UNIVERSITY OF ZAMBIA

PATTERNS OF JOB SELECTION AND CAREER GUIDANCE:

A STUDY OF FORM V. LEAVERS IN ZAMBIA.

ΒY

P.J. WOOD

Submitted as part of the Master of Education degree of the University of Zambia.

To Leonie for all her help.

LIST OF TABLES.

PAGE 25	I	Teaching Load of Teachers Involved in Careers Work.
PAGE 28	II IIa	Analysis of Response of Careers Masters to Questionnaire. 'What Help do you Expect to Receive from the Ministry of Education Do you receive this help?'
PAGE 40	ΙΙb	What help do you expect to receive from the Central Agency (The EOAS of the Ministry of Labour)? Do you receive this help?
PAGE 43	IIc	*Is there any information on the Careers Preference Form which you would delete as unnecessary? If YES, please state.
PAGE 43	IId	'Is there any information which you think should be added to the Careers Preference Form? If YES, please state'.
PAGE 45	IIe	'If you think the Education Occupational Assessment Service, which sends out Careers Preference Forms, could be more effective, please state briefly how!.
PAGE 62	III	A Comparison of Claims made by Firms concerning Careers Literature and Careers Masters Assessment of these Claims.
	IV	A Comparison between the Priorities Careers Masters feel they have to give to Four Different Aspects of Careers Work and the Priorities they would like to give.
PAGE 74a	IVa	Advising Individual Pupils on What Careers They Should Follow.
PAGE 74b	IVb	Passing on Information to the Central Agency (filling in preference forms).
PAGE 74b	IVc	Giving Information to Prospective Employers or Future Training Institutions, e.g., writing references.
PAGE 75	IVd	Giving Information to Pupils in a Group. This includes visits and outside speakers.
PAGE 91	V	Rating of Popularity of Job Openings for 1971 Form V Leavers.
PAGE 92	VI	Comparison of Zambian Form V Leavers' Choice 1971 and Prestige Ratings of Ghanaian Students 1965.
	VII	A Comparison between Choice of Industry or Occupation and Education of Parents.
PAGE 95	VIIa	Education of Father v Choice of Industry of Form V Leaver.

PAGE 9	96		Education of Mother v Choice of Industry
PAGE	96	VIIc I	Education of Father v Choice of Occupation of Form V Leaver.
PAGE	97	VIId :	Education of Mother v Choice of Occupation of Form V Leaver.
		VIII	A Comparison of the Popularity of Career Choices for All Form V Leavers for 1971 and a Sample Group for 1972.
PAGE :	103	VIIIa	1971 Form V Leavers v the Total Sample Group.
PAGE :			1971 Form V Leavers w Lusaka Members of the Sample Group.
PAGE :	104	VIIIc	1971 Form V Leavers v Rural Members of the Sample Group.
PAGE	106	VIIId	1971 Form V Leavers v Copperbelt Members of the Sample Group.
PAGE (109	IX	Results of a Test on Knowledge of Jobs Chosen. A Comparison between Pupils with Parents from Urban or Rural Backgrounds.
PAGE :	111	X	Regional Difference in Career Choice by Industry.
PAGE :	117	IX	Comparisons between Career Choice and Employment taken.
PAGE 1	117	XIa	Comparison by Industry for a Sample of 1971 Form V Leavers.
PAGE :	118	XIb	Comparison by Occupation for a Sample of 1971 Form V Leavers.
PAGE :	119	XII	Jobs Taken by a Sample of 1971 Form V Leavers (expressed as a Percentage of the Total Group).
PAGE	121	XIII	A Comparison between the Proportion of Form V Leavers choosing a Particular Job and the Proportion of a Sample of the Same Group Found in these Openings Twelve Months after leaving School.

CONTENTS

<u>Page</u>				
1	INTRODUCTION			
18	SECTION I			
	Career guidance in the School - its Status and the			
	Infrastructure Appertaining to this Work.			
19	<pre>Chapter I - The Careers Master and the Ministry</pre>			
37	<u>Chapter II</u> - The Careers Master and the Ministry of Labour.			
49	Chapter III - Career Guidance and its Relation to Tertiary Education and Industry.			
72	Chapter IV - Priorities in Career Guidance.			
81	SECTION II			
	The Pattern of Career Choice.			
85	Chapter V - Factors Affecting Career Choice.			
116	Chapter VI - A Comparison of Patterns of Choice and Subsequent Employment or Education.			
130	CONCLUSION			
140	APPENDICES			

160 BIBLIOGRAPHY AND SOURCES

ABSTRACT

INTRODUCTION

The question is raised as to whether a Form V qualification is any longer a guarantee of entry into elitist society or whether, as has been the case with the Grade VII, supply is outstripping demand. The last few years have seen a large increase in the number of Form V leavers. An account is given of the changes in supply of Form V leavers and the system which deals with careers advice and the placement of Form V leavers. Some of the problems arising from these changes are discussed and mention is made of the methods chosen for discussing these in the main body of the dissertation.

SECTION I.

This section is based mainly on data obtained from a questionnaire sent to Careers Masters, and from interviews with a sample of personnel officers from industry and their equivalents in institutions of tertiary education.

Chapter I.

This chapter is concerned with the relationship between the Careers Masters and the Ministry of Education. The following is invloved:-

- 1. Main characteristics of Careers Masters.
- 2. The extent to which Careers Masters are aware of the changes which have taken place in the system controlling careers guidance and the part the Ministry of Education plays in this.
- 3. The extent to which Careers Masters are satisfied with the service they receive from the Ministry of Education.

Chapters II and III

Similarly, as in the previous chapter, but now in relation to the Ministry of Labour, this part discusses whether Careers Masters are aware of what service they should expect from this Ministry and whether they are satisfied with it. The Ministry

of Labour is a central clearing house collecting information from the school on individual Form V leavers and passing this on to industry and institutions of tertiary education. An attempt was made to ascertain how far Careers Masters thought it desirable that this should obviate any direct contact between them and industry and tertiary education, and how far this was in fact the case.

A comparison was made between those institutions using the Central Agency and the validation of these procedures.

Chapter IV.

A comparison is made between what the Careers Masters consider their priorities and what they believe they are forced to spend most of their time on. There is some discussion on the extent to which recent changes have been helpful for the Careers Masters.

SECTION II.

This section is concerned with the pattern of career choice and how it compares with eventual employment. The main source of data was from the University of Zambia TRACER Project, the First and Second National Development Plans and a questionnaire sent to a sample of Form V leavers.

Chapter V.

There is an analysis of some of the sociological factors which might affect career choice. They were the prestige of various jobs (here was discussed how far ideas, in other countries, of what was prestigious affected Zambians), the education of the parents and the extent to which the Form V leaver had an urban or rural background.

Chapter VI.

The expectations of Form V leavers were compared with their eventual employment and the openings available for them. The extent to which these did not relate was discussed.

Projections were made as to future supply and demand for Form V leavers.

In concluding, the dissertation returns to the original question as to what the proper expectations of the present day Form V leaver were. Certain recommendations were made concerning the systems responsible for career guidance, training and employment of Form V leavers.

Not surprisingly, Zambia reflects many of the general characteristics of the development of education in Africa South of the Sahara. Both Coombe and Mwanakatwe have drawn attention to the fact that education in Zambia developed from missionary effort. Even in the 30's, Latham, the officer in charge of African Education at that time, was presented with a system in which sub-standard schools had grown up as a result of competition between the various missionary societies and the first necessity was, even at this late stage, to aim for a reasonable number of schools which could meet the most basic standards. Coombe has shown that behind this lack of development lay the resistance of the settler and his fears of an educated African elite liable to compete for job openings. A settler community tends to retard the development of African education and it was not until the 1940's that secondary education up to Form II level was introduced.

In these circumstances, those who had received full primary education or even an education up to Grade IV found the lower echelons of Western type of employment open to them; such jobs as messenger or very simple clerical work. A very few years of education opened the way to the lowest rungs of a European elitist society and the original distaste for missionary education was replaced by an attitude which valued education for its economic advantages. At first very few passed beyond the level

Coombe "The Origins of Secondary Education in Zambia 1968"
 p. 445-453

^{2.} Ibid p. 54-56

^{3.} Ibid p. 148-156

of elementary schooling for the reasons mentioned above but those who did formed an African elite. With the coming of independence, in every African country, education was highly valued because independence had been gained by this elite which had been able, because of education, to force the colonisers to come to terms. Education was the key to economic advance, both for the individual who had adopted the elitist ideas of the colonisers and saw education as the way into this elite and for the country as a whole in which the only possible way for zambianisation to take place was through the provision of more trained personnel.

That the path to elitism is no longer open to the primary school leaver is so well known that it needs no further discussion. The drift to towns and consequent unemployment of the majority of these primary school leavers is a general characteristic of all African countries. At Independence, in Zambia, there was a very laudable desire to provide everyone with primary education. It was not fully realized then that it did not provide the economic opportunities that it had previously but, even when this was realized, those who governed the country realized the importance of eradicating illiteracy, reacted against the boundaries which had been set for education by the European settlers and found it difficult to resist the rising expectations of their people.

However, in a country with a large expatriate population secondary education at Independence seemed to have no such limits

has been saturated; at this stage it is sufficient comment to point out the following:-

- (a) The numbers have increased so rapidly that the government has not continued its expansion of secondary education at the same rate and has re-organized secondary education so that a smaller proportion of those who enter secondary school go on to Form V level.
- (b) Even if the number of Form Vs produced was not in excess of job requirements, the situation is radically changed and there is no longer the scarcity typical of the period before 1969.

Such a large expansion of numbers inevitably brought about a change in the system which had been set up for placing Form V leavers in employment. Before 1969, the government felt that it was appropriate that those who had been given the privilege of Form V education and who were on a seller's market, should be directed to those openings which the government thought should be zambianized first. Under this system set up in 1965 and run by the Directorate of Civil Service Training every Form V leaver gave his or her career preference and with this in mind was directed to one of a limited number of openings. This placing of students was completed in two stages. When the student left school in December, he was given a temporary job and, when his results came out in the following March, he was moved if unsuitably placed. $^{\mathbf{F}}$ irst priority was granted to the University but, after this, the quota system worked so as to give preference to the government followed by the mines, the railways and the banks.

Figures are not available for every year of the Directorates work but those for 1968 indicate the levels of the different priorities:-

University Central Government Local Government Barclays Bank Zambia Railways R.S.T. (Mines) Standard Bank	420 300 90 80 120 100
Zambia Airways Anglo/American(Mines) Other Private sectors	40 200 400
	1,840

This year is not typical and the extent to which the mines and the government were given priority and other industries excluded was greater in previous years. In 1967 about 1,000 Form V leavers went into government and 300 into the mines, leaving less than 200 for all other sectors. A feature of the 1968 list is that it was beginning to include a far larger number of industries.

This was without doubt a system of direction. Although the preferences of the Form V leavers were respected, the priorities were established first, quotas given to various fields and the leavers placed in such a way as to fit these quotas. Demand for Form V leavers, during this period, was high and, by law, they had to remain for one year in the job which had been given them. Although enforcement was difficult, about 75% did remain and, of the 25%, many had been referred back by their employers as unsuitable and most of these remained in their second placement.

One of the most obvious results of the work of the Directorate

was the early zambianisation of government as compared to private industry. Up to 1968 the government gave itself the largest priority and seemed more concerned with political control rather than zambianisation of the economy. Since then the emphasis has changed.

Before 1969 the Form V leaver was a scarce commodity to be rationed out on a quota system; after 1969 this ceased to be so true and the very large increase in numbers made it impossible for the Directorate to cope and fulfill its obligation to find a job for every Form V leaver. It was in this year that the Directorate gave notice that it would no longer be carrying out this function and Form V leavers would find their own employment. I arrived in Zambia in the same year and remember the effect this decision had on the Form Vs. They realized that they were not as scarce a commodity as they had been in the past. There was a panic in which they fancied that unemployment faced them. The notice they were given in that year was short and they found it difficult to adjust to the idea that they had to go out and look for work.

This change made the life of the Careers Master more difficult. Most schools started producing Form Vs. just when the stability of direction was being replaced by the chaos of free choice. Their students, if they had any feeling as to what had gone before, did not accept easily the idea of not being given a job. Demand for Form V leavers was widening but those firms who had previously worked through the Directorate had to establish new channels of communication and those who were only starting to recruit Form Vs.

were, if anything, in a worse position. To complicate matters even more the system of higher education was being re-organized at the same time and the Commission for Technical Education and Vocational Training were being established. In theory, this body was responsible for all higher education but, during these years, this was not strictly true.

It needs little imagination to envisage what happened. Students in a panic and not used to seeking jobs applied for everything. Headmasters often had to write references for the same student twenty times or more. The Careers Master seemed to be receiving very little in the way of information and found it difficult to help his students discriminate.

It was during this period that the Directorate of Civil Service Training divested itself of its powers.

Soon after this happened the chaos I have mentioned above became evident. For example, institutes of higher education were accepting the same Form V leavers for their courses and finding themselves with insufficient numbers when their term started. At the same time, other pupils equally qualified were rinding it difficult to find any opening. Those concerned with this began to hold a series of meetings in order to try to bring about some kind of order. One of the most important of these meetings was that on April 16th, 1971. This meeting was still trying to deal with too wide a field covering Grade sevens, Form IIIs, Form Vs. and University Graduates. However, from it a definite progression towards the present system can be seen.

Those present did not think that there would be any excess of Form Vs until 1980 and were trying to institute a system to work during the seventies.

They decided to set up a clearing house which would collect information from employers on the job opportunities that existed, and give information to employers on any student who had applied for a job. There was a struggle between the Ministry of Labour and the Ministry of Development & Manpower as to who should run the agency. The Ministry of Development & Manpower argued that it was its proper concern. The Ministry of Labour argued that it already had the machinery to start this kind of work. This Ministry had already run for several years the Educational and Occupational Assessment Service (E.O.A.S.). Its function was to test for both the public and private sector and from 1966, when it had been established, its work had been increasing.

The numbers tested were :-

1966	-	2,154	1970	_	12,799
1967		3 , 239	1971	_	20,356
1968	****	9,830	1972	_	22,000
1969	_	9.830			

The E.O.A.S. was faced with the same problem as everyone else in that several firms tended to send the same applicant to be tested by them. The applicant might therefore take the same test several times, which would tend to invalidate the result. If this new agency was not to have the power of direction, as became evident, but was to act with the more limited powers of acting as a go-between the Form Vs. and the employers, the E.O.A.S. already

provided the rudiments of such a system. A central agency which set one test for all students at the same time seemed to help the schools, the E.O.A.S. and the employer. This limited improvement seemed workable but, at this stage, a wider one involving a detailed knowledge of all job opportunities did This weighted the decision towards the E.O.A.S. and the Ministry of Labour and against a Ministry which was concerned more with overall planning. However, even at this stage, this meeting still emphasized that it should be the responsibility of this central agency to collect information from employers on the job opportunities that existed. Finally, a working sub-committee was set up to work out the details of this new agency. It met on the 27th April, 1971, only ten days later and finally decided to place the new agency within the Ministry of Labour. It was envisaged that this agency would feed the schools information on job opportunities and get from them Mock Cambridge results (the examination taken at the end of Form V is the Cambridge Overseas Schools Certificate, COSC), career choice, results of a test showing general potential and the employment taken by the student. Events moved very quickly. By July, the government had accepted the idea in principle but even before this in June plans had been embarked on to gather information on the 1971 school leavers. With the co-operation of the mines, the Ministry of Education and the Commission for Technical Education & Vocational Training, the Ministry Labour was able to send out to all the schools a general ability test (this test is known as the Zambia Advanced General Ability Test and will be subsequently referred to as ZAGAT). By August,

the four main aims of the central agency had been formulated.

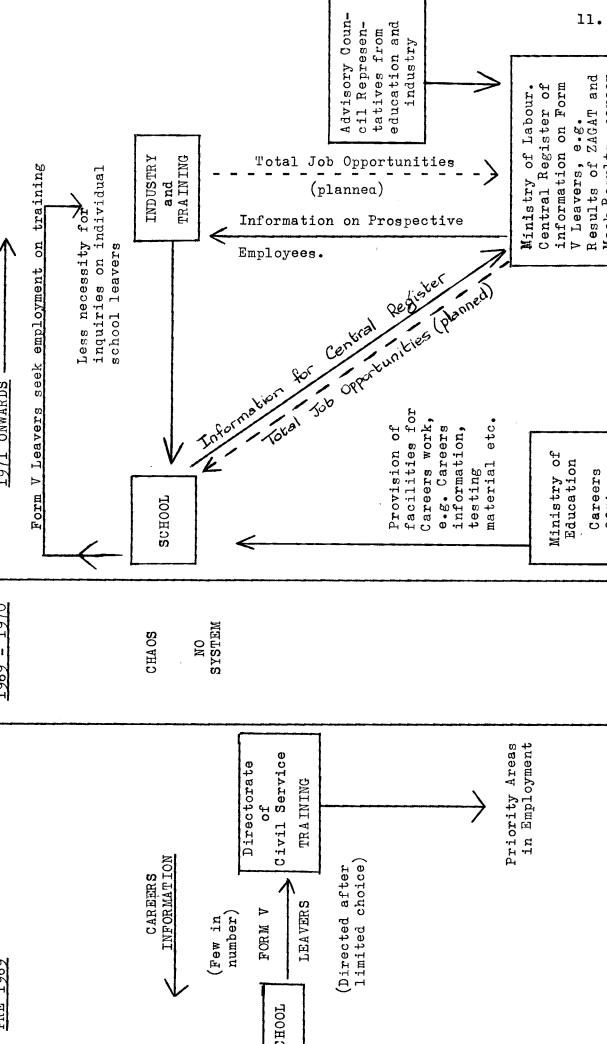
They were :-

- 1. To set up a comprehensive record of Form V students.
- To set up a comprehensive record of all the jobs available.
- 3. To make use of both records
- 4. To help individual Form V leavers.

Finally, in December 1971, the Cabinet agreed to the setting up of the agency. It limited its work to Form V leavers and above, but added that nothing should be done in relation to graduate leavers unless the University failed to provide its own system. The agency set first priority on achieving one above and to date has not managed to embark on two. It has not considered four as suitable to its general purpose.

The Cabinet also instituted an advisory council which consisted of representatives from various employers, the University other institutes of higher education, and representatives from the Ministry of Education and the Ministry of Labour. This advisory council tends to meet once every four months and has concerned itself with such matters as the validity of Mock Results and tests, publicity of the service and other matters of administration.

The service was well publicised from the start and as early as 1971 there was a release to employers explaining what it offered. In January 1972 the Federation of Employers sent a circular to all its members. It emphasised that this clearing house was not an employment agency in the normal sense. Firms were still obliged to advertise for their own employees but could receive from the Central Agency information on these employees. The circular made



it clear that Form V leavers would not be consulting the Central Agency as individuals.

It was recognised that a new situation existed in which the Form V leavers now had to make a more positive choice as to what their future career was to be. The scope of job opportunities had widened and direction had disappeared. Vocational counselling became much more important and with it the task of the Careers Master more significant. The Ministry of Education appointed a Careers Officer. His responsibilities were to advise and help the Careers Masters and provide them with all the facilities they needed. He was responsible for careers work within the schools and therefore was required to supply them with careers literature, facilities for testing within the school and to make sure that training facilities were available for the Careers Masters. 1969, the Careers Masters had been forced to endure a period of chaos and when this new Careers Officer called two conferences in August and September of 1972 (one in Lusaka and the other in the Copperbelt), the frustrations of the Careers Masters came to the surface. They welcomed the services of the Central Agency but were already aware of the need for some testing material for use within the school. Resolutions were passed asking for "ZAGAT tests" for Form IIIs or that such tests could be used within the school for Form IVs . They wanted the service to be better advertised so that more use of it would be made by employers. They did not feel that any practical recognition had been given to their work by the Ministry of Education and both conferences asked for lighter teachin

loads, periods set aside for careers work and a guide-line for

Career Masters. The Careers Masters were well aware of their needs and, although their demands could not be satisfied immediately by the new system, the fact that they made them showed their frustration with the period of chaos and their sensitivity of what was required.

The massive expansion of Form V leavers which took place

from 1969 onwards revolutionised the method by which the Form V leaver moved from school to work. It replaced direction with a free market backed by a central clearing house passing on information to employers and planning to reciprocate by passing onto the schools the number of job opportunities. It moved the Form V leaver into a situation in which he had to make a career choice which took into account the scope of the labour market and his own aptitudes and abilities. It brought in the need for vocational counselling and for facilities to back this up. The initial re-organization has already taken place but what is open to question is how far the following adaptations have taken place:-

- (a) How far is the Careers Master receiving facilities to undertake his new responsibilities? Is he receiving careers literature, allowances in terms of time to do the job, periods for careers work, testing material and realistic information on the employment situation in the country?
- (b) How far is the Careers Master aware of the extent to which the infrastructure of careers work has changed since 1969? Does he know which ministry is responsible for providing which facilities? Is he clear as to how this new system works and what his place is in it?

- (c) To what extent is the present re-organization satisfactory? Are there ways in which it could be improved? Are
 there any essential services which are not as yet being
 provided?
- (d) How far is industry aware of the new system? What changes are being brought about in the relationship of industry and all those concerned with vocational counselling whether in the schools or as part of the infrastructure we have just described?
- (e) Are those factors which are influencing the career choice of the Form V leavers to be found within the school or in society as a whole? Are they healthy factors making for realistic choice or possibly outdated ones creating unrealistically high aspirations?
- (f) Finally, how far has the Form V leaver adapted himself to this new situation? Is he being provided with the kind of counselling which allows him to make a realistic choice and, if so, are his aspirations in line with the job openings which are appropriate to him? This question is inseparable from the one we raised at the beginning of this introduction. Is the possession of a Form V education still the key to entry into an elitist group or do the Form Vs now find themselves in a position very similar to the grade seven leaver? If either of these extremes are untrue, where does the truth lie and to what extent are the Form Vs aware of it?

This dissertation is divided into two sections. The first chapters 1 to 3 are concerned with the conditions which Careers

Masters enjoy in the schools. Their relationship with the infrastructure which has been set up since 1971 is also analysed. Chapter 1 concerns itself with their conditions and the extent to which they feel they are receiving the facilities they require of the Ministry of Education. Their awareness of the new infrastructure is tested in that an analysis is made of those facilities they expect to receive and this in turn is compared with those facilities which are appropriately the responsibility of the Ministry of Education to provide. Chapter 2 is concerned with the Careers Masters relations to the Ministry of Labour and in the same way the expectations of the Careers Masters are analysed and an attempt is made to see how far they are aware of the proper responsibilities of the Ministry of Labour and to what extent when they are correct in their assumptions as to its proper responsibilities, they receive the help they need. The third chapter brings in industry and training institutions and analyses how far industry is aware of and making use of the new It asks how far this new system has changed the relationship that existed between the schools and institutes of further training and industry. As institutes of tertiary education and industry are not compelled to participate in the new system, a comparison is

Such an analysis must involve criticism of the extent to which careers work has been changed since 1971 and chapters 1 to 3 include this. However, chapter 4 concentrates on the extent to which the work of the Careers Master has changed since the introduction of the new system and also the extent to which vocational guidance has been made possible.

made between those which do and those which do not use the system.

