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ABSTRACT

This report dealing with the educational situation in Kenyan schools immediately preceding independence, is a two-part study which focuses on the characteristics of a 196a Form-4 class and several groups of teachers. Both sections investigate the selectivity in recruitment of the groups studied, including secondary school attendance, teaching roles, perspectives of occupational opportunities, and job preferences. Discussion of Form-4 pupils in 1961 focuses primarily on personal orientation to future education, jobs, and career aspects. This group of male African students is ultimately traced to their jobs and occupational status as of 1968. The aim of Part 2 is to help understand some of the little-recognized, central features of the early stages in the development of a nation's teaching force. Analysis includes examination of teachers' attitudes toward, and perception of, their situation and job alternatives, and the relationships of those attitudes and perceptions to reading patterns and social origins. Frequent use of statistical tables is made throughout the study. For Volume 2 of the report see FL 001 835. (Author/RL)

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FINAL REPORT

Project No. S-100
Contract No. 8100

**STUDENTS, TEACHERS,
AND
OPPORTUNITY PERCEPTIONS IN KENYA
1961 - 1968**

Volume I of two volumes
August, 1969

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Volume I of two volumes

Project No. S-100
Contract No. 8100

C. Arnold Anderson, Mary Jean Bowman, and Jerry B. Olson
with the assistance of Kusum Misra

August, 1969

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University of Chicago

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FOREWORD

In the latter part of 1961 the first-named author of this report was a member of the survey mission to Kenya of the International Bank for Reconstruction and Development as the specialist on education. A rewritten account of some of the findings of that Mission are to be found in the Bank's official report to the government of Kenya. In the nature of the case, few topics in that volume could receive more than cursory treatment since the principal focus had to be on fiscal matters.

Kenya already had an unusually complex system of education operating under an excellently staffed central authority. The amount of material made available to the education specialist was vastly greater than could be of interest to the Mission. Yet certain items of information were not available and on some of these points the Ministry was itself most desirous of obtaining data. They agreed to supply lists of schools and to assist in distributing a questionnaire. In return the specialist collected many items of information on which his international status would be more likely to insure prompt and full replies than a local ministry could count on. The senior author's wife (Mary Jean Bowman) was a specialist in economics of education and the Ministry was happy to have her assist in preparing the instruments and in laying out the analysis. (Some items were hand-tabulated and reported quickly.) Unfortunately, the sample was distorted by the

occurrence of unseasonable floods, but (as explained in Appendix E) it is believed that damage to the study was small.

Because pupils in Form 4 would soon be taking examinations that were critical for their individual futures and for expansion of the higher branches of the educational system, the investigation was concentrated upon that 12th (or 11th) year of school, with incidental attention to Form 6 from which successful completion could lead directly to university. Since there were urgent problems of policy surrounding the supplies of teachers, a sample of teachers at different levels of the educational system was selected and special questionnaires were sent to them also. The present report analyzes the responses of Form 4 pupils (in Part I) and of teachers (in Part II).

Subsequently, in 1968, Jerry B. Olson (who had taught in Kenya) decided to do field work on the changing Kenya educational system. In addition to assisting in preparing the present materials in a form suitable for aligning with his own data, he also made a special investigation of what had happened to the boys studied in 1961. These findings are included in Chapters 6 and 7. The Harambee (voluntary) secondary schools are also being made the subject of special inquiries by John Anderson, lecturer in education at University College Nairobi.

The analysis is solely the responsibility of the authors. This particular report is prepared in format as a report (unfortunately delayed) on a small-contract grant from the Office of Education. That financial assistance has been appreciated. In due course, Olson's more recent data and the present data will be integrated into one report.

Every effort has been made to structure the analysis in full consciousness of the problems of a society that is making heroic efforts to achieve development under democratic conditions. All possible efforts have been made to protect the privacy of respondents and to be conscious of the conditions under which teachers and pupils were working. In some respects the present data are unique; when combined with the later data from the 1968 replication and the follow-up of earlier respondents, an invaluable picture of education in one developing society will exist.

In view of the vast amount of publication about Kenya, there is no reason to present a detailed description of the country, but a few summary remarks will obviate misleading inferences on certain topics. Kenya is geographically diverse, ranging from tropic and desert to high mountain and containing richly productive as well as sterile areas. Although the then eight million residents were overwhelmingly African, there were about 200,000 "Asians," mostly engaged in business. As of 1961, there were about 50,000 British, who held most of the higher civil service positions and played the leading part in agriculture. There are about forty distinct tribes of Africans; a few are pastoral but most have lived by subsistence agriculture. African production of cash crops has expanded rapidly, and growing numbers are adopting modern ways of farming.

For convenience, these tribes are divided into four major linguistic clusters, and since the Bantu are so numerous they are further divided into six groups. A set of tribes living near the sea are grouped as Coastal. The Nilotic Luo, the Luyia, and the Kisii reside near Lake Victoria, while most of the other Bantu are

adjacent to Nairobi. The Nilo-Hamitic peoples (other than the Kipsigis and Nandi) cling to a pastoral way of life as do the Hamitic tribes.

The Europeans were farmers, heads of larger businesses, technical advisors, and civil servants. Their activities have left a strong imprint on the life of Kenya in every respect. Until the late 1950's it was quite possible to visualize Kenya becoming such a society as Southern Rhodesia now is, but Europeans with such expectations were disappointed.

As in so many countries, and particularly in Africa, the foundations of education in Kenya were laid by mission societies from Europe, apart from rather weak Arabic influences along the coast. A Christian school had been established by 1846 on the Coast. By the opening of this century with the completion of the railway to Uganda, missionary work spread to central Kenya and to the Kisumu area (at what was then the railhead on Lake Victoria).

Missionaries first trained a nucleus of Africans as catechists who were expected to move out to teach and preach in the surrounding countryside. (Indeed, in some localities the first pupils had to be paid small fees to attend school.) Eventually some of the central mission stations or principal out-stations became the regular primary and intermediate schools of mid-century, by which time interest slowly shifted from religion to schooling as the principal mission activity. Undoubtedly, the entanglement of African-administered schools with the Mau Mau episode occurred in some of the areas with earliest European contact, but tracing that line of development is not germane to this report.

The British colonial officials did not become formally involved in education until 1911 when the Education Department was established. Initially its efforts went to developing schools for the European and Asian children and from 1911 the Kenya school system had a distinctly racial cast of a familiar sort. Until 1924, government was involved in African schools mainly with respect to grants for the training of teachers, with some assistance to "literacy" work.

The program expanded in 1924, in response partly to three world-famous reports about African education just at that time. A grant-in-aid proposal was enacted. The Ministry aided and organized the system, while schools were managed by various missions. From 1923 to 1930 tax expenditures on education for Africans alone rose from 28 to 83 thousand pounds. As many of the former out-stations became "regular elementary schools" offering three or four years of simple education, it was hoped to raise qualifications of teachers. In view of subsequent and still raging debates, it is significant that elementary schools operated in the vernacular languages from their origin.

The post-primary sector of schools did not begin to open up for Kenya Africans until the late 1950's, in large part due to the widespread assumption that independence was decades, not just a few years away. Settler interests were also opposed to improving the education of the Africans. Improvements certainly were retarded by the depression and then by the second world war.

Although Alliance High School had been started by 1926, Kenya still had only four African secondary schools at the end of World War II, and in all the 1940's only 293 Africans passed the School Certificate tests. The system was unquestionably designed to favor

the interests of non-African children, whatever reason one prefers to offer for this state of affairs.

Many accompaniments of World War II stimulated among Africans stronger desires for schools and provided funds to support schools. Expansion could not be stopped, whatever government policy. As a result, teachers of Africans typically were "untrained." The administrative debates over allocation of local public funds to schools resounded among imperial administrators. Archdeacon Beecher's committee, set up to reexamine these problems, recommended continuation of the collaboration between government and missions and that fees and local taxes (rates) should be the mainstay of the elementary schools. By the late 1950's, the committee forecast 40 per cent of the age group to be in primary, 10 per cent in intermediate, and 1 per cent in secondary schools. But events quickly outran those cautious forecasts. Details of the year by year enrollments in different programs and among the various ethnic groups can be found in the annual reports and need not be repeated. Needless to say, even without the complexities of changing world conditions regarding the non-self-governing territories, changing markets for export crops, and the delicate tactical struggles over independence affected all schools. The prospects of independence aroused concern about African "manpower problems" and "localization." African secondary schools expanded in number from 25 in 1957 to 53 in 1961, whereas the Beecher plan had anticipated only 12 such secondary schools by 1961.

There was by 1961 a separate educational system for each major "racial" group. (Enrollments for that year are given in the next chapter.) Since independence, steps toward integration have been taken

by the Ministry, with varying results and many unanticipated consequences.

In 1961, there was an African eight-standard (or eight-year) elementary course, divided into primary and intermediate, followed by four secondary forms and by two higher certificate forms 5-6, operated for Africans for the first time in 1961. Less than half the completers of primary school were able to find places at an intermediate school. Experimenting with use of English as the medium of instruction was beginning. The examination given at the end of Standard VIII (slowly becoming Standard VII) weighed heavily in whether a pupil might count on a secondary place. Only one in seven of those who took that examination went on to a secondary school (and not all were Africans), according to Ministry estimates. Most African teachers in the elementary schools had only eight years of regular instruction plus two years of teacher training.

The African secondary schools were all segregated by sex; with few exceptions they provided boarding facilities. Most of the secondary teachers were British with good qualifications. Though the physical facilities in African schools could not match those in European or in the better Asian schools, African students who competed were surpassing the Asians and doing as well as the Europeans on the Cambridge examinations. Today there are no longer segregated European or Asian secondary schools.

This report is divided into two distinct sections, one concerned with characteristics of the Form-4 class in 1961 and the other part with various groups of teachers. Both parts investigate the selectivity (or lack thereof) in recruitment to the groups studied:

secondary school attendance on the one hand and various teaching roles on the other. Also, both parts are concerned with perceptions of occupational opportunities and with job preferences. However, the contexts of these two studies are quite different and so are the main themes. For one thing, the discussion of Form-4 pupils in 1961 is more focused on personal orientations to future education and to jobs or career prospects; that cohort of students was traced to their jobs and educational status as of 1968. No follow-up or replication was feasible for teachers, and the aim in Part II is much more to understand some of the little-recognized but central features of the early stages in developing a nation's teaching force, including the teachers' behavior and attitudes and perceptions of their situation. Again, the analysis of Africans is given primary emphasis.

There are complex borrowings back and forth between Part I of the present study and that by P. Foster, Education and Social Change in Ghana (1965), especially in his two chapters on selection of pupils (7) and vocational aspirations (8). A subsequent study by Remi Clignet and Foster (The Fortunate Few: A Study of Secondary Schools and Students in the Ivory Coast, 1967) carries the techniques into new directions, some parallel to and some divergent from those of the present report.

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PART I

THE KENYA SECONDARY SCHOOL FORM-4 CLASS OF 1961

CHAPTER I

THE KENYA SCHOOL SYSTEM AND THE FLOWS OF STUDENTS ON THE EVE OF INDEPENDENCE

Table I-1 totals the 1961 enrollments for three ethnic communities in each pre-university year or grade of school. ("Asian" combines what is later called separately Goan and Indian.) The last two columns of the table show how rapidly the system has expanded and portray differential changes in enrollment for various parts of the system.

In 1961, the Kenya school system (below university) contained nearly 900,000 pupils, two-thirds of whom were males, and slightly over nine-tenths of whom were Africans. The remainder were divided about 6:1 between "Asians" and Europeans. Boys comprised more than two-thirds of the African pupils, less than three-fifths of the Asians, and not quite half of the Europeans. Among the African pupils in 1961, over two-thirds in primary (Standards I-IV) were boys as were nearly four-fifths of the intermediate pupils (Standards V-VIII). (After 1961 there began a gradual elimination of Standard VIII in African schools, as had begun earlier in the other schools, moving the system slowly toward a seven-grade elementary school.)

Among Africans, boys were over four-fifths of the Forms 1-4 and all the Forms 5-6 secondary pupils. Over a third of the Forms 1-4 male secondary pupils were already African in 1961, whereas among girls only one in seven in those forms was African. European girls in

TABLE I-1
EDUCATIONAL PYRAMIDS IN KENYA SCHOOLS, 1961 AND 1966-1967

	1961 Enrollments by "Community"		Total Enrollments		1961 Enrollments by "Community"			Total Enrollments		
	European	"Asian" African	1961	1966	1967	European	"Asian" African	1961	1966	1967
Primary Standard										
I	630	3,440	113,800	112,056	131,421	550	3,200	68,400	81,853	97,348
II	680	4,430	102,800	95,840	105,939	560	3,000	58,100	70,270	77,695
III	600	3,450	102,600	90,385	96,442	600	3,040	53,100	62,561	69,198
IV	630	3,790	115,900	79,494	88,028	590	2,970	47,200	50,788	58,884
Total Primary	2,540	15,110	435,100	377,775	421,830	2,300	12,210	226,800	241,310	303,125
Intermediate Standard										
V	610	3,510	50,200	75,484	76,488	610	3,230	17,200	45,366	47,344
VI	540	3,190	29,700	87,844	88,300	580	2,790	7,300	44,870	48,548
VII	440	3,000	23,400	104,472	103,177	580	2,530	5,500	41,720	44,367
VIII	...	.....	18,500	319	.....	...	.....	4,000	121	.....
Total Intermediate	1,590	9,700	121,800	268,119	267,965	1,770	8,550	34,000	132,077	140,259
Secondary Form										
1	460	2,650	1,730	17,954	23,455	330	1,620	460	6,154	8,350
2	360	2,030	1,320	13,684	20,192	320	1,620	310	4,819	6,400
3	270	1,630	1,180	8,164	12,594	380	940	190	3,046	4,286
4	260	1,460	950	5,168	7,969	330	850	100	1,900	2,787
Total Form 1-4	1,350	7,770	5,180	44,970	64,210	1,360	5,030	1,060	15,919	21,823
5	60	80	170	1,069	1,280	140	60	.....	200	342
6	80	70	...	763	902	70	60	.....	130	222
Total Form 5-6	140	150	170	1,832	2,182	210	120	.....	330	564
Total Secondary	1,490	7,920	5,350	46,802	66,392	1,570	5,150	1,060	7,780	22,387
Grand Total	5,620	32,730	562,250	692,696	756,187	5,640	25,910	261,860	293,410	465,771

Males

Females

Source: Annual Reports of the Kenya Ministry of Education. These figures include enrollments in all schools: government, assisted and unaided.

those forms outnumbered the Africans despite many European girls going overseas for secondary schooling. In 1961, over a half of the secondary-school boys and two-thirds of the girls were Asian.

It is impossible accurately to trace changes in enrollments from a one-year static pyramid. Nonetheless, it is of interest that secondary enrollment among African boys was only 4.4 per cent of that in intermediate school and among girls it was 3 per cent. (The European figures are not comparable because of the large numbers studying overseas.) The ratio corresponding to that just given (secondary/intermediate) among Asian boys was 82 per cent and among Asian girls 60 per cent. Since few African girls went beyond the first standard of intermediate school, their ratio was not very meaningful. Although relatively few African youth were continuing in school, their 1961 proportion among all pupils in Form 4 (grade 12) was over a third for boys, but only 8 per cent among girls.

Some very crude estimates of how young African age cohorts were distributed with respect to schooling in 1961 are presented in Table I-2. We estimated that over half the girls and slightly over a quarter of the boys received no schooling. Over a quarter of the boys arrived at intermediate school in contrast to only a tenth of the girls. The Forms 1-4 of secondary school enrolled about 2 per cent of the boys, but only 0.3 per cent of the girls. Only 1 per cent of boys would reach Form 4 (the level at which our inquiry was mainly directed), well over twice the proportion of girls who went that far. The figures at the bottom of the table suggest that about a third of the boys but less than a fifth of the girls went beyond the first four

TABLE I-2

AFRICAN ENROLLMENTS AS PERCENTAGES OF RELEVANT
BASE POPULATION COHORTS, 1961^a

	Boys	Girls
Primary school age cohort ^b		
Never enrolled	27	53
Enrolled Standards I-IV	73	47
Intermediate school age cohort ^c		
Enrolled in Standards V-VIII	29	9
Secondary school age cohort ^d		
Enrolled in Forms 1-4	2	*
Rate of entry to Standard V ^e	34	19
Rate of completion of intermediate school ^f	19	4
Rate of enrollment in Form 1 ^f	2	*
Rate of enrollment in Form 4 ^g	1	*

^aBase population data are from the 1962 census; enrollment figures were provided by the Ministry of Education.

^bThe age span of children enrolled in the primary grades was in fact very wide, with large proportions over-age relative to normal European age patterns. This is a common feature of early stages of rapidly diffusing schooling. Selection of any particular base must be largely arbitrary under these circumstances, and estimates of proportions never attending school are subject to a wide range of error. The estimates presented here use the populations aged 10-14 as the base. Despite the fact that this is a five-year age span for a four-year schooling sequence, it is probably too low a figure, leading to an under-statement of proportions of children obtaining no schooling in the last pre-independence years.

^cAgainst the estimated populations age 13-16.

^dAgainst 4/5 of the estimated populations age 15-19.

^eAgainst the estimated populations age 12.

^fAgainst the estimated populations age 15.

^gAgainst the estimated populations age 19.

*Under 0.5 per cent.

standards; some would contend that only youth reaching Standard V acquired lasting functional literacy.

During the few years since 1961, enrollments have expanded about a third (Table I-1). There were actual declines of numbers in the first four standards; this is indicative of reaching a stage in the diffusion of schooling beyond the peak of over-age primary enrollments. Those proportions were exceptionally high in 1961, partly because primary enrollments in the just-prior years had exploded. Also, immediately after 1961 there was a special drive to open more Standard V-VII places, accompanied in some cases by restriction of openings in Standard I in localities where such entry was judged unlikely to be followed by continuity of attendance. Accordingly, enrollments in Standards V-VII or VIII more than doubled over the years since 1961. The (Forms 1-4) secondary schools quadrupled their enrollments of boys and the upper-secondary Forms 5-6 also expanded four-fold. At the present time the growth sector for girls is at the intermediate level, and the three-fold expansion of female secondary pupils promises for the first time to enable Kenya to remedy the shortages of primary teachers. Compared to many parts of the world, the relatively high enrollments of girls in total and at most levels of school would be viewed as a remarkable achievement. In Kenya the obstacle for girls has not been explicit cultural obstructionism so much as a passive lag in perception of the value of schooling for girls and a practice of giving priority to boys when total school resources are insufficient.

At the time of the 1961 inquiry some projections were made, more as warrantable recommendations in the broad context of development

than as forecasts of what would occur. It is of interest to notice how closely events have followed those suggested enrollments even if the similarity be mainly coincidence. For both sexes combined, it was suggested that by 1966 enrollment in Form 4 (of approved and aided schools) might reasonably reach 7,390 (African 2,940, Asian 4,050, and European 400); actual enrollments (including also unaided schools) for 1966 turned out to total 7,068. The recommended totals for 1967 were 9,185 and the actual proved to be 10,756.

