
5. Housing better	12
6. More suited to the job	6
7. Opportunities to travel	3

As may be expected the major reason given for applying for other jobs was that of increased salary. This response was biased towards married teachers, graduates, Heads and Deputy Heads of schools, and teachers with primary school teaching experience. It must be remembered that teachers with primary school teaching experience may still be paid on a lower salary scale than secondary teacher trained personnel. One difficulty in analysing these responses was that there is no indication of the time when the teacher applied for another job. However as the average length of service is so short it can be surmised that the majority had done so fairly recently. The bias towards Head and Deputy Heads may however

represent a time before their promotion and does not necessarily mean that they were trying to leave the service at the time when they answered the question.

The seeking of better conditions of service was the second most numerous response and was given more by male teachers and married teachers, possibly because of the greater personal obligations which they had.

6. Responses to Question Five "Do you think you will still be in teaching in five years time (please give reasons)?"

This question attempted to determine how teachers viewed their prospects. The results obtained are given in Table 6.7^{5.7?}. Just over 50 per cent of teachers said that they would still be in teaching in five years time, 32 per cent said that they would not be in teaching, and the remainder were not sure. Some of the replies were conditional on improvements being made in the conditions of service. If such improvements are made to the satisfaction of the teachers then 60 per cent of the respondents intended to be in teaching in five years time. If they are not made then 47 per cent of the respondents believed that they would have left teaching within five years.

The two definite responses "Yes", and "No", showed no great degree of bias amongst those giving them, and no pattern could be identified showing that any particular type of teacher was more likely to answer either way. Only when considering the respondent group for those expressing uncertainty did any pattern appear. Here there is a bias towards married teachers, teachers holding some post of responsibility, teachers with no primary school teaching experience, and science teachers. As noted

earlier teachers in the first two of these groups disliked the conditions of service and so perhaps the overall picture may be that teachers in these categories enjoy their work and hope for improvements so that they can feel happier in their job.

TABLE 5.7 RESPONSES TO "DO YOU THINK THAT YOU WILL STILL BE IN TEACHING IN FIVE YEARS TIME. PLEASE GIVE REASONS

Response	Number of times mentioned
1. Yes	54
2. No	87
3. Maybe	41
4. Yes, if conditions of service improve	40
5. No, unless conditions of service improve	24
6. Unsure, depends on conditions of service	20
.....	
Reasons given	
1. Like teaching	51
2. Looking for better conditions	31
3. Finishing studies	19
4. Hope to be promoted	11
5. Will have retired	9
6. Frustrated	8
7. Don't know	6
8. Leaving at end of probation	4
9. Will take other job if offered	4
10. Like job security	4
11. Poor communications	2
12. Not in a classroom	2
13. Outside own control	1
14. Want to travel	1

It is suggested that teachers with primary school experience are likely to be more committed to teaching, as noted from the responses to Question Three (b). The fact that teaching appears to give science teachers a great deal of personal satisfaction in the development of their scientific knowledge, as noted in responses to Question One, may account for their feelings of uncertainty in that the generally observed desire for higher salary is balanced against the satisfaction obtained from teaching.

The pattern of those responding by giving the reason "I like teaching" was biased towards female teachers, non-graduates, teachers holding no posts of responsibility, teachers of practical subjects and teachers with primary school teaching experience. This is almost identical with those responding "enjoy teaching" in answer to Question Four, and is probably due to the same considerations.

When looking at the pattern of the next response "Looking for better conditions" the bias is towards male teachers, married teachers, graduates and teachers holding no post of responsibility. Comparing this to the last response listed above it would appear that the female teachers are more prepared to give reasons for remaining in the profession while the male teachers tend to do the opposite.

7. Responses to Question Six "Do you find there are any obstacles that result in you not being able to do your job the way you want to? If so, what are they?"

The responses to this question are given in Table 5.8. Again conditions of service figure highly in the response. Male teachers,

teachers with no positions of responsibility and teachers with no primary school teaching experience tended to express this view more than others. It is disturbing to note that over half the obstacles listed by

TABLE 5.8 RESPONSES TO "DO YOU FIND THAT THERE ARE ANY OBSTACLES THAT RESULT IN YOU NOT BEING ABLE TO DO YOUR JOB THE WAY YOU WANT TO? IF SO WHAT ARE THEY?"

Response	Number of times mentioned
1. Frustration because of conditions of service	78
2. Lack of equipment and teaching aids	68
3. No	66
4. Incompetent superiors (in the school)	60
5. Distrust of teachers by pupils	10
6. Overwork	6
7. Poor discipline	4
8. No promotion	4
9. Teaching wrong subjects	1
10. Insufficient training	1
11. Examination system	1

teachers in response to this question are outside the control of the school, they can only be altered by changes initiated from the Ministry of Education or, in the case of conditions of service, from central Government.

The lack of equipment and teaching aids was mentioned particularly by teachers of practical subjects, female teachers and non-graduates. The profile is then of teachers of homecraft and commercial subjects, both of which require a large amount of material, a shortage of which badly affects the teaching of the subject.

Disagreements between personnel working in the same school cannot be easily rectified except by transferring one of the parties involved. However frustration with a Head of subject is not unusual amongst young newly qualified and enthusiastic teachers and such disagreements need not necessarily be regarded as major.

Despite the above mentioned difficulties which were expressed by teachers, 25 per cent of those teachers who responded said that there were not any obstacles which prevented them doing their job the way that they wanted to. This must be taken as an indication of the degree of contentment that does exist within the teaching service. Also it is possible that some teachers used this question as another opportunity to mention their concern over conditions of service because of the stimulus of the setting up of the commission to look into these.

8. Responses to Question Seven "What advice would you give to the Ministry of Education that would help them to reduce the number of teachers who resign each year and so increase the rate of Zambianization of the teaching force?"