This first section depends heavily on a questionnaire sent to every school producing Form V leavers. This questionnaire was answered by the Careers Masters in these schools. The questionnaire is included in the appendix and details concerning response and analysis are dealt with in these chapters. Twenty personnel officers or training managers were interviewed. The Careers Officer of the Ministry of Education and the Director of the Educational and Occupational Assessment Service of the Ministry of Labour were both extremely co-operative in making clear what they thought were the responsibilities of their ministries within the present system.

Section II concentrates on the pattern of choice of Form V leavers in Zambia and their eventual employment. This section contains two chapters and in the first the extent to which certain sociological factors determine this pattern of choice is discussed. An attempt is made to find out how knowledgeable the Form V leavers are of the conditions which appertain to particular careers when they make a particular choice. Chapter 2 is concerned with the extent to which these leavers realise their choice and end up in the employment that they desired. It interests itself in economic and manpower planning and the extent to which these particular plans have been realized in Zambia. The balance between output and requirement of Form V manpower is analysed and the question as to how far there is or is not a surplus of Form V leavers is answered. This leads on to an appraisal of what are the proper aspirations of Form V leavers and whether their particular pattern of careers choice is realistic.

The conclusion asks how far the present situation is satisfactory and offers certain recommendations for improving the system which, in the opinion of the writer, will make intelligent vocational counselling possible.

SECTION I

CAREER GUIDANCE IN THE SCHOOL - ITS

STATUS AND THE INFRASTRUCTURE

APPERTAINING TO THIS WORK.

CHAPTER I

THE CAREERS MASTER AND THE MINISTRY
OF EDUCATION.

CHAPTER I

This section is based on a questionnaire sent to every Careers Master* in the country. There were two major objectives in sending out this questionnaire. The first was to examine the conditions which Careers Masters enjoy and to see whether sufficient recognition is given to their work. The second looks at the relation of the Careers Master to the outside bodies with which he has to have contact.

The first part of the questionnaire asks whether the teacher is a Zambian or not and how long he has been the Careers Master. If there has been a high turnover, this would have the effect of creating a situation in which many of the Careers Masters would be unfamiliar with the infrastructure of careers work and of the radical changes which have taken place in the infrastructure in the last few years. This awareness of the system in which they work is tested later but obviously one factor in this is the length of time in which they have been in this post and the first part of the questionnaire tries to find this out. An experienced Zambian teacher would have several advantages over an expatriate if he took up the post of Careers Master. We have been interested, therefore, to find out the extent to which zambianisation has taken place.

We have already made mention of the careers conferences of August and September 1972. At this conference the Careers Masters indicated that they were dissatisfied with many of their conditions. Some of these involved remuneration but the majority were concerned

with other types of allowances which would allow them to do the job better. They asked for better back-up services, e.g. testing material for ascertaining careers aptitude; they wanted time set apart during school periods for careers work; time allowed for themselves to perform the job properly and money allocated to their department. We were interested to see whether the Careers Masters were satisfied that some progress had been made in trying to satisfy their demands and several of the questions are concerned with the extent to which they enjoy the facilities which we have mentioned above.

The first section has made it clear that the infrastructure that surrounds careers work has been radically altered since 1971. The danger of such a radical alteration is that those whom it is serving might not be aware of the innovations that have taken place and may not understand how they are to use the new services and what benefits are to be expected from each section of it. I have said, this problem is accentuated if there is a high turn over of Careers Masters. The next part of our questionnaire is concerned with the relation of the Careers Master to (a) the Ministry of Education, and (b) the Ministry of Labour. How far are Careers Masters aware of the responsibilities of these two ministries in regard to careers work? Not only is the degree to which they are aware of the infrastructure of interest to us but the extent to which they are receiving the services they expect is also important. Sometimes a particular Careers Master will mistakenly expect a service from a Ministry when it is not its responsibility to provide it, but, at other times he may not be

mistaken and here we will see more clearly the extent to which these two ministries are succeeding, in the view of the teachers, in carrying out what is their proper responsibilities.

The questionnaire examines the teachers estimate of what kind of working relationship exists between his school and industry. Part of the purpose of the Central Agency is to eradicate unnecessary correspondence between the schools and industry in which the schools are required to give the same information on the same student to several prospective employers. How far does the Careers Master still accept this duplication as inevitable or even necessary? How far do they feel that it has now ceased to take place? Do they still expect to be contacted at all by prospective employers and, if so, what information do they expect to give? Do they think that this information, some of which may not be as yet supplied to the Central Agency, could be given more effectively through it. We are also interested to see how much careers information reaches the schools from industry. Are the Careers Masters satisfied with the amount they receive? Which firms, in their estimation, are the most conscientious in supplying information?

All that I have mentioned above must affect the Careers

Masters'work. If there is still a high demand for references,
he will have less time to spend on individual counselling. If
he is well supplied with careers information he might feel less
concerned about the need to pass on careers information through
lectures. If he receives good testing material for careers
aptitude, he will feel more capable in advising individual students
on what particular careers they should choose. In the last part

of the questionnaire, there is an attempt made to find out on what particular aspect of careers work the Careers Master spends most of his time. This is compared with the kind of priorities he would use if he were to spend his time as he preferred rather than as he was compelled by circumstances.

The questionnaire was sent to all the 97 schools in Zambia which have Form V's. Of these 67 replied and this constitutes a 69% return. This return is representative of the whole of Zambia for as the following list shows every Province is covered adequately.

Lusaka	8	Western	5
Copperbelt	15	North-Western	4
Kabwe	4	Eastern	4
Southern Northern	13 7	Luapula	7

Of the above provinces, Lusaka and Copperbelt are the most highly industrialised. Kabwe and Southern are close to industrial areas, being on the line-of-rail. All the others can be listed as rural although Luapula and Northern and to a certain extent North Western are more inaccessible than the other rural areas.

To a certain extent, I feel that those who have answered, although the majority of the Careers Masters, may not be completely representative; a newly appointed Careers Master is less likely to respond to this questionnaire as he is likely to feel that he lacks the background knowledge to answer some of these questions confidently. Those who have been serving as Careers Masters for some time are more likely to express an opinion. Of the 67 schools who responded, one sent a letter giving some general comments but apologised for not completing the form because of the absence of any person competent to reply. Another school

pointed out that it was a seminary responsible for training priests and that, although it was ready to advise any student who decided against this vocation, careers work did not figure in the same way as in other schools. The other 65 schools answered the questionnaire completely or in part.

Of the 65 Careers Masters who responded, 16 were Zambians. One non-Zambian pointed out that he was a Ghanaian. country as a whole there are 450 Zambian secondary school teachers and 2,329 non-Zambians. The Zambian teachers therefore constitute just over 16% of the total secondary school teaching staff. However, when it comes to Careers Masters they account for 25%. It has been Ministry policy to try to zambianise the position of Careers Master as it is felt that a Zambian would understand more easily the social factors which impinge on a student when he is thinking about his future. At the same time, it is accepted that the Careers Master should be a teacher of considerable experience and as many Zambian teachers are new to teaching, it is not easy for them to fulfill this task. In spite of this, the above figures show that the zambianisation of the position of Careers Master does seem to be progressing faster than the Zambianisation of the teaching staff as a whole.

When we ask how long the average Careers Master holds this position the picture is very confused. The average time that Careers Masters have held this position is 20.6 months. However, the variation was very great and there was a standard deviation of 16 months. The figures were bi-polar and there were two modes, one of 12 and the other of 24. Two teachers said they had served as

TEACHING LOAD OF TEACHERS INVOLVED IN CAREERS WORK.

SECTION A.

Code -

Deputy Head

House Master

O Head of Department.

Analysis of those teachers who responded by stating how much lighter their time-table was.

. No periods allowed for Careers work

1 period allowed for Careers work

 $\mathbf{x} \mathbf{x} \mathbf{x}$

2 periods allowed for Careers work

20 20 2

3 periods allowed for Careers work

4 periods allowed for Careers work

x

SECTION B

Code -

△ Deputy Head

Mouse Master

O Head of Department.

Analysis of those teachers who responded by stating the number of periods they worked :-

No. of Periods

20 (x) x x

21 🕸 🛣

22 x x

 $23 \times \times \times$

 $|\mathbf{x}||\mathbf{x}||\mathbf{x}||\mathbf{x}|\mathbf{x}$

25 XXXX

26 (X)(X)(X)(X) X

27 | x x x

28 x x x

29 **XX** X

 $30 \qquad (x)(x)(x)(x)$

31 XX

32 **x**

33 (x) x

Careers Masters for as long as 6 years and seven, one of which was a Zambian, had 4 years service. It is not true, therefore, to say that this position suffers from a high turnover of teachers; nor is the opposite any nearer the truth. The general picture is one of great variety.

The Careers Masters were asked whether they were given a lighter time-table. It is difficult to assess what is meant by a lighter time-table because work loads vary from one school to another; where as one school will be over supplied with teachers another, even in the same town, will have insufficient. Even in the same school, one subject might involve heavier working loads than another. However, it is generally accepted in Zambia that heads of departments, paid or unpaid, and house masters, to a certain extent, should enjoy a slightly lighter work load. Careers Masters have been seeking a similar privilege and the questionnaire was interested in finding out how far they have achieved this. Two types of response were given; the first group indicated how much lighter their time-table was; the second group, by far the largest, indicated how many periods they worked in a week.

Of the fifteen teachers who indicated how many periods they were allowed for careers work, six held some other position of responsibility - deputy head, head of department or house master. Of the total number, ten said that they were given no allowance at all; one that he was given one period, three that they were given two periods and one, four periods. None of those holding positions of responsibility were among those who claimed any kind of allowance.

There were 49 teachers who indicated how many periods they taught in a week. The mean for this group was 27 periods; the medium 25 and the mode 24. The standard deviation was 3.5 periods. The lowest recorded figure was 20 periods and the highest 33 periods. What was of particular interest was that those who held positions of responsibility did not enjoy lighter work loads than the other teachers. There were 15 heads of departments, one deputy head and nine house masters. The mean for those holding positions of responsibility was 26 periods, only one period less than the mean for the total number of teachers.

As I have already said, it is difficult to say what is a normal time-table but it does seem that Careers Masters do enjoy some kind of recognition in terms of times allowed for their work. However, many of them hold other positions and, where this is the case, they did not seem to enjoy a further recognition or the fact that they are doing a second job. Of the ten who claimed that they were given no allowance for being Career Masters, six held other positions of responsibility whereas of the five admitted that they were given some allowance, none held other positions of responsibility. Of the ten teachers who taught 30 periods or more, six were heads of departments for which there was no financial allowance and one was a house master, whereas of the twelve teachers who taught 23 periods or less, eight had no other responsibilities. It does seem that the average Careers Master enjoys conditions similar to heads of departments but, if he is a head of department, very little consideration is given to the fact that he is doing two It also seems true that Careers Masters tend to be senior

IIa. RESPONSE TO QUESTION 4 (a)

'What help do you expect to receive from the Ministry of Education Do you receive this help'

were	Numbers of teachers who said they did receive h satisfied with it	elp and	15
	Numbers of teachers who mentioned forms of help expected and did not receive	which	
	Numbers of teachers who failed to answer	• • • • • • • • •	8
	LIST OF TYPES OF HELP EXPECTED.	<u>A</u>	<u>B</u>
1.	To provide careers literature.	11	12
2.	To provide broadcasts on careers	0	1
3.	To send out general circulars	0	1
4•	To provide schools with speakers on various careers.	1	0
5•	To provide training for Careers Masters	5	0
6.	To encourage or stipulate a lighter teaching load.	10	1
7•	To encourage or stipulate the setting aside of teaching time for careers work.	5	0
8.	To give Careers Masters an allowance.	6	0
9•	To assist setting up careers libraries in schools.	2	0
10.	To provide finance for careers visits	3	0
11.	To provide money for a departmental allowance	1	0
12.	To send out tests and their results earlier	3	0
13.	To encourage farming as a career	1	0
14.	Indefinite requests for help	3	0
	Three teachers expected no help at all.		

COLUMN A.

Indicates the number of teachers who expected that particular type of help but claimed that they did not receive it.

COLUMN B

Gives the number of teachers who expected help of a particular kind and were satisfied that they did receive it.

teachers who often hold other posts or responsibility. A standard deviation of 3.5 periods on a range of 13 is quite large and it is obvious that the conditions, under which Careers Masters work, varies considerably from school to school.

The status given to careers work can be assessed according to the extent that Careers Masters are allowed time to do the It can also be assessed according to which time is set aside for it during the normal teaching periods. In 37 of the 65 schools covered in the questionnaire not a single period was set aside for careers work. In those schools where time was allowed during the normal teaching periods, the following was one school had one period for each of its Form IIs and true: IIIs; five schools had a period of each of its Form IIIs and Vsq; one school had one period for its Form IIIs only; two schools had one period for its Form IIIs, IVs, and Vs; fifteen schools had one period for its Form Vs; and two schools had two periods a week for its Form Vs:. Only just over a third of the schools in our survey had time set aside for normal teaching period for careers work.

The Careers Masters were asked to state what help they expected from the Ministry of Education and whether they thought they received this help. Here we were attempting to discover something about the relations between the Ministry of Education and the Careers Masters. Firstly, did the Careers Masters know what services were to be expected from the Ministry of Education or were they unreasonably looking for help which should more properly come from some other source? Secondly, how far did they feel in those cases where they were aware of what was the

responsibility of the Ministry of Education that they were receiving adequate assistance. To take our second point first, there was general dissatisfaction with the service supplied by the Ministry of Education. 40 Careers Masters thought that they did not receive the service which they expected. A further 2 used the terms 'inadequate' and 'not often'. 15 were satisfied and 8 did not answer this question. The expectations of the teachers were generally realistic and showed that they were aware of what services were the responsibility of the Ministry of Education. These services fell into two parts; the first was the responsibility of the Careers Officer, the second of the central administration of the Ministry of Education. We will deal with those which relate to the Careers Officer first.

literature. 11 were of the opinion that it was failing to do
this and 12 thought that it did. Only 1 teacher expected
broadcasts on careers to be provided and was satisfied that this
was being done. A further teacher expected and was of the opinion
that he got a general circular on careers work. Finally, 5
teachers thought that some type of training for Careers Masters
should be provided and all of them were of the opinion that this
was not being done. We will discuss later what the Careers
Officer has achieved and is planning to do and discuss whether,
in the light of this, the Careers Masters'criticisms are fair.
We will also see to what extent he is providing services which
were not stated by any teacher as what they considered to be
part of his responsibilities.

The Careers Officer can do very little by himself about such matters as teaching loads, careers periods or allowances. This is the responsibility of other departments and to a certain extent of course some of these demands can be met by the headmaster within the school. This is true of the decision whether or not to allow time within the time-table for careers work. However, Zambia runs a very centralized system and allowances are not given at the headmaster's discretion. If a headmaster is short of staff, a general directive from the Ministry advising lighter loads for Careers Masters might be an impossibility for In these circumstances only a definite directive on working loads from the Ministry or a change of policy on their part concerning allowances can really change the situation. 10 Careers Masters expected the Ministry to help by making sure that Careers Masters were given a lighter teaching load. Only one thought that something was being done about this. 5 Careers Masters wanted careers work to be included in the time-table. Here they were all dissatisfied. Six teachers thought that the post of Careers Master merited an allowance. As this is not at the moment given, all six naturally made it clear that this expectation had not been realised. Two teachers wanted a room or library for work on careers, three wanted the Ministry to help with travel expenses for careers visits and one wanted an allocation of money to be set aside from each school for careers work. Some of the above criticisms of the Ministry are unrealistic in that the headmaster could deal with these in his own school. These include allocations of money, rooms and time during school hours for careers work.

However, others, as I have said above, can only be resolved by the Ministry, and Careers Masters generally feel that very little is being done.

It was noticeable that very few of the Careers Masters expected services from the Ministry of Education which were the prerogative of the Ministry of Labour. Three did ask that the "ZAGAT test" be sent out earlier so that they could have the results earlier in the year. This request was directed to the Ministry of Education when it is the concern of the Ministry of Labour. A few teachers were unsure as to what service they should expect. Three teachers answered 'help', 'not sure', 'anything'. None of the three thought that they received any help from the Ministry.

Whether the Careers Masters attitude is well founded or not, it is obvious that the working relation between them and the Ministry of Education is not good. It is somewhat better between the Careers Officer and the teachers than between them and the Ministry of Education as such. On the whole their criticisms are realistic in the sense that they expect the appropriate services from the Ministry of Education. We must now discuss whether their criticisms are realistic in the sense that the Ministry does fail to provide services where the Careers Masters say this is the case. In order to answer this, I interviewed the Careers Officer and the next part of this dissertation is based on this interview.

The Careers Officer was conscious of the need to update the material on careers information. He saw this as a re-writing of the booklet 'Plan your Future', which was originally produced by

the Directorate of Civil Service Training. He said that a start had been made with various government departments and to a lesser extent with some of the private and parastatal industries. saw his office as the only centre through which careers information should be passed onto schools. Such a system he thought helped him to know what careers information was being sent to the schools and whether every school was receiving a particular piece of information. All information on tertiary education, including the University of Zamb does pass through his office. He has started holding regional conferences and one of the purposes of these has been to find out which careers, according to the Career Masters, should be given priority when it comes to producing literature on them. In the light of this information the reaction of the Careers Masters seems reasonable. They, like the Careers Officer, give careers literature high priority and their divided opinion as to whether they are receiving careers literature reflects the present state of affairs in which a little has been produced and a lot is still in its planning stages.

The Careers Officer envisaged a need for two conferences in 1974 the first to be held at the beginning of the year would discuss careers work for the year and the second would involve giving some instruction to Careers Masters on how the system works. Here again his feelings on what were needed related to the feelings of the Careers Masters on what was lacking. Several felt the need for this guidance and did not think that they were getting it.

We have already noted that the level of dissatisfaction among Career Masters was high. However, if you ask a group of people to state what they expect to obtain from a certain agency, you are

more likely to remind them of what they are not getting because they feel the need of this rather than what they already receive and have tended to take for granted. We still feel that the negative response was very high but the proviso I have just mentioned does seem to be true. Only one teacher said that he expected the Ministry of Education to provide Radio Broadcasts on careers, and he was satisfied that they had done this. In fact the Careers Officer did produce a series of broadcasts last year and sent the scripts of them to every Careers Master. It is hardly likely that Careers Masters who feel the need for careers literature will consider broadcasts on careers as unnecessary. What seems to have happened here is that my questionnaire has called forth a negative response in which they have been made conscious of what they lack rather than of what they already have. Very little mention is made of services which are being received. significant, however, is that in those areas where they are critical they, except in a few cases, are correctly aware that these should be provided by the Ministry of Education.

There are further examples of the way in which Career Masters have tended to take for granted services they already receive. In the Careers Master Conference of 1971 a resolution was passed demanding a record card of a student sprogress through his school be produced so that the Careers Master could have a complete record of all aspects of the student's school life for the whole of his time at school. This record card has been produced and its use is obligatory for all the 1974 intake. No Careers Master complained about the need for this on the questionnaire but at the same time

not a single Careers Master said that this was a service he expected and that he did in fact receive it. It was already taken for granted.

When we look at the field of career aptitude testing, it is natural that Career Masters should be a little uncertain as to whose responsibility this is. The only careers aptitude test set at the moment is that for school leavers. This is of little use to the Careers Master as it is intended for use after the student has left school. It is therefore intended for the guidance of the employers and accordingly the results of it are known too late for school use. This particular test is set by the Ministry of Labour and, when criticising the authorities for a situation for a paucity of material for use in schools, it is natural that Careers Masters should think that the Ministry of Labour is responsible. It is in fact the responsibility of the Ministry of Education to provide aids for Careers Masters and the Careers Officer is in the process of preparing such tests. These tests are intended for use at the end of Form IV or the beginning of Form V and should assist the Careers Masters in advising students individually or in groups.

GENERAL CONCLUSIONS.

Careers Masters enjoy a wide range of conditions but in the majority of cases some allowance is made for careers work and Careers Masters generally enjoy a lighter time-table. However, if they hold other positions of responsibility and this is the case with a high proportion of them, no extra allowance seems to be given beyond the one they already have. Very few schools are

allowed time within their teaching periods for careers work. This could be effected by the headmaster, but the Careers Masters still put the blame on the Ministry of Education who, it must be agreed, could give a more definite directive. My questionmaire seems to have called forth a negative criticism rather than a positive appraisal. However, the Careers Masters have generally not expected services which are not the responsibility of the Ministry of Education but have pin-pointed services which the Careers Officer admits should be provided and is in the process of preparing. There is a tendency to take for granted what has already been supplied.

CHAPTER II

THE CAREERS MASTER AND THE MINISTRY

OF LABOUR.

CHAPTER II

The response to the question 'Do you feel that you are receiving the help that you expect from the Ministry of Labour?' showed a similar level of dissatisfaction as the similar question directed at the Ministry of Education. 35 Careers Masters said that they did not get the help that they expected; 15 said that they did; 12 either gave no answer or said they were not sure and 3 said that they expected nothing and that was what they got.

However, a greater proportion of the demands made by the Careers Masters on the Ministry of Labour were unrealistic when a comparison is made with the Ministry of Education. 7 Careers Masters expected the Ministry of Labour to supply them with careers literature: 2 more made the more realistic demand that some explanation should be given of the 93 jobs listed as careers choices by the Ministry of Labour. One teacher wanted a more realistic school record card; another two expected this Ministry to arrange career visits to the schools by representatives from firms and another asked for the same services as those supplied by the Ministry of Education. All these expectations should have been more properly directed towards the Ministry of Education and showed that there was a sizeable proportion of Careers Masters who were unrealistically disappointed with the Ministry of Labour. fact 12 of the 35 who expressed dissatisfaction fall into this category.

Another group were concerned that the result of the career aptitude test and ZAGAT were released so late in the year. 3

Careers Masters suggested that the Ministry of Labour should set

the test in Form IV and I asked that the results be returned more promptly. Here, as I have said, it is natural that the Careers Masters should expect any improvement in tests to come from the EOAS, as it has been the only source of such tests up to now, but, in fact, the responsibility for testing within the school and providing the Careers Masters with such aid is the Ministry of Educations.

Of those Careers Masters who made realistic demands on the Ministry of Labour and who felt these had not been met, the largest group consisted of those who wanted a list giving the number of openings in each job. Unlike a large developed country, it is possible in a small developing one for certain openings to be nonexistent in one particular sphere. It is important that the Careers Master knows this so that he may advise his students accordingly. Zambianisation progresses at different rates in different sectors and in one particular year there may be a larger demand, possibly because a crash programme of training has been instituted in this sector. Training programmes depend upon the availability of experts in the country and one particular opening might not be available in a particular year because there are insufficient personnel available to run the training scheme required for it. The more the Careers Master is aware of such variables the more he can help his students. When the EOAS set up the Central Agency it was given the responsibility of creating a two way system of communication. It was obliged to pass on information to prospective employers on Form V leavers. is doing. It was also obliged to pass onto the schools the number

IIb.