Because of changes in ethnic rubrics in recent Ministry reports, it is not possible readily to carry out detailed analyses of trends. In 1961 the Ministry of Education did estimate inter-district variations lying back of the national aggregates. Such estimates may warn readers against generalizing from national averages to local situations. Thus, out of 33 administrative districts the Ministry estimated that in 16 districts at least 80 per cent of the boys and in 4 districts at least 80 per cent of the girls entered the first year of school. Standard I entry rates of 60 to 80 per cent characterized 8 districts for boys and 7 for girls; at 40 to 60 per cent entry there were 7 districts among boys and 8 among girls. In only two of the districts did entry rates for boys fall below 40 per cent (but in both instances they were under 20 per cent); for girls, 11 of 33 districts had entry rates between 20 and 40 per cent, and in 3 districts entry of girls was highly unusual. These are over-estimates because the population bases were too low, as the 1962 census revealed. However, variation among districts was very nearly of the order indicated, with somewhat greater rather than lesser inter-district disparities.

In 1961 the transition from Standard IV to Standard V was an exceedingly important event in most Kenya schools. In no district for either sex did less than 20 per cent of the Standard IV pupils fail to move up, and there were 4 districts of the 33 (plus a fifth district for boys only) in which both boys and girls attained transition rates of 80 per cent or more. Between the lower limit of 20 per cent and the high 80 per cent mark sex differences were marked, however. Thus 60 to 80 per cent transition or continuation rates characterized four districts for boys as against two for girls, rates between 40 and 60 per cent occurred in 18 districts for boys and 12 for girls; in the lowest range (20 to 40 per cent), there were 6 districts for boys and 15 for girls.

After this cursory review of a few highlights of Kenya school history and a confessedly superficial review of the statistics for 1961, we turn now to portraying the parental backgrounds of the Form 4 pupils.

CHAPTER II

PARENTAL BACKGROUNDS OF KENYA FORM 4 PUPILS

An inspection of the marginal tabulations from Appendix Tables A1 and B1 supplies an overview by sex, ethnic group, and locality of origin of the students who were reaching Form 4 on the eve of Uhuru (independence). In 1961 ethnic designations were conventional shorthand. Europeans were mainly from Britain (or in some rural areas from South Africa), Asians were mainly from certain sections of India or of what is now Pakistan, and for convenience are here called Indian. Goans are separated out, being mainly Christians and in many respects culturally distinct. The Arabs resided mainly in Mombasa and along the coast. Goan girls were and are exceptionally well represented relative to boys among Form 4 students, but Arab girls reaching secondary school were few. A comparison of sexes for Indians and for Europeans (in Tables A1 and B1) reflects their essential similarity in Form 4 sex ratios as foreshadowed by the data of Table I-1; namely, about three-fourths the rate for boys.

The analysis of these data focuses upon Africans, for in 1961 independence was just over the horizon and the responsibilities for national life, public and private, would particularly reflect the education of this dominant group. Students in Form 4 were preponderantly born in Kenya, including even a third of European pupils. Of other groups, only Indians and Goans contained a sizeable proportion of immigrants, in each case about a fifth. Sex differences by country

of birth were negligible, girls being somewhat more often native-born. (If we had been studying university students, the proportion of Africans born in another African country would have been larger.) Birthplace within Kenya was largely assignable to one of the municipalities for each group except the Africans. The Goans, for a combination of historical reasons, are distinctively an urban group. The distribution of Indian birthplaces within Kenya reflected the widespread distribution of Indian stores and small businesses.

Table I-3 relates the pupils' province residence to that for the total African population. In contrast to many developing countries, the availability of places in secondary school has been astonishingly near parity by locality over the whole nation. As is so often the case, variation in selectivity indexes (ratio of pupils to population for place of residence or any other trait) is more diverse among girls.

Most Africans were from rural areas. Among African boys the largest numbers (over two-fifths) were from Nyanza near Lake Victoria, another third from the Central province (in the general vicinity of the capital), and about a tenth from the Coast. Only one in twenty of these African boys was from a municipality.

The early and intensive development of missions in the Nyanza area, together with the high population density of that section, largely accounts for its strong representation among Form 4 boys, but this easy explanation does not carry over in the same measure to distributions of origins among African girls. Ten per cent of them were urban and almost half were from non-urban African communities of Central province; only a quarter compared with two-fifths of the boys who came from Nyanza. The influence of Moslem culture among coastal Africans is reflected

TABLE I-3
RESIDENCE SELECTIVITY^a OF FORM 4 STUDENTS; AFRICAN MALES AND FEMALES

	% of Total African Population ^b		% in Form 4 Sample		Selectivity Indices				
	Males	Females	Total	Males	Females	Total			
Nyanza	34.7 (1,436,261)	36.5 (1,542,379)	35.6 (2,978,640)	43.0 (252)	33.7 (30)	41.8 (282)	1.2	0.9	1.2
Rift Valley	12.2 (504,730)	11.5 (488,237)	11.9 (992,967)	3.2 (19)	2.2 (2)	3.1 (21)	0.3	0.2	0.3
Central	22.4 (926,850)	23.2 (982,753)	22.8 (1,909,603)	36.4 (213)	48.3 (43)	37.9 (256)	1.6	2.1	1.7
Southern	11.6 (479,946)	12.5 (530,161)	12.1 (1,010,107)	3.9 (23)	10.1 (9)	4.7 (32)	0.3	0.8	0.4
Coast	6.2 (255,171)	6.5 (275,767)	6.3 (530,938)	9.6 (56)	1.1 (1)	8.4 (57)	1.5	0.2	1.3
Northern	7.4 (308,000)	6.6 (280,301)	7.0 (588,301)	....	....	....	....	....	....
Municipalities ^c	5.4 (222,349)	3.1 (130,712)	4.2 (353,061)	3.9 (23)	4.5 (4)	4.0 (27)	0.7	1.5	1.0
NR's (Persons in transit)	0.0 (1,327)	0.0 (998)	0.0 (2,325)	....	....	....	....	....	....
Total	100 (4,134,634)	100 (4,231,308)	100 (8,365,942)	100 (586)	100 (89)	100 (675)			

^a"Residence" is defined as where mother is living (or mother's permanent residence prior to death).

^bFrom Kenya Population Census, 1962.

^cMunicipalities include: Kisumu, Nakuru, Nairobi, Mombasa.

in the fact that only 1 per cent of girls as against 10 per cent of African boys came from that part of the country. Overall the Central province has twice its quota (reflecting early and prolonged Western contact) while the towns have 50 per cent excess of enrollment over quota. For boys excess enrollment above quota is to be found in three provinces.

It should be kept in mind that the distribution of pupils (for tribe or any other trait) is important irrespective of whether it exceeds what might be expected by chance or not. And four out of five Form 4 pupils of each sex come from Nyanza and the Central provinces combined, clearly an excess though not a large one compared to the distribution of all residents.

The residences of parents, in relation to the location of the secondary school being attended by the child and taken as a measure of spatial accessibility of secondary education, are shown in Appendix Tables A1 and B1. ("District" was used as the measure of distance.) As in many other African countries, a considerable proportion of secondary pupils (and all Africans) were boarders. Among Europeans a majority attended a nearby school, but of course there were relatively more secondary school places specifically for European boys or girls. A considerable proportion of each sex among European pupils came into Kenya from another country. Curiously, girls were more likely than boys to attend a distant school. In the other ethnic groups, girls more often than boys attended nearer home only among Indian and Arab youth. Africans shared with Europeans a comparatively high rate of attendance in a different province (not merely district) from the parental home. Along with other features already discussed,

use of boarding facilities and long absence from home to attend school both characterize and affect many features of secondary schools in Kenya as in other developing countries.

Relying upon the Kenya census categories, as of 1961 and even more recently the different "tribes" were represented among pupils of Form 4 in quite different numbers (see Table I-4); selectivity indexes are given also. Thus, Kikuyu boys made up just over a third of the Form 4 boys; that was about an 80 per cent excess over their statistical quota, and among Form 4 girls Kikuyu had double their share. Some of the more striking contrasts among tribes or between sexes for a given tribe are easily understood; other aspects of the pattern delineated in Table I-3 are more complex, however. The contrast between the Coastal ratio of 0.9 for boys and of 0.1 for girls relates back to the earlier comments about Moslem customs. Without entering into detailed historical analysis or speculations about tribal "personality," a few parental correlates of tribal representation throw light on the foregoing contrasts.

Thus Table I-5 shows broadly that the Kikuyu supply a large proportion of students whose fathers are from low-ranking occupations even as Kikuyus furnish nearly twice their quota of Form 4 pupils. Generally indeed, if a tribe has relatively few pupils in Form 4 (Table I-5), those pupils tend to come from relatively well-placed families; youth from the more fortunate homes are the ones likely first to represent their tribe in secondary school and in university--surely not a startling nor an unexceptionable observation. Similar relationships were observed for backgrounds of secondary pupils in Ghana and the Ivory Coast, to mention only African instances. To a

TABLE I-4
TRIBAL SELECTIVITY OF 1961 FORM 4 STUDENTS; AFRICAN MALES AND FEMALES

Tribe	Distribution of Tribes in Total African Population			Percentage Distributions of Students in Form 4 ^a			Selectivity Indices		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Hamitic	7.1	6.3	6.7	.2 (2)	....	.2 (2)	.03	...	.03
Nilo-Hamitic	13.4	13.2	13.3	7.4 (68)	5.0 (5)	7.2 (73)	.6	.4	.5
Nilotic (Luo)	13.6	13.9	13.7	15.0 (138)	8.0 (8)	14.3 (146)	1.1	.6	1.0
Kikuyu	19.6	19.6	19.6	34.4 (317)	40.0 (40)	35.0 (357)	1.8	2.0	1.8
Embu-Meru	7.2	7.4	7.3	5.5 (51)	12.0 (12)	6.2 (63)	.8	1.6	.9
Luyia	12.9	13.1	13.0	14.3 (132)	21.0 (21)	15.0 (153)	1.1	1.6	1.2
Kisii	7.0	6.9	6.9	2.7 (25)	1.0 (1)	2.6 (26)	.4	.1	.4
Kamba	11.0	11.3	11.2	12.9 (119)	11.0 (11)	12.7 (130)	1.2	1.0	1.1
Coastal	7.4	7.7	7.6	6.5 (60)	1.0 (1)	6.0 (61)	.9	.1	.8
Foreign tribes	0.7	0.5	0.6	1.0 (9)	...	.9 (9)	1.4	...	1.5
NR's	0.1	0.1	0.1	...	1.0 (1)	.1 (1)	...	...	...
Totals	100	100	100	100 (921)	100 (100)	100 (1,021)			

^a Respondents to questionnaires from the twenty schools included in the study and students taking examinations for the seven schools not included (students identified in follow-up study). It is assumed that non-response rates on account of absenteeism and drop-outs match rates of non-appearance for examinations. A comparison of numbers of examinees with numbers of respondents on the questionnaires shows very close correspondence school by school.

TABLE I-5

DISTRIBUTION OF FATHER'S OCCUPATIONAL LEVEL; AFRICAN
MALES BY TRIBE^a

Tribe	Father's Occupational Level: from High to Low							
	1	2	3	4	5	Chiefs	NR's	Totals
Hamitic	...	....	....	100.0 (2)	....	....	....	100 (2)
Nilo-Hamitic	...	4.3 (1)	30.4 (7)	17.4 (4)	34.8 (8)	13.0 (3)	....	100 (23)
Nilotic	...	3.0 (4)	29.1 (39)	21.6 (29)	38.8 (52)	3.7 (5)	3.7 (5)	100 (134)
Kikuyu	...	2.0 (4)	17.2 (35)	24.5 (50)	46.6 (95)	2.0 (4)	7.8 (16)	100 (204)
Embu-Meru	...	4.2 (2)	8.3 (4)	31.2 (15)	43.7 (21)	10.4 (5)	2.1 (1)	100 (48)
Luyia	0.8 (1)	1.6 (2)	22.8 (29)	22.0 (28)	44.1 (56)	7.9 (10)	0.8 (1)	100 (127)
Kisii	...	....	12.0 (3)	24.0 (6)	44.0 (11)	20.0 (5)	....	100 (25)
Kamba	...	21.7 (5)	21.7 (5)	21.7 (5)	30.4 (7)	....	4.3 (1)	100 (23)
Coastal	5.1 (3)	....	23.7 (14)	28.8 (17)	30.5 (18)	11.9 (7)	....	100 (59)
Foreign	...	....	44.4 (4)	11.1 (1)	44.4 (4)	....	....	100 (9)
Totals	0.6 (4)	2.8 (18)	21.4 (140)	24.0 (157)	41.6 (272)	6.0 (39)	3.7 (24)	100 (654)

^aPercentages add up to 100% horizontally.

definitely lesser extent, though generally in the same sense, children from tribes heavily represented relative to their base populations were drawn disproportionately from less-educated homes (Table I-6). Again in general terms, where schooling had permeated a tribe so that its relative representation in Form 4 was high, a relatively large proportion of youth come from tribal homes in which the father had little or no schooling.

It should be emphasized, however, that these remarks do not gainsay the comment often made that compared with the West and with most developing parts of the world, comparatively large proportions of African youth in the upper levels of the school system come from modest homes. Meanwhile, over the period since 1961, there has been for Africans an opening up of access to secondary schools, but in this process there may have been an increase in tribal selectivity to elite schools.

That a comparatively large proportion of youth in Kenya would have a parent deceased is no surprise, but it may be more noteworthy that so large a proportion of secondary pupils continue in school despite this handicap. The strong drive for completion of school once begun and the objectivity of the sorting devices for moving children up the school ladder are revealed. In contrast to secondary schools of earlier generations in developed countries--as will be pointed out--the comparative weakness of the nuclear family's effect on a youth's fate shows up in a situation in which subsidy for school costs has become widespread, even in the absence of direct "large-family" responsibility. In most respects, though not in all, nor in this one

TABLE I-6

DISTRIBUTIONS OF FATHER'S SCHOOLING: AFRICAN MALES
BY TRIBE^a

Tribe	Father's Educational Level						Totals
	No Education	Some Primary	Finished Primary	Some Inter-mediate	Finished Inter-mediate	Beyond Inter-mediate	
Hamitic	50.0 (1)	50.0 (1)	....	....	....	....	100 (2)
Nilo-Hamitic	52.2 (12)	17.4 (4)	4.3 (1)	26.1 (6)	....	....	100 (23)
Nilotic	31.8 (41)	22.5 (29)	17.1 (22)	14.7 (19)	10.9 (14)	3.1 (4)	100 (129)
Kikuyu	42.0 (79)	22.3 (42)	13.3 (25)	12.2 (23)	6.4 (12)	3.7 (7)	100 (188)
Embu-Meru	42.6 (20)	27.7 (13)	15.0 (7)	6.4 (3)	4.3 (2)	4.3 (2)	100 (47)
Luyia	18.3 (23)	31.0 (39)	27.8 (35)	12.7 (16)	7.9 (10)	2.4 (3)	100 (126)
Kisii	25.0 (6)	16.7 (4)	33.3 (8)	20.8 (5)	4.2 (1)	....	100 (24)
Kamba	22.7 (5)	22.7 (5)	27.3 (6)	13.6 (3)	9.1 (2)	4.5 (1)	100 (22)
Coastal	40.0 (22)	21.8 (12)	14.5 (8)	9.1 (5)	9.1 (5)	5.5 (3)	100 (55)
Foreign	37.5 (3)	25.0 (2)	....	12.5 (1)	12.5 (1)	12.5 (1)	100 (8)
Totals	34.0 (212)	24.2 (151)	17.9 (112)	13.0 (81)	7.5 (47)	3.4 (21)	100 (624)

^aPercentages add up to 100% horizontally. NR's excluded.

in particular, girls tend to come from homes of somewhat better status than do boys.

Table I-7 summarizes Appendix Tables A2 and B2, which give distributions of schooling among parents of boys and girls in Form 4 for each of the five ethnic categories. It is necessary to set aside the European data, especially for boys; either ignorance was singularly high or for some reason this item was chosen by pupils as one for deliberate "don't know" replies--in contrast, by the way, to their rather complete reports on paternal occupation. European girls (if one ignores the large NR rates) display a pattern that is familiar in the West. The Arab data are erratic, as are those for Goans, due to fewness of cases; among other groups, the Arabs are singularly low. Positive selection for parental schooling is distinctively sharp among Arab girls in contrast to boys. Considering the combined schooling of father and mother, aside from the Arabs, totally unschooled parents are rare except among Africans. But families in which only one parent had any schooling at all are more frequent among the Indians. It is the Africans who are set off (though almost matched by Arabs) for having both parents entirely lacking any secondary education. Over half the African mothers and a third of the fathers had no schooling (though they may have acquired rudimentary literacy otherwise), and mothers with schooling virtually disappear from the reports after the earlier school years. Comparable figures today would reveal a larger proportion of parents completing or going beyond secondary schooling. As so often pointed out by a few scholars working on African education, educational success among youth from unschooled parents (in defiance, so to speak, of sociological generalizations about educational selectivity) has characterized

TABLE I-7

EDUCATIONAL ATTAINMENTS OF PARENTS OF FORM 4 STUDENTS BY
STUDENT'S ETHNIC COMMUNITY AND SEX, 1961^a

Student's Ethnic Group and Sex	N	Percentage Unschooled	Percentage Completed Intermediate or More	Percentage Beyond Intermediate	Percentage NR
Fathers					
African: Male	654	32	24	4	5
Female	100	5	40	9	12
Arab: Male	33	73	9	6	9
Female	5	(20)	(40)	(20)	..
Goan: Male	35	3	68	54	8
Female	43	..	77	70	12
Indian: Male	493	4	43	40	11
Female	373	2	57	52	7
European: Male	194	..	(45)	(42)	53
Female	148	..	(77)	75	23
Mothers					
African: Male	654	57	5	*	12
Female	100	24	21	..	14
Arab: Male	33	(67) ^b	..	..	30
Female	5	(80)	..	..	..
Goan: Male	35	17	37	34	20
Female	43	..	66	47	14
Indian: Male	493	27	10	7	17
Female	373	16	15	11	6
European: Male	194	..	(38)	(36)	60
Female	148	1	82	79	16

^aFor details, see Tables A2 and B2 in the appendix to this Part. Entries in parentheses are very doubtful either because of small numbers (Arab females) or high non-response rates.

^bThe true figure is probably over 93 per cent (see the high percentage NR).

large parts of Africa since early days of missionary work--sometimes independent of or in defiance of missionary sponsorship or supervision.

Table I-8 relates the schooling among fathers of African pupils to the schooling of the generation to which those fathers belong (males 35-59 in age). A third of the African boys in Form 4 came from homes in which the father had no schooling; for the total adult-male African population that proportion was almost three-fourths; consequently the ratio of these two percentages (or the selectivity ratio) was 0.4. That is, sons of illiterate fathers had almost half their statistical chance to get a place in Form 4. Among daughters, by contrast, only 5 per cent of fathers lacked schooling, so for them the selectivity index is lower, only 0.1. These selectivity indexes rise rapidly with paternal (or maternal) schooling, reaching 5.0 for fathers who had at least entered a post-secondary school--a ratio that was not remarkable among European populations of a generation ago or even more recently. For girls the effect of paternal education is much more marked, reaching 10.0 even for girls whose fathers received only partial secondary education. One must say also about the new African nations today, then, as for nations in other parts of the world, that secondary pupils come disproportionately from better-schooled families. For boys, representation among these secondary pupils, however, is approximately half of "quota" even for illiterate fathers--as was remarked earlier appropos of paternal occupation.