There was a wide range of response to this question the results of which are given as Table 5.9. Not unexpectedly the salary and conditions of service again dominate the responses, over half the teachers indicating that they thought review of some aspect of the conditions of service desirable. This response was uniform through all categories of teachers and again must be interpreted in light of the recent formation of the Mwanakatwe Commission.

TABLE 5.9 RESPONSES TO "WHAT ADVICE WOULD YOU GIVE TO THE MINISTRY OF EDUCATION THAT WOULD HELP THEM TO REDUCE THE NUMBER OF ZAMBIAN TEACHERS WHO RESIGN EACH YEAR ?"

Response	Number of times mentioned
1. Review conditions of service	142
2. Increase pay	105
3. Tackle housing problems	62
4. Sort out teachers problems quickly	18
5. Make loans more available	16
6. Promote on merit only	13
7. Zambianize the profession quickly	13
8. Reduce the probation period	11
9. Post teachers to schools where needed	8
10. Improve living conditions in rural areas	5
11. Recognise all Head of departments	5
12. Encourage further studies	5
13. Get rid of tribalists	3
14. Consult teachers	2
15. Recruit less Asian teachers	2
16. Sort out dead wood	2
17. Review curriculum	2
18. Implement promises and make them practical	2
19. Select trainee teachers better	2

Nine other points were raised in addition to the above, in each case by only one teacher.

The point about increase of salary was also made by all types of teachers, but with a slight bias towards Heads and Deputy Heads. As these senior teachers are the most highly paid group it seems possible that this response was not given from a purely personal desire for more money but as an honest suggestion on how to encourage new teachers to stay within the service.

Tackling the housing problem, the third most frequent piece of advice, was given more by female teachers. Normally female teachers are only entitled to housing if they are single. As mentioned earlier single teachers are expected to share accommodation if living in a house, or may be allocated a flat. Female teachers are therefore only likely to see the poorer side of the housing offered by the Ministry.

Most of the advice offered by the respondents is of a type which could, apparently, be quickly and reasonably easily implemented. However it does not appear that the wider implication of the suggestions are always understood by the teachers. To increase salaries would place a greater burden on the economy. Already salaries of teachers account for about 55 per cent of recurrent expenditure on secondary education. The cost is in the region of K11 000 000 per year. At the same time teaching materials and student consumables account for only about K1 000 000, or five per cent of expenditure. An increase in the salaries of secondary school teachers would hardly be possible without a comparable review of salaries for primary school teachers, the bill for which is currently in the region of K28 000 000 per year. If the Government increased all teacher's salaries by the amount that secondary school teachers indicated that they desired (as discussed in Chapter Three) so that they were comparable with other sectors of the economy, the increase in the wage bill could be an additional K11 000 000 per year, an increase in the total recurrent budget for all education of some 17 per cent.

The implications of a review of all conditions of service are wide. Changes could include, for example, the relaxing of the ruling that teachers visiting the Ministry must have written permission from the regional office. This may however result in more teachers visiting the

Ministry instead of sorting out their problem where they can and should be sorted out, the regional office.

These and many other issues are involved, and the teachers may not fully realize the many implications when stating their relatively simple recommendations. The response "Zambianize the profession more quickly" seems to suggest that some teachers are not fully aware of what is involved.

9. Responses to Question Eight "Do you think that there are sufficient opportunities for promotion within the teaching service? If no, how could more opportunities be created?"

In all 192 teachers thought that there were not sufficient opportunities for promotion within the teaching service. This represents over 70 per cent of the total sample. There were only a limited number of posts within each school which carried a salary allowance for additional responsibility, at the time when the questionnaire was administered. In day schools there were only five such posts, the Head, the Deputy Head, the Head of English, the Head of mathematics, and the Head of science. In boarding schools some additional posts carried a salary allowance, the number being dependent on how boarding duties were organized.

One point which should be made about the allocation of staff to posts carrying a salary allowance is that most posts are not advertised throughout the whole teaching service. A position such as Head of science will be filled by the most suitable teacher within the school, quite often the longest serving member of the department. On rare occasions the Inspectorate arrange for a teacher to be transferred to occupy the position

of Head of Department if they feel that there is no suitable teacher at the school in question.

TABLE 5.10 RESPONSES TO "DO YOU THINK THAT THERE ARE SUFFICIENT OPPORTUNITIES FOR PROMOTION WITHIN THE TEACHING SERVICE? IF NO, HOW COULD MORE OPPORTUNITIES BE CREATED?"

Responses	Number of times mentioned
1. Create more posts	43
2. Zambianize all Headships and Deputy Headships	37
3. Recognise all Head of departments	28
4. Introduce different divisions of teachers	23
5. Promote on merit only	19
6. Offer training in other fields of education	17
7. Don't know how they could be created	14
8. Get rid of dead wood.	14
9. Not possible to create more posts	8
10. Decentralize the administration	6
11. Allow transfers to other Ministries	5
12. Stop tribalism	5
13. Create more posts in school administration	5
14. Hold seminar to sort out whole problem	5
15. Pay more to those who pass examinations	2
16. No promotion for expatriates	2
17. Promote men only	2

Regrettably little advice was offered to explain how to achieve the most popular response "create more posts". However, other suggestions gave more specific ideas. The recognition of all Head of departments was a major suggestion. At the time of the survey a teacher of, for example, geography, could never hold a position of responsibility

in the teaching of his/her own subject. Another suggestion is that different divisions of teachers be created. This would mean promotion to a higher salary scale not as a result of some specific additional responsibility, but as a result of efficiency or the passing of some type of examination. How this could be introduced and fairly administered was not mentioned.

Support for the Minister of Education in his announcement that all Headships and Deputy Headships would be Zambianized within three years was evident from the second most frequent response.

Other views towards the creation of more posts of responsibility are interesting but some would undoubtedly cause difficulties in implementation, for example, who is to decide who is "dead wood"?

10. Responses to Question Nine "What changes in the Inspectorate and the way it works would result in you being able to do your job more efficiently?"