RESPONSE TO QUESTION 5(a)

'What help do you expect to receive from the Central Agency (The EOAS of the Ministry of Labour)? Do you receive this help?'

were	Number of teachers who said that they did receive he satisfied with it		15
expe	Number of teachers who mentioned forms of help which cted but did not receive	they	35
unsul	Number of teachers who either did not answer or were re as to what help they should expect	• • • • • • • •	
	Number of teachers who expected no help	• • • • • • • •	3
	LISTS OF TYPE OF HELP EXPECTED.	<u>A.</u>	<u>B.</u>
1.	To give information on the number of job opportunities available.	12	1
2.	To give statistical returns on how school leavers have been placed.	0	2
3.	To distribute careers information	7	1
4•	To give a brief description to accompany the 93 jobs listed on the Career Preference Form	2	0
5•	To place students in jobs.	2	0
6.	To run the ZAGAT test.	0.	3
7 .	To hold their tests earlier in the year.	1.	0
8.	To hold their various tests in Form IV as an aid for careers guidance.	3	0
9.	To give the results of their tests more promptly.	1	0
10.	To administer the filling in of the Career Preference Form and to give instruction on how to fill it in.	0.	3
11.	To revise the student record card.	1	0
12.	To organize career visits and visits to schools.	2	0
13.	Indefinite requests for help.	0	5
14.	Organize a clearing house.	0	1
15.	General guidance for teachers for counselling	0	1
16.	To provide the same services as the Ministry of Education.	1	0

COLUMN A.

Indicates the number of teachers who expected that particular type of help but claimed that they did not receive it.

COLUMN B.

Gives the number of teachers who expected a particular kind of

of job openings that exist. This is still in the planning stage.

It has been easier to establish contact with firms by offering
them a service and quite understandably the Central Agency has
started by offering firms a central record on Form V leavers.

Only when good will has been created, is it possible for it to
seek reciprocation in the form of information on job openings.

A later part of this dissertation examines how far this is possible
at this stage.

12 Careers Masters expected to be given some information on job openings and 2 expressed themselves somewhat differently by asking for a statistical record of where students had been employed in the past. Those who were satisfied expected to receive tests, general information on how to complete the tests and guidance on how to complete the Career Preference Form.

At first sight, dissatisfaction with the Ministry of Labour seems to be as high as that for the Ministry of Education, but it was less realistically based. Where it was realistic it was mainly concerned with the need to know the extent of job opportunities.

One aspect of the Careers Masters work is the providing information for the records of the Central Agency via the Career Preference Form. Careers Masters were asked whether they wished to delete anything from or add anything to this form. It is easy for requests for information to be given when there is neither any use being made of that information nor even any possible use to which it can be put. At the same time, firms might still be contacting the schools (the extent of this is analysed below) because information which they consider vital cannot be found

through the central records because it has not been included on the Careers Preference Form. Careers Masters were asked to assess this situation. The Careers Preference Form, as it stands, asks for the following:-

- 1. School.
- 2. Names.
- 3. Year of birth.
- 4. Sex.

1. Appendix B.

- 5. National Reg. No.
- 6. Zambian or non-Zambian.
- 7. Grade seven number.
- 8. 1st,2nd & 3rd Choice of Career.
- 9. Choice of training.
- 10. Reason for choice.
- 11. Examination taken other than Cambridge since Form 2.
- 12. Future postal address.

All the above are completed by the student. The following items are completed by the Careers Master:-

- Code number for student and school.
- 2. Results of occupation interest inventory.
- 3. Results of general ability test.
- 4. Mock Cambridge results.
- 5. Schools assessment of future training.
- 6. A five scale rating of three characteristics of the student
 (a) Leadership, (b) Diligence,
 (c) Co-operativeness.
- 7. The final Cambridge results.
- Any other special consideration e.g. disabilities.

It is difficult to defend some of these requests for information as essential. The grade seven number does not seem particularly relevant. Other information might be useful, e.g. that a student has passed Pitmans typing since taking Form II, but to the best of my knowledge, such information is not used. It is, therefore, to be expected that most Careers Masters would find something to delete. It is therefore suprising that most teachers seemed satisfied with the form as it was. 50 of them said that they did not want to delete anything as against 13 who did.

38 did not want to add anything; 24 did and 3 did not give an opinion on this. Of the small group who wanted to delete material, 4 thought the inclusion of the grade seven number was unnecessary;

2

IJ

8.

Health of student

II	RESPONSE TO QUESTION 3 (a)	
	Is there any information on the Careers Preference Form which you would delete as unnecessary? If YES, please state.	e -
	Number of teachers who wanted deletions	13
	Number of teachers satisfied with the form	50
	NO.	
	SUGGESTED DELETIONS NO.	OF TEACHE
1.	The section where the student gives his reason for choosing a particular job.	5
2.	Grade Seven Number	4
3.	Mock $^{ m R}$ esults	1
4•	Details of exams taken since Form II other than Cambridge	2
5•	Name of school as already given in Code Number	1
6.	Deletion of alternative form of teacher training for Technical Teachers.	2
7•	Modification of the last section asking for further comments.	1
8.	No need to indicate what type of training is preferred	3
IId	RESPONSE TO QUESTION 3 (b)	
	Is there any information which you think should be added to the Careers Preference Form? If YES, please state.	
	Number of teachers who did not want to add anything	38
	Number who did not given an opinion	
	Number of teachers who did want to add something	
	SUGGESTED ADDITIONS NO. C	F TEACHER
1.	Inquiries into extracurricular activities and interests of students.	5
2.	Positions of responsibilities held by students	3
3.	Space in which to grade characteristics of students - additional to those already included. Suggestions include - honesty, reaction to criticism, reliability, social behaviour, and academic effort.	7
4.	Number of children in the students family	2
5•	Details from the new students record file	2
6.	Where the student would like to work	1
7.	Not stated	3
_		2

2 felt that there was no need to give details of examinations passed since Form II and 5 did not think that the reasons given for choosing a particular job helped anyone. The last group was probably drawing attention to the fact that the reasons given by students for choosing a particular career are often facile. Those who objected to giving details of examinations were probably aware that no use was made of this information. 3 teachers did not think it necessary for students to indicate training as well as job choice as, according to them, the job indicated the training. However, this is not always the case, e.g. a teacher can be University trained or College trained. One did not think the Mock Results were useful as indicators of the final result.

Of those who wanted additional information on the Careers
Preference Form by far the largest group felt that the section
concerned with character was far too limited. This section asked
for a five scale rating on three aspects of character. (a)

Leadership qualities (b) Diligence, (c) Co-operativeness. 5

teachers wanted comments on extra-curricular activities or pupils'
interests to be added; 3 wanted comments on positions of responsibility and 4 others wanted the list of characteristics of the
students extended. They suggested such aspects as honesty,
punctuality and reaction to criticism. A further 3 teachers wanted
space left for a character reference from the Careers Master. There
was very little else suggested apart from comments on this particular
section and it is obvious that those teachers who do feel the form
is deficient are mainly concerned with its lack of detail when it
comes to giving the employer a 'character' reference.

IIe. RESPONSE TO QUESTION 5 (c)

'If you think the Education Occupational Assessment Service, which sends out Careers Preference Forms, could be more effective, please state briefly how'.

Number of teachers who thought it could be more en	ffective 31
Number of teachers who did not comment or thought effective enough	
OUTLINE OF SUGGESTIONS FOR INCREASED EFFECTIVENESS	<u>3</u> :-
	NO. OF TEACHERS
1. That the service should be publicised more to industry.	7
Insist that employers use it first to satisfy employment needs.	3
3. Stop string=pulling in industry.	1
4. Find out what employers want.	1
5. Provide advice to individual school leavers	1
6. Concentrate more on those who can't find a job	1
7. Make clear what jobs are available	7
8. Give more time to fill in the forms.	6
9. Set test for Form IVs.	1
10. Make clear the purpose of the form.	1
11. Provide a brief description for each of the 93 journated in order to help the student make his choice	
12. Provide careers information.	2
13. Arrange visits of employers to schools.	1
14. Not stated.	3

As well as asking the Careers Masters how far the Central Agency had failed to live up to their expectations, a more general question was put in which they were encouraged to suggest ways in which it could be improved. There is a certain amount of overlap between a question which asks 'are you getting the help you expect? and do you think the agency giving you this help can be improved?'. However, there is a difference of emphasis. In the first you are criticising what is their known responsibility; in the second you are encouraged to make a more radical appraisal of what you think they ought to be doing. is worth noting that the suggestions given for improving the EOAS were generally different from the explanations given by some Careers Masters of why they thought its services were deficient. 34 teachers did not think that any improvement of the service was necessary; 31 did. Of those who did, 10 were concerned with the extent to which the Central Agency's services were made use of and known of by industry. The Central Agency's record in this respect is good. They have realized that it is impossible to impose this system on industry and have spent most of the last two years creating good will between themselves and industry as a whole. Use has been made of the press to advertise this service and the Zambian Federation of Employers have been very co-operative in contacting their members. However, as my interviews with personnel officers, to which I make reference below, shows there are still a reasonable number of firms who are unaware of the existence of the Central Agency. Realising this, the Careers Masters were pressing for more publicity for the work of the

Central Agency. Some even went further and two were groping towards some form of compulsary system by insisting that the employers used the Central Agency first before they fill any vacancy.

The other major way in which Careers Masters thought the service could be improved was by sending out the Careers Preference Forms and test material earlier in the year or even in Form IV. Some bush schools said that they found it difficult to complete the forms and return them on time. There was very little unrealistic advice. 3 teachers wanted more careers information and visits: two further teachers, who wanted additional careers information, were quite aware that this was normally the responsibility of the Ministry of Education but felt that a brief description of the job alongside the 93 listed jobs on the back of the Career Preference Form would help the student to make a more intelligent choice on career preference in filling in the form. The most important impressions gained from this section are that, in suggesting improvements, the teachers were mainly concerned with publicity and the promptness with which the forms were sent out. They made very few unrealistic suggestions and these were not generally mere duplications of their earlier comments when they were asked to state in what way the service had not come up to their expectations.

GENERAL CONCLUSIONS

At first sight it seems that the level of dissatisfaction with the Ministry of Labour was as high as that found with the Ministry of Education. However, the criticisms raised against

the Ministry of Labour were less realistic in that the deficiencies mentioned were often the responsibility of the Ministry of Education. Where the criticism was valid, it was mainly concerned with the fact that the Ministry of Labour has not yet passed onto schools a record of job openings. are discussing later how far this is possible. Most Careers Masters were satisfied with the Career Preference Form and did not wish to see anything added or deleted. Of those who considered deletions necessary the grade seven number and results other than Cambridge since Form II were considered the Those who wanted additional least helpful aspects of the form. material were mainly concerned that the character reference aspect of it should be extended. The Careers Masters were evenly divided in considering that the service could or could not be improved. Those who suggested improvements were mainly concerned that it should be better publicised to industry and secondly, forms should be sent to schools earlier in the year.

CHAPTER III

CAREER GUIDANCE AND ITS RELATION TO TERTIARY

EDUCATION AND INDUSTRY.

CHAPTER III

It has already been seen that the contact between the school and industry in so far as it is effected through the Ministry of Labour is unsatisfactory in the amount of information received from industry concerning job opportunities. Careers Masters do not receive such information by this source and are dissatisfied with the present level of careers information emanating from the Ministry of Education, are they able to make up this deficiency by direct contact with industry. Under the present system. it is expected that firms interested in employing Form V leavers, although advertising for them on their own initiative, will gain all the information that they need through the Ministry of Labour. How far is this happening? Is it still the case that firms are approaching schools directly for this information and the multiplicity of requests for references for each student is still continuing. If this is so, how far are the Careers Masters satisfied with this and looking forward to a time when all contact between them and industry concerning an individual Form V leaver will go through the central clearing house? Or do they not expect this and wish some kind of direct contact to remain.

The use of the clearing house is not compulsory and it is of interest to see not only how far it is being used or by-passed but how far those involved expect the latter to continue if that is the situation. To investigate the workings of this triangular relationship - between the Careers Masters, the clearing house and industry - data from the questionnaire and the findings of interviews with 20 training officers have been used. Of these 20 firms, ten

make use of the clearing house and ten do not.

From the questionnaire, it was first ascertained how many Careers Masters thought that a situation should exist in which no contact was necessary with industry in order to pass on information concerning a particular student because the completion of the Careers Preference Form covered this function adequately. They were then asked whether firms did contact them. Of the 65 Careers Masters, 54 said that the completion of the Careers Preference Form did not mean that they did not expect any further enquiries from industry. Only 11 said that they felt further contact was unnecessary. Of the 54, 21 said that they did not get any enquiries and 33 that they did. From these returns, it is obvious that the vast majority of Careers Masters still expect some direct contact with industry when it comes to asking for information on a particular student. There are two possible reasons for this: the first is that they think that it is desirable in itself and the second that they feel the Careers Preference Form does not convey all that is necessary and further contact is required.

It will be noted that of the 65 teachers, 38 did not think any addition was necessary to the Careers Preference Form and it must be concluded that they are of the opinion that adequate information is being passed onto the clearing house but that, even in such circumstances, they still feel that some direct contact is desirable between them and industry. If we accept the consistency of these replies, it means that almost half of the Careers Masters feel that there is some information that cannot be

put on a standardised form and that at least in some cases direct contact is necessary to deal with an individual applicant. However, the implications of their answers were not put to the Careers Masters in this questionnaire and, if this were done, they might decide that the loss through doing away with individual contact might be less than the gain through insisting on centralizing all information.

Of the 11 Careers Masters who said that the filling in of the Careers Preference Form should release them from any other contact with industry, only one said that such contact did not take place. This means that out of the total of 65, 45 still received requests from firms for information on particular students. There still persists, therefore, a great deal of direct contact. The majority of Careers Masters accept this as at least inevitable and the majority of this group seem to think that it is even desirable.

The Careers Masters were asked whether they were satisfied with the information that they received from the firms. This would consist in the main of either careers literature or information on job openings. 46 said that they were not satisfied and of these 29 went further and indicated that even in those cases where they did receive careers literature, it was not detailed enough. They suggested ways in which it was deficient:-

NO. OF TEACHERS

Suggested deficiencies -

${ t More}$	information	\mathbf{of}	qualifications needed 1	
More	information	on	conditions of service 3	,
More	information	on	training 3	t
Other	items			ı
Vague	or no expl	ici	titem mentioned	,

Even where the Careers Masters are dissatisfied with the type of information they are given, they were not generally very explicit as to what they thought was lacking and in what ways it could be improved. Even if there were not many constructive suggestions as to how improvements could be made in the content of the information, just over half of the Careers Masters thought this content was inadequate (32) and as we have already seen, the majority thought the supply was poor anyway.

In order to see the scope of the number of firms which supplied information to the schools, the Careers Masters were asked to list those three firms which in their opinion were best at supplying information to schools. If the list had been varied with each school providing different choices rather than all of them concentrating on a few industries, it would be possible to conclude that a large number of firms are sending out careers literature and the dissatisfaction of the Careers Masters is unjustified. If, on the other hand, the schools concentrated on a few firms, this would tend to substantiate the feeling of the Careers Masters and reveal a situation in which industry, for the most part, is not interested in supplying careers information to the schools.

The latter seems to be the real situation. From the 65 schools and, therefore, the 195 choices, only 20 firms or training institutes were mentioned. Although a large sector of Zambia's industrial life is government or parastatal, it is worth noting that only one

private firm, a bank, was mentioned. The choices break down in the following way:-

Α.	Training Institutes	• • • •	7
В.	Parastatal-	• • • •	3
C.	Private	• • • •	1
D .	Government	• • • •	9

The preponderance of government and training institutes is reminiscent of the pre-1969 era and of the rparastatal and private, 3 out of the 4 were given quotas under the previous system run by the Directorate of Civil Service Training. It does seem that, when we are talking of careers literature, there seems to be very little movement from five years ago and those firms who did not enjoy a quota under the previous system do not seem to have accustomed themselves to the fact that the Form V Leaver is available to them.

In assessing the relative effectiveness of these firms in passing careers information to the schools, I gave three marks for the first choice of each school, two for the second and one for the third. Here the paucity of contact was emphasized as a very small number of firms were mentioned frequently and the majority very rarely. The four most highly marked firms accounted for 72% of the total marks and the top firm accounted for over a third.

Copper Mines	126	36%
NRDC	68	1 9%
Department of Technical Education & Vocational Training.	41	11%
Kabwe and other Teacher Training Colleges.	26	6%
Total for first four		72%

55•

We seem to have a situation here in which a few firms are passing on careers information to the schools but the majority are not.

In order to get a full picture of the relationship between the industries and the schools it is essential that the recruiting procedures of different industries be studied and some enquiry made into their policies in relation to the Form V leaver. 20 personnel officers or training managers of large firms or institutes of tertiary education were interviewed. Of these, 40 made use of the clearing house and 10 did not. The interview was based on a series of questions which are as follows:-

For Institutions making use of the Clearing House.

- 1. Do you refer all Form V leaver applications to the clearing house?
- 2. If not, on what basis do you select those leavers for whom you make use of the clearing house?
- Which information on the Clearing House Form do you find most useful?
- 4. Have you any statistical material to back up the decision you make in your answer to question 3?
- 5. Is there any part of the form you disregard completely?
- 6. Is there any information you do not get which you require?
- 7. Do you still contact the schools for information on an applicant?
- 8. If 'yes' to 7, what information do you require?
- 9. Do you pass on careers information to the schools?
- 10. If 'yes' to 10, is it to all schools?
- 11. Would it be possible to provide the Ministry of Labour with an approximate figure of the number of Form V leavers you require in any one year?
- 12. If 'no' to 11, why not?

For Institutions not making use of the Clearing House.

- 1. Could you explain why you have not made use of the clearing house?
- 2. Do you intend to make use of it?
- What is your main source of information in selecting a Form V leaver?
- 4. Have you any statistical evidence to back up the procedure you follow in 3?
- 5. to 10 These are 7 to 12 in the first block of questions.

The ten firms or educational institutes making use of the clearing house, which were interviewed:-

- 1. Standard Bank.
- 2. Ministry of Health Nurses Training.
- 3. Indeco Central Office.
- 4. National Milling.
- 5. Shell

- 6. Department of Technical Education & Vocational Train
- 7. Steel Build.
- 8. Unza
- 9. Copper Industry Service
 Bureau Ltd.
- 10. Zambia Airways.

The Department of Technical Education and Vocational Training and the mines assist in running the tests and are, therefore, given a complete record of their own. They do not, therefore, make individual inquiries to the clearing pouse. Shell retains the services of the EOAS generally, that is for all its recruitments of which Form V leavers make up a rather significant part. The Ministry of Health, although asking for information, admitted that up until now it had made no use of it in its selection procedure. It was rectifying this situation and instituting a selection process with the co-operation of the EOAS and making use of their facilities.

The ten firms or educational institutes, making no use of the clearing house which were interviewed.

- 1. Barclays Bank
- 2. Dairy Produce Board
- 3. Zambia State Insurance.
- 4. Central Cigarette Manufacturers
- 5. Zambia Sugar Company.

- 6. United Bus Company of Zambia.
- 7. Natural Resources Development College.
- 8. Chilanga Cement.
- 9. Police Training School.
- 10. Zambia Bottlers.

The questionnaire was carried out on an interview basis partly because management would quite understandably be reticent about disclosing the policy of their firm if sent a questionnaire through the post, and partly because the aim was not to produce statistical data but to gain a first hand impression of the policies governing recruitment of Form V leavers. As a result of these interviews, the following questions can be given some kind of answer:-

- (a) How far is industry finding out about Form V leavers through the clearing house or how far is it, even when using the clearing house, still making direct contact with the schools. Does the impression gained from the interviews agree with that of the returns of the questionnaire sent in by the Careers Masters? In the case of those firms who do not use the clearing house, is there any chance of them doing so in the near future? Will this affect their present relationship with the schools and mean that less inquiries will be made to Careers Masters in the future.
- (b) Is there any fundamental difference between those firms who do make use of the clearing house and those who do not? Are those, which make use of the Clearing house, the firms which are employing most of the Form V leavers? Is it the case that those who do not use the clearing house are not taking on Form V leavers either because they are capital intensive, need more

experienced staff or are rather reluctant to zambianise.

If this is the case, it would mean that the bulk of Form V recruitment is passing through the clearing house even though many firms do not make use of it.

- (c) Are the earlier findings, which state that generally firms

 have a bad record in supplying schools with Careers literature,

 true? Do the firms which use the Clearing house have a better

 record in this respect?
- opportunities be met? Is this the right time for the clearing house to set up a two way channel of communication? If industry is approached by the Ministry of Labour to give figures indicating its future requirements, will it be willing and able to do this? If there is any significant difference between the response of some firms and others to this request, will those which co-operate tend to be the same firm that already make use of the clearing house?
- (e) How far have the training offices or those responsible for selection tested their selection procedures? Is the record of those firms who use the clearing house different from those who do not.

Of those firms who make use of the clearing house, three did still contact the schools, one did occasionally and five did not. One response was rather indefinite. Of those firms who do not use the clearing house, four said that they had direct contact with the schools, five that they did not and one said that this only happened if the headmaster was quoted as a reference. However, when we look

at the numbers in this group it is seen that in one case it is because the firm does not employ Form Vs , in another because it's intake was very limited and two others because contact for Form V leavers was made at the tertiary level of education. There seems to be a small number of firms who are interested in Form V leavers but would rather leave the Department of Technical Education and Vocational Training the task of selecting for particular courses and then sponsor prospective employees when they have shown some progress in their course. Such firms do not use the clearing house except indirectly in that the Department of Technical Education and Vocational Training does. Of the ten firms who do use the clearing house, the above figures show that half do not contact the schools directly for any information. Those that did gave the following reasons :- in one case they recruited in October and the information they required was not usually prepared at that time. Seeing that this particular firm helps to run the tests for the Ministry of Labour this reason cannot be facile. Several of the firms require information particular to their own industry; the mines want to know if an applicant would refuse to work underground; the banks want a very sure guarantee of honesty. A centralized system cannot cater for such peculiarities and it is possible that the Careers Masters were conscious of this when they allowed that some direct contact was still necessary. This does not mean that there cannot be some improvement in the Career Preference Form which would include a more detailed section on character and a clear indication for the firms as to whether a Form V leaver has indicated a wish to go on for full time training. Four of the five firms who use the clearing house, but still contacted schools, were looking for this kind of information. It will be remembered that those Careers Masters who thought the Careers Preference Form was deficient were, in many cases, dissatisfied with the section dealing with character.