It is for schooling (almost distinctively among the many items surveyed in Appendix Tables A1, 2, and 3 and B1, 2, and 3) that the greater degree of social selectivity for girls at advanced levels of

TABLE I-8

EDUCATION OF FATHERS OF AFRICAN STUDENTS COMPARED WITH THE
EDUCATIONAL CHARACTERISTICS OF THE KENYAN ADULT
POPULATION, AGE 35-59

Educational Level	African Adult Male Population 1962	Male Students		Female Students		Totals	
		Paternal Education	Se-lectivity Index	Paternal Education	Se-lectivity Index	Paternal Education	Se-lectivity Index
No schooling	72.7	32.4 (212)	0.4	5.0 (5)	0.1	28.8 (217)	0.4
1-4 years	18.0	40.2 (263)	2.2	43.0 (43)	2.4	40.6 (306)	2.3
5-8 years	8.4	19.6 (128)	2.3	21.0 (31)	3.7	21.1 (159)	2.5
9-12 years	0.8	2.7 (18)	3.4	8.0 (8)	10.0	3.4 (26)	4.3
13 years or more	0.1	0.5 (3)	5.0	1.0 (1)	10.0	0.5 (4)	5.0
NR's	.....	4.6 (30)		12.0 (12)		5.6 (42)	
Totals	100	100 (654)		100 (100)		100 (754)	

school (with which we have been so familiar in the West) comes to light. Girls who reach the 12th year of school have considerably better-educated parents than do their brothers.

Although (as Appendix Tables A2 and B2 revealed) few Indian pupils had wholly uneducated parents, yet the selectivity ratios for this level of parental education were very like the figures shown for Africans in Table I-8. The remarkable point about the Indian figures is that for individuals whose fathers had 9+ years of schooling, the selectivity ratios for boys were virtually at parity (1.0) and for girls only 1.2. Even at the 13 plus level, the selectivity ratios for Indians were only 1.4 for boys and 2.1 for girls. Girls enrolled in Form 4 have better-schooled fathers than do the boys, but this sex disparity is less than among Africans.

The "index of dissimilarity" (i.e., the percentage who would have to be shifted to match two distributions) between the Form 4 boys and all Kenya adult males for parental schooling (aged 35-59) was 40.3. For Indian males it was 44.2 and for Indian females 37.8. But for African girls it was 67.7--indirectly confirming the particularly strict selectivity in their attendance at secondary school. The parallel index between parents of Indian boys and girls was only 14.4 in contrast to 27.4 for the parents of African boys and girls, confirming earlier remarks about lesser contrasts within the Indian than within the African group.

Contrasts among ethnic communities with respect to parental occupational status and corresponding differences in selectivity of secondary enrollment generally parallel the relationships observed for parental education, although usually in lesser degree and with

a few exceptions. For this analysis, as for examining occupational aspirations and expectations, a five-level status scale was constructed (details of which are given in Appendix IV). The findings are summarized in the upper part of Table I-9 and presented more fully in Appendix Tables A3 and B3. The very striking ethnic contrasts in parental distributions of status reflect the contrasting occupational roles of members of the various ethnic communities far more than they reflect differences for within-race selectivity of attendance at secondary school. Indeed, the colonial pattern of racial differentiation was such as to wipe out the differential selectivity for European girls as against boys that we might otherwise expect. Sex differences in occupational selectivity of secondary attendance are clear enough among the Africans, however. Thus, African girls who have reached Form 4 are more likely than African boys to have fathers in high-status occupations and are much less likely than boys to have a father in a low-status job. Of the African boys 42 per cent, as against only 21 per cent of the girls, were children of men classified in the lowest status (as unskilled laborers and small subsistence farmers). But the differences are considerably less salient than one would anticipate in, say, the United States.

Needless to say, the type of enterprise represented by farm parents was rather different typically among Europeans than among Africans, but the high frequency of farm parents among Europeans was intrinsically connected to the special position of Keyna as a focus for farm settlement by Britains. For the African pupils, on the other hand, high representation from farm homes would be expected statistically (see lower half of Table I-9); since farmers are the preponderant

TABLE I-9
 OCCUPATIONAL CHARACTERISTICS OF FATHERS OF FORM 4 STUDENTS BY STUDENT'S
 ETHNIC COMMUNITY AND SEX, 1961^a

		Occupational Status Levels			Selected Occupational Types or Sectors					
		Number Re- porting	Percentage High (Levels 1,2)	Cumulative Percentage Level 3 or Above	Percentage Level 5	Number Re- porting	Farming; Other Agri- culture	Com- mercial, Clerical, Adminis- trative	Teaching and Related	NR
African										
Male	632	4+6*	26+6*	43	628	57	17	5	26	
Female	97	9+1*	49+1*	22	93	49	14	15	7	
Arab										
Male	32	3	37	16	32	16	59	..	1	
Goan										
Male	34	26	91	..	34	..	64	6	1	
Female	42	42	93	..	42	2	81	5	1	
Indian										
Male	476	29	84	1	473	1	71	3	20	
Female	355	35	82	1	351	1	82	4	22	
European										
Male	186	85	98	..	184	23	28	13	10	
Female	140	88	98	1	140	28	27	11	8	

^aFor details, see Tables A3 and B3 in the appendix

*African local "chiefs" under the colonial administration.

occupation among Africans, there is also a comparatively large proportion of youth seemingly destined for higher education who have peasant fathers. This is one of the remarkable and in many ways unique features of African secondary and higher education.

The salience of teaching among semi-educated Africans of the older generation shows up, as does their then initial entry into solid white-collar positions, the latter being singularly linked with the "Asian" groups. In both types of paternal occupation and in its level, girls are much less marked off from boys than would be observed in earlier Western generations. At the same time, the diversity of occupations (leaving agriculture aside) among fathers of these secondary pupils from African homes is noteworthy in a society that had so recently adopted the patterns of schooling represented as a model by the occupations of Europeans.

It is not helpful to discuss maternal occupations unless one goes into great detail, for in the particular ethnographic circumstances of Kenya, where pre-European customs are by no means extinct, a heavy proportion of African mothers are actual operators of small farms. Equally noticeable was the large proportion of European wives without gainful employment.

As to type of father's employer, only a few comments are here in order. The percentage of Africans listed as working for government would today be much larger than in 1961. Self-employed does not mean the same for the African peasant and the Indian storekeeper. The stratification of jobs in either private or public sector by ethnic category was in 1961 much sharper than today. Almost certainly, the larger proportion of girls than of boys from homes of government-employed

men reflects accessibility (through urban residence), and it takes on some color also from the recognized shortage of schooled wives for rising African officials and for professional men. Equally, however, it reflects (though almost certainly less consciously) the vital part that educated women must play in staffing the rapidly expanding school system.

CHAPTER III

ETHNIC DIFFERENCES IN EDUCATIONAL ATTITUDES

AND HOPES

Each ethnic group has shared the recent history of the area now called Kenya and the events leading up to national independence in individual ways. Each ethnic community today has its particular part to play in the economy, in the polity, and in education. Each has had its distinctive prospects for the future and each has weighed its own prospects in relation to those of other groups in particular ways. Furthermore, students in each sector and level of the school system have been exposed to distinctive ideological and moral polemics--along with objective circumstances; as a result, each group has arrived at its own outlook and attitude, patterns of behavior, and subjective preferences.

Two questions asked of all the Form 4 students were:

11. What in your opinion is the best reason for getting a good education, among the following?

_____ Because you can get a well paid job
_____ Because you will be respected by others
_____ Because you can become a powerful person if you are well educated

12. Perhaps you don't think the reasons given above are enough. Do you think there is a better reason for having an education besides the ones we have listed? If you do, then write it down here.

The responses to these questions are displayed in detail in Appendix Tables A4 and B4 and summarized in Table I-10. The ethnic

TABLE I-10

PERCEPTIONS OF THE PURPOSE OR VALUE OF EDUCATION; FORM 4 STUDENTS BY ETHNIC
COMMUNITY AND SEX, 1961

	Males					Females				
	Africans (N=654)	Arabs (N=33)	Goans (N=35)	Indians (N=493)	Europeans (N=194)	Africans (N=100)	Goans (N=43)	Indians (N=373)	Europeans (N=148)	
Percentages										
<u>Choices presented on questionnaire</u>										
1. Get well paid job	30	15	29	30	77	23	42	27	68	
2. Be respected by others	12	43	32	38	15	5	40	19	15	
3. Be powerful	12	36	23	34	4	23	12	37	3	
4. NR or none of these	46	6	70	8	13	49	7	19	17	
<u>Other answers written</u>										
Attruistic	64	18	11	10	2	82	12	12	4	
Economic	3	3	12	5	10	2	7	7	11	
Miscellaneous	16	6	11	12	20	10	25	12	29	
No write-in	17	73	66	73	68	6	56	69	56	

contrasts are indeed striking. European students tended to see their activity in explicitly vocational terms. The Arabs (a tiny sample) stress first the winning of others' respect, a motive also prominent among Indians. African youth found the fixed choices of Question 11 restrictive; all but 17 per cent of the African boys and 6 per cent of African girls wrote in some other response. These African responses were predominantly altruistic and linked with the building of a new society; this was so regardless of sex but overwhelmingly so among girls (Table I-10).

Other questions called for preferences among the subjects taught in Forms 1 to 4 and for individual perceptions of the usefulness of those subjects (see Appendix Tables A4 and B4). To start with, we see no reason to expect a tight relationship between pupils' rankings of the utility of school subjects and their personal preferences among the subjects they had actually studied, though it would be surprising if the two rankings were unrelated. It was noteworthy that the allegation that Africans spurn science and mathematics definitely was not upheld; of African boys 29 per cent and of Indians and of Europeans 30 per cent ranked science first in "liking" among the subjects they had studied. For usefulness, top rankings were given to science by 28 per cent of African, 30 per cent of Asian, and 29 per cent of European boys. Only the small samples of Goan and Arab boys deviated from these virtually identical rankings, each of these latter two groups displaying less enthusiasm for science in either context. Ethnic contrasts among girls in these respects were more marked. In "liking" European girls put science highest (20 per cent); Indian girls rated it very low (6 per cent); African girls fell between (14 per cent).

For "usefulness" the percentages giving first place to science were 20, 5, and 9 per cent, respectively. The much-lamented shortage of students in science at university (which is virtually a world-wide problem) can hardly be attributed to boys' dislike of science in secondary school or to their lack of appreciation of its usefulness for national development. However, the African pupils are slightly less zealous for those subjects (20 per cent) than are Indians (29 per cent) or Europeans (26 per cent). European boys, not surprisingly, were far the most likely to stress the usefulness of mathematics; almost two-fifths said mathematics was most useful, as against a sixth of the Indian and only a tenth of the African boys. These relative standings may in part reflect the greater emphasis that Indians and Africans feel it necessary to place upon acquiring a command over English, but it is interesting and perhaps important that it is mathematics rather than science that loses Indian and African votes. There are no parallel ethnic contrasts in attitudes toward mathematics among girls; the range is from 14 to 19 per cent liking it best and from 7 to 10 per cent rating it most useful.

English came out ahead of any other school subject overall, and especially among girls. For the three most numerous male sub-populations, proportions ranging from 33 per cent of Indians to 40 per cent of the Africans said that they liked English best. Male ratings or rankings were quite different with respect to the usefulness of English: European boys took it for granted and were least likely to put it first in usefulness (30 per cent did so), in contrast to Indian (49 per cent) and African (54 per cent) boys.

Distinctive sex differences show up among Indians in the rankings of English. Thus, while European and African girls are quite similar in liking English best (43 and 38 per cent respectively), the frequency was much higher among the Indian girls (59 per cent). Girls generally saw English as their most useful subject: two-fifths of both European and African and over three-fourths of the Indian girls so rated it.

Even for males, these attitudes toward English suggest a favorable situation for choosing an educational language medium on a basis that gives maximum access to international letters and science at a minimum cost of learning. We find in these various attitudes of students no support for the fancy that the difficulties of many societies in rearing up good scientists or linking to the world literature of science is attributable to some disaffinity between exotic "western" science and "local" life. Broadly speaking, the most needed subjects are also popular among pupils who understand why those subjects are useful--not on an ideal plane but as a foundation on which to build a technologically modern system of production.

From any point of view that relates to ambition or drive to obtain further education, the pupils we studied must be seen as outstanding. Moreover, the Africans in particular have moved ahead in a system clearly aligned to "strange" procedures and to what must often have seemed to be mysterious goals. Hope to go further in school has been strongly held, especially among boys--with minor exceptions noted. African responses may have been attenuated by use of the word "school" with its modest connotations. Even so, with

three-fourths hoping to continue, they almost match the Indians among boys, and they exceed the Indians among girls (63 and 85 per cent respectively). It is possible also that some of the "hope" in Question 9 spilled over into the expectation of Question 10. Certainly, although the questions were being asked in the euphoric atmosphere of plans for independence, the Africans (and particularly boys) were less optimistic about realizing their ambitions than were the others except the seemingly passive Arabs. Combining the expressions of hope with expectations, the Asians stand out for drive toward additional schooling, but Africans come second, surpassing Europeans and Goans. The follow-up data will enable us to assess the realism of these educational hopes and expectations.

Even well before independence, Kenya had a diverse spectrum of educational programs: some operated by the Ministry of Education, some by other public agencies or industries, and some privately. Depending upon many factors, individuals saw these ways of schooling (entry to which occurred after Form 4) in different lights. Table I-11 summarizes some of the findings (shown in more detail in Appendix Tables A4 and B4).

Most prevalent was the conventional choice to continue academic education into Forms 5-6. Not quite half of the African boys, those who were already in Form 4 and had good actuarial chances of passing the school certificate tests, were clearly setting their sights upon higher academic work. Proportions among Goan, European, and Indian boys ran ten points higher. For girls also this academic choice was the most popular one but at a lower rate (ranging from a third among Goans and Europeans to two-fifths for Africans and nearly half for

TABLE I-11

PREFERENCES FOR POST-FORM-4 AND POST-FORM-6 TRAINING; PERCENTAGES EXPRESSING SELECTED PREFERENCES BY ETHNIC COMMUNITY AND SEX

	Males					Females				
	African (N=654)	Arab (N=33)	Goan (N=35)	Indian (N=493)	European (N=194)	African (N=100)	Goan (N=43)	Indian (N=373)	European (N=148)	
Teacher training From Form 4 Beyond Form 6	8 5	6 ...	... 3	5 2	3 2	26 10	19 7	18 11	7 6
Agricultural training From Form 4 Beyond Form 6	15 14	12 6	3 6	3 4	10 6	... 1	... ...	... *	5 3
Mechanical, technical, engineering From Form 4 Beyond Form 6	3 9	6 9	23 23	13 41	5 16	1 ...	... ...	4 *	7 ...
Medical From Form 4 Beyond Form 6	2 11	... 9	3 11	1 17	... 3	23 13	9 21	19 24	14 9	
To Form 6	46	18	54	64	55	39	33	45	35	
Arts, law, fine arts Science, math.	21 8	3 6	26 3	8 8	14 13	20 1	16 5	27 5	16 4	
Misc. commercial Misc. governmental OJT Other	9 18	27 30	6 12	9 6	19 9	7 4	26 14	11 4	30 3	
No choice stated	2 30	... 67	... 29	3 16	... 45	55	51	32	62	
Total	101 100	99 100	101 101	101 99	101 99	100 100	101 100	101 99	101 100	

Indians). None of these proportions are surprising after one has scanned a series of annual reports for the climactic years just before independence.

More striking is the strong inclination of African boys for agricultural courses, surely a divergent pattern when seen in a worldwide context. This preference at least in part reflects the importance of farming among the European settlers, whose prosperity was observed by many aspiring African as well as by European boys. By contrast, African and European boys who displayed interest in any sort of pre-university technical training were few; such ambitions were more frequent among Indians and Goans. Among girls, a seventh of the Europeans, a fifth of the Indians, and a fourth of the Africans favored training to be a nurse after completion of Form 4. Whether teacher training should be classified with the more immediate and pragmatic post-Form 4 training is perhaps a subjective question--on which further light may be thrown in a later part of this report. To be sure, choice of employment as a teacher was distinctly more popular among girls than among boys in each group. In the light of the growing nationalism of public opinion at that time, the approximately one-fifth of Indian and Goan girls choosing teaching may have been unduly optimistic. However, the quarter of African girls and tenth of African boys with that intention were surely canny.

Beyond asking pupils about their preferences and hopes for post-Form 4 training, respondents were asked to indicate in which subjects they would desire to concentrate if they went further with academic or university training. Although responses to such "if" questions must be viewed cautiously, considerable light may be thrown

upon how youth are thinking and the general directions of their educational and occupational leanings. Professional ambitions come through more clearly in this second question. Agriculture drops from 10 to 6 per cent preference among Europeans and remains stable at 15 per cent among Africans. In all cases among boys, technical education becomes considerably more popular, though relatively few Africans express interest in becoming engineers; only 9 per cent of African boys made this choice against 16 per cent of Europeans, a fifth of the Goans and two-fifths of the Indians. It is here, rather than in attitudes toward science as a subject in school, that we find some validation of the complaints about the difficulties of building up technical competence in the nation. Meanwhile the proportion of African and Indian youth striving to become physicians rises to quite unrealistic levels in the light of any defensible schedules of manpower needs. Ambitions for higher-level medical professions are more marked among girls than boys in all ethnic groups. Teaching dropped substantially in relative position with a shift to the higher educational assumptions except among the European girls.

CHAPTER IV

OCCUPATIONAL ASPIRATIONS AND EXPECTATIONS BY SEX AND ETHNIC GROUP

The questions asked of each Form 4 pupil about his vocational aspirations and expectations reproduced those that had or have been asked in many studies over the world, and specifically in studies by the Comparative Education group at Chicago in Brazil, Ghana, the Ivory Coast, and Japan. (The data for Kenya are reported in detail in Appendix Tables A5 and B5.) One recognizes that all occupational designations are ambiguous; for example, no doubt many "agriculture" replies failed to distinguish whether the boy was thinking of running a farm or becoming a junior agricultural officer. Students often were quite vague as to the level of work they had in mind, particularly in farming and teaching. Insofar as possible other replies were used to resolve ambiguities; for example, if a student expected to go to university and also expressed a desire to work in "agriculture," he was placed on Level 1 and if he further expressed a preference to work for government, we concluded that he had in mind the job of Agricultural Officer. To some degree, unfortunately, this procedure builds in a little spurious correlation among items.

Looking first at pupils' "aspiration" levels (Table I-12), a generous two-fifths of the African, Indian, and Goan boys dreamed of top-level jobs, proportions that are high but not so high as the two-thirds reported by Europeans. (Again the few Arabs manifest comparative

TABLE I-12
 OCCUPATIONAL ASPIRATION LEVELS BY ETHNIC
 COMMUNITY AND SEX

		African	Arab	Goan	Indian	European
Males						
Percentages						
1 (top)		42	19	42	45	63
2		49	63	27	37	31
3		9	19	30	18	6
4		...	...	...	...	...
5		...	...	...	...	...
Total:	%	100	101	99	100	100
	N	539	27	33	412	170
	NR	115	6	2	81	24
Per cent	NR	18	18	6	16	12
Females						
Percentages						
1 (top)		25	...	16	24	23
2		48	(75)	41	48	48
3		27	(25)	44	28	29
4		...	...	...	...	...
5		...	...	...	...	...
Total:	%	100	(100)	101	100	100
	N	93	4	32	282	130
	NR	7	1	11	91	18
Per cent	NR	7	20	25	24	12

apathy, though even they dream at least of modest jobs.) African boys are clearly more ambitious or hopeful than are Indians, in that many fewer of the Africans confine their dream to Level 3 aspirations.