The final question of the section was written as "What changes in the Inspectorate and the way is works would result in you being able to do your job more efficiently?" One strong reaction to the question was the number of teachers who corrected the error!

At the time of distribution of the questionnaire the Inspectorate was reasonably well staffed in that the numbers of Inspectors corresponded closely to the establishment allowed. Two of the Senior Inspectors were handling subjects and consequently nearly all subjects had an Inspector in charge of them. The two exceptions were Religious Knowledge and Zambian Languages.

TABLE 5.11 RESPONSES TO "WHAT CHANGES IN THE INSPECTORATE AND THE WAY IT WORKS WOULD RESULT IN YOU BEING ABLE TO DO YOUR JOB MORE EFFECTIVELY?"

Responses	Number of times mentioned
1. Advise teachers not criticize	66
2. Visit schools more often	63
3. Regionalize the Inspectorate	25
4. Run courses and demonstrations	20
5. Increase size of the Inspectorate	17
6. Only experienced teachers to be members of the Inspectorate	13
7. Help make up deficiencies in teaching materials	10
8. Produce teaching materials	10
9. Zambianize the Inspectorate	9
10. Attend to problems quickly	7
11. Ensure all subjects have Inspectors	5
12. Inspectorate should recommend suitable teachers for promotion	5
13. Inspect Heads as well as teachers	4
14. Abolish the Inspectorate	4
15. Inspectors to handle their own subjects only	4
16. Inspection only by Head of department	3
17. Clear out dead wood	3
18. Improve transport for Inspectors	3
19. Inspectors to wake up	2
20. Stabilize syllabi	2
21. Inspection reports to be shown to teacher	2

Discussion with members of the Inspectorate elucidated several points regarding the difficulties under which Inspectors work. The cost of visiting schools and the travel allowance made available to Inspectors means that it is often not possible for individual Inspectors to make as many visits as they would like. It was estimated that every school

in the country is visited, on average, by a member of the Inspectorate every four years. During the four years, because of the reliance on contract expatriate staff, the teachers in the school may have changed completely.

As the amount of time Inspectors can spend away from Lusaka is limited by financial controls the effort to visit as many schools as possible within a short time means that a very limited period can be spent at each school. The Inspectors may only be in the school for a few hours. This in turn means that the Inspector is only able to watch each teacher in a department for one period. The Inspectorate consider this to be entirely inadequate and unfair to the teachers, especially if the teacher is nervous about being inspected. Only if there is an obvious problem will the Inspector make the time to have a discussion with the teacher afterwards. One Inspector indicated that, whilst he would like to think that through his job he was ensuring an improvement in the standard of instruction in his subject, all he was able to do was make sure that the professional competence of teachers of his subject was not falling.

In view of this it is not surprising that the most common response to the question was that the Inspectorate should advise teachers and not criticize them. Members of the Inspectorate would tend to completely agree with this. The second most common response, that Inspectors should visit schools more often, also meets with the same agreement. It also indicates that teachers may welcome closer contact with the Inspectorate.

The third most frequent response indicated that Inspectors should be based on regional offices rather than on the central headquarters.

The establishing of regional Inspectorate would probably also answer the second point raised by teachers, that of more frequent visits, because of the Inspectors being in a better position to visit the schools. They would also be in a better position to spend longer at the schools. The Ministry of Education has appointed an Inspector to each regional office to look after the interests of secondary schools. These Inspectors do make visits to schools for general consultation with the Heads and are available to assist teachers with any problems which they may have.

The Inspectorate in the Ministry of Education headquarters also encourages teachers who wish to consult them over teaching problems to visit Lusaka and talk to them during the school holidays. Such visits may help minimize the lack of contact caused by the Inspectors' inability to travel widely.

Many other points raised by the teachers were both sensible and practical. Their implementation would however necessitate an increase in the establishment of the Inspectorate and a greatly increased budget.

11. Summary

The analysis of these responses has indicated that, in general terms, teachers are not discontent with the nature of their job, but rather with the conditions of service which apply to them. They know of the better salaries and conditions of service obtained by their former colleagues from school or tertiary-training institution, and this has resulted in a desire for similar remuneration for themselves. In itself this may not be harmful, but if a materialistic approach is allowed to develop unchecked then resignations from the teaching force are inevitable.

There is an apparent lack of understanding by teachers of the way in which the Ministry of Education operates and the factors that officers within the Ministry have to consider. Unfortunately it is doubtful if an explanation of these factors would be easily accepted by teachers, primarily because of the differences between the type of organization represented by the Ministry and that represented by the school. The need to have a file available before initiating action is of importance to a Ministry official who relies on written precedents. It may however seem completely unnecessary to a teacher who is used to operating mainly by verbal means. This difference in approach is due to the necessary nature of the organizations. Because of the different purposes which the two organizations serve it may be that the teachers in schools will always have difficulty in seeing eye to eye with Ministry officials.

The implications are that, with 66 per cent of teachers admitting that they have seriously thought about leaving teaching, and with nearly 50 per cent stating that they do not think they will be in teaching in five years time, the observed attrition rate may continue at its present level unless there is a change in the relationship between conditions of service as they apply to teachers and as they apply to other employment opportunities, and unless there is a change in the relationship between the teachers and the Ministry of Education.

CHAPTER SIX

Conclusions and recommendations about the staffing situation.

As noted, where teacher discontent exists this is rarely with the actual job of teaching, but is based on the relationship with the employer and the terms of the conditions of service which govern teachers' employment. The teachers have indicated strongly that they like the work of teaching, but there are indications that they feel unable to commit themselves fully to the teaching service because of materially based pressures. The standard of living which they experience is not as high as they wish, or as high as they feel they deserve. The knowledge that similarly qualified people in other jobs outside teaching enjoy higher salaries and additional benefits has stimulated this discontent.