Of those firms who do not use the clearing house, it was noticeable that in many cases there was some kind of contact with In one firm they had called in this department on a consultative basis to help with their test. Four other institutions intend to use it in this coming year (1974). In one case they had already received, and at the interview produced, the complete ZAGAT results for this year. One of the other six institutions, the police, is completely zambianised at the levels that require Form V entry and, therefore, has no intake; another firm had a limited intake, being capital intensive. We have already mentioned that two firms find their future employees through the tertiary system but even here one firm made slight use of the clearing house and was aware of it in that it consulted it to select two Form V leavers to sponsor at UNZA. Only in three cases did firms give unsatisfactory replies when asked where they stood in relation to the clearing house; two claimed that they did use it when, on checking, this was found to be untrue and one did not know of this service, was not aware of any plans to make use of it and did not know why management had not made a decision on this matter. It seems that liaison between the clearing house and those firms who do not make use of the clearing house is good in that such firms are either planning to make use of it, select through the tertiary system or use the agency on a

consultative basis to help with their selecting procedure. It seems that the use of the clearing house is being taken up by more and more firms. However, from the comments that we have made in the previous paragraph, this does not necessarily mean that direct requests to the school for information on individual Form V leavers will decline.

From the interviews, it is obvious that the majority of firms do not send out a general circular on careers to the It is also true that those firms that do not make use schools. of the clearing house are even less likely to provide this In this group, only one sent literature to every service. school and this was a training institution which is already making preparations to use the clearing house. Its good record in this respect is substantiated by the fact that, in the opinion of the Careers Masters, it came second in providing literature for schools. This is the Natural Resources Development College(NRDC).Of the other nine, seven said that they did not send out careers literature, one only, if asked, and one had some literature in preparation. For reasons which have already been explained, the intake of some of these firms is very limited. If they were to make widely known the opportunities that exist within them, they would be swamped with applicants, and would be virtually forced to make use of the clearing house for screening purposes. Others make contact, as we have seen, through the tertiary system and might not feel that it is to their immediate advantage to make themselves known to the secondary school student. However, the Form V leaver is not in a position where he can gain direct experience of many jobs he is interested in and, unlike a developed country, where it

is relatively easy to make contact with a friend or relation who is involved with an industry or trade which the student is considering, in a less developed country such a contact is often not possible. Careers education is, therefore, more important and a greater responsibility rests with industry to help the Careers Master in this respect. The record of those who do use the clearing house is better but not good. Only one firm did not send out any careers literature, three more did if they were asked by the schools; the other six did provide some kind of service. To a great extent the findings from the responses of the Careers Masters is substantiated, and those firms or training institutions which claimed to send careers literature to every school were those listed by the Careers Masters as best at doing this. The mines and the Department of Technical Education and Vocational Training listed as first and third by the Careers Masters are examples. However, one bank, which claimed that it did send out literature, is not mentioned by the Careers Masters. III. A Comparison of Claims made by Firms concerning Careers

Literature and Careers Masters Assessment of these Claims.

Firms.	Claim made by firm concerning its performance in sending out careers literature	Rating by Careers Masters for the same firm.
a.	Yes to all schools	126
b.	Yes to all schools but not always accurate.	41
C.	No.	0
d.	Printed handouts not very good.	3
e.	No.	0
f.	Only those who apply	0
& •	Yes.	14
h.	Only those who apply	4
i.	Yes	9
j•	Yes.	0

Only the returns from the last firm seem contradictory.

In all the other cases, both the firms and the Careers Masters agree as to the extent to which each firm is sending careers literature to the schools. We have already mentioned some of the reasons given for not sending out careers literature.

However, the Department of Technical Education and Vocational Training, whilst sending out brochures, admitted that these were not completely accurate because they could not be sure what courses it would be running until very near the time they were due to start.

This leads us to our next section: the ability of industry to provide the schools with the job opportunities that exist and the numbers for each opening. The difficulties of the Department of Technical Education and Vocational Training have been mentioned. However, in most cases, firms whether using or not using the clearing house were able and willing to provide at least in general terms, the number of Form V leavers they will require in any one year. Those who were not able to do this took the question very seriously and gave a reasoned reply for their position. the 20 firms, 16 could provide this information. Some of these even added comments such as 'not only possible but highly desirable' others provided exact figures and others insisted they would itemize their list according to trades. Two of those who said that it was not possible said that because of decentralization and the recruitment of Form V's locally linked with a high wastage rate, any figure given by the central office would be unrealistic. position of the Department of Technical Education and Vocational Training has already been mentioned. One other firm merely said

The Clearing house has not used any compulsory measures in relation to industry and has established itself through personal contact and the provision of a useful service. If, however, it is to provide a two way channel of communication, it must start asking for something from industry as well as giving information to it. This is a more difficult exercise in industrial relations but the above findings indicate that the response will be far from hostile and should encourage the Clearing house to take this next step forward. It will be remembered that the relevant demand made most frequently by the Careers Masters as far as the Ministry of Labour is concerned was that it should provide figures on job opportunities. It has already been mentioned why this is essential in a small developing country such as Zambia.

The Ministry of Labour is dependent on the firms it serves in order to acquire some measurement of the validity of the tests that it sets. As it serves industry in general, these tests will only have a limited value in relation to specific job skills and one would imagine they would prove more useful in primary selection - general screening. The record of industry in providing feed back to the Ministry on ZAGAT and career aptitude tests is poor. The impression gained was that many firms were quite happy with a particular selection system without even making general assessments of its efficacy let alone enter into an exercise which would involve measuring the validity of the tests they were setting. Of the ten firms who made use of the service, seven took notice of the ZAGAT results and four the Occupational Interest Inventory. However,

^{1.} See Appendix C for examples from ZAGAT.

^{2.} See Appendix D for example of GRZ Occupational Interest

(Continuation from page 64.)

of these only four were able to give some indication of ways in which they had tested the adequacy of their testing procedures. The adequacy of their approach is discussed below. Of those firms who did not make use of the service only one had made a cursory check of his selection procedure against ZAGAT and felt that ZAGAT would act as a good screener. The career aptitude tests were seen as a good selector. Another firm suggested that their selection system seemed to work. The other eight, however, admitted that they had not paid much attention to this question.

The three firms or training institutes which could provide statistical evidence on the efficiency of the clearing house results were - National Milling, UNZA and the mines. The Department of Technical Education and Vocational Training claimed a correlation of 0.7 for its own technical intelligence test but was still in the process of writing up the results of its research. It was under the impression that its own tests were a little more suitable for its purposes than ZAGAT.

National Milling's evidence consisted of a rank correlation between the results of ZAGAT and a questionnaire sent to the employees' superiors. This correlation was only 0.48 but attention was drawn to one particular employee which ranked very high according to his superiors because he had enjoyed longer experience than the others and so had achieved a high rating for factors which were outside the scope of the ZAGAT test. When the findings of this employee were ignored the rank correlation rose to 0.70 which is significant at very near .01 level.

The UNZA evidence consists of a report presented to the selection committee. This report analyses the qualifications laid down by the University and compares these with performance at the end of the first year. The report also compared performance at the end of the last year with various EOAS tests. One of these, AS 64, is very similar to ZAGAT. This test when correlated with performance at the end of the first year produced the following results.

UNZA COURSE	<u>R</u>	UNZA COURSE R
Humanities.		National Sciences
E110	.11	GPA •30

H110	.17	M110	.15
PL110	•15	M160	. 21
A110	•06	P110	•37
M110	•24	C11 0	• 35
M160	•30	BZ110	•30
G110	• 27		
CPA	21	,	

None of these correlations are very significant but the report claims that they can be useful indicators when used alongside the results of other tests. It is, however, important how much more or less efficient the other tests for entry are and for entry for the University these consist mainly of the Cambridge examination.

In the science courses, the appropriate '0' Level results were much more useful than those of the humanities subjects. In the physics course there was a correlation of .53 between Cambridge physical science and achievement at the end of the first year. Cambridge physical science proved a better indicator than Cambridge physics where the correlation was .45. Even with the chemistry course, Cambridge physical science (.52) was a better indicator than Cambridge chemistry (.37). As has been stated earlier, the EOAS tests were all useful and AS 64 ranged from .30 to .49 for the physics and chemistry courses; abstract reasoning .30 to .38; mathematical ability .39 to .61 and English comprehension .22 to .41. The EOAS tests were more useful than Cambridge biology; AS 64 - .38, Cambridge biology - .33.

When we come to maths a lot seems to depend on what kind of maths course is being taken. M110 seemed to demand more in the way of abstract reasoning and less on computational skills, therefore, AS 64, the nearest thing to ZAGAT, which tests computational skills gave a poor reading of .09 but the EOAS

test, AR which tests abstract reading gave the result .27. Here the Cambridge result in maths seemed a better indicator .43 and even the result in physical science was better than the EOAS test .35. In M160, computational skill seems to take priority over abstract reasoning and the result of the two EOAS tests are reversed. However, Cambridge maths is the better indicator .43. In all the science subjects the English Language Cambridge results are of very little use giving either a low correlation figure or even a negative one. This is particularly true with the maths courses and especially so with M110.

When we come to the study of English at the University, we find that the EOAS English comprehension test is as good, if not better, than the Cambridge English result. The report suggests that Cambridge English is such a poor indicator for this course that anyone with a grade 7 or 8 should not be accepted unless their results on the EOAS English comprehension test is good. Results in other humanities at Cambridge were virtually useless as predictors for the English course. Even English Literature achieves the small correlation of .08.

When we ask how useful AS 64 is (the equivalent of ZAGAT) we find that in the School of Natural Science Cambridge physical science seems to be the best indicator and in physics the appropriate Cambridge subject is in fact better than ZAGAT. Even here ZAGAT is useful. In chemistry and biology, ZAGAT is more useful than the appropriate Cambridge subject. Generally with the sciences the Cambridge result is much more useful than in the humanities. Here the same pattern is evident as with the mock and actual result in Cambridge.

(This comment is based on a study of mock results for 1971 leavers made by the Central Agency. A few schools were very poor, producing even negative correlation but generally correlation of .6 and above were produced. The science subjects were found easier to predict at this level as well). With the humanities, the Cambridge result was of little or no value and although ZAGAT seem to be less valid here than in the natural sciences, it still came out well when compared to the appropriate Cambridge result.

The Copper Industry Service Bureau Limited (the mines) said that they had found it difficult to validate their selection procedure against later performance within the industry. reason for this was the difficulty of *comparing the performance of people in very different kinds of work and work situations . The performance of 'A' as an assayer is difficult to compare with 'B' as a computer operator. Secondly, 'a group of literally select people who by reason of the selection process should all be able to cope adequately with the work anyway! has 'differences in performance which are liable to depend on other variables than the selection devices. The mines were, however, able to provide reports which compare ZAGAT and performance at Cambridge. is ZAGAT able to inform the mines when they select in November whether a student will gain certain subjects at Cambridge or a certain number of subjects? The mines do in fact select in November and hope to recruit students some of whom will qualify for UNZA and others for other forms of tertiary education. mines have also tested their own selection battery to see which parts of it are most effective. Again, in predicting qualities of passes at Cambridge, ZAGAT is one test in this battery.

A. Quoted from a letter from the Copper Industry Services Bureau.

The two reports which are concerned with this area :-

- 1. Statistical Analysis of the Validity of the Fifth Form Staff Learner/Scholarship Selection Battery December 1972 Exercise.
- 2. The ZAMBIAN ADVANCED GENERAL ABILITY TEST and its Relationship to COSC Performance in English Language, Maths and Science and Overall COSC Performance.

The first report was concerned with 168 1972 Form V Leavers who were assessed at the Luanshya Division Testing Unit. For maths and physical science, the maths and physics with chemistry tests respectively provided the most valid. For maths, the maths test gave a r of .61 and for physical science, the physics and chemistry test gave .51. However, in both cases ZAGAT was found to be useful. ZAGAT was the best test for predicting 'O' level English, and whether a division one or two would be obtained.

The second report agrees basically with the first. It found quite a high correlation between ZAGAT and Cambridge English, a poor one between ZAGAT and Cambridge maths and a very poor one between ZAGAT and Cambridge physics. The mock results were stronger in those areas where ZAGAT was weak. For example, in Cambridge physics the r for ZAGAT was .04 but for mock results .75. ZAGAT was not particularly useful, according to this report, for predicting the number of passes. There was an r of .476 but the distribution was poor. When it came to predicting '0' level passes ZAGAT becomes more useful with an r of .507, better distributed, and when the types of passes needed for entry into various tertiary institutions are being predicted, ZAGAT is extremely useful. The recommendation of this report is that anyone gaining less than five on ZAGAT can be discounted as having any chance of gaining Cambridge passes adequate for entry into the University of Zambia or the Zambia

Institute of Technology(ZIT). Here this report agrees with the first one which drew attention to ZAGAT's usefulness in predicting division one and two passes. Hardly surprisingly ZAGAT, as has been seen earlier, is seen to be useful as a primary screening test.

GENERAL CONCLUSIONS

The majority of Careers Masters still have some direct contact with industry and expect this to continue. Those firms which do use the central Clearing Agency seem to find less necessity to contact schools directly but even among these some contact was maintained. This seems to be partly because of the inadequacy of the Careers Preference Form, especially in relation to information concerning character and partly because firms still need information which cannot be covered in a general questionnaira.

Very few firms seem to place a high priority on the dissemination of careers literature. Both the replies from the Careers Masters and industry agreed in this respect and furthermore, those firms which claimed to be doing something in this field were generally those accepted by the Careers Masters as having the best record.

The work of the clearing house is widening and its relations are good even with those firms who do not make use of its services. It seems appropriate that this good will can be utilized in two ways allowing that the EOAS has the facilities to extend its activities:-

(a) The Careers Masters were aware of the need to be informed of job opportunities. Industry seems quite willing to provide this information and when the clearing house was

set up it was conceived of as a two way channel of communication. It, therefore, seems appropriate that the service be extended and that industry is asked to provide an estimate of the number of job opportunities and types of work available.

(b) The EOAS is naturally concerned that its test should be thoroughly validated. The response from industry has been poor and generally testing procedures have been carried out with very little regard as to their efficiency. Where exceptions exist, we have looked at these in detail and given some indication as to the scope of the usefulness of EOAS tests, particularly ZAGAT.

CHAPTER IV

PRIORITIES IN CAREER GUIDANCE.

CHAPTER IV

With the abandonment of a system of direction in 1969 at a time when there was a large increase in numbers of Form V leavers, there followed a kind of chaos. The most significant aspect of this chaos has already been mentioned in the introduction. It was a period when contact between industry and schools was poor and Form V leavers were tending to apply for any job. This led to a situation in which both the EOAS and the Careers Master were dealing with the same student many times over either for testing or for writing references. It was to solve this situation that the Central Agency was instituted so that, even if one student continued to make several applications, various firms could make use of the same source and so save the Careers Master wasted If this system is working, we should find a situation in which the Careers Master has more time to do careers work with his own students either as individuals or in a group and will be less burdened with the necessity to write references. In order to find out how far this is so, four aspects of careers work were listed on the questionnaire and the Careers Masters were asked to list them in the order in which they spent most of their time carrying out each aspect - 1 would indicate the greatest amount of time spent and 4 the least. They were then asked to take the same activities and list them 1 to 4 to indicate 'how they would prefer to spend their time rather than how they are compelled to by circumstances'.

The four aspects of Careers work which they were given were:-

(a) Advising individual pupils on what career they should follow.

- (b) Passing on information to the Central Agency (filling in preference forms).
- (c) Giving information to prospective employers or future training institutions, e.g. writing references.
- (d) Giving information to pupils in a group. This includes visits and outside speakers.

Six Careers Masters did not answer as requested and, for four others, their responses were only partially acceptable. The number of responses, therefore, is between 55 and 59. Laid out below are 4 four way tables, one for each of the aspects of careers work covered. The vertical axis, in each case represents the priority they have to give this particular aspect of their work. The horizontal axis represents the priority they would like to give it.

IV. TABLE A - Advising Individual Pupils on What Careers They Should Follow.

	1	2	3	4	Total
1	14	7	0	0	21
2	10	2	0	2	14
3	7	3	1	0	11
4	7	5	0	1	13
Total	38	17	1	3	59

No. of responses - 59

38 out of the 59 teachers thought that this aspect of careers work should be their main concern. Of these, 14 claimed that they were able to give it priority. Only 4 teachers placed this aspect of their work lower than second position if they were in an ideal situation. However, 24 claimed they had to give it a '3' or '4' priority in present circumstances.

IV. TABLE B - Passing on Information to the Central Agency (filling in preference forms).

	1	2	3	4	Total
1.	1	0	7	2	10
2.	0	3	10	9	22
3.	0	2	5	12	19
4•	0	0	0	4	4
Total	1	5	22	27	55

No. of responses - 55

The impression gained from this table is that Careers Masters spend a little more time on this than they would like. Understandably, very few consider that this should be the most important part of their work but, at the same time, very few feel that it is taking up most of their time at the moment. The most common response was either to say that in the present situation it was listed '2' and ideally it should be '3' or that it was '3' and should be '4'.

IV. TABLE C - Giving Information to Prospective Employers or Future Training Institutions, e.g., writing references.

	1	2	3	4	Total
1.	0	0	6	1	7
2.	0	0	4	2	6
3.	0	1	2	6	9
4.	0	1	15	19	35
Total	0	2	27	28	57

No.of responses - 57

On the findings of this table, there appears to be a satisfactory situation in which most of the Careers Masters wish to give this a low priority and are in fact able to do so. To go further, some would even wish to spend more time on this, placing it '3' but in fact are forced to give it a low priority. This table would seem to indicate that the period in which Careers Masters were forced to write a multiplicity of references has passed and that the use of the clearing agency is cutting down this aspect of the Careers Masters work.

IV. TABLE D - Giving Information to Bupils in a Group. This includes visits and outside speakers.

	1	2	3	4	Total
1.	10	10	1	0	21
2.	5	8	0	0	13
3.	2	8	0	0	10
4•	2	6	2	1	11
Total	19	32	3	1	55 .

No.of responses - 55

Of the 55 responses, 51 gave this aspect 1st or 2nd priority.

However, the majority of these gave it 2nd priority. Of these 50,

18 claimed that they were forced to spend much less time than they

would like to and indicated that they thought it should have '1' or

'2' priority but they were forced to give it either '3' or '48.

It is hardly surprising that a large proportion of Careers

Masters wanted to give priority to the job of giving advice to
individual students. However, it is a little surprising that a
third of this group thought that under the circumstances they were
able to do this. Certain conditions are necessary as a pre-requisi
before vocational counselling can take place in a school. Without
these, such counselling can be little more than a vague discussion
between Careers Master and student. These pre-requisites are:
(a) Knowledge of the job opportunities that exist. We are

(a) Knowledge of the job opportunities that exist. We are not implying here that the Careers Master should direct the

student to those of greatest need but as we have already pointed out in a small developing country like Zambia, some job opportunities may not exist, may be temporarily unavailable or not given a high priority for zambianisation. Without some knowledge of job openings a Careers Master cannot point out when a choice is unrealistic and possibly suggest a near alternative.

- (b) A good knowledge of the qualifications necessary for the various openings and the conditions which appertain to particular jobs. In other words, up to date cargers information.
- factors which are determining the student's choice. At its best, this means that the Careers Master is part of the same society of the student or at least has an intimate knowledge of it. In a good situation, there is contact between the counsellor and the family, the counsellor and those institutions which are most important in making up the character of the society and contact between the counsellor and organisations which can provide assistance in special cases. Counselling is only possible (and this is true of teaching) if the counsellor is aware of those reference points which allow him to interpret student's comments.
- (d) A good knowledge of the student's abilities and aptitudes. This in turn can only exist if a continuous record has been kept. Without such a record, the Careers Master cannot tell whether the student's choice is realistic. Intuition here is unreliable and only with validated test for ability and

aptitude can a Careers Master hope to do anything more than guess at the suitability of a student with regard to the job he has chosen.

- (e) Individual counselling takes up a great deal of time and a generous allowance for this would have to be given before a Careers Master could anticipate a programme which would include it.
- An educational situation is required in which the (f) curriculum is student centred. Because real vocational counselling can only exist where there are a variety of courses to suit the abilities and aptitudes of the student (in such a situation counselling is not left to the last year but, in a very real sense, choices are being made all the time) counselling is impossible in a situation where there is a rigid system of streaming which limits the possibilities of choice for students and often does so by creating a hierachy of subjects so that the more academic are specialized in one direction and the less academic in another. The ideal situation for vocational counselling is one where the school aims at a general education rather than specialized training, does not stream and provides options. (These options will be taken up after the counselling). Counselling works better in a school where courses are made for horses rather than horses trained for a course. This point is closely related to (d) in that a system which tries to find a curriculum which suits the student rather than judging the student against a curriculum will depend heavily on continuous assessment in order to work.

Other pre-requisites could be mentioned but even limiting ourselves to these six, we find that in the Zambian educational system, the necessary pre-conditions for vocational counselling do not exist. It has already been made clear that Careers Masters are aware that they have insufficient knowledge of the job opportunities that exist in the country. This was one of the criticisms they levelled at the Ministry of Labour. It is a valid At the moment the system of communication works in one direction only, and, although industry is willing to give information In interviewing the to the schools, this is not happening as yet. personnel officers, it became evident that careers information is not being passed onto the schools with the exception of a few firms who have an outstanding record. The Ministry of Education admits its responsibility for circularising.careers literature but also admits that, although a substantial amount of work is in the planning stage, very little careers literature is emanating from the Careers Officer at this stage. The Careers Masters also asked at their careers conferences for a record sheet so that a continuous record of the student could be kept throughout the whole period he is at secondary school. Action has been taken on this and from next year the use of such a record card is compulsory. However, the demands of the Careers Masters showed that most of them were aware of a deficiency here and it will be several years before this record card will be ready for use within the school. The Careers Officer is preparing such tests but again we are talking of the future and not the present. The time allowance given for careers work are not generous and in the case of those who had other

responsibilities usually non-existant. It is difficult to generalise on the Zambian educational system but it seems to be the case that in most schools there is streaming, a hierarchy of subjects which students either fail or succeed in taking and a situation where students are fitted to the curriculum rather than the curriculum to the students.

Zambianisation of Careers Masters is progressing slightly faster than the zambianisation of the total secondary school teaching staff and to that extent we can say that more teachers who may have an intuitive knowledge of the social factors which determine career choice are being brought into the ranks of Careers Master. However, the number of Zambian Careers Masters is still small and in a situation in which 'elitist' employment for Zambians is recent and in which society is extremely fluid, such knowledge may not be very strong. The majority of expatriat Careers Masters cannot hope to gain such strong intuitive insight and in boarding schools cut off from the student society they will find contact with representatives of that society virtually impossible. In such circumstances in order for pre-condition 'c' to be met, these Careers Masters must be given a more academic appraisal of the extent to which sociological factors affect the pattern of career choice. In the next section, a partial contribution has been made but at the same time it is made clear that the amount of material available in this field is very thin for the whole of Africa, South of the Sahara.