Among girls, the striking phenomenon is the broad similarity across the ethnic groups in levels of aspiration (Table I-13). African girls are closer to the Indians than to the Europeans in their emphasis on teaching, giving the impression of having responded to the tacit and open national appeals to take up teaching. The strong preference among girls aiming to become secondary teachers reflects not only the limited range of alternatives presently open to them, but also their adoption of a traditional western female role. (For some time, however, a large proportion of African primary teachers will not have reached the Form 4 level of school.) The European girls have had more occasion to visualize themselves in certain artisan sorts of work (as beautician) and in professions such as social work; however, European girls were least interested in teaching. Still, not surprisingly, the traditional women's occupations (like secretary, nursing, or teaching) predominate in each ethnic community as girls look ahead from their 12th year of school.

Among boys the amorphous commercial-administrative category is popular in all groups and especially among Indians, for familiar reasons arising out of Kenya history. Agriculture is as popular among Africans as among Europeans (at least in anticipation), but it is not salient among any other group. Data not included here show that African interest in agriculture is mainly and quite unnecessarily confined to jobs with the Ministry, whereas about half the Europeans were thinking of becoming operators of farms. The comparatively high preference for

TABLE I-13

OCCUPATIONAL ASPIRATION TYPES BY ETHNIC COMMUNITY AND SEX

	Males					Females				
	African	Arab	Goan	Indian	European	African	Goan	Indian	European	
	Percentages									
Medical	14	7	6	11	2	25	16	22	21	
Social, religious, political	6	4	3	4	3	7	3	5	9	
Scientific, technical, mechanical	17	14	52	41	37	1	6	2	6	
Agriculture	22	11	3	4	22	1	...	...	7
Commercial, admin., clerical	19	36	12	27	17	25	41	30	23	
Education	18	21	9	7	5	38	34	36	16	
Military and police	4	7	9	5	11	1	...	...	...
Artisan	*	...	6	1	3	2	...	4	17	
Total:	100	100	100	100	100	100	100	99	99	
%	606	28	33	414	174	93	32	282	139	
N	48	5	2	79	20	7	11	91	9	
NR	8	15	6	16	10	7	26	24	6	
Per cent	Percentages within the Category Commercial, Administrative and Clerical									
Accountants and bookkeepers	20			27	33					
Government-Admin.	62			24	13					
Private business	8			13	40					
Clerical	7			25	3					
Other	4			11	10					
Total:	101			100	99					
%	114			114	30					
N	4			4	4					

agriculture that shows up among these data in so many ways surely in large part reflects the favorable status of English farmers in recent decades. By contrast, Indians along with Europeans display much greater interest in technical sorts of work. Indians reveal themselves also as more likely than Africans to look for accountancy or clerical work; they are much more oriented to operation of a private business. Administrative posts preempt the attention of African boys (who surely had become conscious of what was coming to be called "localization"). The then-marked inclination of Africans and of Indians for medicine surely has not been dampened by Kenya's decision to build a new local medical school.

If one undertook comparisons with either "official" or other manpower targets, commentary on these data would have to run to many pages. Putting a few salient points briefly, the lack of interest among African boys in business positions or entrepreneurial endeavor can hardly be seen as favorable to development. On the other hand, the distribution of African aspirations is dispersed and diverse; there is no obsession with a single level or type of employment among these youth who as a group surely have favorable vocational outlooks. We have no evidence that any other country with more "appropriately" constructed curricula is inducing greater interest in technical (particularly agricultural) kinds of work.

The expectation question presupposed that the pupil had no formal schooling in prospect beyond Form 4, as we have pointed out. Since a large proportion of these pupils could be confident of obtaining more schooling, the "forced" responses about "expectations" were partially misleading in that responses are more modest and are

oriented toward jobs closer to the point of entry into the labor market from Form 4. Furthermore, for understandable reasons, the proportions not responding about expectations are much higher than for aspirations. With these cautions in mind, one may still derive some illuminating relationships from the data.

On levels of expectation (Table I-14) African boys resemble the Europeans, who were the models for the Africans who were then anticipating a move into key positions in local government and business. In this context the Indians are essentially carrying out a holding operation (if one is pessimistic) or capitalizing on their long experience of business affairs (if one takes a more neutral viewpoint). Among African girls expectations polarized between Levels 2 and 3, whereas three-fourths of the Indian and European women see the moderate levels as those available to a Form 4 graduate without additional schooling. Among individuals who truly did not expect to stay in school beyond Form 4, teaching was the salient choice among Africans of both sexes but unattractive for all other groups. Among Indian and European girls, priority expectations were for commercial, administrative, or clerical jobs.

Quite apart from any projections of rising enrollments, it is easy to see why governments find the staffing of schools so high among their priorities as against (for example) only encouraging more individuals to remain longer in school. Since Africans already display diverse interest in many sorts of occupations, it is doubtful whether manpower forecasts would be of much use even if they were to be comprehensive and made with care. Rather, improving the quality of schools should take priority over "introducing a correct curriculum"--which

TABLE I-14

OCCUPATIONAL "EXPECTATION" LEVELS BY ETHNIC
COMMUNITY AND SEX

		African	Arab	Goan	Indian	European
Males						
Percentages						
1 (top)		2	...	...	1	19
2		46	12	3	8	34
3		50	88	97	89	46
4		...	...	...	1	...
5		3	...	...	1	1
Total:	%	101	100	100	100	100
	N	532	25	31	374	118
	NR	122	8	4	119	76
Per cent	NR	19	24	11	24	39
Females						
Percentages						
1 (top)		...	...	...	...	...
2		65	...	9	25	26
3		35	...	82	74	74
4		...	...	...	*	...
5		...	...	9	1	...
Total:	%	100		100	100	100
	N	87	2	33	258	103
	NR	13	3	10	115	45
Per cent	NR	13		23	27	27

*Under 0.5 per cent.

is probably in any case an imaginary entity. One can only be impressed with the good sense of the choices displayed by these African youth. Though they have had little chance to observe directly the concrete tasks of development, they are sensitive to urgent issues, sufficiently so as to obviate a waste of scarce manpower on guidance counselors (or careers masters).

A summary picture, considering the many influences playing upon these youth can be obtained by relating the distribution of expectations to aspirations (within each sex) in respect to type of occupation (Table I-15). On the assumption of no further schooling, hopes of becoming a physician clearly had to be lowered and this cut into the proportions classified "medical" among Africans and Indians especially. Teaching was specified by many African boys whose dreams were of quite another sort, as was true to about the same extent among African girls. Goan and Indian girls, by contrast, saw teaching as the preferred or dream occupation, substituting clerical jobs when assuming no further education. Indeed, what seems to have been a hope among Indians and Goans of both sexes (to leave the commercial sector) appears to have been sharply reversed, as it was also among European girls, when no further schooling could be counted on. One wonders how much of that contrast reflected lack of success in enticing Africans into non-farm businesses or into technical sorts of work on the middle level in a situation in which other ethnic groups had well entrenched positions in commerce. It is only recently and as yet in only a few countries that one tries to enter business above the lowest white-collar level on the basis of formal schooling. In Kenya, many changes

TABLE I-15

PERCENTAGES ASPIRING MINUS PERCENTAGES "EXPECTING"
TO ENTER DESIGNATED TYPES OF OCCUPATIONS, BY
ETHNIC COMMUNITY AND SEX

Type of Occupation	African	Arab	Goan	Indian	European
Males					
Medical	+11	+ 7	+ 6	+10	+ 1
Social, religious, political	+ 5	+ 4	+ 3	+ 3	+ *
Scientific, technical, mechanical	+ 4	-22	+23	+25	- 2
Agriculture	+12	+ 7	- *	+ 3	+ 1
Commerce, admin., clerical	-13	-20	-49	-49	- 2
Education	-20	+21	+ 9	+ 5	+ 2
Military and police	+ 1	+ 3	+ 6	+ 3	+ 2
Artisan	+ *	...	+ 3	+ 1	- 3
Females					
Medical	+ 8		+ 9	+15	+ 2
Social, religious, political	+ 8		+ 3	+ 1	+ 7
Scientific, technical, mechanical	0		+ 6	+ 1	+ 5
Agriculture	+ 1		...	...	+ 7
Commerce, admin., clerical	- 1		-46	-41	-42
Education	-18		+31	+21	+ 8
Military and police	+ 1		...	...	...
Artisan	+ 1		- 3	+ 3	+14

will have to occur in order for success in business to appear as a realistic goal to the typical African young man.

CHAPTER V

INFLUENCES UPON AFRICAN ASPIRATIONS AND EXPECTATIONS REGARDING OCCUPATIONS

The contrasts (and often the similarities) of Africans' aspirations or expectations with those of the other ethnic groups in Kenya were reported in the two preceding chapters. Here we explore in more detail the patterning of attitudes among the dominant ethnic group: Africans. We can link this analysis with that presented earlier by first surveying a few simple tabulations.

As we noted in Chapter III, African girls were distinctively hopeful of continuing their schooling, and African boys also were optimistic, falling only slightly behind Indian boys. In respect to expectation or certainty of continuing in school, however, the African youth were cautious (Appendix Tables A4 and B4).

In viewpoint toward level of occupation, no set of youth could be spoken of as modest; none preferred working at either of the two lower levels of jobs (see Tables A5 and B5). In facing up to their "realistic" expectations (assuming no formal education beyond Form 4), youth lowered their sights, virtually eliminating statements expressing confidence in obtaining top-level jobs. On the whole, the Africans emulated European rather than Indian models.

In due course, as the follow-up data from the 1968 inquiry are integrated into these data from the earlier investigation, it

will be practicable to undertake complex multi-variable analyses. However, even a simple exploration into differences within the preponderant African group will suffice to indicate, for example, how far paternal schooling may affect student aspirations and expectations for additional schooling and for obtaining a particular type or level of job.

Effects of paternal education and occupation upon educational or occupational hopes and expectations may be viewed in two major ways. One may examine associations at the individual level, relationships between individual aspirations or expectations and the characteristics of their individual fathers. Or we may consider the African students in groups characterized somewhat differentially with respect to parental traits; the most obvious grouping for such purposes is by tribe. Also, effects of individual differences in parental background may be manifest in some tribal groups but not in others. For example, on the average about 15 per cent fewer African boys expect to continue in school than hope to do so, a difference that was comparatively larger among those tribes who had been longest enmeshed in the patterns of western schooling. Pursuing these tribal comparisons further, it was found that the most optimistic groups of students (both in hoping and in expecting to continue in school) belonged to those tribes having the best schooled fathers of Form 4 boys. However, these were not necessarily the tribes in which schooling was on the average most advanced for adults generally. The complex selectivity processes at play here have been noted before, and tribal contrasts in educational longings or aspirations among those particular youth who have reached Form 4 are generally quite small.

Much more interesting, as concerns effects upon educational outlooks, were the relationships to individual parental traits, disregarding tribal backgrounds (Table I-16). Clearly, whether a boy's father had primary schooling made little if any difference for the boy's educational hopes or prospects. The contrast comes between those whose fathers had gone on at least to completion of intermediate school versus the others. We divided the male African students into two categories, fathers (1) with primary school or less and (2) with some intermediate school or more. For category (1), 76 per cent of the respondents hoped to continue and 59 per cent expected that this would prove to be possible; for category (2) the corresponding percentages were 86 and 75. These contrasts are large but not overpowering.

The lower half of Table I-16, relating educational aspirations of boys to the occupational status of the father, again reveals differences among the main parental occupational levels to be small. Indeed, even the important break between Level 3 and the even lower and more traditionally-oriented occupations has little effect. What does stand out is the educational commitment of the small group of African boys whose fathers were in high professional or administrative posts and the relatively few sons of tribal "chiefs" who wanted but doubted that they would succeed in obtaining more schooling.

In any country undergoing transformation in both ways of living and in ways of work, notions related to future careers will be confused and complex. With so bright a prospect for attaining government positions as expatriates depart (including some sections of non-European residents), type of employer and place of work become

TABLE I-16

COMBINED INDICATORS OF STUDENTS' HOPES AND EXPECTATIONS OF CONTINUING SCHOOLING; AFRICAN MALES
BY FATHER'S EDUCATION AND FATHER'S OCCUPATIONAL LEVEL

Educational Aspirations		No Education	Some Primary	Finished Primary	Some Interm.	Finished Interm.	Beyond Interm.	NR's	Totals	
Hopes to Continue	Expects to Continue									
Father's Education										
Yes	Yes	55.6 (114)	51.0 (75)	54.7 (58)	72.8 (59)	64.4 (29)	76.2 (16)	40.0 (12)	57.2 (363)	
Yes	No	14.6 (30)	17.7 (26)	17.0 (18)	9.9 (8)	11.1 (5)	14.3 (3)	23.3 (7)	15.3 (97)	
No	Yes or No	21.4 (44)	22.4 (33)	22.7 (24)	11.1 (9)	17.8 (8)	9.5 (2)	10.0 (3)	19.4 (123)	
Others and NR's		8.3 (17)	8.8 (13)	5.7 (6)	6.2 (5)	6.7 (3)	.....	26.7 (8)	8.2 (52)
Totals		100 (205)	100 (147)	100 (106)	100 (81)	100 (45)	100 (21)	100 (30)	100 (635)	
Father's Occupational Level										
Hopes to Continue	Expects to Continue	1	2	3	4	5	Chiefs	Unclassifiable	NR's	Totals
Yes	Yes	100 (4)	80.0 (12)	59.4 (79)	61.4 (94)	52.1 (139)	66.7 (26)	100 (2)	31.8 (7)	57.2 (363)
Yes	No	14.3 (19)	15.7 (24)	17.6 (47)	7.7 (3)	18.2 (4)	15.3 (97)
No	Yes or No	13.4 (2)	17.3 (23)	19.6 (30)	21.3 (57)	20.6 (8)	13.6 (3)	19.4 (123)
Others and NR's		6.7 (1)	9.0 (12)	3.3 (5)	9.0 (24)	5.1 (2)	36.4 (8)	8.2 (52)
Totals		100 (4)	100 (15)	100 (133)	100 (153)	100 (267)	100 (39)	100 (2)	100 (22)	100 (635)

critical in the planning of careers among African secondary pupils.

Government was overwhelmingly the preferred employer irrespective of paternal vocation. Few of the other choices merit comment (due to few cases). It is clear, however, that sons of farmers were going into all categories of employment, whether public or private, and such sons promise to outrank sons of present-day white-collar employees, if the students' reports can be relied upon. Grouping students by tribe, in only one case (the Kikuyu) did preference for government as employer drop below 80 per cent, and even among the Kikuyu three-fourths placed government first. The fact that preferences for a private employer or for owning one's own business were nevertheless somewhat more common in this tribe is perhaps not too surprising in view of Kikuyu familiarity with urban business in nearby Nairobi and their distrust of government arising out of the Mau Mau episode.

Preferences to work in a city or in a rural place are (partly because of how we asked the questions) choices between living in Nairobi or Mombasa against all other places (Appendix Tables C1 and 2). Effects of parental education on these preferences were erratic, however, as we should expect; preferences for living in the city, and particularly in Nairobi, were most common among boys having fathers in modern and urban-centered top-level jobs; 50 to 75 per cent of such boys preferred the cities as compared with 40 per cent of the total. Sons of "chiefs" remain strongly oriented to village or rural life, with only a fourth considering the city as desirable. There were also definite tribal preferences for workplace (Appendix

Table C1). Tribes located near the major urban centers--but also the Luos--were almost evenly divided on this point, but since these tribes have provided large proportions, if not the bulk of urban workers for many years, it is not surprising to find them more ready to abandon the traditional rural setting.

It is important to notice how far African boys' aspirations and expectations for level of occupation may be associated with tribe or (disregarding tribe) with paternal occupation or education (Table I-17). In this table we use an index that shows where the average boy of a group places himself in relation to his possible placement along a range from Level 3 (at zero) to Level 1 (at 100). None of the boys limited their aspirations to anything below Level 3, and relatively few set sights below 2. On the whole, aspirations clearly were being patterned by forces that affected the whole cohort of boys more than by forces distinctive of individual families. However, sons of fathers who had reached intermediate schooling or more did aspire a bit higher than the others. As has already been noticed, "expectations" are more modest than aspirations, but here also there is no systematic connection between paternal schooling and the level of job that a youth feels confident of obtaining without further formal education. What relationship does appear suggests that the sons of illiterate fathers may be less aware of how much education would be required to qualify for top level jobs in the years to come. Although sons of "chiefs" display rather high occupational aspirations (as do the few sons of men in high administrative or professional positions), there is no difference in this respect between sons whose fathers were in Level 3 jobs or better and fathers in subsistence farming or menial

TABLE I-17

AFRICAN STUDENTS' ASPIRED AND "EXPECTED" OCCUPATIONAL
LEVEL; INDEX VALUES BY PARENTAL EDUCATION,
OCCUPATIONAL STATUS AND TRIBE

	Aspiration Level		Expectation Level	
	Number Reporting	Index	Number Reporting	Index
Father's schooling				
None	190	70	162	57
Primary only	234	68	215	42
Some intermediate	75	74	67	49
Completed intermediate or more	63	75	54	48
Father's occupational status				
Levels 1,2,3	142	70	124	44
Level 4	142	72	123	45
Level 5	249	69	213	50
Chiefs	39	81	36	58
Tribe				
Nilo-Hamitic	22	62	18	72
Nilotic (Luo)	126	71	103	48
Kikuyu	188	68	157	37
Embu-Meru	47	76	44	52
Luyia	123	75	113	51
Kisii	24	73	23	74
Kamba	15	50	10	30
Coastal	53	63	44	47
Foreign	6	75	6	83

^aPer cent of distance from lowest reported score (of 3.0) to highest possible score (of 1.0).

manual work. The optimism of sons of "chiefs" with respect to "expected" as well as aspired-to jobs matches the findings with respect to sons of illiterate men.

It would be important, even if one were interested only in forming an idea of the makeup of the new cadres of national leaders (outside the strictly political sphere), to study the relationship of tribal membership to students' level of aspiration and expectation. To be sure, as shown earlier, tribal name is shorthand for differences in average level or kind of schooling or of employment, and hence, to some degree at least, of how youth perceive opportunities. The boys' aspiration indexes vary rather erratically as among tribes, however. Thus the Kikuyu, who have enjoyed many opportunities and are usually assumed to hold preponderantly high aspirations, seem not to have done so. Turning to job expectations, certain tribes (again, e.g., the Kikuyu) have had abundant opportunities to see how attractive modern jobs can be, but they also have had opportunities (if only through reports from kinfolk) to learn that many individuals will be disappointed. So it turns out that tribes whose boys set high aspirations also display the more marked lowering of expectations below hopes when asked for a more "realistic" assessment. The patterns displayed suggest a sharper differentiation of responses on the two occupational outlook questions among the boys from homes and tribes that have experienced wider exposure to western culture. If this does account for the seeming paradoxes in the indicators of expectations, it suggests once again that "expected" occupation may be a poorly specified variable in this study, and probably in parallel investigations of other societies.

To sum up with respect to the more reliable responses on "aspirations," on all scores there is an astonishingly strong tendency for boys to set their sights independently of the father's personal situation. Either the general climate of opinion over the nation or influences passing among classmates seem clearly to outweigh any marked tendency for "inheritance" of status.

As with fathers, students' responses with respect to their own occupational outlooks were classified not only by level but also by type of occupation. Details are given in Appendix Tables C3 and C4. With respect to aspirations among boys, "technical" categories of jobs were desired to a distinctive degree by Coastal, Kikuyu, and Luo pupils; that outcome might be expected in view of the more frequent and rewarding contact of those groups with mechanical objects and with jobs in cities. Similar experiences among the Luyias, however, seem not to have elicited the same reactions. Aspiring to get an agricultural position does nevertheless tend to be expressed most frequently among those tribes living in the localities that are more favorable for farming. The high inclination of Kikuyu boys for agriculture must surely be attributed to real opportunities. The largest proportions of African boys aspiring to teach occur in tribes with relatively lesser involvement in or contact with western urbanizing influences, and expressions of preference for teaching are rare among the Kikuyu. But there are also idiosyncratic variations in the tribal distributions that are best not rationalized by speculation.