There is an element of uncertainty in the teaching service because of the announcement that all Headships and Deputy Headships will be Zambianized in the near future. Any major change of personnel or policy creates an element of uncertainty until the new system is seen to be working effectively. For some teachers the knowledge that they are to

have new, and probably inexperienced, Heads has raised privately expressed fears for the short-term future of their schools. On the whole the change to a Zambian Head is more than welcome, and the move will be popular with pupils. Teachers will however be keeping careful watch on the performance of the new Heads, and though they will give the new Head every support they may also be quick to criticize if the Head makes a mistake.

The Report of the Commission of Inquiry into Salaries, Salary Structures and Conditions of Service of, amongst others, the Teaching Service, was published late in 1975. Chapter eight of the Report deals with the Teaching Service. The opening paragraph of that chapter contains the following:

"It would be hard to exaggerate the importance of the role of the teacher in society or of his contribution to the development effort. The part played by the teacher in society is no less significant because it can not be qualified in terms of monetary gain. It represents the Nation's most direct investment in preparing future generations to take up the challenge of development and Zambia's progress depends on the success of this investment more than on any other cause."

Whilst teachers have not deliberately considered the issue of status, it is suggested that in the immediate post-independence era teachers, both primary and secondary, had considerable status within the community as the future development and prosperity of the country was within their hands. His Excellency Dr K.D.Kaunda was himself a teacher before entry to politics, a fact well known to all citizens of the country.

With the crisis that soon effected the primary school leaver, previously able to gain employment, unable in large numbers to find paid work the prestige accorded to members of the teaching service may have tended to fall.

In rural society the teacher often remains as highest-paid member of the community and respect and status is often accorded to him/her on this basis. In more urbanized areas this is not so. Often other Zambians with higher salaries than teachers are members of the community and so may consequently be accorded a higher status in the minds of the people. If there is known discontent amongst teachers and this becomes publicly apparent then known low morale could contribute to a lowering of status. The long term effect could be a reduction of the quality and quantity of new applicants for teacher training courses.

Specific recommendations accepted by the Government included the Mwanakatwe Commission proposal that salaries be raised. The amount by which the salaries are to be raised being in the region of K500 per year, just over K40 per month. The Commission proposed the payment of a salary allowance for an additional Head of department, that of Zambian Languages. Another proposal was an alteration to the conditions of service so that a pregnant unmarried female teacher should not automatically be dismissed. This proposal was rejected by the Government, but has been referred for consideration to a committee of the Central Committee of the Party, to be chaired by the former Minister of Education, the Hon. W. Nyirenda.

Other general proposals which affect other branches of the public service include a modification of house rents, in general a reduction, and the specification that some types of houses be rented at lower rates than others. The houses in all cases for Zambians to be unfurnished. Provision is to be made, under the Commission's recommendations, for Zambian public sector employees to obtain a loan to purchase furniture for their houses.

Perhaps the most significant point made by the Mwanakatwe Commission

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Perhaps the most significant point made by the Mwanakatwe Commission

was the alteration of the conditions of service within the parastatal sector of the economy. This sector has in the past held a great attraction for teachers thinking of leaving education. The Mwanakatwe Commission modified the conditions of service of the parastatal companies, bringing them more into line with Government service conditions. Two examples of this are firstly the intention to bring salaries offered within the parastatals in line with salaries offered within the public service. Salaries are to be standardized for comparable jobs within both sectors. Many employees within parastatal companies can expect a reduction in salary, in some cases by as much as 50 per cent. To lessen the effect of this the Commission recommended that all employees continue on their present salary for three years before reduction of salary comes into force. The second example is the housing policy of the parastatal companies. Before the findings of the Commission became effective an employee of a parastatal company was given a housing allowance, normally correlated to the salary which he/she received. The employee was offered a variety of accommodation at various rents. If the rent of the property chosen was lower than the housing allowance received the employee would be paid the difference. If the rent was more than the allowance the difference was deducted from salary. Most parastatals offered private medical facilities or membership of various medical aid societies. Other perquisites often included membership fees being paid for sports club members and either a company car or generous car-user allowance. These perquisites have now largely been withdrawn. All parastatal employees now have to pay rent on the same basis as Government employees. The effect of this has been an actual reduction in take-home pay for most parastatal employees.

The net effect has been to reduce the attractiveness of the parastatal companies as alternative employers for teachers. The teachers can no longer see better conditions of service being offered to members of their reference group than are offered to themselves.

This reduction in the attraction of the parastatal companies as an alternative employer for teachers may well have another effect. Stannard noted that there was a desire by some employees working in industry to enter the teaching profession. Applications were received by teacher-training institutions from persons working in the private and parastatal sectors. The change in conditions of service may open the way for such people to more easily enter the service. It may also open the way for teachers who had previously left teaching to return to it, if they now realize that the job satisfaction gained from teaching was important to them and that the salary differentials have now been removed. The industrial experience that such persons had gained would undoubtedly be an asset to them when they returned to teaching. It will be remembered that a 'drop-in' factor was identified when dealing with teacher numbers in Chapter Two. If this rate was increased as a result of encouraging ex-teachers to return to teaching then a reduced attrition rate would result.

The general reaction of teachers to the Mwanakatwe Commission's proposals has, however, not been one of unqualified approval. Whilst the salary increase was welcome the amount of the increase was not as much as teachers felt they deserved. (The Tracer Project findings showed a difference of K100 per month between the salaries of teachers and those of ex-teachers working in other sectors. The amount of the increase was only K40 per month). Some previous anomalies have however been corrected,

for example the fact that teachers received a lower salary on entering teaching than other Government employees with similar qualification and comparable training did on entering their profession. Now all receive the same salaries. Some new anomalies have however been created which may be detrimental to teaching. Such an example is concerned with the teachers trained by the Department of Technical Education and Vocational Training. On employment by the Ministry of Education as secondary school teachers they receive a normal teachers' salary, but if they take up employment in a technical training institution run by the D.T.E.V.T. they receive a higher salary. As the D.T.E.V.T. is responsible for the training of all technical teachers the difference in starting salary could suggest to the trainees that teaching in a secondary school is in some way inferior to teaching in a technical institution, and these teachers may consequently be less prepared to enter secondary schools.