In such circumstances, in which none of the pre-requisites necessary for individual counselling (listed above) exist, it seems

difficult to conceive that many Careers Masters are able to undertake this aspect of career work. Their desire to do so is commendable; the claim of some of them that they do is suspect.

GENERAL CONCLUSIONS.

The Careers Masters wish to spend more time first in giving individual counselling to their students and secondly to passing on careers information. They feel they spend a little too much of their time in dealing with the Ministry of Labour forms and wish to give the lowest priority to such matters as writing references for school leavers. A reasonable minority claim that they are able to give priority to individual counselling but because the necessary pre-requisites for such counselling are not to be found in the Zambian education system, this claim is suspect.

difficult to conceive that many Careers Masters are able to undertake this aspect of career work. Their desire to do so is commendable; the claim of some of them that they do is suspect.

GENERAL CONCLUSIONS.

The Careers Masters wish to spend more time first in giving individual counselling to their students and secondly to passing on careers information. They feel they spend a little too much of their time in dealing with the Ministry of Labour forms and wish to give the lowest priority to such matters as writing references for school leavers. A reasonable minority claim that they are able to give priority to individual counselling but because the necessary pre-requisites for such counselling are not to be found in the Zambian education system, this claim is suspect.

SECTION II

THE PATTERN OF CAREER CHOICE.

In the last section, we looked at the Careers Masters' relation with the three most important institutions outside the school, with which they have contact, the Ministry of Education, the Ministry of Labour, industry and tertiary education. In order to do his job properly, he must be aware of this infrastructure and his place in it. However, he also has contact with the Form V leavers. Part of the purpose of the present re-organization has been to relieve the Careers Master of unnecessary duplication in his dealings with the institutions mentioned above so that he can expend more of his effort in informing and advising his students. It has already been discussed how far re-organization has been successful in this respect, and how far the above institutions provide the Careers Master with the aids necessary to carry out his work of helping students.

If a Careers Master is to be successful in advising students individually or in groups, apart from the aids provided from external sources he must:-

- (a) know what factors contribute to a student making a particular choice,
- (b) and whether the choice is a realistic one.
- (a) There are, of course, an indeterminate number of factors which contribute to the making of a particular choice. However, some are so general as to make a significant difference between one socielogical grouping and another. Students from a rural background may tend to choose a certain type of job because they are from a rural background. Only when a Careers Master is aware of such a situation is he able to answer a further series of questions. Is this socielogical

factor leading his students into making unrealistic choices? Is it inhibiting their ability to choose by limiting their horizons? Only when these questions are answered can the Careers Master consider the final one 'In what way do I advise the student? This particular field is in need of a great deal of study and this paper has limited itself to collecting the evidence available at the moment in Zambia and making some comparison with other parts of the world.

- (b) There are four criteria by which a career choice can be defined as unrealistic; two of them apply to individual choices and two of them apply to the proportion of choices made by a particular group.
- 1. A choice is unrealistic if a student chooses a career for which he will not possess the necessary qualifications (or too high a qualification), e.g., student has poor English and yet chooses journalism.
- 2. A choice is unrealistic if the student chooses a career about which he knows little or nothing, e.g., chooses radiography because he is interested in radios.
- 3. A higher number within a group may select a certain career for which there are far fewer openings.
- 4. The pattern of eventual employment may differ radically from the pattern of career choice of a certain group.

The Careers Masters, as has been noted above, have been concerned as to how to make career choices more realistic. Conscious of the unrealistic choices which arise from the first criterion, they have asked that careers literature should state more clearly

what qualifications are necessary. They have also asked for intelligence tests in Form IV and Form V to help them assess a student's ability to reach a certain level of qualification and so be better able to advise him. For the same reason they have requested career aptitude tests for use within the school. In dealing with the second criterion, the Careers Masters have expressed dissatisfaction at the amount of careers literature which they receive. The appeal for more information on job openings was directed at the Ministry of Labour and revealed the Careers Master's awareness of their limitations in advising students as to how extensive a particular opening was. Criterion 3 is the definition of the unrealistic choice which exists because Careers Masters lack this particular information.

In this section, patterns of career choice in Zambia will be studied and some comparison made with other parts of the world. Following this there will be an analysis of certain sociological factors in order to see how far they affect the pattern of career choice and to what extent, if any, they contribute to making that choice or group of choices unrealistic according to the four criteria we have already mentioned. The study of unrealistic choice, according to the last criterion, will involve a comparison between the career choice of a particular group and the employment taken up by that group. Here we will concentrate on the 1971 school leavers because more evidence is available as a representative sample of this group has been traced for the last two years by Dr.P.Dow and Mr. J. Case of the University of Zambia.

1. Where statistical evidence from this study has been used, it will be shown by the words "UNZA Tracer". This study traced just over

CHAPTER V

FACTORS AFFECTING CAREER CHOICE

CHAPTER V

In Zambia, every Form V leaver has indicated his first, second and third choice of job for several years. Whether this choice has been realistic or not in terms of employment taken up after leaving school will be discussed in the next section, and it is there that we will argue how far this pattern of choice is one of prestige rather than one of realism. However far this may be the case it is still true to say that a society's concept of what is prestigious could be a factor affecting job choice. Even if we are reserving our comment on the extent to which this factor forces students into unrealistic choices it is still appropriate, in this present section in which we are looking at factors affecting pattern of choice to include prestige as one of them.

The other factors which are to be discussed are :-

- (a) The education of the father
- (b) The education of the mother
- (c) The employment of the father
- (d) Whether the student attends an urban or rural school
- (e) Whether the student lives in an urban or rural area
- (f) Whether the father's background is urban or rural.

Although our choice of these particular sociological factors is not arbitrary but dependent on the data which is at present available in Zambia, it is not possible to claim that this list is exhaustive or that the items which we have included are more important than any which have been excluded. In drawing attention to some sociological factors and showing their importance in defining the pattern of career choice (whether they cause that pattern of choice to be unrealistic or not) the necessity to extend this field of study

and increase awareness of it on the part of those advising Form V leavers will become more obvious.

It will be seen that sociological factors are not only important in determining the pattern of career choice so that it becomes unrealistic in terms of criteria 3 and 4 (mentioned in the introduction to this section), which will be dealt with in the next section but also in terms of criteria 1 and 2 which can be more appropriately dealt with in this section. These factors may be so strong as to persuade a group of Form V leavers to choose jobs about which they know very little or for which they do not possess the appropriate qualification.

PRESTIGE as a Factor Affecting the Pattern of CAREER CHOICE

When a comparison is made between various prestige ratings from different parts of the world, the most striking result is the great similarity between them. Prestige ratings first started in 1925 with a study by G.S. Counts of 450 of student teachers and high school pupils. Even after 21 years, in 1946, Kank showed that the prestige ratings of the jobs chosen by Counts differed very little. Among developed countries, similarities of ratings have been very high. Hicks (1967) quotes the following correlations for studies carried out in various developed countries.

- 1. Quoted by Hicks "The Grading and Choice of Occupation by African Youth in a Developing Nation Independent Zambia 1967".
- 2. Quoted by Hicks from work of Inkeles and Rossi "National Comparisons Of Occupational Prestige" American Journal of Sociology No. 61 Pages 329-39, January 1965.

	USSR	JAPAN	GREAT BRITAIN	NEW ZEALAND	UNITED STATES	GER MANY	
		•74	.83	•83	• 90	•90	USSR
			• 92	•91	• 93	• 93	JAPAN
				•97	•94	•97	GREAT BRITAIN
					• 97	• 96	NEW ZEALAND
						•96	UN ITED STATES
							GERMANY
Average	.84	•89	• 93	• 93	• 94	• 94	

What is more remarkable is that the similarity in the prestige ratings persists even when developed and developing countries are compared. I include mention of two studies other than Africa south of the Sahara to make it clear that this similarity is world wide, and from the following figures it is clear that a Zambian study by Hicks 1966/67 correlates highly with developed countries and developing countries alike.

Comparison of Zambian Prestige Ratings with Developed and Developing Countries.

Developin	g Count	ries.		
v Tinyaka, Phillipines v Desouza, India v Xydias, Belgian Congo, 1956 v Northern Ireland, Mitchell & Epstein, 1959 v Mitchell & Irvin, Rhodesia (1965)		v Two USA Studies v Two U.K.Studies v Two Japanese Studies	.964	& .97 & .80 & .81
v Foster, Ghana	• 84			

The lowest figure is for the Belgian Congo and Hicks points out that the choices in this study were limited to those possible for Africans at that time. The list is therefore truncated. We have

here a very stable concept of prestige rating, which is world wide and unaffected by varying social conditions. Xydias and others have shown that this similarity cuts across various social groupings. In Hicks's study, European and African school childrens' choices correlated highly. There was also a high correlation between the school childrens' choices and groups of industrial workers. Mitchell & Trvints study shows some difference between the ratings of miners and students but this result is exceptional.

When we look at the respondent's opinion as to what are the factors within a job that makes for prestige we find certain dissimilarities between the developing world and the developed one. Financial rewards figure much more highly in studies south of the Sahara than in countries such as the USA or Japan. Foster, in comparing student's perception of income for a job and their prestige rating of it finds a correlation of .92 for boys and .87 for girls. For a similar study in Japan the correlation was .65 and for USA .52. This disparity does not seem to exist within Africa. Hicks, Zambia, found that in eleven of twelve groups that salary was placed first out of five possibilities of factors contributing to the prestige of a job. This similarity of characteristics of prestige ratings south of the Sahara is evident in other respects. Xydias asked her subjects to list their jobs in order of prestige, it was found that similar results could be obtained by asking subjects to give a rating on a five point scale. This had the added advantage that the extent of variance for the total rating for each job could be measured and given a standard deviation. Obviously,

3. Foster "Education and Social Change in Ghana" Chapter VII.

٧	٠	

1.	Mechanical Engineer ((486)	16.	Lawyer (124)
2.	Teacher	(465)	17.	Journalism	(113)
3.	Nurse	(386)	18.	Automotive Repair	(102)
4.	Accountant	(341)	19.	Chemical Engineer	(94)
5•	Railway Worker	(327)	20.	Civil Air Traffic Control	(93)
6.	Air Force Pilot	(278)	21.	Health Inspector	(89)
7.	Copper Mining Industry	(247)	22.	Forestry	(85)
8.	Soldier	(217)	23.	Civil Air Line Pilot	(79)
9.	Medicine	(214)	-24.	Civil Engineer	(79)
10.	Shorthand Typist/Secretary	(213)	25.	Telecommunications Engineer	(72)
11.	Aeronautical Engineering	(195)	26.	Science Technician	(72)
	Agriculture	(185)	27.	Immigration Officer	(68)
	Banking	(156)	28.	Pharmacist	(67)
	Social Worker	(156)	29.	Salesman	(66)
	Electrical Engineer	(137)	30.	Police	(59)

There are certain difficulties to be encountered in making a rank correlation between this pattern of job choice and various prestige ratings :-

- The prestige ratings cover a wider field including low (a) prestige jobs such as dagga boy and scavenger. These, understandably, are not included on a career preference list for Form V leavers. Such a list tends to concentrate on more prestigious In such circumstances, only part of one list can be compared with the other one.
- This difficulty is accentuated by the fact that different (b) lists concentrate on different jobs. Mitchell & Epstein place African Education Officer at the top of their list. Such a category is not completely comparable with any item on the career preference list.
- It should also be noted that certain jobs which rank high (c) on some lists, e.g., clergyman, which ranks seventh on Foster's list is well below the first 30 on the career preference list; only 10 people chose this opening.

A cursory glance at the career preference list shows that it does not follow the normal prestige rating pattern. Teacher is placed far above doctor and lawyer. When seven jobs from this list are compared with the same jobs in Foster's list of prestige rating, the rank correlation according to the formula $\rho = 1 - \frac{1}{n(n^2 - 1)}$ is .43. This is considerably lower than the correlations between various prestige ratings and indicates that although prestige may have some effect on the present pattern of jobs choice in Zambia, it is by no means considerable. To obtain a significant correlation at the .05 level, a figure of .714 would be necessary. Prestige is not the over riding factor in deciding the pattern of career choice in Zambia.

VI. Comparison of Zambian Form V Leavers Choice 1971 and Prestige
Ratings of Ghanaian Students 1965.

Zambia	an	Ghanaian
1.	Teacher	3∙
2.	Nurse	4•
3.	Soldier	5•
4.	Doctor	1.
5.	Lawyer	2.
6.	Motor Mecha	anic.7.
7.	Policeman	6.

Foster⁵not only asked for a prestige rating but for the vocational aspirations and expectations of his subjects. Aspirations are choices of jobs when the subject ignores such limitations as the opportunities that exist or his own qualifications. Expectation is meant to be more realistic. Even when we look at the aspirations of the students we see some movement away from their prestige ratings. The students do not always want to take up a job which they feel society rates highest even when their choice is hypothetical to the extent of ignoring such factors as qualification and job opportunity.

5. Foster "Education and Social Change in Ghana" Chapter VII

For the boys, scientific and technical came higher than medicine and secondary school teacher very much higher than lawyer. The reverse was true in the prestige ratings. As perceived income correlates very high with prestige rating, the reverse is also true for perceived income. When Foster looks at expectation it is noticeable that many of the jobs which rate high for prestige are not chosen at all. None of the students chose medicine or law and only 1.4% of the boys and .5% of the girls chose secondary school teaching. Foster shows that in the Ghana of 1965 these expectations were realistic.

What is of interest in Foster's table of expectation is not only that it differs from aspirations which in turn differ from prestige rating and perceived income but that it also differs from the pattern of careers choice in Zambia in 1971. In Ghana in 1965 only 1.4% of the boys and .5% of the girls considered secondary school teaching because this was a high level for any Form V leaver in Ghana at that time to reach. In Zambia, secondary school teaching is the second most popular choice and would not be considered an unreasonable expectation. Medicine seems an impossibility for the student in Ghana and according to Foster he is realistic in thinking this but, in Zambia it is a realistic expectation for some of the school leavers. This difference may be accounted for by the fact that Foster made it clear to his subjects what the difference was between aspiration and expectation whereas in Zambia they are merely

^{6.} Foster "Education and Social Change in Ghana" Chapter VII, page 280. It is true that Foster asked his respondents to make a choice, taking into account the fact that they would not be proceeding to any higher form of education. This automatically excluded such openings as secondary school teacher and doctor. However, he points out that this is realistic because only 25% could hope to enjoy further training or education. In Zambia a

asked to give their first choice for a career. However, social conditions in Zambia in 1971 do seem to be different than those in Ghana in 1965. A prestige rating seems to be stable and universal; a pattern of career choice is much more affected by the social conditions in which it is set, very little affected by what is considered to be prestigeous and, therefore, continually changing.

EDUCATION OF PARENTS as a Factor Affecting the Pattern of CAREER CHOICE.

The hypothesis we are adopting in the section is that those Form V leavers who have a father and what is less likely a mother with secondary, or post secondary education will indicate a significantly different pattern of career choice from those who have parents with either primary education or no education at all.

Four types of comparisons are made.

- (a) The pattern of choice according to industry is compared to the fathers! level of education.
- (b) The pattern of choice according to industry is compared with the mothers! level of education.
- (c) The pattern of choice according to occupation is compared to the fathers! level of education.
- (d) The pattern of choice according to occupation is compared with mothers! level of education.

In the UNZA Tracer Study industry is divided into twelve categories and occupation eight categories.

The data for the following tables come from the tracer project for 1971 Form V leavers. I have been forced to ignore a rather large

^{7.} Source of data - UNZA Tracer.

proportion of returns which state that the education of the parent is unknown. Of those whose education is known, I have divided them into two groups; those who have secondary education and those who do not. Understandably, the latter group is the largest. The increase in the number of Form Vs is only recent and it is to be expected that the standard of education of their parents is much lower. This is particularly true for the mother.

VII.

EDUCATION OF FATHER V CHOICE OF INDUSTRY OF
FORM V LEAVER.

	Primary	y or less	Seconda	ry or more
Agriculture	73	8.07%	. 4	2.3%
Mining	59	6.52%	8	2.87%
Manufacturing	32	3.53%	5	2.87%
Construction	35	3.87%	7	4.02%
Elec. and Water	24	2.65%	4	2.30%
Trade	26	2.87%	9	5.17%
Finance & Insurance	40	4.42%	5	2.80%
Real Estate	18	2.00%	7	4.02%
Transport and Communication	190	21.00%	37	21.26%
Government Administration	22	2.43%	3	1.72%
Community Business Service	383	42.32%	82	47.13%
Hotels and Restaurants Tourism	3	• 33%	3	1.72%
TOTAL	905	100%	174	100%

VII. TABLE B

EDUCATION OF MOTHER v CHOICE OF INDUSTRY

OF FORM V LEAVER.

	Primary	or less	Secondary	or more
Agriculture	76	7.37%	, O	0%
Mining	67	6.50%	0	0%
Manufacturing	33	3.20%	0	0%
Construction	39	3.70%	3	6.38%
Elec. and Water	27	2.61%	1	2.13%
Trade	34	3.30%	1	2.13%
Finance & Insurance	44	4.27%	1	2.13%
Real Estate	21	2.04%	3	6.38%
Transport and Communication	229	22.20%	6	12.76%
Government Administration	25	2.42%	. 0	0%
Community Business Service	433	42.00%	29	61.70%
Hotels and Restaurant Tourism	3	.29%	3	6.38%
TOTAL	1031	100%	47	100%

VII.

EDUCATION OF FATHER V CHOICE OF OCCUPATION
OF FORM V LEAVER

	Primar	y or less	Secondar	y or more
Prof. & Technical	699	60.52%	178	71.49%
Administration	0	0	0	0
Clerical	30	2.59%	12	4.81%
Sales	14	1.21%	2	.80%
Service	2	.17%	1	• 40%
Agriculture & Fishing	63	5 • 45%	4	1.6%
Prod. Tran.Labourers	20	1.73%	5	2.00%
Undergoing Training	327	28.31%	47	18.87%
TOTAL	1155	100%	249	100%

VII.

TABLE D

EDUCATION OF MOTHER v CHOICE OF OCCUPATION

OF FORM V LEAVER

	Primary	or less	Seconda	ry or more
Prof. & Technical	810	60.9%	58	79•45%
Administration	0	0	0	0
Clerical	38	2.85%	2	2.73%
Sales	16	1.20%	0	0
Service	2	.15%	1	1.3%
Agriculture & Fishing	76	5.71%	0	0
Prod. Tran. Labourers	23	1.72%	1	1.37%
Undergoing Training	365	27.4%	11	15.06%
TOTAL	1330	100%	73	100%

The chi squared for the above tables are :-

Table A - 8.03 with eleven degrees of freedom.

Table B - 34.9 with eleven degress of freedom.

Table C - 6.66 with seven degrees of freedom.

Table D - 13.89 with seven degrees of freedom

The conclusion to be drawn from these tables is that generally there is no significant dissimilarity between them. The only table which does show a significant difference table B, in which there is less than a 1 in 100 chance that the differences are accidental. With table A, there is a seven in ten chance of the difference being accidental; in table C, approximately a 50/50 chance and, in table D, the difference is almost significant at the .05 level. The education of the mother, therefore, seems to be more important than the education of the father as a factor affecting career choice. With occupation, the education of the mother results in differences

which are significant at between the .1 and .05 level; with industry, the education of the mother is extremely significant - more than .99. In both cases, the differences resulting in the fathers! education are not significant.

It must, therefore, be accepted that the hypothesis at the beginning of this section is not acceptable and that generally the education of the parents does not significantly affect the pattern of career choice. However, it is worth noting that certain industries/occupations stand out on all the tables as having a greater difference in the percentage choice of the highly educated and less well educated parent. It has already been admitted that these differences are not great enough to affect the overall pattern but it is important to draw attention to them. They are agriculture and mining. In Tables A and B, agriculture and mining have chi square figures much higher than those of the other groups and in Tables C and D agriculture and fishing is the highest chi square figure in both cases.

RURAL v URBAN AS FACTORS AFFECTING CAREER CHOICE.

In some ways it is easier to define rural and urban in Zambia than it is in a small developed country such as the U.K. The line-of-rail has always been much more economically developed than the rest of the country. Of the line-of-rail, the Lusaka, Kafue and Copperbelt areas can again be easily distinguished. According to Jackman, 1973 in "Geographical Distribution and Movement of Tracer Project Participants", population can be very clearly categorised into three areas. (A) Rural areas which contain no town of more than 4,000 people; (B) Minor townships which contain populations of 4,000 to 13,500 people all of which are either off the line-of-

the line of moil and administrative centres and

not centres of industry (the only arguable case here is Mazabuka).

(C) Towns with populations in excess of 24,000, all of which are on the line-of-rail, are industrial centres and except for two, Kabwe and Livingstone, are found in the two areas mentioned above. On this basis Lusaka, Kafue and Copperbelt stand out as distinctly industrial. The criteria could be widened to include Kabwe and Livingstone. Furthermore, when we note the following table, the economic importance of these two areas becomes obvious. The categories for rural, minor townships and urban are as stated above.

1971 FORM V LEAVER.	RURAL	MINOR TOWNSHIP	UR BAN	
Place of birth.	66.44	7•9	20	
Attendance at upper Primary School.	56.10	7.7	34.43	
Attendance at Secondary School	48.94	15.84	35.2	
Residence 12 months after leaving school.	16.06	4.73	77•55	

Of the 77.55 in urban areas, twelve months after leaving school, 68.76 were either in Lusaka or the Copperbelt. 4.62 were in Kabwe and 3.63 were in Livingstone. There is obviously a large migration to these two areas on the part of Form V leavers, and in terms of job opportunities they figure very highly. The increase in the urban categories from 20% born in the area to approximately 35% completing upper primary and secondary schools education in urban areas is accountable by the general movement towards towns in the period in which this group had been growing up but the rise from 35.2% for secondary education in urban areas to 68.76% for employment after twelve months in just two sectors of that urban area shows how highly industrialised these two sectors are.

 Place of birth does not approximate to 100% because foreign born are excluded.

Although urban areas are clearly distinguishable from rural areas geographically, Zambian society is very fluid and great care must be taken in drawing conclusions from a particular question. As we have seen in the above table, residence after leaving school has no relation to the other three categories. However, what is confusing is not so much this (The drift to the towns is a world wide feature) but the fact that if an urban resident is asked what is his home district, he will, in most cases, answer by giving the district in which he was born or even in the case of some people who are born in urban districts, the district in which their parents were born. Jackman has pointed out that although a year after leaving school the majority of Form V leavers for 1971 were working in urban areas, the majority still gave the area of their birth as their home district; of those born in rural districts, 79 to 90% answered in this way and even of those born in urban areas, 22 to 40% gave this answer.

If, as Hicks does, you make a definition of rural and urban according to how long a student has lived in an urban area, you are likely to either be forced to set your standards at an insignificant level, e.g. five years, or be more discriminating and find that your urban proportion is extremely small. Hicks stipulated 10 years in his study of 1967. He was somewhat surprised that a less than a third of his sample were urban. However, this would naturally be the case. We have already commented that the above table shows a drift to the towns. In 1973, almost a third of the population live in urban areas; in 1969, it was little over 25%, in 1963, the figure was 18%. Hicks

^{9.} Hicks - "The Grading and Choice of Occupation by African Youth in a Developing Nation - Independent Zambia

stipulates as urban a student who was in an urban area in 1957 when the proportion must have been somewhere in the region of 15% or less.