As one should expect after reading the foregoing page, there is a closer association between tribal patterns in types than in levels of jobs to which youth aspire, on the one hand, and "expect," on the

other. Thus, Coastal and Nilo-Hamitic groups both hope and expect to become teachers. On the other hand, "realism" emerges in the much greater "expectation" of white-collar (and in fact clerical) work among the Kikuyus relative to their expressed hopes or dreams.

Among the important influences upon a son's career perceptions in comparatively stable and highly developed economies are the careers of the fathers. But in developing countries, the occupational structure will alter rapidly as development occurs, and all forms of "inheritance" of occupation can be expected to be correspondingly low. In fact, for expectations 14 and for aspirations 21 per cent of the sons selected occupations in the same occupational-type categories as those of their fathers (see Table I-18). But whether these figures are to be regarded as high or as low is not obvious. One could compare the numbers in the diagonal cells (identical category for father and son) with the random numbers for the same cells (taking the marginal distributions as given). This computation was made for occupational aspirations, and (excluding NR's) the predicted number of matched father-son occupational types was 104, the observed number was 117, and the maximum possible number (given the marginal constraints) was 340. The ratio to random expectancy for all diagonal cells combined was thus $117/104$ or 1.13. The proportion of possible aspired "inheritance" (given the high degree of anticipated aggregate inter-generation shift in distribution by occupational type) was $117/340$ or .34. The excess of observed over expected numbers in the diagonal cells was only 13 as compared with a difference between expectancy and full inheritance of 236 (i.e., $340-104$).

TABLE I-18

STUDENTS' ASPIRATIONS AND EXPECTATIONS WITH RESPECT TO TYPE
OF OCCUPATION; AFRICAN MALES BY FATHER'S OCCUPATIONAL
TYPE^a

Father's Occupational Type	Occupational Type								Totals
	Med.	Soc.	Tech.	Agric.	N.C.	Educ.	Mil.	N.R.	
	Students' Aspirations								
Medical	7.1 (1)	....	7.1 (1)	21.4 (3)	28.6 (4)	14.3 (2)	7.1 (1)	14.3 (2)	100 (14)
Social, Political, and Religious	5.0 (1)	10.0 (2)	25.0 (5)	10.0 (2)	10.0 (2)	25.0 (5)	5.0 (1)	10.0 (2)	100 (20)
Scientific, Technical and Mechanical	16.1 (5)	6.5 (2)	25.8 (8)	19.4 (6)	12.9 (4)	9.7 (3)	...	9.7 (3)	100 (31)
Agricultural	12.8 (46)	5.3 (19)	15.2 (55)	22.8 (82)	17.8 (64)	17.5 (63)	3.1 (11)	5.6 (20)	100 (360)
Commercial, Adminis- trative, and Clerical	14.9 (15)	8.9 (9)	17.8 (18)	17.8 (18)	17.8 (18)	15.8 (16)	5.9 (6)	1.0 (1)	100 (101)
Educational	10.7 (3)	3.6 (1)	7.2 (2)	25.0 (7)	25.0 (7)	25.0 (7)	3.6 (1)	....	100 (28)
Military and Police	11.8 (2)	5.9 (1)	5.9 (1)	11.8 (2)	11.8 (2)	35.3 (6)	5.9 (1)	11.8 (2)	100 (17)
Artisan	15.4 (6)	5.1 (2)	20.5 (8)	15.4 (6)	17.9 (7)	12.8 (5)	5.1 (2)	7.7 (3)	100 (39)
NR's	8.0 (2)	4.0 (1)	4.0 (1)	12.0 (3)	8.0 (2)	8.0 (2)	....	56.0 (14)	100 (25)
Totals	12.8 (81)	5.8 (37)	15.6 (99)	20.3 (129)	17.3 (110)	17.2 (109)	3.6 (23)	7.4 (47)	100 (635)

TABLE I-18--Continued

Father's Occupational Type	Occupational Type								Totals
	Med.	Soc.	Tech.	Agric.	W.C.	Educ.	Mil.	N.R.	
Students' Expectation									
Medical	...	...	14.3 (2)	14.3 (2)	21.4 (3)	28.6 (4)	...	21.4 (3)	100 (14)
Social, Political, and Religious	...	...	15.0 (3)	10.0 (2)	25.0 (5)	25.0 (5)	...	25.0 (5)	100 (20)
Scientific, Technical and Mechanical	...	...	16.1 (5)	9.7 (3)	35.5 (11)	16.1 (5)	3.2 (1)	19.4 (6)	100 (31)
Agricultural	2.5 (9)	1.1 (4)	9.5 (34)	8.1 (29)	20.6 (74)	35.8 (129)	3.1 (11)	19.4 (70)	100 (360)
Commercial, Adminis- trative, and Clerical	3.0 (3)	3.0 (3)	11.9 (12)	8.9 (9)	33.7 (34)	25.7 (26)	2.0 (2)	11.9 (12)	100 (101)
Educational	...	...	14.3 (4)	7.1 (2)	32.1 (9)	28.6 (8)	...	17.9 (5)	100 (28)
Military and Police	...	5.9 (1)	....	11.8 (2)	17.6 (3)	23.5 (4)	5.9 (1)	35.3 (6)	100 (17)
Artisan	2.6 (1)	...	15.4 (6)	....	35.9 (14)	23.1 (9)	...	23.1 (9)	100 (39)
NR's	...	...	....	....	24.0 (6)	16.0 (4)	...	60.0 (15)	100 (25)
Totals	2.0 (13)	1.3 (8)	10.4 (66)	7.7 (49)	25.0 (159)	30.6 (194)	2.4 (15)	20.6 (131)	100 (635)

^aPercentages add up to 100% horizontally.

Overall indicators such as we have just presented do less than justice to the possible effects of paternal occupations upon sons' choices. Given the large discrepancies in marginal distributions for fathers' occupations and for aspirations of sons, it is clear enough a priori that a son's occupation can hardly be predicted from his father's. But it is of interest nevertheless to ask the inverse question: how do sons with one or another aspiration by type of occupation differ in the parental-occupational background from which they come. A few important examples will suffice. For all Form 4 sons combined, 56 per cent had fathers who were farmers of some sort or working in an agricultural agency. (Indeed, farmer constituted the largest single category of paternal occupations regardless of student aspirations.) Among the 129 sons aspiring to enter agriculture (usually as officials rather than as operators), 82 (or 64 per cent) had come from farm homes. Commercial, administrative, and white-collar fathers made up 16 per cent of all Form 4 fathers and likewise 16 per cent of the youths aspiring to such occupations. Fathers in education were only 4 per cent of the total; they accounted for 6 per cent of the youth aspiring to teach. The other favored type of work among these African students was medical (mainly physicians), an occupation for which virtually no occupational inheritance was possible. Clearly this dynamic development situation was one in which there could be only the most tenuous of links between what fathers did and the dreams (or expectations) of their sons.

Earlier it was noted that the educational hopes and expectations of African boys in Form 4 and their levels of occupational

aspiration were much the same whether the fathers had only primary schooling or were entirely unschooled. Some modest differences do appear in comparing sons of men having not over four years of schooling with fathers who had at least moved into intermediate school (Standard V and up). Not even such a dichotomization of parental schooling differentiates clearly with respect to the types of sons' occupational aspirations. The only relationship deserving comment (Appendix Table C7) relates to boys choosing to teach, an aspiration that generally was highest if the father had at least completed intermediate school at one extreme or was quite unschooled at the other. Teaching held little attraction for sons whose fathers had had enough schooling for solid literacy but little more (say, Standards IV through VI). This pattern is repeated (though with higher percentages mentioning teaching) for "expected" type of occupation.

It has been mentioned (perhaps too often or too insistently) that for some types of occupations (usually the "higher" ones) pupils adjust their aspirations downward with the passing of time and they become more willing to take "lower" sorts of work. To be sure, all such comments are relative in now-developing countries when we are dealing only with those pupils who have already become a marked group by reaching the 12th year of school. Teaching shows the largest relative gain from aspiration to "expectation," and there is an appreciable gain for white-collar work. Pupils shift out of scientific-technical (and police-military) kinds of work as they adopt constraining assumptions about further schooling or restrain their dreams otherwise.

To an even greater extent, agricultural aspirations are reduced, as are hopes for jobs in the "social" category, and most of all, of course, the hope of becoming a physician.

CHAPTER VI

ACADEMIC PROMISE AND LATER EDUCATIONAL CAREERS

As a supplement to his more elaborate 1968 replication of the 1961 study of Kenya secondary students, Jerry B. Olson investigated the present activities of the boys who had been members of the Form 4 classes of 1961, and he traced nearly three-fourths of them. In this search, which was distinctly successful, he received generous help from students at University College Nairobi.

Among the basic items obtained in that follow-up was the student's performance on the examination taken after completing Form 4. This chapter relates those examination outcomes to the boys' anticipations and later careers, whether within or outside the schools. The data generally confirm the frequent observation that although teachers in colonial educational systems may offer a bookish training, they prepare their pupils conscientiously for the external examinations. In view of the recency of western-type schools in Kenya and the keenness with which universities in many countries scrutinize these examination results, the relationships displayed below testify to a rapidly maturing educational system.

A close relationship between students' expressed assessments of their likelihood to continue with full-time education after Form 4 and their subsequent performance on the Cambridge examinations is displayed in Table I-19. Moreover, these same relationships come out clearly in the expressions of expectations or preferences with respect

TABLE I-19

STUDENTS' EDUCATIONAL EXPECTATIONS: AFRICAN MALES
BY CAMBRIDGE RESULTS

Expectation of Continuing Education	Cambridge Results ^a					Totals
	First Division	Second Division	Third Division	GCE	Failure	
Certain to continue	31.8 (42)	22.4 (44)	23.8 (35)	13.3 (8)	18.2 (10)	23.6 (139)
Good chance to continue	50.8 (67)	52.0 (102)	31.3 (46)	41.7 (25)	43.6 (24)	44.7 (264)
Unlikely to continue	12.9 (17)	20.4 (40)	38.8 (57)	43.3 (26)	27.3 (15)	26.3 (155)
Certain will not continue	4.5 (6)	5.1 (10)	6.1 (9)	1.7 (1)	10.9 (6)	5.4 (32)
Totals	100 (132)	100 (196)	100 (147)	100 (60)	100 (55)	100 (590)

^aChi square statistic = 48.7; significant at the .001 level with 12 degrees of freedom.

Gamma (ordinal) statistic = .23.

to types of immediate post-Form 4 training or schooling. For boys who remained within the school system, the appropriate next step was to try to complete Form 6, and (as Table I-20 shows) over half the boys did aim for Form 6 if they ranked in the top two-thirds on the School Certificate tests (i.e., ranking in the first two divisions). These boys were realistic in judging their own prospects. Nevertheless, a fourth or more boys who scored lowest on the tests also said they expected to enter Form 5, surely weaker evidence of realism about their academic qualifications or their chances in the higher schools.

Popularity of some kind of agricultural training that did not presuppose completion of Form 6 was about equally frequent whatever the test scores. Boys opting for some government-operated extra-school training scheme (along with those opting for teaching) were relatively more frequent among low-scorers on the tests.

The essential level-headedness of a large proportion of boys comes out in Table I-21 also, which relates the subjective expectation of continuing some form of training to actual subsequent acquisition of that training. The boys seem to have had accurate notions of their chances of making it through Form 6. While we again notice that prospective teachers are disproportionately the less confident boys, half of all individuals actually training to become teachers had displayed confidence in their ability to stay in school beyond Form 4.

At the same time, it should be kept in mind that 60 per cent of the students who preferred to go on to Form 5 actually were able to do so; for teaching the figure was only 45 per cent. On the other hand, most of those preferring some form of government training or agricultural training were not able to obtain it (see Table I-22).

TABLE I-20

TYPE OF TRAINING PREFERRED AFTER FOURTH FORM: AFRICAN
MALE STUDENTS BY CAMBRIDGE RESULTS

Type of Training Preferred After Fourth Form	Cambridge Results					Totals
	First Division	Second Division	Third Division	GCE	Failure	
<u>Sixth form</u>	70.5 (93)	56.0 (112)	32.0 (49)	35.5 (22)	25.9 (14)	48.3 (290)
<u>Without sixth form:</u>						
Medical	....	2.5 (5)	2.0 (3)	....	5.6 (3)	1.8 (11)
Government scheme	6.1 (8)	12.5 (25)	26.8 (41)	29.0 (18)	25.9 (14)	17.6 (106)
Technical	4.5 (6)	3.5 (7)	2.0 (3)	....	....	2.7 (16)
Agricultural	13.6 (18)	13.5 (27)	14.4 (22)	16.1 (10)	20.4 (11)	14.6 (88)
Commercial	3.8 (5)	4.0 (8)	10.5 (16)	4.8 (3)	5.6 (3)	5.8 (35)
Teaching	0.8 (1)	7.5 (15)	11.8 (18)	12.9 (8)	14.8 (8)	8.3 (50)
Military and police	0.8 (1)	0.5 (1)	0.7 (1)	....	....	0.5 (3)
Miscellaneous	....	....	....	1.6 (1)	1.9 (1)	0.3 (2)
Totals	100 (132)	100 (200)	100 (153)	100 (62)	100 (54)	100 (601)

TABLE I-21

ACTUAL TRAINING AFTER FORM 4; AFRICAN MALE STUDENTS
BY EXPECTATION OF CONTINUING EDUCATION

Actual Training After Form 4	Expectation of Continuing Education			Totals
	Certain to Continue	Good Chance to Continue	Unlikely to Continue or Certain Will Not Continue	
Sixth form	57.4 (62)	45.3 (77)	24.3 (28)	42.5 (167)
Government	7.4 (8)	11.8 (20)	11.3 (13)	10.4 (41)
Commercial	1.9 (2)	4.1 (7)	6.1 (7)	4.1 (16)
Agricultural	7.4 (8)	9.4 (16)	9.6 (11)	8.9 (35)
Teaching	15.7 (17)	18.2 (31)	35.7 (41)	22.6 (89)
Military	8.3 (9)	7.1 (12)	8.7 (10)	7.9 (31)
Other	1.9 (2)	2.4 (7)	4.3 (5)	3.5 (14)
Totals	100 (108)	100 (170)	100 (115)	100 (393)

TABLE I-22

COMPARISON OF REALIZED WITH PREFERRED TYPE OF TRAINING;
AFRICAN MALE STUDENTS

Actual Training after Form 4	Expressed Preferences for Type of Training after Form 4					
	Sixth Form	Govern- ment	Agri- culture	Teaching	Other	Total
Sixth Form	60 (123)	17 (11)	28 (19)	13 (4)	32 (10)	43 (171)
Government	9 (18)	15 (10)	8 (5)	19 (6)	10 (3)	11 (44)
Agriculture	6 (13)	8 (5)	16 (10)	3 (1)	10 (3)	9 (34)
Teaching	16 (33)	32 (21)	23 (14)	45 (14)	32 (10)	23 (77)
Other	8 (17)	28 (15)	25 (15)	19 (6)	16 (5)	15 (61)
Total	101 (204)	100 (65)	100 (61)	99 (31)	100 (31)	101 (402)

If the father had at least some secondary schooling, three-fifths of the boys went through Forms 5-6; among sons of men who had intermediate schooling only, 35 per cent attended Form 6; the figures dropped to 24 per cent for youth whose fathers had no more than four years of school, although it was 30 per cent if the father lacked any schooling whatever. The absence of contrast in chances between sons of fathers with no schooling and those with primary schooling only, as respects educational anticipations, is here confirmed by later events.

The percentages of attendance at Form 6 for the several "levels" of paternal occupation were as follows: Levels 1-2, 37.9; Level 3, 28.7; Level 4, 32.4; and Level 5, 25.7. Again one observes how loosely related a son's schooling is to his father's occupation. The schooling of father does carry greater, even though only moderate, weight than the paternal occupation. Once youth have reached Form 4, tribe likewise is not a very good predictor of whether the boy will go on to Form 6 (Appendix Table I-C11).

A second table gives parallel findings about attendance at university (Tables I-23 and C12). First of all, we may notice that over half the males and five-sixths of the girls were attending or had taken a degree in one of the constituent colleges of the University of East Africa. North America had displaced Britain in numbers attending from Kenya; and the almost-surely-undercounted attendance in Communist countries matched that for attendance in Britain (though only for males).

Attendance at university was over twice as frequent among boys who had earlier expressed a hope to remain in school than among those not daring to have that hope: 40 against 17 per cent. Correspondingly, individuals who had no expectation at all of continuing went to university at the low rate of 18 per cent, and those believing it unlikely they would continue at all did little better (25 per cent) as against 40 per cent and 43 per cent of those indicating respectively that they would probably or certainly go on.

Father's schooling had about the same effect upon attendance at university as for finishing Form 6; to be sure, the latter may be the major step toward the former. Just over 30 per cent of those queried in 1961 while in Form 4 did reach Form 6 and 29 per cent

completed it. A slightly higher proportion (36 per cent) attended university, though not necessarily within East Africa; indeed some clearly circumvented the Form 6 step to enter non-British universities whether in the West or elsewhere (see Table I-23).

In broad terms, tribes with comparatively large proportions completing Form 6 had relatively high rates of attendance at university. The selectivity of students in our Form 4 sample who came from Nilo-Hamitic tribes or were Kamba is reflected in their higher subsequent rates of attendance at universities as it was for Form 6 (Table C12). The percentage going to university was 62 if the father had received at least some secondary schooling; it was 42 if he finished intermediate school but only about a third if he either had no schooling or had not gone beyond Standard IV. To reiterate a point made many times, while a boy's chance to enter university was certainly improved if his father was relatively well educated, of all sons attending university a third had fathers with not more than a Standard IV schooling if any.

One of the most bitter controversies within developing countries and among the national and international counselors to educational officials in developing countries has turned on the question of whether and how students might be directed into those courses of study that would best facilitate development of the country. Agriculture usually is praised as a suitable choice while "arts" has fewer defenders. We are not entering this controversy, but we will show the information from the follow-up study (for each sex) that displays the actual type of work taken in college (Table I-24). The concentration of girls upon education is noteworthy, exemplifying the dependence of every nation upon university or specialized training for girls if sufficient

TABLE I-23

COUNTRY WHERE ATTENDING UNIVERSITY OR WHERE
DEGREE WAS OBTAINED; AFRICAN STUDENTS
BY SEX

Country	Males	Females	Totals
Uganda	15.2 (30)	13.0 (3)	15.0 (33)
Kenya	27.4 (54)	56.5 (13)	30.5 (67)
Tanzania	13.7 (27)	17.4 (4)	14.1 (31)
Great Britain	8.1 (16)	....	7.3 (16)
North America	17.8 (35)	8.7 (2)	16.8 (37)
Communist countries	7.6 (15)	....	6.8 (15)
Other	6.1 (12)	....	5.5 (12)
Country unclear	4.1 (8)	4.3 (1)	4.1 (9)
Totals	100 (197)	100 (23)	100 (220)

TABLE I-24

TYPE OF DEGREE WORK; AFRICAN STUDENTS BY SEX^a

Type of Degree Work	Males	Females	Totals
Arts	28.0 (44)	31.8 (7)	28.5 (51)
Medicine	12.7 (20)	4.5 (1)	11.7 (21)
Law	12.7 (20)	9.1 (2)	12.3 (22)
B.Sc.	12.7 (20)	4.5 (1)	11.7 (21)
Engineering	12.7 (20)	....	11.2 (20)
Agriculture	8.3 (13)	....	7.3 (13)
Commerce	5.1 (8)	....	4.5 (8)
Education	7.0 (11)	50.0 (11)	12.3 (22)
Miscellaneous	0.6 (1)	....	0.6 (1)
Totals	100 (157)	100 (22)	100 (179)

^aIncludes those still in university and those who have obtained degrees. NR's excluded.

individuals are to be found to staff the secondary schools. But despite the much smaller fraction of education enrollees among boys, males were likely to contribute as many in actual numbers to the secondary-school cadre. The popularity of "arts" courses not only reflects a British tradition; it reflects also the link with management-oriented training that appears so vital to developing countries such as Kenya. While one could quarrel with the particular non-arts and non-education subjects these youth are taking in college, certainly there is a heavy enrollment in the technical kinds of courses. This fact likewise casts doubt upon the common assertion that only when curricula in lower schools have been suitably modified will college students make appropriate choices among the lines of study. Indeed, as Table I-25 shows, students who entered university were prone to pick the line of study they preferred, particularly if they had one of the more popular choices, arts or science. "Other" combines diverse very specific responses.