The changes in pattern of renting houses has been generally well received because it has, in effect, reduced the rental of the types of houses most often associated with rural schools, thus increasing still further the take-home pay of teachers in rural areas. The effect of the change to unfurnished accommodation is less immediately obvious. Teachers in rural areas have few opportunities to purchase furniture locally and may be forced to transport it long distances from the major towns. Whilst teachers may be able to take a greater pride in their homes the additional immediate costs involved, especially for newly-qualified teachers setting up their first home, may be viewed with concern. The additional difficulties involved in transfers to other schools will also not be inconsiderable.

The creation of an additional position of responsibility carrying

a salary allowance may go some way to overcoming the reluctance of Zambian teachers to teach Zambian languages, but may have a detrimental effect on the teachers of other major subjects whose Heads of department still do not receive an allowance. Only dedication and self-motivation enable such Heads of departments to accept the additional responsibility and the fact that they are not given official recognition for their efforts may be depressing during times of stress.

No changes have been suggested as to the manner in which the Ministry of Education looks after the welfare of its teachers. No procedural changes are to take place and no improvements are recommended. The only major change which may affect the attrition rate is any reduction in attractiveness of the parastatal companies. It is felt that there may be an initial reduction in the attrition rate, indeed it is not unlikely that the rate dropped prior to the publication of the Mwanakatwe Commission Report, in expectation of improvements, but that the rate may return to a higher level when the full implications of the changes are better known.

An associated factor which may eventually have implications for the attrition rate from the teaching service is the reaction of the expatriate personnel employed in the parastatal companies to the Commission's proposals. Expatriates are employed on a contract basis and their conditions of service will remain the same until their completion of contract. Faced with the choice of whether to accept a new contract to do the same job with less attractive conditions of service many may decide to leave the country rather than continue after the end of their present contracts. Any vacancies so created will, as standard practice, first be offered to suitably qualified Zambians before being advertised abroad. Any internal promotion which this situation produces will create vacancies at lower

points on the scale. These will be available to Zambians with the appropriate basic qualifications. The largest pool of qualified manpower in the country is the teaching service. Thus the reduction of the gap between conditions of service in the Government and parastatal sectors may, in spite of making the parastatals less attractive, still initiate further movements away from the teaching service.

The attraction of the private sector of the economy must also be taken into account. This sector is under constant pressure to Zambianize its staff, a pressure formally exerted through the Zambianization Committee and by means of the controlled allocation of employment permits for expatriate staff. Suitably qualified Zambians are therefore in high demand in this sector and as salaries are not bound to set limits, as they are in other sectors, many private employers are willing to pay as much as is necessary to obtain qualified Zambian personnel. Any increase in the pressure to Zambianize will result in salaries rising still further in order to tempt qualified people away from the Government and parastatal sectors.

The very real need for well qualified Zambians in all sectors of the economy provides the background against which Zambianization of the secondary school teaching force must be set. Priorities set by Government on the targets for Zambianization of various agencies will affect the attraction of teachers to other sectors, as will the rate at which new students are trained for entry into the commercial sectors. Excessive pressure on any type of employer to Zambianize rapidly must eventually affect teachers, who represent the largest pool of trained Zambian manpower.

The future rate of Zambianization of the secondary school teaching force will therefore depend on many factors. The major areas are:

1. The expansion of the secondary school system and the number of teachers required.
2. The dedication of the teachers to their jobs and their enjoyment of their work.
3. The need for Zambian manpower in all other sectors of the economy and the incentives which these sectors are prepared to offer to obtain suitable manpower (in relation to what is being currently offered to teachers).
4. The relationship between the teachers and their employer.
5. The rate at which Zambians are trained to teach.

The production of new teachers has been discussed in the second Chapter. It was noted that there exists an element of reluctance amongst young Zambians to enter teacher training, and that some may enter training to obtain a place on a course rather than because they deeply desire to enter the teaching service. The projected needs for teachers has also been discussed in Chapter Two. The number of teachers required can be calculated accurately for the education system as it presently stands, and little can be done that will significantly alter these needs in the immediate future.

The attitudes of teachers towards their work was examined in Chapters Five and Six. From this it appears that the vast majority of the teachers enjoy their work and are, in the main, dedicated to it. All teachers agreed about the importance of their work to the nation and its further development.

The third and fourth points contain the major reasons for teachers leaving the teaching service, representing both the "push" and the "pull" aspects of the situation. Both aspects can be controlled by the Government if it so desires. The Government can reduce that attrition from teaching by influencing the demand for Zambians with similar educational attainment in the other sectors of the economy. By controlling the pressure to Zambianize in these other sectors it can control the incentives offered to Zambians to leave teaching. It is unlikely that the Government would consider forcing teachers to remain in teaching against their will, but the Zambianization of the teaching force must be controlled as part of an overall Zambianization policy for all sectors and employers. The attraction of other opportunities outside teaching represents the "pull" aspect of the situation.

To lessen any "push" pressure that may exist the Government must consider how to ensure that the relationship between the teachers and the Ministry of Education can be made as close and effective as possible. It must be remembered that Mei (1971) and Elliot (1971) warned the Ministry of the existence of a feeling of alienation between the teachers and Ministry officials, in their papers to the Workshop on Secondary School Teacher Requirements, Training and Recruitment held in 1971. At the same Workshop Gledhill (1971) made recommendations as to how the problem could be overcome:

"It is essential that the Staffing Officer is also a Public Relations Officer. When postings are done it is vitally important to remember teachers are human beings, and if best use is to be made of their professional skills cognisance needs to be taken of their personal problems which may affect their efficiency . . . A discontented teacher will be worthless and the country's investment will be worthless."