It is dangerous to assume that questions concerning the area in which the father is working or the type of work that he is doing will necessarily indicate the social background of the student. The 1969 census, as we have already said, indicates that 25% of the population were urban. However, this same census points out that half the men of working age were working in Lusaka or the Copperbelt or had been working there the previous year. Although most students (67.54%) completed their primary education in the region they were born (a quite high figure bearing in mind that primary education takes 10 to 15 years and there is a drift to the towns) and a very high proportion (87.67%) completed secondary school education in the same area in which they completed primary school education, it is not safe to assume that this continuity exists for the father as well. The census returns seem to indicate that many fathers during this period leave their families to work in the urban areas. It is possible, in a rural school in which a high proportion of the students are receiving education in the district in which they were born, to give a return which indicates that a high proportion of the fathers are living in urban conditions.

Bearing these difficulties in mind, we put forward the following hypothesese:-

10. There is very little discrepancy in the sex ratio in urban areas and one theory is that the post independence drift consists to a great extent of wives joining husbands in the urban areas. The child is then left in the care of the

- (a) That the pattern of choice in a rural school will be significantly different from the pattern of choice in an urban school.
- (b) That the choice of those children who have a father with an urban background will be significantly more realistic than the choice of those students who have a father with a rural background irrespective of what kind of schools they attend. By realistic, the knowledge of the conditions of the job which has been chosen is referred to and not the extent to which the same job is taken up later on.

The discussion of both these hypothesese stem from data supplied by the results of a questionnaire given to 502, 1972 Form V leavers. This sample is not representative of the whole country but weighted heavily in favour of the two urban areas. The numbers in each area are:-

Lusaka 287 Copperbelt 111 Rural 104

HYPOTHESIS A.

Although a comparison is made to see how far the pattern of job choice of this sample is typical of the whole population, our main concern is not with this but rather with the extent to which the three areas differ in the pattern of their job choice. We compared their response to the Career Preference Form group by group with the total response for 1971 already mentioned on page (91). From the questionnaire we were able to find out how far their choice had changed from June when they filled the Career 11. See Appendix E for a copy of the questionnaire

Preference Form and October when they answered the questionnaire.

There was a reasonably fluid situation in which from thirty to fifty percent did change their preference. No one area was significantly different from any other in this respect.

Table VIII. A compares the most popular choices of the whole of the sample with the rating which these jobs have in the 1971 figures for the whole of the population.

VIII	TABLE A.	Form V Lea	vers v the To	otal Sampl	e Group.	
		Popularity rating of Career Choice as for all Form V Leavers for 1971.	Rating of choices in the first column as for total sample group.	No. of choices made by sample group.	Differ- ence	Differ- ence Squared
	anical neering	1	1	38	0	0
Teach	ner	2	4	27	- 2	4
Nurs	ing	3	2	30	-1	1
	untancy	4	3	29	1	1
Railv	_	5	8.5	12	-3.5	12
Airf		6	6	21	0	0
Mini		7	10	7	- 3	9
Army		8	5	22	3	9
Medi		9	7	15	2	4
	thand Typ		8.5	12	1.5	2.2
			p = .73			

The correlation is quite high. What is worth noting is that the major discrepencies exist in railways followed by mining and the army. It is to be expected that the next largest group to the total sample, namely Lusaka, would correspond most with the total population. However, this is not the case. The rural area corresponds much more closely as can be seen in Tables B and C.

TABLE B.

TOTAL POPULATION v LUSAKA

	Rating of Popularity of choices for Lusaka Sample	of the same jobs according	Difference Squared.
Engineering	1	1	0
Accountancy	2	4	4
Airforce	3	5	4
Law	4	10	36
Army	5	6	1
Journalism	6	11	25
Civil Engineering	7	12	25
Nursing	8	3	25
Medicine	9	7	4
Electrical Engineering	10	13	9
Teaching	11	2	81
Aeronautical Engineering	12	9	9
Shorthand Typing	13	8	25
	n - 32		

p = .32

TABLE C.

TOTAL POPULATION VERURAL

		Rating of Popularity of choice of the same job according to 1971 Form V Leavers Choice	Difference Squared
Teaching Nursing Army Mechanical Engineering Public Health Automotive Repairs Community Development Journalism Mining Railways	1 2 3 4 5 6 8 8 8	2 3 6 1 9 8 10 7 5	1 9 9 16 4 1 9 36

p = .46

In the rural sample, teaching and nursing are, as is the case in the total sample, extremely popular. In the rural sample, they are a little more popular than for the total sample. In the Lusaka sample, nursing drops to eighth position and teaching is not even in

the top ten. The difference in the rating of teaching is the most significant fact in this table. The small rural sample seems to reflect the position with regard to the majority of the schools of which approximately 60% are rural and agrees with the total population in placing teaching high. In the rural areas the students do not have direct experience of many jobs for which Form V leavers qualify. There are the teachers who are teaching them and often a local clinic. Limited to this, they seem to have been orientated to choose within the limited possibilities of those jobs with which they are familiar. The rural table is heavily weighted, both with government employment and jobs to which Form V leavers were directed prior to 1969. The Lusaka list does not contain the mines or railways, places far less emphasis on nursing and teaching, puts a higher value on mechanical engineering and includes among its high ratings jobs which are not government or typical of the era prior to 1969, e.g., accountancy comes second.

The Copperbelt area seems to be torn between the extremes of the rural areas and Lusaka. Mechanical engineering and nursing as with the rural areas held fourth and second places respectively. Although accountancy is among the first ten in the Copperbelt, it is not as popular. However, teaching is nearly as unpopular in the Copperbelt as it is in Lusaka and here there is a contrast with the rural area.

I. TABLE D.

COPPERBELT v TOTAL SAMPLE

	Rating of Popularity of choices for Copperbelt sample	Ratings of Popularity of choice for 1971 Form V Leavers.	Difference Squared
Railways Nursing Electrical Engineering Mechanical Engineering Medicine Mining Shorthand Typing Airforce	1 2 3 4 5 6 7 8 9	9 3 10 1 7 6 8 5	64 1 49 9 4 0 1 9
Accountancy Teaching	10	2	64

p = -.63

With these small samples, it is dangerous to draw too hasty a conclusion but there does seem to be some significant difference in the choice pattern of the rural area and the urban, particularly Lusaka. The job which shows the greatest difference is without a doubt, teaching. The tentative conclusion may be drawn that in Lusaka the Form V leaver is made aware of a greater variety of jobs and has moved further from the traditional pattern of choice which I delineated above. However, an awareness of a wider pattern of jobs may not necessarily indicate very much knowledge of them. The rural student could possibly be more knowledgeable of the more traditional career he has chosen than the seemingly more sophisticated Lusaka student. Later on we will discuss how far this is the case.

The second hypothesis is not concerned with patterns of career choice but the extent to which that choice is realistic in the sense that the Form V leaver is aware of the conditions of the job which he has chosen. For rural v urban, here we have not taken the geographical position of the school but the economic background of

the father. Is it true that those students who have urbanized fathers are more likely to make a realistic choice than those who have no such contact with the urban areas? We have already seen that the student in an urban school is aware of a wider variety of jobs but, as many of the urban schools allow only a limited contact with the society in which they are set, this awareness may not go very deep. The hypothesis contends that the student in an urban school with very little other urban contact is liable to make a less traditional but more unrealistic choice than his counterpart in the rural area who might be sticking to what he knows.

Our comments on population at the beginning of this section suggest that even in a rural school a high proportion of the parents, particularly the father, will have jobs in the urban areas. The results of the questionnaire confirm this. The participants were set a series of questions concerning their father to indicate how rural or urban he was. If their answers followed the pattern that he was a farmer, living off the line-of-rail and not employed, he was considered rural. If the opposite pattern held: that he lived on the line-of-rail; was not a farmer and employed, he was considered urban. A third group existed in which the responses were mixed.

For the Lusaka area, 210 fathers were urban (73.2%); 19 were rural (6.6%) and 58 could not be placed in either category (19.9%) For the rural area, 41 were urban (40%); 20 were rural (19%) and 43 could not be placed in either category (41%). For the purposes of testing this hypothesis, I ignored the group where it was difficult to decide whether the father was rural or urban and

concentrated on the two extremes. Even in rural schools, this meant that the number of students with rural fathers was always much smaller than those groups with urban fathers. However, this seems to be the reality of the situation in Zambia today.

The participants were asked a series of questions to test how far they were knowledgable of the conditions which pertain to the job they had chosen. If a student gave eight or more correct answers out of ten, he was considered to be fully aware of what kind of job he had chosen and, on this criterion, his choice was considered realistic; if four or less of the answers were correct, the student knew very little and his choice was considered unrealistic. There remained a kind of neutral zone in which the range of marks were five to seven. The questions asked were concerned with, (a) the training given for the job (whether full-time, part-time etc, and length of training), the salary to be expected whilst in training and five years after leaving school, whether the job involved night work and the possibility of being posted to any part of the country. A comparison was then made between the three areas. The Copperbelt is not considered here as the numbers involved were too small to be useful.

Code for the following three tables.

Pass: 8 - 10 on that section of the questionnaire which tests awareness of job chosen.

Neutral: 5 - 7 on that section of the questionnaire which tests awareness of job chosen.

Fail: 0 - 4 on that section of the questionnaire which tests awareness of job chosen.

Results of a Test on Knowledge of Jobs Chosen. IX. A Comparison between Pupils with Parents from Urban or Rural Backgrounds.

TABLE A.

TOTAL SAMPLE

	Urban	%	Rura	L %
PASS	101	29	5	12
NEUTRAL	166	49	26	62
FAIL	98	22	11	26

LUSAKA

Urban	%	Rural	%
58	27	0	0
94	43	11	5 7
67	30	8	43

TABLE C.

RURAL

	Urban	%	Rural	%
PASS	16	40	5	25
NEUTRAL	21	51	14	70
FAIL	4	9	1	5

In all three tables, a larger proportion of those pupils with parents with an urban background are found in the 'PASS' category. Those Form V leavers, irrespective of what school they attend, who have a father with an urban background, make a more reasonable choice. However, the difference is smaller in the rural schools and a tentative reason for this is that the rural Form V leaver: limits his choice to more traditional openings and those openings of which he has direct experience in a small community. school is less cut off from its community than the urban school and if choice is limited to that community it is likely to be knowledgeable.

The UNZA TRACER Project, although based on a good sample of 1971 school leavers, suffers from the fact that the careers choices are not listed individually but categorized in eight sections, excluding unemployed and unknown, and the industrial area into twelve excluding unemployed and unknown. For our purposes, it might seem that the occupational category is more useful than the industrial one but professional technical and related workers and production and related workers cover such a wide area of occupations that these eight categories are less discriminating than the twelve industrial ones. Even here community and business services and manufacturing are very wide in their scope. effect of listing 93 choices in twelve broad bands should be to even out any differences when we ask the question, "are there any significant differences between the pattern of choice in rural and urban areas?". Therefore, if significant differences exist, it will be possible to say that urban and rural have dissimilar characteristics. However, from this data, it will not be possible to state what particular choices make for that difference. In that respect the previous study, although based on a smaller number is more useful. If there are no significant differences it is not possible to say that they do not exist because of the levelling effect of the banding.

The table below shows the proportion of choices, in the form of percentages, of four different regions for the eleven industrial areas. For each industrial are the proportion of choice for each region is compared with that for the total population. The figures in brackets below the percentage figures indicate the chi squared

difference. Where this is below .1, this is shown with a +. The total chi squared for each industrial area is placed in the right

hand column. Regional Difference in Career Choice by Industry. X. Chi Rural Kabwe Lusaka Copperbelt Squared Industrial Area. 18.63 7.32 60.51 13.5 Total Population. 5.51 10.23 Agriculture 70.84 13.38 (3.7)(1.7)**(.**44) 5.84 16.30 6.52 30.43 46.71 Mining (7.9)11.55 (3.15)**(.**5) + 52.42 (1.0) 21.3 18.03 8.19 Manufacturing (1.5)(.38)2.88 18.33 48.31 10.0 23.33 Construction (35.00)(2.45)38.35 (.9) 16.66 25.0 52.74 5.55 Electricity & Water (.43) (.2)**(.**99) (9.8)11.42 10.2 20.4 38.76 30.61 Trade (6.6)(21.6)(1.1)(.17)32.47 12.12 9.09 6.06 72.75 Finance (2.25)(1.1)(1.4)4.75 + 11.36 22.72 49.97 15.9 Real Estate (1.6)(.42)(2.1)(.8) 4.92 24.93 13.67 6.43 Transport 54.92 (.5)(.1)(2.1)2.7 + 11.90 73.78 14.28 Government (7.32)(2.88)(2.4)12.60 + 6.82 12.88 Community and 67.62 12.62 (.34)(1.8)2.94 (.8) Business Services 40.0 20.0 20.0 20.0 Hotel & Catering (.2) 41.26 (31.0)(6.66)(3.2)

^{12.} UNZA Tracer Study.

With three degrees of freedom a chi squared of 11.3 or more shows a significant difference at the .01 level. Of the twelve categories in the list, six are significantly different at this level. When we pay regard to the levelling factor mentioned above, there does seem to be a significant difference between the pattern career choice in one region and another. Unfortunately, some of the career choices in which we were particularly interested as a result of findings from the smaller sample are not tracable here because they have been categorized along with many other choices. It was found that teaching was much more popular in rural areas. However, teaching in this table comes under Community & Business Services which, because it includes such a wide variety of industries, does not produce a significant difference between the regions. Where comparisons are possible, they seem to confirm the findings based on the smaller sample. Railways were the most popular choice on the Copperbelt and transport on this table shows a higher figure for the Copperbelt; Government administration shows a figure of nil for Lusaka and confirms our suggestion that Lusaka has moved further away from traditional avenues of employment which include Government. Generally, this table confirms the findings of the small sample but there are certain discrepancies; mining in Lusaka is not less popular than as for the country as a whole and finance in the rural areas is more popular than for the country as a whole. We conclude that a comparison between these two studies is difficult but both indicate that attendance at a rural school as against an urban one, particularly if that urban one is in Lusaka, does significantly affect the choice of a student.

GENERAL CONCLUSIONS

This section has been concerned with the pattern of career choice and the extent to which different sociological factors have affected it.

The level of education of the father does not seem to affect this pattern; the level of education of the mother is more important in this respect.

Even if career choice is affected by prestige rating (we have seen that these prestige ratings are very stable and it would be unreasonable to imagine that prestige ratings were completely unconnected with career choice) the pattern of career choice is significantly different from the pattern of prestige rating and this makes clear that, when Form V leavers are making a career choice, they are not affected merely by the prestige of the job.

A distinction between "urban" and "rural" is difficult, not because their geographical boundaries are not definite but because questions used to determine "urban" and "rural" must take into account the fact that a high proportion of parents whose children are rural and still attending rural secondary schools will be in urban employment; a high proportion of urban secondary school students, even though born in urban areas, will consider their home area to be rural. Finally, with the drift to the towns, there will only be a small proportion of secondary school students who can claim a long residence in urban areas.

It was found that the pattern of choice between rural and urban schools, particularly Lusaka, was significantly different. The rural schools tended to choose more traditional avenues of

employment. In both types of schools, there was a significant difference between those students with fathers with urban backgrounds and those with rural backgrounds in the extent to which they were aware of the conditions of employment of the job they had chosen. In both urban and rural areas, the students with urbanized fathers made the more realistic choice. However, the difference between the two groups was smaller in the rural schools and it was concluded that this was so because the rural schools had limited themselves to more traditional avenues of employment such as teaching and nursing of which they had direct experience.

At the start of this section it was pointed out that an exhaustive enquiry into all the sociological factors affecting career choice is impossible and any general conclusions must be tentative. However, the most significant differences have occured where the sociological factor is operating within the education system. The pattern of career choice was significantly different for rural as against urban schools. This has been substantiated by Clignet & Foster, who in their study of the Ivory Coast, found that rural schools, as is the case in Zambia, tended to give greater preference for teaching. In Zambia the Form V leaver, because of the great expansion of numbers is still liable to come from a background where there are very few friends or relations with a comparable education. Normally his parents will be less aware of what is involved in career choice than he is himself. It will be many years before we can talk of a second generation elitist group in Zambia. It was seen that, in those very few cases where

13. Clignet & Foster "The Fortunate Few"

Form V leavers did have both parents with secondary education or more, the student was tending to make different choices. influence of the family does seem to be significant where the education of both parents is high but such cases are rare. ${f Z}$ ambia the school is very divorced from society and even from the student's home background. In my own particular school, not one single parent has enquired concerning their child's education since the school was established six years ago. Reports are written in English and teachers often wonder whether the recipients are capable of reading them. Attempts to establish parent teacher associations, except in those very few cases such as The Dominican Convent, Lusaka in which the parents are already elitist, do not succeed. It is hardly surprising, therefore, that the influence of the family is weak in affecting patterns of career choice. Very little can be done about this if the contact of the parent with industrial society lags far behind that of the student; if, for example, the parent is a subsistence farmer who has never visited the line-of-rail.

However, such extreme cases are not common and it was seen that, even in the case of rural schools, a large proportion of the fathers were employed in the urban areas. Where this was the case, this seemed to help the student make a more realistic choice in terms of knowing more about the job he was choosing. Even allowing for this it must be accepted that, in Zambia, the school will play a greater part in influencing career choice than it would in a developed society where other sociological factors would be stronger. This emphasises the need to provide the best vocational counselling

possible.

CHAPTER VI

A COMPARISON OF PATTERNS OF CHOICE AND SUBSEQUENT EMPLOYMENT OR EDUCATION

CHAPTER VI

It would be unreasonable to expect a complete correspondence between the career choices made by a group of students and the jobs they eventually take up. Vocational counselling is not an exact science in which the teacher directs the student to a choice which he will certainly follow up because he has been persuaded of it and no other and because no other suitable opening exists for him. However, in a situation where there has been good counselling, where the student is aware of what is and what is not a possible opening both in respect to his own abilities and aptitudes and in respect to the job openings that exist, it would not be unreasonable to find some kind of correspondence between the choices made by the whole group and the type of job that group takes up. This is not the case in Zambia. Even if we ignore the fact that a large number of 1971 school leavers were unemployed, Table A shows quite clearly that there are marked differences between the industry chosen by the 1971 school leavers and their eventual employment.

XI. TABLE A. Comparisons between Career Choice and Employment Taken.

- A. Career choice by industries of a sample of 1,000 1971 school leavers.
- B. Employment taken, by industry, of the same group.

(Figures in %)

	<u>A .</u>	<u>B.</u>
Unemployed	0.0	20.24
Agriculture	5 • 33	1.76
Mines	4.40	10.47

1. UNZA TRACER Study for data for Tables XIa, XI b and XII.

	<u>A</u> .	<u>B</u> .
Manufacturing	2.46	2,11
Construction	3.60	1.14
Electrical & Water	1.76	1.49
Trade	2.02	3.25
Finance	2.64	3.25
Real Estate	1.36	0.00
Transport	16.10	5.45
Community & Business Services	33.36	24.03
Hotels & Tourism	•52	•35
Government	1.23	8.71

A far larger number found themselves in government and the mines than had chosen these particular industrial sectors. On the other hand, far fewer entered transport and community and business services.

Table B which makes the same comparison but in terms of occupation instead of industry, reveals a similar discrepancy.

XI. TABLE B. Sample of 1971 Form		<u>B</u> •
Unemployed Professional & Technical Administration Clerical Sales Services Agriculture Production & Manufacturing Full time training	0.0 61.33 9.0 3.51 1.14 .26 6.32 1.58 24.51	20.38 13.55 1.66 16.78 1.75 2.72 .96 6.94 30.49

This table indicates that the aspirations of this group of Form five leavers seems to have been too high and, whereas nearly two thirds of them aspired to professional and technical jobs, only an eighth found such positions. More went into full time training than expected to do so and a far larger number entered clerical jobs than expected. This was also true for production and manufacturing but with agriculture the reverse is the case.

Figures are available for part of this sample (909) which give a more detailed picture of the type of openings which were taken up by these school leavers. The figures are again expressed in the form of percentages.

XII.	. Jobs Taken by a	Sample of	f 1971 Form V Leavers.	
	(expressed as a	Percenta	ge of the Total Group).	
	Mines (non training)	6.24	Teaching (Nkrumah)	1.32
	Mines (training)	1.54	Teaching (Min. of Ed.)	7.04
	Government	9.90	Teaching (primary)	4.40
			Other full time train	, .
	Local Authorities	•77	Other luft time train.	rug•-
	Army	• 99	NRDC	1.87
	Airforce	1.54	Nortec ZIT	3.08
	Police (training)	• 33	101 000 211	7600
	Police (non training)	2.29	Evelyn Hone	1.98
	Hospital (training)	1.98	Trade Training Int	66
	Hospital (non training)	•77	11000 1101111115 1110	
	GPO (training)	•66	Other DETEV	• 44
	GPO (non training)	2.24	UNZA	7.15
	Banks	1.87	Foreign	2.42
	Indeco Para statal	8.91	NIPA	•33
		0.71		19.14
	and private industry		${\tt Unemployed}$	17014
			Unknown	5 .17

Before a comparison is made between this table and the pattern of career choice for these school leavers the following should be noted. A large number took up teaching but very few of these managed to gain entry to Nkrumah College, the only college for training secondary school teachers. Many more entered primary teacher training colleges or were temporarily employed by the Ministry of Education as untrained teachers for a maximum period of one year. At the end of this year they would be entering a labour market again and would receive no preferential treatment if they chose to apply for teacher training. There is no suggestion that primary teaching is less important than secondary but, in Zambia, the secondary school teacher does enjoy a much higher status and, whereas minimum entry to secondary school teaching is Form V, for primary, it is Form II or III. It is, therefore, reasonable to assume that, even though

large numbers enter teaching, very few of them were taking up what was in fact their choice which was secondary school teaching. Here again we see a lowering of the level of aspiration. A similar situation exists for the police. Form V entry for the police is closed except for one small department, the Signals Section. It will be noted that the majority that have gone into the police are in the untrained category. They have taken up the position of constable which is normally open to Form II or Form III but is also open to Form Vs at a slightly higher salary.

The next table, which is a comparison between the percentage of choices made for particular careers by the 1971 school leavers and the percentage of the group that followed these particular careers, shows that, although a large proportion went into teaching, very few of these, as we have seen, took up training for secondary teaching and so a far larger number aspired to teaching at secondary level than actually entered Nkrumah College. If we compare the proportion who wish to take up training in the Police Force with those who actually did, there is still a large number of choices than places obtained, but when we take into account those who entered the police at a lower level far more went into the Police Force The position is very similar for the Post Office. than chose it. The proportion entering the mines is far higher than those who chose mines but this could include many who had chosen careers such as surveying and various branches of engineering etc. and who were achieving this through some form of training within the mines. In many cases it is not possible to make a direct comparison between the percentage of career choices and the percentage of the 1971 school leavers who took up a particular opening. For example, the

most popular choice, mechanical engineering is not easy to identify. Some of the group following this opening would be found at UNZA, others with the Directorate of Technical Education and Vocational Training and others in private or parastatal industries.