TABLE I-25
COMPARISON OF REALIZED WITH PREFERRED UNIVERSITY TRAINING;
AFRICAN MALE STUDENTS

Actual University Training	Preferences for University Training			
	Arts	Sciences	Other	Total
Arts	67 (22)	30 (18)	38 (6)	42 (46)
Sciences	18 (6)	47 (28)	25 (4)	35 (38)
Other	15 (5)	23 (14)	38 (6)	23 (25)
Total	100 (33)	100 (60)	101 (16)	100 (109)

In analyzing the complex educational systems of the more advanced of the developing countries, taking account of the shortage of good statistics on many points, there can be no single best way to "take hold" of the material. One could identify pupils by "quality" (using some kind of intellectual index) and then trace out their academic or other careers, allowing perhaps for the effects of family background upon the index of abilities. Or, the questions could be examined in terms of historic accessibility of individual tribes (or even families) to western influence. Although we have followed no single or consistent pathway through these data, it will perhaps be illuminating if we present a few figures that suggest to what degree various sorts of indexes are either useless or mutually redundant.

At the time of the 1961 study, headmasters were asked to score each boy on his ability and on his prospective achievement in later school (Table I-26). When we now compare those ratings with the results in the externally administered examinations taken at the end of Form 4, the correlation is high. It is not without interest, moreover, that this correlation is a little higher with the headmaster's judgment of the boy's "probable achievement" in school than with estimated "ability."

One must underline the difficulty of isolating strictly in-school effects from those pervading the environment in which the boys grew up, even if they spent long months away at school when they became less directly subject to local or family influences. By and large, the tribes with comparatively large enrollments in either Form 6 or in university also display a relatively large percentage scoring well on the School Certificate examinations (Table I-27). Whether that

TABLE I-26

ASSOCIATION BETWEEN CAMBRIDGE EXAMINATION RESULTS AND HEADMASTERS'
ESTIMATES OF STUDENTS' ABILITY AND ACHIEVEMENT IN FOURTH
FORM; AFRICAN MALES

	Cambridge Results					Total	
	First Division	Second Division	Third Division	GCE	Failure	%	N
	<hr/>						
Headmaster's rating on ability							
A (high)	65	29	3	3	..	100	34
B	37	45	13	4	1	100	142
C	12	37	34	9	8	101	199
D	1	11	46	19	23	100	90
E (low)	9	..	27	..	64	100	11
Total	21	33	27	9	10	100	476
Headmaster's rating on achievement							
A (high)	81	19	..	..	..	100	26
B	41	48	8	3	..	100	137
C	10	38	34	11	6	100	175
D	4	17	45	16	19	100	107
E (low)	6	3	36	7	48	100	31
Total	21	33	27	9	10	100	476

Ability/Cambridge: Chi square = 213.1; significant at the .001 level with 16 degrees of freedom. Gamma (using raw numbers) = .68.

Achievement/Cambridge: Chi square = 259.8; significant at the .001 level with 16 degrees of freedom. Gamma (using raw numbers) = .71.

correspondence would be judged satisfactory would depend upon how readers weighted the various factors or criteria.

The lower section of Table I-27 relates results on the School Certificate tests to paternal education. Once again, there is little difference whether fathers had no schooling or at least had made some beginning in school. Among other things these data may raise questions about the distribution of literacy independent of schooling and the extent of illiteracy persisting or recurring when father's schooling is very limited. Clearly, however, pupils whose fathers had at least some secondary schooling were much more likely than other boys to get the top marks in the exam, suggesting supportive effects of the home such as have been documented elsewhere. Paradoxically, however, of the first-division boys, the majority came from homes in which the father presumably was virtually or actually illiterate. Contrariwise, a noticeable share of the sons of secondary-schooled fathers failed or received only a low pass. The odds on a boy's performing well are appreciably improved if his father had several years in school, but the "openness" of the Kenya and similar educational systems is revealed by the extreme looseness of the correlation displayed in this table.

TABLE I-27

STUDENTS' CAMBRIDGE RESULTS; AFRICAN MALES BY TRIBE
AND FATHER'S SCHOOLING

	First Division	Second Division	Third Division	GCE	Failure	Total	
						%	N
Tribe							
. Nilo-Hamitic	36	18	23	14	9	100	22
Nilotic (Luo)	19	33	29	10	9	100	129
Kikuyu	36	30	20	7	7	100	193
Embu-Meru	18	34	18	21	9	100	44
Kamba	50	19	..	25	6	100	16
Luyia	6	47	30	7	10	100	127
Kisi	16	20	52	..	12	100	25
Coastal	8	32	28	15	17	100	53
Foreign	(40)	..	..	(60)	..	(100)	5
Total	22	33	25	10	9	100	624
Father's schooling							
None	24	31	26	10	9	100	199
Primary only	16	33	28	13	10	100	244
Intermediate	29	39	17	7	8	100	122
Secondary or above	40	15	30	5	10	100	20

CHAPTER VII

ACADEMIC PERFORMANCE IN RELATION TO OCCUPATIONAL ANTICIPATIONS AND REALIZATIONS

The follow-up study already used in Chapter VI enables us also to compare occupational anticipations with occupations of early adulthood and to explore some of the factors that influence the latter. It allows us, among other things, also to pursue some important questions as to how far academic performance may be related to the kinds of jobs boys hope for or expect and to their early occupational histories.

In some respects, our least satisfactory data are the designations of occupational levels and comparisons between "aspiration" or especially "expectation" levels that were anticipated in 1961 and those reached by 1968. The scales used were crude and the boys' responses displayed a narrow range; thus the concentrations at upper levels of the scales are high. However, the relationships displayed in Table I-28 are impressive and no matter whether we standardize the columns or use the raw figures with their low frequencies in Level 3. One could for that matter compare the top aspiration levels only. Standardizing column frequencies, the value of gamma for the first two aspiration levels alone is .28 and for all three levels -.06.

TABLE I-28

PERCENTAGE DISTRIBUTIONS OF STUDENT'S PRESENT
OCCUPATION LEVEL BY PRIOR OCCUPATIONAL
ASPIRATIONS

Present Occupational Status, 1968	Level of Occupational Aspirations, 1961; from High to Low			
	1	2	3	Total
1 ^a	51	32	57	44
2	35	42	24	37
3	14	26	19	20
Total ^a %	100	100	100	101
N	232	205	37	474

^aIncludes those classified level 1½ and those attending universities in 1968.

In fact boys who in 1961 modestly aimed for Level 3 are today actually more likely to be in top-level jobs than are those who in 1961 expressed more glorified hopes. On the other hand, substantial proportions who had aspired to Levels 1 or 2 are as yet at Level 3 only; present Level 3 men total three times the number who anticipated being at that level.

Lest one be tempted to think that present occupation is the result mainly of family "pull" or similar advantages, we can recall how low was the correlation between pupils' backgrounds and their 1961 expressions of ideas about future jobs and notice that when we turn to the jobs held today, a similar picture emerges. Family and related factors do help or hinder, but in Kenya they are not decisive

any more than they are in developed countries, and perhaps even less so. For example, Table I-29 distributes each category of parental schooling among the sons' present positions. It is evident that if a youth's father had experienced at least some secondary schooling, we would improve considerably our ability to predict the occupation attained by that son over the interval from completion of Form 4 in 1961 to 1968. Sons of such men rarely were found at Level 3 (7 per cent as against 27 per cent of the total sample) and they were also relatively infrequent at Level 2, but their total number is very small. Otherwise associations between paternal schooling and son's realized vocation were quite negligible.

The best predictors of both aspiration levels and occupation attained, but especially of the latter, unquestionably are ability and academic achievement. This shows up in the first part of Table I-30, where again the hiatus on aspirations is between Levels 1 and 2. These relationships manifest a systematic ordinal pattern for Level 1 versus Level 2 (or 2 and 3 combined), and the gamma coefficient with the raw numbers is a solid .34. The sharpest break on Cambridge results comes where we should expect it, between second and third division passes. In this formalized system a second-division pass or better may be a ticket of entry into the most desirable educational or job opportunities. It should then hardly surprise us that the association is even stronger when we come to realized occupational status (with a gamma value of .54). Boys holding first division passes had by 1968 attained either to Level 1 jobs or were attending university, while almost none of those working at Level 3 in 1968 had obtained first division passes in 1962. Relatively few

TABLE I-29

STUDENTS' PRESENT OCCUPATIONS WITH RESPECT TO LEVEL;
AFRICAN MALES BY FATHER'S EDUCATIONAL LEVEL

Students' Present Occupational Level: from High to Low	Father's Education				Totals
	None	Primary Only	Inter- mediate	Secondary and Above	
Level 1	14.5 (24)	15.8 (32)	16.0 (17)	40.0 (6)	16.2 (79)
Level 1 ^{1/2} ^a	4.2 (7)	2.0 (4)	6.6 (7)	....	3.7 (18)
Probably in University	2.4 (4)	3.4 (7)	2.8 (3)	6.7 (1)	3.1 (15)
In University	18.8 (31)	12.8 (26)	22.6 (24)	20.0 (3)	17.2 (84)
Level 2	30.9 (51)	35.5 (72)	31.1 (33)	26.7 (4)	32.7 (160)
Level 3 ^b	29.1 (48)	30.5 (62)	20.8 (22)	6.7 (1)	27.2 (133)
Totals	100 (165)	100 (203)	100 (106)	100 (15)	100 (489)

^aIncludes those students between levels 1 and 2.

^bIncludes all primary school teachers. For student aspirations, however, primary school teachers are coded on level 2.

TABLE I-30

ASPIRED AND REALIZED OCCUPATIONAL STATUS BY CAMBRIDGE
EXAMINATION RESULTS; AFRICAN MALES

	Cambridge Results					
	First Division	Second Division	Third Division	GCE	Failure	Total
Aspiration level, 1961^a						
1 (high)	67	56	38	29	27	48
2	26	38	55	58	69	45
3	7	6	7	13	4	7
Total %	100	100	100	100	100	100
N	<u>126</u>	<u>192</u>	<u>141</u>	<u>55</u>	<u>52</u>	<u>566</u>
Occupation level, 1968^b						
1	39	16	6	...	2	16
1½	6	6	1	...	...	4
In university	30	19	3	4	9	3
Probably in university	2	1	8	9	6	17
2	20	36	46	32	33	34
3 ^c	3	22	36	55	50	27
Total %	100	100	100	100	100	100
N	<u>123</u>	<u>165</u>	<u>115</u>	<u>53</u>	<u>46</u>	<u>502</u>

^aChi square = 51.3; significant at .001; gamma = .34.

^bChi square = 169.1; significant at .001; gamma = .54.

^cIncludes all primary school teachers. For student aspirations, however (and in tables comparing aspired with realized levels), primary teachers who had completed Form 4 were coded level 2.

with second division passes had failed to attain at least a Level 2 position; by contrast, half or more of the GCE and fail students were now employed on Level 3. However, boys who were so unsuccessful on Cambridge examinations were comparatively few, for the youth in our sample were an intellectually selective African elite already. This of course is less the case today than it was a few years ago.

How far has the type-distribution of realized occupations matched or approximated either student aspirations or their more modest expectations (based on assuming little or no post-Form 4 schooling)? As shown in Table I-31, in actuality by far the largest proportion are now working in the vague white-collar category, double the 19 per cent who had aspired to such occupations (when they were pupils in Form 4) and a third over the 31 per cent who had "expected" to accept such jobs. On the other hand, only half as many found their way into agricultural work as said they would like to. There was a short fall below aspiration for the technical-scientific employments. The twenty-two individuals in medical practice (or medical school) were a high percentage of the class we were surveying, but nevertheless well below the proportions who had dreamed of becoming physicians. Numbers actually in education, however, matched very closely those who had aspired to enter such work.

Despite the mentioned ambiguity in pupils' "expectations" about future work (because it specified the assumption of no further schooling after Form 4), examination of the ratios of "expectation" to "aspiration" is not without value, especially if one brings in the pupils' varying standing on the School Certificate examinations (see Table I-32). The largest excess of expected over hoped-for numbers

TABLE I-31

PERCENTAGE DISTRIBUTIONS OF OCCUPATION TYPES REALIZED, ASPIRED TO,
AND EXPECTED; AFRICAN MALES

	Realization 1968	Aspiration 1961	"Expectation" 1961
Medical	5	14	3
Social, religious, political	7	6	2
Scientific, technical, mechanical	11	17	13
Agriculture	10	22	10
Commerce, adminis., clerical	40	19	31
Education	20	19	38
Military, police	7	4	3
Total	100	101	100
N	473	588	504

TABLE I-32

RATIOS OF EXPECTATION TO ASPIRATION PERCENTAGES ON DESIGNATED
OCCUPATION TYPES BY CAMBRIDGE RESULTS^a

Type of Occupation	Cambridge Results					
	First Division	Second Division	Third Division	GCE	Failure	Total
Medical	.11	.29	0	0	.38	.16
Social, religious, political	0	.20	0	.40	1.00	.21
Scientific, technical, mechanical	.74	.78	.69	.85	1.17	.68
Agriculture	.50	.40	.21	.77	.27	.38
Commerce, adminis., clerical	1.50	1.77	1.26	1.00	1.33	1.39
Education	1.59	1.60	2.11	1.64	1.70	1.74
Military, police	0	.50	1.00	.50	0	.61

^aFor a check on cell frequencies, see Table I-31 and Appendix
Tables C13 and C14.

for any given type of occupation was for teaching (1.74). For white-collar work the ratio was also high (1.39) but for scientific sorts of jobs only .68. For police-military work the ratio was .61, for agriculture .38, for "social" occupations .21, and for medicine .16. This effect with respect to agriculture reflects the fact that aspirations of African students oriented to agriculture are interested specifically in jobs as agricultural officers. Indeed, all of the ratios are variously affected by job markets, openings in higher schools, and certainly (as we will now point out) by a boy's ability. For example, the shift or drift into educational work from aspiration to the constrained expectation context was only slightly more common among those with low examination scores, being actually greatest for boys with third-division passes. It was only for the "fail" category that we found no net shift in favor of scientific-technical sorts of occupations with the stipulations of the "expectation" question. It is quite possible that there was a good deal of realism in the aspirations of these youth to start with and that the no-further-schooling stipulation made little difference. Those most inclined to drop their technological aspirations under the assigned conditions were youth with third-division passes for whom in fact a shift from dreams of engineering to realities of quite another order was particularly likely.

Quite generally, the white-collar category increased or held their numbers. What is particularly interesting is that they did so more often when examination results were excellent. Youth clearly headed for higher education give little thought to alternatives, and the obvious fall-out jobs in their unrealistic expectations were clerical.

Tables I-33 and I-34 relate aspirations and expectations as stated in 1961 to the present jobs of the same individuals. In nearly a third of the cases located in 1968 (which was most of the former pupils), these young African men were working at the type of occupation "expected" (despite all the qualifications we have mentioned so many times), and for aspirations 28 per cent were doing so. How does one decide whether either figure is high or low?

In every category the largest percentage relates to the same type of occupation stated as an aspiration in 1961. For example, present teachers make up a third of those who had earlier given teaching as their preference. For no other aspired-to occupational type is there so large a percentage who now are teachers. Although only a sixth of the boys hoping to become physicians were going to succeed (as best we can judge), physicians are an even smaller percentage of any other category of "hoped for" occupation. Moreover, the vast and amorphous rubric of white-collar work (embracing two-fifths of all employed men in Kenya) is today the preponderant employment whatever pupils gave as their vocational hopes in 1961. (Teaching is the sole exception to this generalization.)

Despite the vast shifting between earlier choice and present work, a considerably larger number of men are working at the general sort of occupation they had wished to follow than could be anticipated by chance. If one takes the total marginal distributions of aspirations and realized work (Tables I-35 and I-36) as constraints in estimating probabilities that a man will appear in some diagonal cell of that table, we may follow the analysis used earlier when examining

TABLE I-33

STUDENTS' PRESENT OCCUPATION WITH RESPECT TO TYPE; AFRICAN MALES BY TYPE
OF OCCUPATIONAL ASPIRATIONS

Occupational Aspirations--Type

Students' Present Occupational Type	Occupational Aspirations--Type							Totals
	Medical	Social, Political, Religious	Scientific, Technical, Mechanical	Agri- cultural	Commercial, Admin., Clerical	Edu- cational	Military and Police	
Medical	15.5 (9)	3.6 (1)	1.3 (1)	4.0 (4)	....	5.4 (4)	10.5 (2)	4.8 (21)
Social, political, religious	6.9 (4)	14.3 (4)	3.8 (3)	5.0 (5)	7.5 (6)	8.1 (6)	5.3 (1)	6.6 (29)
Scientific, technical, mechanical	10.3 (6)	7.2 (2)	20.0 (16)	5.0 (5)	10.0 (8)	10.8 (8)	....	10.3 (45)
Agricultural	6.9 (4)	....	8.8 (7)	17.0 (17)	7.5 (6)	5.4 (4)	31.6 (6)	10.0 (144)
Commercial, admin., clerical	34.5 (20)	35.7 (10)	38.8 (31)	42.0 (42)	61.2 (49)	35.1 (26)	15.8 (3)	41.2 (181)
Educational	17.2 (10)	32.1 (9)	18.8 (15)	21.0 (21)	8.7 (7)	32.4 (24)	21.4 (4)	20.5 (90)
Military and police	8.6 (5)	7.1 (2)	8.8 (7)	6.0 (6)	5.0 (4)	2.7 (2)	15.8 (3)	6.6 (29)
Totals	100 (58)	100 (28)	100 (80)	100 (100)	100 (80)	100 (74)	100 (19)	100 (439)

TABLE I-34

STUDENTS' PRESENT OCCUPATION WITH RESPECT TO TYPE; AFRICAN MALES BY TYPE
OF OCCUPATIONAL EXPECTATIONS

Students' Present Occupational Type	Occupational Expectations--Type								Totals
	Medical	Social, Political, Religious	Scientific, Technical, Mechanical	Agri- cultural	Commercial, Admin., Clerical	Edu- cational	Military and Police	Totals	
Medical	....	....	3.9 (2)	7.9 (3)	2.6 (3)	2.8 (4)	....	3.2 (12)
Social, political, religious	11.1 (1)	33.3 (2)	5.9 (3)	7.9 (3)	7.7 (9)	4.8 (7)	....	6.6 (25)
Scientific, technical, mechanical	....	....	9.8 (5)	7.9 (3)	13.7 (16)	11.0 (16)	....	10.5 (30)
Agricultural	33.3 (3)	....	11.8 (6)	18.4 (7)	6.0 (7)	10.3 (15)	21.4 (3)	10.8 (41)
Commercial, admin., clerical	33.3 (3)	50.0 (3)	35.3 (18)	31.6 (12)	49.6 (58)	40.7 (59)	35.7 (5)	41.6 (158)	
Educational	11.1 (1)	16.7 (1)	17.6 (9)	21.1 (8)	12.8 (15)	26.2 (38)	28.6 (4)	20.0 (76)	
Military and police	11.1 (1)	....	15.7 (8)	5.3 (2)	7.7 (9)	4.1 (6)	14.3 (2)	7.4 (28)
Totals	100 (9)	100 (6)	100 (51)	100 (38)	100 (117)	100 (145)	100 (14)	100 (380)	

TABLE I-35

PRESENT OCCUPATION TYPE BY FATHER'S SCHOOLING; AFRICAN MALES

Occupation Type, 1968	Father's Schooling				Total
	None	Primary Only	Inter-mediate	Secondary and Above	
Medical	4	3	8	7	5
Social, political, religious	8	8	3	7	7
Scientific, technical, mechanical	7	10	16	22	10
Agriculture	10	10	11	14	10
Commerce, admin., clerical	46	43	32	22	41
Education	21	18	22	14	20
Military, police	4	8	8	14	7
Total: % N	<u>100</u> 156	<u>100</u> 188	<u>100</u> 90	<u>100</u> 14	<u>100</u> 448

TABLE I-36

PRESENT OCCUPATION TYPE BY CAMBRIDGE RESULTS; AFRICAN MALES

	Cambridge Results					Total
	First Division	Second Division	Third Division	GCE	Failure	
Medical	12	3	3	...	2	5
Social, political, religious	12	8	3	4	5	7
Scientific, technical, mechanical	15	13	12	...	5	11
Agriculture	7	16	8	8	7	10
Commerce, admin., clerical	37	39	36	48	54	40
Education	11	13	33	32	21	20
Military, police	6	8	5	8	7	7
Total: % N	<u>100</u> 113	<u>100</u> 145	<u>100</u> 112	<u>100</u> 50	<u>100</u> 43	<u>100</u> 463

occupational inheritance, though this time, by contrast, we will be assessing predictability from individual aspiration to realization. It turns out that the observed diagonal entries are 1.7 times the expected (122 versus 72), an observed excess of 50 as compared with a possible excess of 239. Knowing a youth's aspirations does improve this predictability, but the unexplained variation in adult work remains very substantial.