The Ministry must appreciate that any degree of alienation between itself and the teachers which it employs results in the teaching force being more likely to seek alternative employment in other, possibly more financially attractive, sectors. The use of the teaching force as a pool of trained manpower on which other sectors can draw does not, in itself, make bad economic sense. The training of teachers is relatively cheap, compared to the training of some types of student, and imparts to school leavers a degree of intellectual maturity which can make them attractive to employers. As expatriate teachers are relatively cheap, compared to expatriate workers in many industrial and commercial concerns, it makes economic sense to encourage first the replacement of the most expensive expatriates. There are, however, more factors than the purely economic ones to take into consideration and the paragraph quoted from the Report of the Mwanakatwe Commission earlier does not appear to support the above view.

If any alienation between the Ministry of Education and the teacher is to be reduced an examination of the way in which policies are administered must be made. This is especially important because of the amount of influence which the Ministry exerts over the lives of teachers outside the classroom as well as within the school. There appear to be no specific policy regarding the attitude which administrative officers should adopt towards teachers. Teachers represent the largest body of highly-trained, well-qualified manpower in the whole country. The attitude of the administrators may however vary from treating them as colleagues with desires and needs similar to their own to treating them as well-paid robots or child-minders. Administrators may become more involved with the rules and regulations which they have to follow than with the problems

which teachers bring to their attention. Such attitudes from the administrators must inevitably build up resentment amongst the intelligent, highly-trained and very socially aware people whose working and living conditions they administer.

One possible explanation of these administrative problems is that the rapid expansion of the secondary school system has outstripped the ability of the Ministry headquarters, as presently organized, to cope with it, by overloading a system initially evolved to administer a much smaller concern. Difficulties of working within such a system may then create stress for the individual administrators.

It is worth noting that Stannard (1971) said:

"Officials of the Ministry of Education are aware of the poor reputation which it has in the schools for efficient or sympathetic personnel management. In fairness, this is a reputation which it does not deserve. Housing shortages, staff transfer, inappropriate postings, shortages of water, equipment and supplies, delays in dealing with correspondence and other inconveniences and apparent injustices are not an indication of indifference. They have been the direct consequences of the huge expansion of the school system (unaccompanied by any corresponding expansion of the Ministry's headquarters establishment), of the shortage of qualified staff for administrative appointments, and of a turnover of staff at headquarters as rapid as that in the schools." pp.70-71

It is perhaps of concern that the same statement still applies six years later, though it is appreciated that the Ministry of Education operates under very difficult conditions.

The recommendations made by Stannard in 1971 are still relevant.

"The time may therefore be ripe, first, for the appointment of an additional personnel officer to serve within the Establishment Section of the Ministry. He should be a Zambian with secondary school teaching experience and capable of exemplifying the Ministry's supportive approach towards teachers. His functions might include: (a) gathering and disseminating accurate information on all matters relevant to the professional and personal satisfactions of teachers in secondary schools, and providing liaison with the principal central and regional officers of the Ministry on the handling of such matters, and (b) supplying secondary school pupils with accurate and relevant careers information concerning the teaching profession..... With regard to the second function, it must be observed that, in the last analysis, the best stimulus to recruitment is a force of proud, confident and contented teachers." Stannard, 1971, p.71

The fact that the Ministry of Education is, in organizational terms, a bureaucracy with a strong role ideology, whilst schools have an organizational ideology more self- of task-orientated, leads to conflict when communication between the two types of organization occurs. The approach which a teacher adopts when handling pupils' problems has to be different from that adopted by the Ministry when handling teachers' problems because of the different relationship between the problem-solver and the organization to which he/she belongs. Unfortunately the teacher occupies a central place in this conflict. He/she probably believes that the type of approach he/she is able to adopt when dealing with pupils' problems should also be applied by the Ministry when dealing with his/her own problems. The teacher knows that if he/she ignores the individual when dealing with pupil's problems he/she will not be able to help the pupils. The Ministry cannot adopt such a role. The Ministry must consider

each teacher as a teacher, not as himself individually, because any action which it takes must act as a precedent for all other teachers with a similar problem. Each problem is therefore considered by the Ministry in this light and not as unique to the individual.

The feeling of de-personalization which the teacher feels as a result of this attitude naturally leads to some degree of alienation between himself and his employer. This must be recognised and a conscious effort made to reduce it. One way in which this might be done is to appoint liaison officers to act as mediators between the Ministry headquarters and the teachers. In the normal course of events the liaison officer need not be called upon if a problem is handled quickly and effectively. However if a teacher feels he/she has been unjustly treated, or that delays are excessive, he could have recourse to the officer as a person to complain to and who can investigate the issue on his behalf. Such a team of officers would do much to remove the rather impersonal facade of the Ministry and would give the teachers a more personal way in which to communicate with their employer.

The major conclusion of this study must therefore be that while the teaching service remains less attractive to work in than other sectors of the economy, and while the secondary school teaching force thus acts as a pool of educated labour on which the other sectors can draw, the rate of attrition from the force will remain high. The needs of the commercial sector, the rate at which people are being trained to fill these needs, and the pressures being brought to bear on companies to Zambianize their staff, are largely beyond the scope of this survey. Linked as they are to the growth of the economy it is difficult to fortell

when their demands will cease to be a serious attraction to members of the secondary school teaching force.

If the Ministry of Education is successful in reducing the feeling of alienation which exists between itself and the teachers it employs, the effect on the attrition rate should be substantial. It must be remembered that unless the rate of attrition is reduced to a maximum of 14 per cent the number of Zambian secondary school teachers will never exceed 3 500, i.e. the total number of teachers estimated to be required in the year 1981. The tables in Chapter Two show how different rates of attrition would affect the numbers of Zambian teachers in schools in 1981. If the rate of attrition could be reduced to five per cent an extra 1 200 Zambian teachers could be expected to be teaching in 1981, over those expected in projections made using the present actual attrition rate.

The date at which the complete Zambianization of the secondary school teaching force will occur, the initial objective of this study, depends entirely on changes being made to those factors identified as affecting the attrition rate. If no changes are made complete Zambianization is not foreseeable. If strong efforts are made to reduce both the "push" and the "pull" factors identified and discussed in this Chapter, then complete Zambianization of the secondary school teaching force can be anticipated within ten years.