There is only one major college for training Form V leavers in agriculture. This is the NRDC and it is assumed that the majority who chose agriculture were anticipating entering this college.

- XIII A Comparison between the Proportion of Form V Leavers choosing a Particular Job and the Proportion of a Sample of the Same

 Group Found in these Openings 12 months after leaving School.

 A. The proportion of the 1971 leavers choosing a particular opening.
 - B. The proportion of a sample of the same group who were to be found in a particular opening 12 months after leaving school. (Figures in %).

	<u>A</u> •	<u>B•</u>
Agriculture	$2.\frac{A}{67}$	1.87
Army	3 .1 3	• 99
Banking	2.25	1.87
Mining	3•57	(6.24 - non training 7.78 total (1.54 - training
Nursing	5.57	1.98
Police	. 85	{2.29 - non training 2.62 total .33 - training
Post Office	• 55	(2.24 - non training 2.90 total 66 - training
Teaching	6.71	(1.32 - training for sec. (4.40 - training for prim. (7.04 - temporary work 12.76 total

In every case in this table, except those already mentioned in which there has been a lowering of aspirations, a far smaller proportion of the group were to be found in a particular opening than the proportion which chose that opening. The difference is accounted for by the fact that a larger proportion ended up in full

2. Column A is from figures produced from Central Agency referred to above Column B is from TableXIIon page 119.

time training than chose it, and what is most important did not find any opening at all. One in-five of the 1971 Form V leavers were unemployed twelve months after leaving school.

In the Introduction, we drew attention to the very large increase in the number of Form V leavers. Zambia still has a large cempatriate working force. If we take our earlier figures on the zambianisation of teaching and Careers Masters as an example, this is obvious. In 1968 the number of non-Zambians in division one and two of the civil service (this includes jobs appropriate to Form V leavers) of the total of 20,000, 6,000 were non-Zambians. Of these, 2,000 were teachers. Since 1968, the total working population has increased from 319,730 to 360,130 in June of 1972. In such circumstances, the absorption of 30,000 Form Vs does not seem to be difficult. However, Form V in itself is not usually a qualification for a job but for training for a job. Such training is usually from between two to seven years. Therefore, the absorption of Form V leavers depends on three factors, not one. They are:-

- (a) An expansion of the economy creating new openings, particularl in the professional and technical, administrator and manager and clerical and related workers category.
- (b) An expansion of all forms of tertiary training and education.
- (c) That the Form V leavers reach a sufficiently high standard to be capable of undertaking further training. As an example of this last point, we can imagine a situation where there are plenty of University places but an insufficient numbers of leavers which have gained the necessary entry requirements according to the policy of the University.

Therefore, the process of making use of Form V leavers is a costly one involving a setting up of many institutes of further education. This in turn would initially involve the employment of more non-Zambians not only at secondary school level itself but also for further training. It is not simply a matter of taking out a costly non-Zambian and replacing him with an untrained Form V leaver. The economy needs to expand not only to the extent of finding jobs for Form V leavers, but finding jobs or more usually providing training for them and so far from immediately replacing the expatriate having to bring more expatriate help in. Such a process places great strain on the economy.

In such circumstances, it was realized that if 75% of those entering the secondary school system completed a five year course, there would be far too many Form Vs to be absorbed into the system. As has been mentioned in the introduction, it was decided to select only 50% at Form III level instead of 75% at Form II level. Zambianisation at the Form III level is easier to achieve as the post secondary training is usually shorter and less costly. The following table which is reproduced from '2nd National Development Plan, 1971' shows the expected output of Form III's and Form Vs and the planned requirements for these two groups. It will be realized that it is far easier to give an estimate of how many school leavers are to be produced than the number of job opportunities which will exist.

en de la companya de la co

State of the state

Planned Secondary School Outputs and Estimated
Outputs Required to Meet Manpower Needs 1972 - 76. (in '000)

Year	Projected Form III Output		Projected Form V Output	
	Planned	Required	Planned	Required
1972	7.4	8.1	7.2	7.1
1973	7•5	8.8	7.1	6.3
1974	7•7	9•6	6.5	5•7
1975	8.4	10.6	6.6	6.5
1976	9•9	11.6	6.8	7.1

The introduction pointed out that the increase in numbers of Form Vs produced has stopped and that the future will see the figure stabilising around 7,000 and at one stage even dropping a little. However, even in these circumstances, the table shows that slightly more Form Vs will be produced than can be absorbed by the economy. The 'required' column is the total of very many other figures - estimates of University entry over this period, estimates based on the expansion programme for tertiary education generally and estimates of the extent to which the economy will expand. It only needs this estimate to be over optimistic and the slight excess of Form V leavers becomes serious. This is in fact what happened and the position was further accentuated by the fact that in 1972 the price of copper, on which the Zambian economy is heavily dependent, was very low. In such circumstances a period of recession is inevitable.

The First National Development Plan for 1967-71 envisaged the creation of one hundred thousand new jobs every year. As the Second National Development Plan points out, this was not achieved.

was 390,000. 'Zambian Manpower' (1969) estimated a total working population of 420,000 by 1970. However, it was only 383,500. The number of jobs created has not reached the very high expectations held in the First National Development Plan(FNDP). We are discussing here the 60's when the price of copper was exceptionally strong. With the weakening of this price in the early '70's, the ability of the economy to sustain the high expectations of the FNDP or even the more moderate ones of the 2nd National Development Plan became impossible.

The expansion of tertiary education has also failed to live up to the expectations of the First and Second National Development Plans. The First National Development Plan envisaged a full-time student population at UNZA of 1,325 in 1970 increasing to 1,930 in 1971. In reality the figures were 1,184 for 1970 and 1,566 for The Second National Development Plan lowered the estimate to 1.752 in 1972 and 2.175 in 1973. However, even here the target was not reached and in the year in which we are particularly interested and in which we have seen one in five of the Form V leavers unemployed, the more moderate estimate of 1,119 for entry was not reached and only 618 entered the University in that year. In this year 500 Form V leavers did not enter the University as planned and so put extra pressure on other training institutions When it is realized that the plan figure had or job openings. been scaled down and is part of the Second National Development Plan and not, therefore, as high as that used to estimate requirements in the last table and that there were slightly less than 7,000 Form V leavers in this year it can be seen that this discrepancy between planned and actual University intake is a large contributary factor to the resulting unemployment.

for the University is also true for the Department of Technical Education and Vocational Training. The Second National Development Plan envisaged NORTEC - ZIT as having a total population of 473 in 1971. However, even by 1972 this had only reached 331.

Part of the reason for the University's low intake in 1972 was a lack of money but equally, if not more important, was the lack of Form V leavers with the necessary qualifications. In this particular year, only 1,010 gained a first or second division pass. It is only from these two categories that one can expect entrance to University and not all of them will wish to attend. On the other hand, 2,019 failed to gain any kind of qualification. Almost one third of this group of Form V leavers could not hope to gain any kind of tertiary education except at a Form III level of entry. The 1971 leavers are not unique in producing poor results. 'Zambian Manpower' in looking at the 1967 results noted that even with these much smaller numbers, approximately a quarter failed to gain a certificate.

In a situation where even with optimistic estimates there was to be a slight excess of Form V leavers and in the circumstances in which these optimistic estimates have been reached and the quality of pass of the Form V leaver has been low and if anything has deteriorated, it is hardly surprising that in 1972, with Zambia in a period of recession, we find one in five of the Form V leavers unemployed twelve months after leaving school and many of the rest of the group lowering their aspirations.

There are indications that the situation will improve from 1973 onwards. Although the number of Form V leavers will not increase and will in fact decline slightly for a few years, extra training

facilities have been provided or are planned. The University is increasing its number of under-graduates, a new school for nurses has been opened in Ndola this year and a secondary teachers training college will be opened shortly at Kitwe. The 1972 Form V leavers were the last of those who entered Form III after a 75% selection; those who follow them have been more stringently selected at Form III and there are already signs that this will improve the standard of results in the Cambridge Examination. At the time of writing, the price of copper has reached a record level and although Zambia cannot hope to escape the scurge of fluctuating prices in the near future, it must be remembered that 1972 represent a low point in the economy. Therefore, although a slight excess in the number of Form V leavers is expected to continue for the next few years, it is not over optimistic to expect some kind of balance between output and requirement by the later 1970's.

So far the comparison between choice and job taken up has been on a very general level in that only the proportion of choices made by the 1972 leavers as a whole has been compared with the proportion of jobs taken up of the group as a whole. When we look at each industry separately and ask how many who chose that particular industry as his career choice actually was found to be in that industry twelve months after leaving school, we find that the dissimilarity is even greater. Using the twelve industrial categories of the TRACER Project, we find that in four of them not one person who chose a particular industry for his career was found to be in that industry. In only two sectors were more than a quarter to be found in the industry of their career choice — community and business services 34.03% (it will be noted that this

is a large category covering a wide variety of career choices) and mines 26%. Even if we ignore the four categories in which 0% of the group were to be found in industries of their career choice, the standard deviation is 21, which indicates that apart from community and business services and mining, the proportions are very low. In fact they range from 2.43% to 4.37%.

We have a situation in which jobs are scarce, aspirations have to be lowered and it becomes more important to find a job, any job rather than to pay attention to finding an opening which is most suitable for the school leaver. Better vocational counselling at school could do something to obviate this situation. It would surely be the responsibility of the Careers Masters to point out to certain Form Vs. that jobs which had been previously thought of as suitable for Form III are now appropriate to some of the Form Vs.

In the situation of the 1960's in which Form V leavers were scarce, it was defensible for the government to limit their choice and direct them into areas of high priority. The aptitudes, ability and personal wishes of the individual were secondary to the needs of the state. Therefore, Careers Masters had little need to pay attention to these characteristics. The job opportunities were the priorities laid down by the state and these presented a very limited field of choice. In return the school leavers received a definite offer of a job and security. Vocational counselling in such circumstances was of very limited value. In the 1970's, as we have seen, the situation is completely different. With an excess of Form V leavers, it is important that these

leavers should be aware of what job opportunities exist, not only

in general terms but at each level of academic ability. Only
then can they set their aspirations at the correct level. It is
wasteful of human resources to allow the present situation to
continue in which untested selection procedures on the part of firms
and unenlightened choices on the part of school leavers who are
unaware of job opportunities results in a random seeking of jobs.
The oversupply of Form V leavers makes it more important, not less,
that school leavers should be given every facility to make an
intelligent choice. A choice of job which takes account of his
own aptitudes, abilities and what is available on the labour market.

GENERAL CONCLUSIONS.

Although it is not to be expected that there would be a high correspondence between the choice of Form V leavers and the jobs eventually taken up, the picture is one of no correspondence at all. There was in 1972 an oversupply of Form V leavers which resulted in one fifth of them being unemployed and many of the others lowering their aspirations. This resulted, because the massive expansion in the numbers of Form V leavers, despite the extra cut back at Form III, could hardly be met in terms of employment and tertiary education even if the most optimistic expectations for expansion were realized. These expectations were not realized and the oversupply mentioned was the result. Such a situation will exist until the late 1970's when a balance between the output of Form VS and the requirements of the economy should be achieved.

In such circumstances the need for careers guidance becomes greater and without it careers choice will be meaningless; there will be a random seeking of jobs and a resultant waste in terms of human resources.

CONCLUSION.

CONCLUSION

Zambia suffers from many of the problems which beset developing countries. At Independence, there was a natural and very laudable desire to expand the educational facilities of the country. The Government planned to provide universal primary education and secondary education for one third of those who took the grade 7 school leaving examination. This was impossible to achieve. It was too costly, impossible to keep up with the ever increasing numbers of children of school $a_{\ensuremath{\mathfrak{g}}} e$ and creative of an excess of employable manpower at all levels. However, a massive expansion of secondary education did take place and it was realized that the supply of Form V leavers would very soon exceed the numbers required for further training and employment. Because of this and because it was easier to zambianise at the Form III level, the secondary school system was changed so that only 50% continued after Form III instead of 75% after Form II. Despite this, upto 1976 there was still envisaged a slight excess in the supply of Form V leavers. This was not because there were lack of jobs to be zambianised but because to zambianise such jobs, long and costly training beyond the Form V level was involved and this in itself put an extra strain on the economy.

The very high expectations of the First and Second National Development Plans have not been completely realised and, as a result of this, the excess of Form V leavers has been larger than was anticipated. By 1971, it was realised that the position of the Form V leaver was changing radically. The numbers had increased

so that school leavers were no longer rationed out to certain privileged sectors of the economy but in a position where they were in competition for a limited number of training facilities and job openings. The old system of direction, therefore, became inappropriate and, as early as 1969, the Directorate of Civil Service Training abrogated its responsibility of finding every Form V school leaver a job. There followed a period of chaos in which the authorities were uncertain as to what should replace this direction and the students, Careers Masters and industry were groping to accommodate themselves to a system in which a free market existed.

By 1971, a new system had evolved which was under the auspices of the Education and Occupational Assessment Service of the Ministry of Labour and the Ministry of Education. The Ministry of Labour was not made responsible for finding jobs but acted as a central clearing house which had the responsibility of obtaining information on each individual Form V leaver which was of use to prospective employers, and passing onto schools details on the number of job opportunities that existed. It gave first priority to the former function and has not in fact undertaken the latter one as yet. The Ministry of Education was made responsible for the provision of careers literature and other career information, any testing material for use within the school and the responsibility for seeing that conditions existed which allowed careers work to be carried out effectively.

Although this new system has got off to quite a good start, very serious defects still exist which make careers counselling virtually impossible. The central clearing house has cut down the

necessity for Careers Masters or headmasters to write the same reference for the same student for every application he makes. The Ministry of Labour is providing industry with useful information. Its academic test in so far as it has been validated has been found useful for general screening purposes and is being used more extensively in this way. It has drawn attention to the importance of testing careers aptitude and its services are being used by more and more firms. However, the present situation in which Careers Masters are not acquainted with the numbers of job opportunities that exist is a serious one and is recognised by many of the Careers Masters as being so. If facilities are available within the Ministry of Labour for embarking upon the task of providing schools with this information, they will meet with the co-operation of industry and will be providing a service which is an essential pre-requisite if vocational counselling is to get off the ground in Zambia.

A second essential pre-requisite is the dissemination of careers literature. The Careers Masters also complained that this dissemination was poor and their picture of a few firms providing a good service and the majority doing nothing was borne out by the responses from industry itself. Most of the work of the Ministry of Education in this field is still in the planning stage, and here again the Careers Masters were aware of this. A third pre-requisite was the provision of testing material for use within the school and here again very little existed and a great deal was planned. Continuous record cards had been introduced but would not be of value until several years from now.

The Ministry of Education did not seem to take careers work very seriously in terms of giving Careers Masters sufficient time

to do the job. The extent to which they are given a lighter timetable has been left to the headmaster and, although this position
was recognised in that most Careers Masters enjoyed a time-table
similar to that of head of a department, if they were already a
head of department, no extra time was allowed. As the work of the
Careers Master, especially if it is to include individual counselling is much more time consuming than that of any head of
department, this allowance is meagre.

The position of Careers Master has been zambianised to a greater extent than secondary school teaching as a whole but Zambian teachers still constitute only a small minority. In such circumstances it cannot be expected that Careers Masters will have an intuitive knowledge of the sociological factors which persuade Form V leavers to choose one career rather than another. An academic knowledge of such sociological factors is only of limited use if used non-intuitively and even the reservoir of such knowledge is very limited in Zambia.

In such circumstances in which so many of the pre-requisites of vocational counselling do not exist, it is fair to say that both the Ministry of Labour and the Ministry of Education must give high priority to the provision of certain facilities before it can be claimed that the system inaugurated in 1971 is working at anything like a satisfactory level. These priorities are:-

- (a) Provision of information on job opportunities by the Ministry of Labour.
- (B) A substantial reduction in the teaching loads of Careers Masters.
- (c) Much more careers information providing details of training and qualifications required.

- (d) The provision of aptitude and ability tests for use within the school.
- (e) Either an attempt to zambianise the position of Careers

 Masters or an effort to provide Careers Masters with some
 feeling for those sociological factors which impinge upon
 career choice.
- (f) Training in the use of these facilities is essential and some form of training should be supplied for Careers Masters either in the form of inservice training, conferences or as part of the teacher training programme. Teacher training could do well to take account of the place of counselling in schools as this has been neglected in the past, more emphasis being placed on teaching skills in their relation to teaching the syllabus.

Careers counselling is not to be seen as persuading the student to make a particular choice but as making the student aware of his own characteristics and abilities and the openings that exist for such characteristics and abilities so that he is able to make a serious choice without the provision of the facilities listed above such counselling is not possible. We have seen that the result is that careers choices are made which are unrelated to reality.

Although industry has welcomed the services provided by the Ministry of Labour and has shown itself ready to co-operate in providing information, its use of these services has been unscientific. In most cases selection procedures, whether making use of the Ministry of Labour or not, continue untested and the Ministry of Labour, which is dependent on industry for the validation of its tests, has received very little response. If

the above recommendations were carried through, we would still be left with a situation in which there would be an excess of Form V leavers in relation to the types of jobs which have been habitually thought of as applicable to them. However, the following advantages and improvements are not impossible:-

- (a) The Form V leavers will become more realistic in their aspirations as they become more knowledgable of the reasonable upper and lower limits of job opportunities open to them. They will realise, for example, that primary teaching and certain courses in the Trades Training Institute are now acceptable openings for some of them. They will be aware of those fields where temporarily at least no openings exist. This will not only apply to the Form V leavers as a group but to each individual leaver after discussion with his Careers Masters, equipped with the necessary testing facilities, a greater awareness of what job opportunities are open to him will become possible.
- (b) The more plentiful supply of careers literature will also help to create such an awareness and at the same time should raise rather than diminish the number of applications received by each firm. However, this in turn provides the firms with more possibility of choice and choice based on intelligent awareness with the services of the Ministry of Labour and using validated tests for screening and selection purposes, the increased numbers would not create an impossible burden for the personnel departments.

At the present stage of development in Zambia, the burden of vocational counselling seems to weigh more heavily with those within

the educational system as the influence of home background is For many years it will be difficult to bring the parents into vocational counselling as the present Form V leavers constitute a first generation of students able to make their particular career choices - a first generation elite. this problem could be given more recognition and it might be possible to produce more guidance for parents on career openings for Form V leavers, possibly in the venacular languages, so that they can discuss their children's futures with them more intelligently. Under the present system, the Form V leaver is shown the Career Preference Form during the second term, asked to discuss his future with his parents during the holidays and fills in the form at the beginning of the third term. The formation of parent teachers associations in boarding schools is at this stage, virtually impossible except in a few schools where a large proportion of the parents already have secondary education. position of the day schools is not much better. Because of inadequate home conditions, homework is done at the school and the educational activities of the school are usually just as divorced from society as is the case with the boarding schools. Unlike my earlier proposals for improving the system, the problem of lack of contact between the secondary schools and society is not an easy one and in pointing this out it must be recognised that for many years, vocational counselling will $\stackrel{\circ}{\text{be}}$ confined to within the school.

The present Form V leaver in Zambia does not find himself in the easy position of those who graduated before 1971. He must learn to make a career choice in a situation in which aspirations have to be lowered when compared to the period before 1971. The various development plans have not come up to expectation and the number of Form V leavers, although levelling off at present, has increased massively in the last few years. There is not here a grade 7 leaver problem but adjustments are necessary and the counselling which will allow these adjustments to take place must be given every facility to operate. Without it, there is a random chasing after jobs which is not only wasteful but can have the effect of putting too many square pegs in round holes. The individual suffers in finding himself in a job to which he cannot adjust. If the Form Vs. are not given a realistic picture of what their aspirations should be and are left with elitist concepts which are out of date, a frustration can be created in this group which could have political consequences.

Except for the integration of the school and society, the problems I have mentioned are not insuperable and, if vocational counselling is taken seriously, the improvements I have mentioned are immediately possible. In a country which has spent millions of kwacha in expanding its secondary educational system it is only reasonable that more attention is paid to the proper use of those who pass through that system. It is both educationally and economically unsound not to do so. To ignore the needs of the student and to refuse to provide facilities which will allow the student to understand himself and make the most sensible choice within the limits of the economic system is educationally bad. It results in a random seeking of jobs and a situation in which it is purely a matter of accident whether a student will find the opening most appropriate to him. After spending so much on his secondary education, this is economic folly.

APPENDICES.

APPENDIX A.

A COPY OF THE QUESTIONNAIRE SENT TO CAREERS MASTERS
IN 1973.

Dear Career's Master,

I am sorry to trouble you with this questionaire, but I am doing an M.Ed. dissertation on the infrastructure of careers work for FORM V Leavers in Zambia, and I would appreciate your help. Could you

answer the following questions and return them in the stamped, addressed envelope. Thank you very much. Yours sincerely, C/o. David KaundaST PETER J.WOOD. R.W. 133, LUSAKA QUESTIONNAIRE (To be answered by the Careers Maste of the school). NAME OF SCHOOL

				•
Position held	рy	Careers	Master	*************************************

Are you a ZAMBIAN ?

(Headmaster, Form V Teacher etc).

In those cases where the answer is 'YES' or 'NO', please delete what is not appropriate.

- How much time are you allowed for this work ?
 - a) How much of a lighter time-table are you given? State the number of periods
 - b) How many periods are you given with each class for careers work?

- No. of classes No. of periods per class FORM I

- No. of classes No. of periods per class FORM II Form III - No. of classes No. of periods per class

FORM IV - No. of classes _____ No. of periods per class _____

- No. of classes No. of periods per class_____ FORM V

- 2.a) Do you think that the completion of the CAREERS PREFERENCE FORM means that no further enquiries should be made to the school concerning a particular pupil? YES/NO
 - b) Are you asked by employers to give them information which is already

Dear Career's Master,

I am sorry to trouble you with this questionaire, but I am doing an M.Ed. dissertation on the infrastructure of careers work for FORM V Leavers in Zambia, and I would appreciate your help. Could you answer the following questions and return them in the stamped, addressed envelope. Thank you very much.

Yours sincerely,

PETER J.WOOD.

C/o. David KaundaSTS, R.W. 133, LUSAKA

YES/NO

YES/NO

QUESTIONNAIRE

(To be answered by the Careers Master of the school).
NAME OF SCHOOL
Position held by Careers Master
(Headmaster, Form V Teacher etc).
Are you a ZAMBIAN ?
How long have you been Careers Master?
In those cases where the answer is 'YES' or 'NO', please delete what is not appropriate.
1. How much time are you allowed for this work ?
a) How much of a lighter time-table are you given? State the number of periods
b) How many periods are you given with each class for careers work?
FORM I - No. of classes No. of periods per class
FORM II - No. of classes No. of periods per class
Form III - No. of classes No. of periods per class
FORM IV - No. of classes No. of periods per class
FORM V - No. of classes No. of periods per class
2.a) Do you think that the completion of the CAREERS PREFERENCE FORM means that no further enquiries should be made to the school con-

b) Are you asked by employers to give them information which is already

cerning a particular pupil?

on the Careers Preference Form?