In the light of the "loose" fabric of Kenya social structure implied by the discussion in preceding pages, it will be no surprise to discover that the sorts of occupations in which the boys are now engaged bear little connection to parental schooling (Table I-35). Sons of the best schooled parents were slightly more often to be found in medical careers or in technical and engineering occupations; they were considerably less likely to be found in commercial activities or in clerical jobs. Yet, once more, the majority in every sort of activity grew up in homes headed by illiterate or barely-schooled fathers. There has been a very dramatic climb in one generation from a traditional, non-literate way of life into something like full-fledged "modernity."

Once more (Table I-36) we observe that a boy's standing on the School Certificate results affects his present type of occupation, as earlier it was shown to be correlated with level of occupation desired. Nearly three times the chance proportion of first-division boys went into medicine, and the majority of physicians actually had received a first-division grade. Men in "social" jobs also came disproportionately from receivers of first-division passes, but only a minority of all working in "social" jobs were holders of top passes. Scientific-

technical workers are chosen from those doing well on school certificate considerably beyond chance expectancy. The majority working in agricultural sorts of jobs had either first- or second-division passes, but proportions going into agriculture are approximately the same for each examination class. The heterogenous white-collar category draws from all groups, but individuals with relatively poor scores are most likely to be clerks. Teachers distinctly come from the low scorers on these exams that were taken at end of Form 4.

A small part of the pattern observable in Table I-36 could be observed also for occupational aspirations. In particular, boys aspiring to become doctors or engineers tended to be among the academically most successful. On the whole, however, variations in the initial aspirations of youth had only slight connection to their revealed intellectual competence--again, at least in part, because they were a highly select and highly motivated group with distinct academic capability from the start.

There was available also one other sort of predictive variable for type of occupation: preferences among school subjects and judgments of their usefulness. Tables I-37 and I-38 accordingly relates these preferences and perceptions (as reported in 1961) to the 1968 occupations. English was the preferred subject beyond chance expectancy among individuals who now are in what may be called "verbal" occupations, but this differentiation was not marked. Either science or mathematics (and commonly both) were more favorably viewed by pupils who now are in scientific-technical work, and doctors leaned strongly to science. However, those in agricultural work display no departure from random preferences. Once more reading the table both ways to

TABLE I-37

PRESENT OCCUPATION TYPE BY SCHOOL SUBJECT LIKED BEST, 1961;
AFRICAN MALES

Occupation Type, 1968	Subjects Liked Best 1961				
	English	Math	Science	Other	Total
Medical	2	4	8	7	5
Social, political, religious	8	6	5	7	7
Scientific, technical, mechanical	10	12	12	4	11
Agriculture	9	11	12	7	10
Commerce, admin., clerical	45	37	38	43	41
Educational	20	22	17	29	20
Military, police	7	7	8	4	7
Total: % N	<u>101</u> 186	<u>99</u> 81	<u>100</u> 154	<u>101</u> 28	<u>101</u> 499

TABLE I-38

PRESENT OCCUPATION TYPE BY SCHOOL SUBJECT BELIEVED MOST
USEFUL FOR CAREER, 1961; AFRICAN MALES

Occupation Type, 1968	Subjects Believes Most Useful				
	English	Math	Science	Other	Total
Medical	3	2	9	4	5
Social, political, religious	8	5	6	4	7
Scientific, technical, mechanical	8	25	10	8	10
Agriculture	12	7	10	4	10
Commerce, admin., clerical	40	39	43	42	41
Educational	22	16	15	35	20
Military, police	7	7	7	4	7
Total: % N	<u>100</u> 242	<u>100</u> 44	<u>100</u> 152	<u>101</u> 26	<u>100</u> 464

avoid misleading conclusions, we notice that nearly half of those now in teaching had been strongly inclined while in Form 4 toward mathematics and science; yet repeatedly one reads that it is just this lack of interest on the part of prospective teachers that holds back modernization. Another paradox is found in the fact that individuals in white-collar jobs listed mathematics or science more often than they listed English. English, in 1961 even more than today, was essential for any position involving dealing with expatriates or with important persons abroad. The display of subjects that had been considered "most useful" while a Form 4 boy manifests an association with present occupational type essentially similar to "subject liked best," though there is a moderate tendency for the "utility" judgments to be somewhat more "appropriate" than the "liking" judgments.

In the next few pages (with which we conclude the analysis of students) three tables are used to show the distribution of tribes: in anticipation (aspiration) and in actual occupation. Many of the differentiating characteristics among tribes have been in previous pages shown to be modest. Here we present a snapshot of the different stages of modernization and level of achievement at which our special sample of Kenya boys have arrived, considering the various tribal categories or groups among those youth. To give an adequate historical picture of how each tribal group arrived at its present relative situation on the features we deal with would require a long historical analysis.

The first three columns of Table I-39 distribute the Form 4 boys according to their present type of employer (totalling 100 at column 4 in each case); the last two columns compare the proportions preferring to work for government with those actually doing so. Thus,

TABLE 1-39

STUDENTS' PRESENT TYPE OF EMPLOYER AND PREFERENCES FOR GOVERNMENT WHILE
IN FORM 4; AFRICAN MALES BY TRIBE^a

Tribe	Present Type of Employer			Comparison of Present Employer and Form 4 Preferences	
	Private	Government Administrative and Economic	Education and Social Service	Present Employer: Government, Education and Social Services	Form 4 Preferences: Government, Education, and Social Services
Nilo-Hamitic	26.3 (5)	57.9 (11)	15.8 (3)	73.7	100.0
Nilotic (Luo)	25.0 (22)	59.1 (52)	15.9 (14)	75.0	82.7
Kikuyu	18.2 (26)	63.6 (91)	18.2 (26)	81.8	76.8
Embu-Meru	30.6 (11)	41.7 (15)	27.8 (10)	69.5	85.4
Kamba	20.0 (2)	60.0 (6)	20.0 (2)	80.6	87.5
Luyia	14.1 (10)	53.5 (38)	32.4 (23)	85.9	91.3
Kisii	11.8 (2)	47.1 (8)	41.2 (7)	88.3	88.0
Coast	23.3 (10)	53.5 (23)	23.3 (10)	76.8	90.7
Foreign	....	75.0 (3)	25.0 (1)	100.0	83.3
Totals	20.4 (88)	57.3 (247)	23.3 (96)	80.6	85.4

^aPercentages add up to 100% horizontally.

from tribe to tribe at present between 70 and 88 per cent are employed by government; their preferences to be employed by government ranged from 77 to 100 per cent. These Kenya boys are overwhelmingly oriented to working in public jobs. One can now be more confident, for example, in saying that those seeking agricultural jobs were not expecting to become working farmers. There is, incidentally, no clear correlation between relative preference and realized employer, comparing one tribe with another.

Table I-40 contrasts the tribes with respect to present level of job and level to which in 1961 they had aspired. The percentage in total aspiring to top-level jobs was 48 while only 40 per cent attained a position at that level, but of course they have more years of career ahead of them. (The Nilo-Hamitic and Kamba students, due to the vicissitudes of sampling explained elsewhere, are only the boys of those tribes attending schools mainly populated by other tribes and should be ignored in these ensuing comments.) It is noteworthy that only Kikuyu boys manifest the same aspired-to and realized level of job. The Luo, Kisii, and Coastal groups have about the average discrepancy (9-13 points), while the Embu-Meru and the Luyia groups display nearly 20 points excess of ambition over accomplishment up to this date. Finally, we examine the distribution of types of occupations to which youth of the various tribes had looked in 1961 and those now realized. The latter is a topic fraught with political overtones in most of the new nations.

Overall there is little connection between 1961 differentials among tribes in aspiration and their 1968 distributions among occupations. The main exception is the large representation of the Nilotic (Luo) men among physicians and medical students in both sets

TABLE I-40

REALIZED AND ASPIRED OCCUPATIONAL LEVELS; AFRICAN MALES BY TRIBES

Tribe	Present Occupational Level; from High to Low							Aspiration; Per Cent Level 1		
	N	1	1½	In Univ.	Prob. Univ.	2	3		Total	Σ Cols. (1)-(4)
Percentages										
Nilo-Hamitic	19	42	5	••	11	21	21	100	58	24
Nilotic (Luo)	105	11	3	21	2	35	28	100	37	49
Kikuyu	168	24	5	14	2	31	24	100	45	47
Embu-Meru	41	10	2	17	5	27	39	100	34	55
Kamba	14	36	••	14	14	14	21	99	64	62
Luyia	90	7	4	21	2	37	29	100	34	53
Kisii	22	14	••	18	4	46	18	100	36	46
Coast	50	10	2	16	••	42	30	100	28	41
Foreign	5	(20)	••	••	(20)	(40)	(20)	(100)	(40)	50
Total	514	17	3	17	3	33	27	100	40	48

of figures (Table I-41 and Appendix Tables C4 and C17). Indeed the most remarkable thing about both aspirations and realizations is their seeming randomness as among tribes. Place of mother's residence (Appendix Table C15) makes a moderate difference of the sort to be expected, with more physicians and lawyers from cities and likewise larger proportions of city dwellers working at technical and engineering jobs (17 per cent of city men as against 9 per cent of those living elsewhere). Initial residence transcends the tribal factor.

There are tribal differences in occupation, however, even if largely random ones. As noted, the Luo are over-represented in medicine; with three or four other tribes the Luo also have more than their "share" in scientific-technical or mechanical jobs. Somewhat surprisingly, only the Nilo-Hamitic group substantially exceeds the average rate of entry into agriculture. Coastal peoples are distinctly over-represented in the white-collar category.

The tribes exceeding average proportions in teaching are generally, as one would expect, those with less than their statistical "quota" of white-collar or administrative-clerical positions. Nevertheless, nearly half the men in teaching come from tribes displaying less than a "proportional" interest in teaching. And about half of the men in agricultural work are from the tribes displaying somewhat less than their quota for agriculture. So, once more we emphasize that disproportionate over- or under-representation in job or school on the part of some social category (whether tribe or level of paternal schooling) does not alone tell us much about the composition of the upcoming "ruling" group or faction in that particular sphere of national life; it is necessary also to take account of the

actual sizes of populations of pupils. Nor does selectivity on the School Certificate results automatically identify gaps or differentials in quality of leadership in the various spheres of national life.

By the use of Table I-41 an effort is made both to summarize these complex findings about occupational destinations (when contrasting tribes) and also to remove certain statistical distortions built into earlier tables. Tribes are named in Table I-41 for particular present occupations if they have a ratio of more than 1.40 times their quota in the occupation or a difference of more than seven percentage points in excess of the percentages in that occupation for all other tribes. (In each case this cutting point stands clearly separate from one that might alternatively have been used.) More important, as the footnotes to the table make clear, is the exclusion of each tribe in turn from the base measure. Since members of some tribes are more numerous than others, failure to exclude them from totals in making comparisons would bias the analysis against findings of "substantial relative over-representation" in the more populous groups. Table I-41 presents an analysis of disproportionate representation both for aspirations as of 1961 and for occupations held in 1968.

The table clearly highlights the deviant, not the conventional, patterns. As previous comments would indicate, the Luo show a statistical superiority (as defined) for the same occupation types both on aspirations and in realization (for medical and technical work). Moreover, their realizations do not fall markedly below their targets. The Kikuyu show a quite different pattern; in aspirations they were heavily inclined toward technical and agricultural jobs (for each of which they had abundant European models around them), yet in the end they wind up

TABLE I-41

CASES OF SUBSTANTIAL RELATIVE OVER-REPRESENTATION^a ON 1961
OCCUPATIONAL ASPIRATIONS AND ON ACTUAL 1968
OCCUPATIONS, BY TRIBE

Tribes	Occupation Type	Aspirations, 1961		Tribal Excess	
		Number	Share	Ratio ^b	Difference ^c
Nilo-Hamitic; N=17	Education	7	6%	1.72	13.8
Nilotic (Luo); N=99	Medical	24	30%	1.59	7.2
	Technical	27	27%	1.42	6.5
Kikuyu; N=154	Technical	40	40%	1.43	7.3
	Agriculture	50	39%	1.45	13.0
Embu-Meru; N=44	Military, police	4	17%	2.54	5.4
	Social-Political	4	11%	1.46	2.7
	Agriculture	13	10%	1.35	7.5
Luyia; N=110	Military, police	8	35%	2.09	3.5
Kisii; N=22	Social-Political	6	16%	3.79	18.4
Coastal; N=43	Technical	12	12%	1.44	8.7
	Education	14	13%	1.77	9.2
Actual Occupations, 1968					
Nilo-Hamitic; N=17	Agriculture	5	10%	3.13	20.0
Nilotic (Luo); N=97	Medical	7	32%	4.30	13.3
	Technical	6	19%	1.46	4.5
Kikuyu; N=159	Social-Political	14	44%	1.54	3.1
Embu-Meru; N=40	Social-Political	4	13%	1.54	3.5
Luyia; N=79	.....	..	...	.....	.....
Kisii; N=20	Education	7	7%	1.80	15.6
Coastal; N=45	Commerce, admin., etc.	24	13%	1.36	14.1

^a Selection ratio (see b) exceeding 1.40 and/or percentage differences (see c) exceeding 7.0. Cases with less than 4 entries excluded; these were Nilo-Hamitic or Kamba.

^b Percentage in designated occupation type divided by percentage of members of all other tribes who are in that type.

^c Percentage in designated occupation type minus percentage of members of all other tribes who are in that type.

(as do also the related Embu-Meru) in social-political positions (mainly, for the Kikuyu, law). The Kikuyu and Embu-Meru pairing was the single case in which two tribes selected the same actual employments well beyond expectancy (as defined for this table). There clearly are sharper disparities, or distinctiveness of pattern, among the tribes in realization of occupations than in aspirations, though the Luyia struck a distribution of actual positions close to that for the entire sample, favoring no single type disproportionately.

It is an impressive fact that a group (such as a tribe) may have only a moderate over-representation within the very tiny Form 4 population, yet if it is a populous tribe and sends a relatively high proportion of youth through the schools, that tribe can obtain a large share in the favored jobs. The Kikuyu are perhaps the outstanding example of this conjuncture of circumstances. By contrast, the Nilo-Hamitic, despite very high over-representation in agriculture, supplied only 10 per cent of that occupation. Some of these aspects of the situation will emerge again as we explore the data for teachers in Part II. Broad conclusions for the study as a whole will be deferred to that point.

PART II

KENYA TEACHERS ON THE EVE OF INDEPENDENCE

CHAPTER VIII

COMPOSITION AND ALLOCATION OF THE TEACHING FORCE

With an explosion in public demands for schooling in newly-developing nations there have emerged massive shortages in numbers of teachers. At the same time governments have found themselves faced with the task of maintaining the skill of teachers, hopeful of raising that quality gradually. Nevertheless, there is a surprising void in the literature on "education and development" about teachers, once the annual reports of ministries have been printed and the input-output educational or manpower specialists have tidied up their estimates. A primary purpose in the remaining chapters (comprising Part II of this report) is to fill part of this void by taking a closer look at the teachers of Kenya--and most particularly at the critical but most neglected category of teachers, those in primary schools attended mainly by Africans.

Kenya offers a prime case study for such a purpose. In 1961, when the questionnaires were sent out to the teachers, the schools were still in large part racially segregated. There was a correspondingly multi-racial cadre of teachers, who were less segregated than the pupils, however, in that African secondary schools were staffed mainly by Europeans. Few Africans yet were deemed qualified for such positions, and the few who were found themselves in the higher levels of the shadow government for an independent Kenya. Indeed, a considerable fraction

of the legislature were former teachers. Kenya was a comparatively new colony, and in the years immediately after World War II, second-generation secondary graduates were a rarity among Africans. There are many obstacles to supplying teachers for primary schools at the early stage in diffusion of education in any country, even when, as in Kenya, it was assumed that native education should be expanded in measured steps but not as a crash program.

At the same time a separate and semi-indigenous Asian system had expanded rapidly, with high continuation rates through the secondary years and staffed by Asians through secondary school. This accomplishment was in many ways remarkable, but it was a problem to maintain teaching standards and good performance on examinations. While the African teaching cadre of 1961 (which will be our main concern) could be studied on its own account, to do so would be to miss many significant elements in the total educational situation of Kenya that affect interpretations on basic points. All in all, the complex system of ethnic schools in the Kenya of 1961 illuminates by contrast more than it complicates analysis.

School integration since 1961 has brought large numbers of African secondary pupils into previously Asian as well as into European schools. Together with accompanying political events, desegregation probably has damped Asian secondary-school attendance, and it certainly has brought daily interaction among pupils, and between pupils and teachers of different ethnic groups where previously there had been little inter-ethnic contact. (We use the then-prevalent phrase "Asian" to refer to Indians and Goans. There were, also separate sub-systems for Europeans, it goes without saying, and for Arabs as well as for Africans. In fact, Asian schools were frequently divided in practice also by language and religious

sect.) With the coming of a measure of integration in the schools, both the realities and the statistical rubrics for teachers have changed: today the statistics distinguish Kenya citizens, locally employed non-citizens, and non-citizens on overseas contracts. (Citizens may be of any "race.")