Bibliography

Alnes, J.M.; Howie, W.C.; and Whitely, K. 1971. Recommendations of Selection of Students for higher institutions. In Workshop on Secondary School Teacher Requirements, Training and Recruitment. Lusaka: Ministry of Education.

Coombe, T. 1967. The origins of secondary education in Zambia. African Social Research, Nos 3, 4 and 5. Institute of Social Research. Lusaka: University of Zambia.

Correa, H. 1969. Quantitative methods of educational planning. Scranton: Intext.

Curle, A. 1963. Educational strategy for developing societies. London: Tavistock Publications.

Davies, D.H. (ed.). 1971. Zambia in Maps. London: U.L.P.

Government of the Republic of Zambia.

1966. First National Development Plan, 1966-1970. Lusaka: Office of National Development and Planning.

1969. Zambian Manpower. Lusaka: Office of the Vice-President.

1971. Second National Development Plan, January 1972 - December 1971.

1975. Zambia 1964 - 1974. Lusaka: Zambia Information Services.

1976. Education for Development: Draft statement on educational reforms. Lusaka: Ministry of Education.

— Educational Statistics. Lusaka: Development and Planning Unit, Ministry of Education. (Annual statistics).

— Annual Reports, Ministry of Education. Lusaka. (various).

Gledhill, M.B. 1971. Problems of staffing secondary schools. In Workshop on Secondary School Teacher Requirements, Training and Recruitment. Lusaka: Ministry of Education.

Guilford, J.P. 1965. Fundamental statistics in psychology and education. New York: McGraw-Hill.

Harbison, F. 1967. Educational planning and human resource development. Fundamentals of educational planning No. 3. Paris: Unesco.

Mei, J.S. 1971. What might be done to improve the retention of Zambian and expatriate secondary school teachers. In Workshop on Secondary School Teacher Requirements, Training and Recruitment. Lusaka: Ministry of Education.

Mwanakatwe, J.M. 1968. The growth of education in Zambia since Independence. Lusaka: O.U.P.

Olivero, J.L.; and Buffie, E.C. 1970. Educational manpower, from aids to differentiated staff patterns. London: Indiana University Press.

Platt, W.J. 1970. Research for educational planning: notes on emergent needs. Paris: Unesco.

Sanyal, B.C.; Case, J.H.; Dow, P.S.; and Jackman, M.E. 1976. Higher education and the labour market in Zambia. Paris: Unesco/University of Zambia.

Schein, E.H. 1965. Organizational psychology. New Jersey: Prentice-Hall.

Stannard, D.P. 1970. Report of the Supply of Secondary Level Teachers in English-Speaking Africa - Zambia. Michigan State University and Institute of Education, University of Zambia.

Thomson, J.B. 1971. Secondary teacher requirements by year, by subject, and by level. In Workshop on Secondary school teacher requirements, training and recruitment. Lusaka: Ministry of Education.

Wood, P.J. 1975. Patterns of job selection and career guidance, a study of Form V leavers in Zambia. Unpublished M.Ed., dissertation. Lusaka: University of Zambia.

Stannard 1971.

REQUIREMENTS FOR EXPATRIATE TEACHERS IN GOVERNMENT AND AIDED SECONDARY SCHOOLS, 1972-76

	1971	1972	1973	1974	1975	1976
1. Total teachers required at 1st January	2456	2743	2831	3079	3285	3453
2. Total Zambians in previous year (previous year's 6)		233	340	511	769	1183
3. Less attrition in year at 10 per cent.		23	34	51	77	118
4. Zambian stock at 1st January (2-3)		210	306	460	692	1065
5. Input of Zambians from training programmes		130	205	309	491	535
6. Zambians in system at 1st January (4+5)	233	340	511	769	1183	1600
7. Total expatriates required at 1st January (1-6)	2026	2403	2320	2310	2102	1853
Col. 7 as % of Col. 1		87.6	81.9	75.0	64.0	53.6
8. Total expatriates in previous year (previous year's 7)		2026	2403	2320	2310	2102
9. Less attrition in year at 25 per cent		506	601	580	577	525
10. Expatriate stock at 1st January (8-9)		1520	1802	1740	1733	1577
11. Total new expatriate recruits required (7-10)		883	518	570	369	276

Sources:

1971 figures: Actual figures: 'Secondary School Staff by Subjects - Government and Aided Schools - 1971', Development and Planning Unit, Ministry of Education, April 1971 (Workshop Paper C.1). (See notes)

sources (cont.)

Line 1, 1972-6: 'Estimated Secondary Staff Requirements: 1972-6: All Schools, Government and Aided', Development and Planning Unit, Ministry of Education, April 1971 (Workshop Paper A.1) (See notes)

Line 5, 1972-6: See Appendix I.

NOTES

1. 1971 figures: Notes in source: '(i) In a few cases 1970 staff returns were used. (ii) All Heads and Deputy Heads were included only in the final total except 4.' 1971 figures for 1972 in lines 2 and 8.
2. Line 1, 1972-6: Important assumptions were made in the source concerning the building schedule and teacher loads.
3. Line 11, 1972-73: The figures include output from University of Zambia P.C.E. course.
4. Line 11, 1973-76: The figure for any one year assumes that the previous year's requirement for expatriate teachers was met.
5. It should be noted that this table excludes teacher requirements at the secondary level in other institutions than government and aided secondary schools, e.g. Commission for Technical Education, Ministry of Rural Development, primary teacher training colleges.
6. In general, the assumptions behind the figures in lines 3, 5 and 9 appear to be optimistic.

Copied from Stannard (1971) Requirements for expatriate teachers in government and aided secondary schools, 1972 - 76.

David Kaunda S.T.S.,
P.O.Box RW 133,
Ridgeway,
LUSAKA

8th May 1974

Dear Teacher,

I would be grateful if you would spare some of your time to complete the attached questionnaire.