3•	a)	Is there any information on the Careers Preference you would delete as unnecessary?	Form which YES/NO
		If yes, please state :-	·
		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • •
3.	b)	Is there any information which you think should be Careers Preference Form?	added to the YES/NO
		If YES, please state :-	155/ 110
			• • • • • • • •
4.	a)	What help do you expect to receive from the Ministr	y of Education?:
		•••••	• • • • • • • • •
		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
	b)	Do you receive this help?	YES/NO
5•	a)	What help do you expect to receive from the CENTRAL EOAS of the Ministry of Labour?)	AGENCY (the
		••••••••••••	• • • • • • • • • •
		•••••••••••	• • • • • • • • • •
	b)	Do you receive this help?	YES/NO
	c)	If you think the Education/Occupational Assessment sends out the Career Preference Forms, could be mor please state briefly how.	
		• • • • • • • • • • • • • • • • • • • •	
			• • • • • • • • • •
6.	a)	Do you think that you receive information from MOST employers and Training Institutes?	of the YES/NO
	b)	Do you think that this information is usually suffi	ciently detailed
		If NO, please state what extra information you gene	erally require.
		••••••••••	• • • • • • • • •
	c)	Name the THREE employers of Training establishments most useful in passing on Career or Training informschool:-	which have beer nation to your
		1	
		2	
		3	
7.	1)	On which of the following, during the present year MOST of your time? '11' should indicate the one you of your time on and '4' the least.	have you spent have spent most
	Α.	Advising individual pupils on what Career they show	uld follow

Passing on information to the Central Agency (filling in preference forms).....

В.

Giving information to prospective employers on future training C. Institutions e.g. Writing references Giving information to thepupils in a group. This includes D. visits and outside speakers. If you were to place the above in the order in which you would a) prefer to spend your time rather than how you are compelled by circumstances to spend it, what order would you choose? (the order may be exactly the same as in 7 (a). Advising individual pupils on what career they should follow Α. Passing on information to the Central Agency (filling in preference В. forms) Giving information to prospective employers on future Training C. Institutions, e.g. writing references

Giving information to the pupils in a group. This includes visits and outside speakers.

D.

Do you think that the FORM V's accept your advice? Do they apply for EVERY JOB "in case"?

YES/NO

Thank you for your help.

Peter J. WOOD, c/o David Kaunda Secondary Technical School P.O. Box R.W.133 LUSAKA.

Giving information to prospective employers on future training C. Institutions e.g. Writing references Giving information to thepupils in a group. This includes D. visits and outside speakers. If you were to place the above in the order in which you would 8. a) prefer to spend your time rather than how you are compelled by circumstances to spend it, what order would you choose? (the order may be exactly the same as in 7 (a). Advising individual pupils on what career they should follow Α. Passing on information to the Central Agency (filling in preference В. forms) Giving information to prospective employers on future Training C. Institutions. e.g. writing references Giving information to the pupils in a group. This includes \mathbb{D}_{\bullet} visits and outside speakers.

Thank you for your help.

for EVERY JOB "in case"?

9.

Do you think that the FORM V's accept your advice? Do they apply

Peter J. WOOD, c/o David Kaunda Secondary Technical School P.O. Box R.W.133 LUSAKA.

YES/NO

APPENDIX B

A COPY OF THE CAREER PREFERENCE FORM (THIS IS SENT TO

THE SCHOOL BY THE CENTRAL AGENCY - ONE FOR EACH

FORM V LEAVER. IT IS PARTLY COMPLETED BY THE

LEAVER AND PARTLY BY THE CAREERS MASTER AND

HEADMASTER

APPENDIX C.

SOME EXAMPLES OF QUESTIONS SET IN THE ZAMBIAN ADVANCE GENERAL ABILITY TEST (ZAGAT).

AN EXAMPLE OF A FAIRLY EASY ITEM.

Α.	Refer to the alphabet on your special sheet of paper. If the	
	numbers 1 - 7 taken in order stand for the first letters of the alphabet, which of the following figures stand for the word BAGGAGE.	

- 1. 2177174
- 2. 2177275
- 3. 2166165

- 2177175
- 5. 2166164.

This is a number reasoning item. It had a facility level of .86 and a P.B. discrimination of .59.

EXAMPLES OF ITEMS OF MEDIUM DIFFICULTY

- FORWARDS is related to BACKWARDS as ADVANCED is related to В.
 - Withdraw
- 2. Behind
- 3. Proceed

- Attack 4.
- Surrender. 5.

This item is verbal in character. It had a facility level of .6 and a P.B. discrimination of .68.

- What number is missing from the following series 81, ___, 49, 36. C.
 - 1. 78
- 2. 69
- 64 3.
- 4. 58 5. 32.

Again, this is a number reasoning item. It had a facility level of .43 and a P.B. discrimination of .63.

EXAMPLES OF ITEMS AT THE MOST DIFFICULT LEVEL.

- Ackim is shorter than Boswell but taller than Charles. Dickson is D. shorter than Ackin but taller than Edward. Boswell and Edward are the two heaviest men. What is the name of the shortest man who is also lighter than the second tallest man.
 - 1. Ackim
- Boswell 2.
- 3. Charles

- Dickson
- 5. Edward

The facility level for this item was .17 with a P.B. discrmination of .63. This item is verbal in nature.

- What is the maximum number of bricks each 50 cm x 20 cm x 20 cm E. that would be stored in a place that is 10 m x 6 m x 3m
 - 1. 800
- 2. 900
- **3. 6.**000 **4. 8.**000
- 5. 9,000

This item has a facility level of .27 and a P.B. discrimination of .74. This was a number reasoning item.

APPENDIX D.

A COPY OF THE G.R.Z. OCCUPATIONAL INTEREST INVENTORY.

GRZ Occupational interest Inventory - 1970

MALIN		AGE	SEX
SCHOOL_		FCRM	DATE
Instructions		,	
do in their and choose w	re listed 72 pairs of ac jobs or spare time. For hich you would prefer to , next to the activity y	each pair look at to do if you had to d	he two activities,
	the example below, you c " you would tick the box		
EXAMPLE			
•	Interest people in for Check financial detail		
	e activity in every pair There are no right or wr		
1.705	Judge stories in a c	ompetition	
.764	Represent the views	of workers at indus	trial meetings
2.531	Operate a sewing mac	hine	
.615	Choose books for a l	ibrary	
3.246	Act in a play		
•594 	Persuade people to j	oin a political par	ty
4.061	Fit telephones in bu	ildings	
•203	Analyse chemical fer	tilizers in a labor	atory
5•382	Work out how much pa	per to order for an	office
•479	Supervise the irriga	tion system on a su	gar plantation
6.141	Cook and prepare mea	ls	
.114	Try to persuade stri	king emplyees to re	turn to work
7.005	Write about books yo	u have read	
.909	Grow crops of tobacc	o for sale	
8.794	Obtain signatures of	people in support	of an appeal
.602	Add up the cost of p	urchases in a shop	
9.232	Draw graphs showing	the profits of a co	mpany
. 858	Keep records of book	s in a library	

10.744	Sell clothes in clothing shop
•718	Take shorthand notes at a meeting
11.197	Learn how to give first aid
•994	Take a course in salesmanship
12.531	Service motor car engines
•362	Keep a record of the money received in a post office
13.428	Type copies of reports
•561	Repair radios and record-players
14.969	Go for long walks through the bush
. 387	Do volunteer work in a hospital
15.496	Design fine jewelry
•573	Test and improve fuels for heating purposes
16.165	Write a history book
.783	Develope new perfumes
17.093	Study air conditions to forecast the weather
.442	Do calculations changing foreign money into Kwacha
18.847	Train physically h andicapped people for new jobs
•825	Choose stories for a magazine
19.507	Help a church minister or priest in his welfare work
. 836	Design posters for a festival
20.408	Keep a diary of appointments for an employer
•966	Choose furniture and colour schemes for offices
21.883	Examine plants to see how they are made
•338	Classify articles according to size
22.508	Send out details of a meeting
•555	Study the books of a well-known author
23.597	Do voluntary work for the Red Cross
.481	Cut and stitch leather to make handbags
24.668	Look for errors in a copy of a report
.687	Read lessons to a blind student
25.839	Raise chickens
.061	Make a ladder out of wood.
26.332	Solve mathematics problems
•426	Select photographs for an exhibition
27.966	Attend an exhibition of Famous paintings
. 645	Belong to a book discussion group

28.754	Run a sales campaign for a new milk product
•333	Analyse blood to find evidence of disease
29•975	Edit articles for newspaper
•152	Collect figures on accident rates for insurance companies
30.224	Recruit members for a new association
•099	Be a guide in a game park
31.546	Take a course in modern music
.871	Take apart a small machine to see how it works
32.713	Do experiments to improve foods for domestic animals
•237	Teach poor people about hygiene
33.313	Develop chemicals for destroying insect pests
•589	Spray crops to control pests
34.969	Keep a herd of cattle
.818	Sort incoming correspondence in an office
35.502	Work out the costs of production in a factory
•967	Help to run a refugee camp
36.549	Breed sheep on a state farm
•546	Make pottery, or model, in clay
37.244	Try to influence people to change their eating habits
•957	Give children who are behind extra help with their school work
38.648	Type business letters
•474	Present your own point of view in a debate
39.172	Work out percentages from a table of figures
.164	Try to persuade a group of people at a meeting to adopt your
	point of view.
40.977	Help a released prisoner to lead an honest life
•929	Explore an unmapped river
41.393	Test water supplies to see if they contain impurities
•335	Write a report of a film for a magazine
42.835	Write about popular themes in African Literature
•428	Write down the proceedings in a court hearing
43.272	Calculate the cost of transporting goods
•275	Translate stories from one language to another
44.747	Give exercises to injured people to help their recovery
•293	Test foods to determine their vitamin content

45•552	Be a chashier in a shop
•371	Repair faulty gears on a bycycle
46.499	Travel through remote area
.625	Write a short story about something you have done
47.093	Test new steels to assess their resistance to rusting
326	Design furniture
48.385	Read about the different styles of writing of various novelists
. •446	Attend a festival of plays and dances
49.055	Write a report of a recent event
•737	Help alcocholics to overcome their drinking problems
50.964	Sell office equipment to business men
•511	Operate a machine in a factory
51.069	Judge cows and goats at an agriculture show
•352	Analyse the results of a survey
52.988	Keep work records of employees
.872	Keep accurate records of stock in a factory
53•377	Help people solve their personal problems
•592	Calculate wages in a small firm
54.418	Look after office records
•523	Test the strenght of different metals
55.043	Study ways of preventing soil erosion
•471	Fit water pipes on a building site
56.146	Play a musical instrument in a band
•269	Hunt wild animals
57.681	Cut keys and repair locks
ъ •826	Arrange displays for shop windows
58.436	Design patterns for a clothing manufacturer
•552	Calculate interest payments in a bank
59 • 559	Help to survey the route for a new railway line
•564	Set up a trade agreement with another country
60.276	Design a cover for a picture book
.167	Help poor people to find better housing
(1.004	Make a green at a relition meeting
61.074	Make a speech at a political meeting Write articles for a newspaper
•775	1 HIT DO OF OF OF OF W HOUSE OF

62.269	Grow fruit and vegetables
•503	Develope a variety of maize that will resist plant diseases
63.207	Be a voluntary assistant at a clinic
•508	Arrange lists of names in alphabetical order
64.952	Estimate the costs of a new building
•143	Make up medicines in a chemist shop
65.893	Do experiments to improve the quality of paint
•304	Persuade firms and shops to advertise in your newspaper
66.971	Mend clocks and watches
.909	Photograph wildlife
67.328	Check forms to see that they are filled in correctly
•699	Work with a team prospecting for mineral deposits
68.645	Read about the lives of well known men and women
•191	Make models of airplanes
69.514	Present a legal point of view in court
•976	Judge paintings in a competition
70.331	Make gates out of metal
•718	Organize a new filing system in an office
71.886	Choose photographs for a magazine
•028	File letters in an office
72.401	Mend a broken table
•157	Visit old people in hospital who have no relatives
	harmonia de la

APPENDIX E

A COPY OF THE QUESTIONNAIRE SENT OUT TO A SAMPLE OF 1972 FORM V LEAVERS

M V QUESTIONNAIRE

	's/Guardian's Career
(a) D	oes he work on (a) line of rail:
(b) I	(b) self employed:
(c) I	s he a farmer? Yes: No :
(d) I	If he is a farmer, is the size of his plot (a) above 500 hectore (b) below 500 hectore?
u	That jobs have you applied for? (Please indicate the jobs by using the career preference numbers on the sheet)
Write	out any job not covered by a number
(b) W	What jobs do you still intend for apply for ?
V	Write out any job not covered by a number
(a) V	Which of the above mentioned jobs in 2a or 2b would you particularly like to get. State only One.
(b) !	The training for this job is (a) full time:
(c)	The length of training is (a) nothing:
(d)	What salary would you expect for this job whilst training (monthly salary) (a) less than K50 (b) K51 to K80 (c) K81 to K100 (d) over K100

(e)	What yearly salary would you expect for this job in five years time?
	(a) less than K1,00 (b) K1,001 to K2,000
	(c) K2,001 to K3,000 (d) Over K3,000
(f)	Would this job involve night work: Yes No
(g)	Could you be posted in this job to any part of the country
	Yes No
(h)	What position in this job would you eventually hope to reach?
	9 *** * * * * * * * * * * * * * * * * *
	SECTION B

Early this year you selected three jobs and placed them on the Careers Preference Form. Look at the list again and write down the numbers of the jobs you chose then in the same order.

First choice Second choice..... Third choice......

(e)	what yearly salary would you expect for this job in five years time?
	(a) less than K1,00 (b) K1,001 to K2,000
	(c) K2,001 to K3,000 (d) Over K3,000
(f)	Would this job involve night work: Yes No
(g)	Could you be posted in this job to any part of the country
	Yes No
(h)	What position in this job would you eventually hope to reach?
	•••••••••••••••••••••••••••••••••••••••
	SECTION B
Careers I	ly this year you selected three jobs and placed them on the Preference Form. Look at the list again and write down the of the jobs you chose then in the same order.

First choice Second choice..... Third choice.....

APPENDIX F.

A COPY OF THE FORM CONTAINING RECORD OF AN INDIVIDUAL

FORM V LEAVER AND SENT BY THE CENTRAL AGENCY TO

ANY FIRM OR TERTIARY EDUCATIONAL INSTITUTION

REQUESTING IT.

APPENDIX F.

A COPY OF THE FORM CONTAINING RECORD OF AN INDIVIDUAL

FORM V LEAVER AND SENT BY THE CENTRAL AGENCY TO

ANY FIRM OR TERTIARY EDUCATIONAL INSTITUTION

REQUESTING IT.

... Exts. 256 REPUBLIC OF ZAMBIA

ANCED GENERAL ABILITY

UMBER

DRY

EDUCATIONAL AND OCCUPATIONAL ASSESSMENT SERVICE

P.O. BOX 2186, LUSAKA

EMPLOYMENT POTENTIAL - FORM V

SCHOOL

Reasoning With	Vonde]								
988. 3. 3												
Reasoning With	Numbers											
AINMENTS (Cambri	idge)				- 4							
SUBJECT			ESTIMATE F									
	Disti	Distinction		Credit				3.6	Pail	RE		
	1	2	3	4	5	6	7	8	9			
			2	1,	*	6	*	Ω		I		

RAPHY	1	2	3	4	5	6	7	8	9	11
MATICS	1	2	3	4	5_	6	7	8	9]]
ICAL SCIENCE	1	2	3	4	.5	6	7	8	9	
ics	1	2	3	4	5	6	7	8	9] [
ISTRY	. 1	2	3	4	5	6	7	8	9	
RAL SCIENCE	1	2	3	4	5	6	7	8	9]
DGY	1	2	3	4	5	6	7	8	,]
TH SCIENCE	1	2	3	4	5	6	7	8	9]
CULTURAL SCHIENCE	1	2	13	4	5	6	7	8	9]
202101112 201122102	-		+		12					7

<u>ish language</u> ISH LITERATURE

UNTS (PRINCIPLES)

.5

ERCE . 5 . DRAWING

A/NYANJA

BIBLIOGRAPHY.

- Angi, C. and T. Coombe. Training Programmes and Employment Opportunities in Zambia. IN Manpower and Unemployment, 1. Research in Africa. Newsletter of the Centre for Developingare Studies, McGill University, Montreal. Vol 2. Nov. 2 1974.
- Central Statistical Office. Monthly Digest of Statistics, 2. Vol. 9, No. 10. Government of the Republic of Zambia. Lusaka. 1973.
- Clignet, R. and P. Foster. The Fortunate Few: A Study of 3. Secondary Schools and Students in the Ivory Coast. North Western University Press. U.S.A. - 1966.

4.

- Cowan, L.G., J. O'Connell and D.G. Scanlon. Education and Nation building in Africa. Section 3. pp. 185-286. Praeger. New York - 1965.
- Darley, J.G. and G.V. Anderson. The Function of Measurement 5. in Counselling. IN Educational Measurement. (ed. E.F. Lindq p. 68. African Council on Education. U.S.A. 1951.
- Dow, P., Interim Report: Predictive Statistics for the 1971 E 6. (University of Zambia). Mimeo. Lusaka. 1972.
- Educational and Occupational Assessment Service. Annual Repo 7. (various). Government of the Republic of Zambia. Lusaka.
- Foster, P. Education and Social Change in Ghana. R. and C. F. 8. London. 1965.
- Hicks, R.E. The Grading and Choice of Occupation by African 9. Youth in a Developing Nation - Independent Zambia. M.A. dissertation. University of Cape Town. 1968.
- Hughes, P.M. Guidance and Counselling in Schools. Pergamon 10. Press. Oxford. 1971.
- Hunter, G. The New Societies of Tropical Africa. Oxford 11. University Press, Oxford. 1962.
- Inkeles, A. and P.H. Rossi. National Comparisons of Occupat Prestige. IN American Journal of Sociology, No. 61. pp. 32 12. 339, Jan. 1965.

BIBLIOGRAPHY.

- Angi, C. and T. Coombe. Training Programmes and Employment Opportunities in Zambia. IN <u>Manpower and Unemployment</u>, <u>Research in Africa</u>. Newsletter of the Centre for Developingare Studies, McGill University, Montreal. Vol 2. Nov.2 1974.
- Central Statistical Office. Monthly Digest of Statistics, Vol. 9, No. 10. Government of the Republic of Zambia. Lusaka. 1973.
- 3. Clignet, R. and P. Foster. The Fortunate Few: A Study of Secondary Schools and Students in the Ivory Coast. North Western University Press. U.S.A. 1966.
- 4. Cowan, L.G., J. O'Connell and D.G. Scanlon. Education and Nation building in Africa. Section 3. pp. 185-286. Praeger. New York 1965.
- Darley, J.G. and G.V. Anderson. The Function of Measurement in Counselling. IN Educational Measurement. (ed. E.F. Lindquist) p. 68. African Council on Education. U.S.A. 1951.
- 6. Dow, P., Interim Report: Predictive Statistics for the 1971 Entry. (University of Zambia). Mimeo. Lusaka. 1972.
- 7. Educational and Occupational Assessment Service. Annual Reports (various). Government of the Republic of Zambia. Lusaka.
- 8. Foster, P. Education and Social Change in Ghana. R. and C.P.. London. 1965.
- 9. Hicks, R.E. The Grading and Choice of Occupation by African Youth in a Developing Nation Independent Zambia. M.A. dissertation. University of Cape Town. 1968.
- O. Hughes, P.M. <u>Guidance and Counselling in Schools</u>. Pergamon Press. Oxford. 1971.
- 1. Hunter, G. The New Societies of Tropical Africa. Oxford University Press, Oxford. 1962.
- 2. Inkeles, A. and P.H. Rossi. National Comparisons of Occupational Prestige. IN <u>American Journal of Sociology</u>, No. 61. pp. 329 339, Jan. 1965.

- 13. Jackman, M.E. Geographical Distribution and Movements of Tracer Project Participants. TRACER Project, University of Zambia. Mimeo. 1973.
- 14. Knights, A.J. The Zambian Advanced General Ability Test and its Relationship to COSC Performance in English Language, Maths and Science, and Overall COSC Performance, Copper Industries Service Bureau (Zambia). 1973.
- 15. Lloyd, P.C. The New Elites of Tropical Africa. Oxford University Press. Oxford. 1966.
- Second National Development Plan, January 1972 December 1976.

 Government of the Republic of Zambia. Lusaka. 1971.

 Ministry of Education. Education Statistics 1971. Government

Ministry of Development, Planning and National Guidance.

16.

L8.

19.

- Ministry of Education. <u>Education Statistics 1971</u>. Government of the Republic of Zambia. Lusaka. 1972.
 - Mitchell, J.C. and A.L. Epstein. Occupational Prestige and Social Status among Rural and Urban Africans in Northern Rhodesia. Africa. Vol.29. pp. 22 40.
- Mosely, D. and D. Hamblin. <u>Interviewing in the Learning Process</u>. Open University Press, Bletchley, Bucks, U.K. 1972.
- Mwanakatwe, J.M. The Growth of Education in Zambia Since Independence. Ch. 4,6,8 and 13. Oxford University Press. Oxford 1968.
- Mwanza, J. Statistical Analysis of the Validity of the Fifth Form Staff Learner/Scholarship Selection Battery December 1972 Exercise. Produced for the Roan Consolidated Mines Ltd., Luanshya Division. Mimeo. 1973.
- 2. Office of the Vice President. Zambian Manpower. Government of the Republic of Zambia. Lusaka. 1969.
- 3. Psychological Services, Ministry of Education. Annual Reports (various). Government of the Republic of Zambia. Lusaka.
- 4. Sibande, C.C. Effective Manpower, Utilization The Zambian Experience. Dissertation for the University of London 1972.

- 25. Unesco Educational Planning Group. Northern Rhodesia Report of the 1st. Mission, 15th Sept 15th Dec. 1963. Unesco.

 Northern Rhodesia 1963.
- 26. Wober, M. Some areas for the Application of Psychological Research in East Africa. IN <u>International Review of Applied Psychology</u>. Vol. 22. No. 1. April 1973. Liverpool University Press.
- 27. Xydias, N. Social Implications of Industrialization and Urbanization in Africa South of the Sahara. p. 458. Unesco. (ed. D. Ford) 1956.
- 28. Zimmerman, M.W. A Survey of Careers Guidance and Information in Zambian Secondary Schools. 1966. Produced by Educational Occupational Assessment Service. Mimeo 1966.