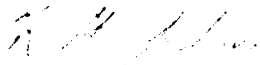
The questionnaire, which forms part of a thesis I am writing for the University of Zambia on the rate of Zambianization of the Secondary School Teaching Force, is designed to find out some of the problems and difficulties, and some of the aspirations, of Zambian teachers. Please feel free to write what you wish and if you find there is insufficient space on the sheets add extra sheets if you want to.

I assure you that your answers will be treated in the strictest confidence and only the collective results will be made known. If you prefer to remain anonymous then omit your name.

Please return the completed questionnaire as soon as possible to me by using the envelope provided. All you need do is put the school stamp on the outside.

Thank you for your help,

Yours sincerely,



R. H. Jackman

David Kaunda S.T.S.,
P.O.Box RW 133,
Ridgeway,
LUSAKA.

8th May 1974

Dear Headmaster,

I would be grateful if you would assist me by distributing the enclosed questionnaires to all Zambian members of the teaching force in your school.

The questionnaire forms a part of a thesis on the rate of Zambianization of the Secondary School Teaching Staff which I am wrriing as part of my Masters' Degree course for the University of Zambia.

Permission to send the questionnaire to all schools has been granted by the Permanent Secretary.

The answers to the questionnaire will be treated in the strictest confidence and individual answers will not be made available to anyone else, only the collective findings will be made known.

It would be greatly appreciated if you would encourage your staff to complete the questionnaire and then return it directly to me.

Thanking you for your help,

Yours sincerely,

R. H. Jackman

ME/72/12/6 CONF.

MINISTRY OF EDUCATION,
P. O. BOX RW. 95,
LUSAKA.

8th May, 1974

To: ALL CHIEF EDUCATION OFFICERS,
ALL HEADS OF SECONDARY SCHOOLS

M. ED THESIS - R. H. JACKMAN

Mr. R. H. Jackman is, at present, a part-time post-graduate student of the University of Zambia and has sought and has been granted permission to carry out a survey of the rate of Zambianization of the secondary school teaching force.

2. As a part of his thesis, a questionnaire has been designed to help identify some of the factors that may be causing disquiet to Zambian teachers. Specific approval to send the questionnaire to all Zambian secondary school teachers and heads has been granted by the Permanent Secretary.

3. You are requested to assist Mr. Jackman by distributing the questionnaire to all Zambian members of the teaching service in your school.

4. Individual responses will be treated in the strictest confidence by Mr. Jackman and no personal information will be released to the Ministry.

5. The Ministry is keenly awaiting his findings and hopes that his thesis will indicate the measures Government should take so that the ideal of a completely Zambian teaching force in our secondary schools will become a reality.

Trevor Coombe

Trevor Coombe
for/PERMANENT SECRETARY,
MINISTRY OF EDUCATION

PLEASE ANSWER
ALL SECTIONS

SECTION I

Name..... Age..... Sex.....

District of birth..... Marital status..... Number of children.....

	Qualification	Obtained from	Date
Academic
Teaching

Have you ever taught in a primary school?

If YES how long did you teach there?

How long have you been a Secondary School Teacher?.....

How many Secondary Schools have you taught in?

What subjects were you
trained to teach?What subjects are you
presently teaching?What subjects do you enjoy
teaching most?When was the last time a member of the
inspectorate examined your work?Term 19.....What positions of responsibility
do you hold at present?What is your present monthly salary
(before deductions)? . . . K.....:.....nIf you were not a teacher what
salary do you think you would
be earning? K.....:.....n

SECTION II

This section contains a number of statements. If you think that the statement is true and that you completely agree with it, put a tick under the column labelled YES. If you think that the statement has some truth in it and you tend to agree with it put a tick under MAYBE. If you have no opinion on the issue put your tick under NEUTRAL. If you think that the statement is completely untrue and you strongly disagree with it, put your tick under NO. If you think the statement is slightly wrong and you tend to disagree with it, put your tick under MAYBE NOT.

YES MAYBE NEUTRAL MAYBE NOT NO

1. Teaching is a challenging job.
2. Going into a classroom to teach is enjoyable
3. I hate the start of a new term.
4. Teaching is monotonous work.
5. My pupils are not interested in what I teach them.
6. The Ministry of Education is efficient.
7. The Ministry of Education is interested in teachers problems.
8. Teachers should be consulted before they are transferred.....
9. Teachers should be transferred to schools of their own choosing.
10. The housing I get as a teacher is good.
11. I am respected because I am a teacher.
12. People with my qualifications get better jobs outside teaching.
13. Teachers are underpaid.
14. The Government cannot afford to pay teachers more

YES	MAYBE	NEUTRAL	MAYBE NOT	NO
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- 15.Bad results by pupils in examinations are the result of bad teaching.
- 16.The probation period for new teachers is too long.
- 17.Teachers are vital to the development of the nation.
- 18.Inspectors always try to help teachers.
- 19.Schools should be inspected more often.
- 20.There should be no inspectors.

SECTION III

In this section please write down anything that you think is of importance.

- 1. What do you like most about teaching?
- 2. What do you dislike most about teaching?
- 3. Have you ever thought seriously about leaving teaching?
If YES. (a) Why did you want to leave teaching?

(b) What made you decide not to leave teaching?

4. Have you ever applied for a job outside teaching since you started to teach?

If YES In what way was the last job you applied for better than teaching?

5. Do you think you will still be in teaching in five years time (please give reasons for your answer)?

6. Do you find that there are any obstacles that result in you not being able to do your job the way you want to? If so what are they?

7. What advice would you give to the Ministry of Education that would help them to reduce the number of Zambian teachers who resign each year and so increase the rate of Zambianization of the teaching force?

8. Do you think that there are sufficient opportunities for promotion within the teaching service?

If NO How could more opportunities be created?

9. What changes in the inspectorate and the way it works would result in you being able to do your job more efficiently?