To understand events today in Kenya, it is important that we understand some of those occurring yesterday. Although it was not feasible to conduct a 1968 follow-up study of 1961 teachers parallel to that among former students, there is sufficient evidence in published sources to suggest that many of yesterday's problems persist while new ones have arisen. This study should serve as a base-line, furthermore, in attempts to probe behind surface statistics in the years ahead and help us decide what those years may portend not only for Kenya but also, in broad terms, for a large number of "new nations" over the world.

Many of the chronic and enduring problems of teachers in these kinds of countries are succinctly brought together in the following quotation from one African teacher (Schedule 2485).

This is very important and as a teacher I am very proud of my job; except we teachers are squeezed in thick forest of troubles and problems. This to say that even anyone in the country including the Education Department have entirely neglected a teacher simply because his salary is no salary at all. Surely this is true, and we as teachers get in such sorrows when we are forgotten in a such manner. As teachers have only symphathized with the country to teach with such small pay as some call pocket money. As we travel within the school-compound we find a headmaster who is very much toilsome and gets no allowance. There are also members of School-Committees who are not even thought of. They work quite hard but Education department doesn't see, and yet he have some other bodies in the Department which are paid something small. The other point is that teachers working hard are not even seen to be promoted; and as a result of such negligence causes many teachers to neglect also. To this I consider that unless the Education Department takes such pain towards teachers I am afraid the countries will be growing backwards.

Another teacher (Schedule 2449) who saw something of the full breadth of this work wrote:

I and other teachers, we do a lot of work; i.e. you will find that, we are health inspectors, government tutors, Community Development Officers, teachings, etc. I mentioned all these because we do part of their work. When I sit down and think about all these, I find that I do a lot of work on one day.

The educational qualifications and sex composition of the Kenya teaching cadres of 1961 (and of 1966 for comparison) are shown in Table II-1, which is derived from data to be found in annual reports of the Ministry of Education. (Additional, related information is presented in the appendix, Tables D-7, 8, and 9.) There were in 1961 nearly 22,000 teachers (including two hundred teachers in Technical and Trade schools), of whom over 92 per cent were teaching in primary and intermediate schools; 18,000 of these were in African schools. By 1966 the total teaching cadre numbered over 36,000 and despite expansion at the secondary level (where numbers of teachers had more than doubled) again about 91 per cent were in elementary schools. This expansion of elementary schools reflected mainly a major effort to open places in Standards V to VII, the dynamic of which was already impressive by 1962. (In neither year are we paying any attention to teachers on the tertiary level.) Nearly all the European teachers in African schools were assigned to the aided secondary schools, being most of the teachers of Africans at that level. "Unaided" schools (today often called "Harambee" or "self-help" schools) are multiplying rapidly; in 1961, however, they were not an important part of the scene and most of the small and unaided schools then were Asian.

While by 1966 African teachers were taking a prominent place in some secondary schools (even in some of those aided and maintained by the government), it remains true that the post-elementary sectors of the system rely heavily upon non-citizens, and (despite attempts to shift teachers to local contracts) individuals on overseas contracts still supply the major share

TABLE II-1

QUALIFICATIONS OF TEACHERS IN KENYA SCHOOLS, 1961 AND 1966

Type of School and Qualification of Teacher	Number of Teachers (All Races)		Percentage in African Schools, 1961	Percentages by Citizenship, 1966			Percentages Female	
	1961	1966		Kenya Citizens	Non-citizens		1961	1966
					Local Contract	Overseas Contract		
Primary (and Intermediate)								
Graduate								
Trained	141	93	6	8	34	58	49	32
Untrained	126	19	2	11	73	16	34	32
Completed Secondary								
S ₁ P ₁ (KT1)	1,704	1,906	36	49	43	8	47	51
Untrained	437	847	29	83	13	4	46	20
Not Completed Secondary								
P ₂ (T ₂ from T ₃)	13,721	3,271	99	99	*	*	21	21
P ₃ P ₄ (T ₃ , T ₄), Other	4,063	9,351	95	99	*	*	22	20
Untrained	4,063	9,351	95	99	*	*	22	20
Total	20,192	33,522	91					
Secondary Schools; Maintained and Aided								
Graduate								
Trained	508	1,013	33	9	30	61	39	35
Untrained	329	247	5	10	50	40	17	28
Completed Secondary								
S ₁ P ₁ (KT1)	389	544	29	64	30	6	30	33
Untrained	47	103	9	55	43	2	55	22
Other								
Trained	13	104	45	27	29	44	52	25
Untrained	7	31	32	32	33	35	52	55
Total	1,193	2,042	26	27	33	40	34	33
Secondary Schools; Unaided								
Graduate								
Trained	48	193	20	4	65	31	37	39
Untrained	45	120	4	16	81	3	33	37
Completed Secondary								
S ₁ P ₁ (KT1)	38	266	11	77	21	2	39	16
Untrained	7	302	..	67	32	1	(57)	12
Other								
Trained	7	40	14	48	50	2	(57)	28
Untrained	..	41	63	63	35	2	(57)	19
Total	145	962	10	50	42	8	39	22
Teacher Training Colleges^a								
Graduate	128	155	79	14	39	47	45	32
Completed Secondary	121	198	90	55	19	26	26	35
Not Completed Secondary and other	61	49	100	74	6	20	41	51
Total	310	402	88	42	25	33	36	36

^aVirtually all are "trained" teachers.

Source: Reports of the Kenya Ministry of Education.

of the better qualified teachers in these schools. Sixty per cent of the trained graduates in secondary schools today are on overseas contracts, and only 10 per cent of all Kenya citizens teaching in secondary schools (including Asians) are graduates, be they trained or not. There has been no increase in the proportion of teachers who are women, though women are relatively more important within the unaided sector of schools. A fundamental shift in a teaching cadre takes decades to carry through.

As the series of appendix tables shows for 1961, the African teachers are rather consistently the poorest trained; and many have received only meager pedagogical instruction in addition to successful (or even unsuccessful) completion of the intermediate grades. As of 1961, indeed, over 90 per cent of the African (and two-thirds of Arab) teachers in primary grades had not completed a four-year secondary course, and still fewer had received a certificate that testifies to successfully passing the appropriate leaving examination at that point. Such poorly-qualified teachers were comparatively rare in Asian or European schools.

The provisions for teacher training and the grades of African teachers in 1961 are indicated in the official report for that year, which describes the usual categories as follows (pages 9-10):

African teachers are trained at two levels. Students who have completed eight years of education take a two-year course of training, and those who are successful are awarded a T.3 certificate or, in the case of those who have not passed the Kenya African Preliminary Examination, a T.4 certificate. On employment they are graded as Assistant Teachers, Grade II or Grade III, according to whether they hold the T.3 or T.4 certificate. As the intermediate school system expands there will be an increasing field of recruitment of students with a pass in the Preliminary Examination and the T.4 certificate and the corresponding Assistant Teacher, Grade III, will gradually disappear.

At the higher level there is a two-year course for those who have received secondary education. Successful students who have previously passed the School Certificate Examination are awarded a K.T.1 certificate, and graded as Teachers. Successful students who have not passed the School Certificate Examination are awarded a T.2 teacher's certificate and graded as Assistant Teachers, Grade I.

Special two-year courses are run for the training of Handicraft Teachers, who, on successful completion of the course, are graded T.2. Similar courses for Domestic Science Teachers are also conducted. In addition, one-year courses are conducted for T.3 Teachers who have shown marked ability and on successful completion of the course and after a further year's satisfactory teaching they are eligible for grading as T.2.

The majority of Training Centres are managed by Missions, with the total costs paid by the Government.

Teachers are also trained in the Makerere College Faculty of Education. At the end of the two-year course for the Intermediate Examination those who do not qualify for the degree course may take a two-year course for the Diploma of Education and on appointment in Kenya are graded as Assistant Education Officers. Graduates who take a one-year course for the Diploma of Education are graded as Education Officers.

By 1966 there had been many changes, but teachers changed often more in quality than in the formalities of eligibility for one or another sort of training. In those localities with greatest shortage and where schooling was generally most backward, one could find many pragmatic compromises of using T₄ (now P₄) assistant teachers. The situation as respects training for the years after 1964 is given in the following quotation from the 1966 report (page 7).

Although teachers were regraded in 1964 with the P₄, P₃, P₂ and P₁ grades replacing the former T₄, T₃, T₂ and KT₁ grades, the actual entry point and duration of training for primary teachers remained virtually unchanged between 1964 and 1966. The training for each category was two years, the entry point being possession of a School Certificate or four G.C.E. "O" Levels, including English Language, for P₁ teachers, two to four years secondary schooling (without C.S.C.) for P₂, possession of K.P.E. for P₃, and a completed primary course (without K.P.E.) for P₄. P₄ training was being phased out over this period except for candidates from those less developed areas which were particularly short of trained teachers.

A major development was the creation of two new colleges to train secondary teachers and the beginning of graduate teacher education at University College, Nairobi. Secondary teacher education had started in Kenya on a small scale at the Central Teachers College and at the Highridge Training College in Nairobi but in 1965 all secondary courses were transferred to Kenyatta College which was established at the site of the former Templer Barracks at Kahawa outside Nairobi. The college has been running a one-year course for Higher School Certificate level entrants and a three-year course for School Certificate level entrants both leading to the S₁ certificate qualifying the holder to teach up to Form 4 of secondary school. Kenyatta College has also mounted upgrading

courses of one year's duration to enable P1 teachers specializing in such subjects as art, home economics, physical education and Swahili to gain promotion to S1. The Kenya Science Teachers College, in respect of which the Kenya Government is obtaining generous capital and recurrent help from the Swedish Government over a period of ten years, opened in 1966 at the former Central Teachers College site pending the construction of its new buildings on Ngong Road, Nairobi. The college accepts entrants with School Certificate and gives them a three-year course leading to the S1 Certificate.

In no school system can one describe a classroom situation adequately by enumerating qualifications of teachers in the bureaucratic language used for setting pay scales or obtaining promotions. Though we now know that size of class is seldom determinative of how much pupils learn, in many situations (as for Kenya in 1961), that index does tell us a great deal about how pupils must go about their learning. Thus in 1961 the average secondary class (enrolling heavily selected African pupils for the most part) varied little in size by ethnic group; even among the Africans and Arabs there were just twenty pupils per teacher as compared with a low of sixteen in European schools. But at the primary level, the situation was vastly different; the average European elementary class had eighteen pupils and there were twenty-nine in the average Asian, Goan, or Arabian school, but in African schools the typical teacher had to cope with forty-five pupils. Some teachers had even more, with children of all ages sitting around the edge of the room on the floor or outside the door. The reports from teachers about their discontents (discussed later) take on more poignancy as well as credibility when some of these crude external circumstances are kept in mind.

One teacher wrapped up nearly all the laments and gripes of the most humble teachers in one compact package (Schedule 2965).

One thing which is very hard to us in our school the pupils are too many in one class. In one class we do have 50 children and it is difficult to observe each child or to help each child because the

period is short too. Sometimes one can have a class which half of it is clever and another is not and if you try to help those who are not clever you waste the time of teaching the clever. In the class you can have a child who is born naturally foolish. The time does not allow a teacher to bring up the foolish child to the same level with the others, but when the Education officer or supervisor comes and go through books of such child, he will just give bad report to the teacher. Shortage of teachers is also a great problem. In my school we have over 800 children but the teachers are 16. Though all these children do not attend school at the same time, for they either come in the morning or afternoon, but are still too many to be controlled by such few teachers. It is also impossible for the teachers to learn the habits of the children for he is with great number and again in very short time so you cannot help them to be important people of future. Due to the shortage of teachers one has to teach one class through the day with no free times. You have even to teach subjects which you do not feel interested to teach and so the children becomes immune to you and you also become immune to them.

As the first part of this report (on secondary pupils) made clear, by 1961 the completers of a good schooling could count on having favorable job opportunities for some years to come. But the implications of that fact in terms of related obstacles facing officials who were trying to staff the schools, and the contrasting outlooks of ill-educated and weary teachers with Form 4 secondary pupils evoke a more distressful picture. As one man put it (2783),

without teachers there would be no important people in the world. Doctors, pilots, engineers and many others pass through a teacher. And, after all that, the teacher is only the one who gets the least in his pay.

The reorientations or even disillusionments of the poorly-prepared teachers make up a major part of the story recounted in this second part of our report. In human terms it is a story easily repeated over much of the developing world. The demand for teachers (in developing countries especially) derives directly from the occupations for which their pupils expect ultimately to enjoy superior bargaining positions. But by the same token, a large proportion of the individuals seeming well-suited for recruiting as teachers are keenly alert to identify and capitalize on favorable

occupational opportunities outside the schools. In the replies on our questionnaires, with independence just ahead, this was all the more important to Africans in particular. Anxiety among Ministry officials to maintain standards of teaching in the critical forms that led to training for the high-level manpower positions was well justified. The major part that Peace Corps and its British or other European predecessor organizations would play was not yet clear in 1961.

The last columns of Table II-2 compare the attitudes of the various categories of teachers toward teaching in comparison with alternative occupations. Within each ethnic group, male secondary school teachers were usually more inclined to consider taking another kind of job and were of course usually in a better position to obtain a satisfactory different job than was a primary teacher or a woman at any level. African secondary teachers were especially ready to shift into more congenial work if opportunity arose or if the government seemed to be neglecting their interests. These African secondary teachers were also, it should be noted, often in an inferior position (or qualification category) relative to their immediate colleagues. On the other hand, the European teachers in African secondary schools were an unusually committed group; indeed, Europeans teaching in African schools were better schooled than those serving only European pupils. That is one side of the tangled relationship between missions and schools in Africa.

The behavioral or predictive validity of reports about occupational intentions, particularly at a time of uncertainty such as prevailed in Kenya when we gathered these data, is always open to question. But the patterning of attitudes or perceptions revealed in these responses is no less reliable on that account. It is not accidental that the groups most

TABLE II-2
 CULTURED CHARACTERISTICS OF KENYA TEACHERS BY ETHNIC GROUP, POSITION AND SEX, 1961

	Percentages with Experience		Total This School	Total This School	Percentages with 10 or More Years Experience	Percentage Under 30 Years of Age	Percentages with Schooling		Percentage Reporting Upgrading Efforts		Percentage of Fathers with Occupational Status 1 or 2	Percentage Expressing Occupational Preference Other than Teaching
	Under 5 Years	Under 10 Years					< Form 4	> Form 4	Present	Past Only		
	Total This School	Under 5 Years	Under 10 Years	Total This School	Under 30 Years of Age	< Form 4	> Form 4	Present	Past Only	Percentage of Fathers with Occupational Status 1 or 2	Percentage Expressing Occupational Preference Other than Teaching	
<u>African teachers in African schools</u>												
<u>Primary schools</u>												
Male head	23	72	38	6	55	89	1	47	12	12	28	26
Male non-head	50	84	20	4	73	92	1	47	8	8	24	24
Female	59	82	21	7	33	97	..	35	3	11	19	19
Secondary schools; male	73	88	..	..	61	23	72	58	3	4	52	52
Trade schools; male	45	50	25	21	63	95	..	58	5	7	20	20
<u>Teachers in Arab primary schools (mainly Arab)</u>												
Male	25	78	34	3	60	68	8	29	21	28	16	16
Female	43	43	36	21	64	58	8	7	43	62	..	..
<u>Indian teachers in Indian schools</u>												
<u>Primary schools</u>												
Male head	6	72	78	..	12	..	61	11	39	56	17	17
Male non-head	36	67	40	13	50	..	47	31	14	43	16	16
Female	48	71	25	13	71	6	9	13	13	58	8	8
Secondary schools	17	53	60	19	26	1	92	23	14	55	24	24
Male	33	58	46	22	46	8	53	13	39	63	13	13
Goan teachers in Goan secondary schools; male	25	40	45	15	37	..	75	40	20	35	25	25
<u>European teachers in African schools</u>												
<u>Secondary schools</u>												
Male head	..	67	92	17	..	..	92	8	17	33	8	8
Male non-head	38	87	33	8	36	..	100	13	15	36	15	15
Female	38	92	35	..	52	..	92	4	12	68	15	15
Trade schools; male	21	43	36	14	13	8	50	38	7	14	29	29
<u>European teachers in European</u>												
<u>Primary schools</u>												
Male	6	56	81	13	13	..	62	6	37	63	13	13
Female	10	55	95	5	37	5	32	5	25	80	20	20
Secondary schools	..	47	80	7	..	..	87	7	20	62	27	27
Male	11	45	72	11	21	13	76	2	22	91	24	24
Female	..	..	..	..	..	..	..	..	..	..	..	..

ready to say they are considering a move are comparatively young and well schooled, two complementary factors favoring shift of job. Most of the non-European teachers had distinctly unimpressive formal qualifications, especially the young African women (though for some of them unusually favorable teacher-training opportunities may have made up for wretched initial schooling). To be sure, if new cohorts of well-prepared teachers could be turned out rapidly the situation could be ameliorated with comparative alacrity, provided one were ready to close his mind to the older and less-experienced individuals being simply discarded into semi-starvation and the even-more-unbearable ignominy of "worthlessness." But this is a series of unlikely and unpalatable "ifs." In actuality things must move slowly, and many of the Africans listed as "trained" will continue to obtain their "practical" preparation after only an intermediate schooling. Alarming as the educational prospects often may seem, if classrooms are turned over to ill-prepared young women or girls, many of the problems that will be highlighted in the following pages are exacerbated by the risk that men will drift out of classrooms faster than women are made ready to take their places with confidence. (The national education commission reported in 1964 [I:119] that 6,418 untrained teachers were still in classrooms, of whom 1,654 lacked both pedagogic drill and the KPE certificate indicating successful termination of intermediate schooling; the corresponding figures for 1966 were 9,351 and 1,356 [plus 2,884 reported as trained but who definitely had failed KPE].) The inexorable outcome of accelerating expansion of a school system, with its accelerating demands for teachers, has been an increase in the absolute numbers of unqualified teachers; under such circumstances to have reduced their relative numbers must be counted a considerable accomplishment. No doubt numerous readers

will notice the analogy that many countries have reduced the proportion of illiterates while the absolute number of illiterate individuals continues to grow.

When working with mass data, it is tempting to seek neat stereotypes of, for example, "the teacher." But the data of the present study, and even more the personal visits to schools, reveal teachers to be a most diverse group (see again Table II-2). A substantial proportion have tried in the past to raise their accreditation, and in several groups large proportions are doing so today whether or not they also did so in the past. It is perhaps a warranted inference that the teachers who now are least educated are most likely to have made efforts at self-improvement hitherto, even when the financial inducements to do so were smaller. For almost any developing country one could write a fascinating account of how small funds have been used to motivate teachers to use their private hours for improvement of qualifications, and of the eagerness of many to take advantage of such opportunities or to seek them out. (This struggle furnishes much of the story-line in C. E. Beeby's Quality of Education in Developing Countries.)

As was shown for the Form 4 pupils, different categories of teachers also display different distributions of social backgrounds, though some of the differences may be artifacts; e.g., the status of parents of teachers in trade schools. But one notices that European teachers in schools for European pupils come from homes of "higher" social status than do the Europeans who teach in African schools. (Undoubtedly, this feature varies also by religious denomination.) Few African teachers could have come from homes of more than very modest status, though the very lowliest among Africans were not likely to have sons or daughters who are now teaching. Among

Africans, as in each ethnic group, women teachers have a home status above that of their male peers. And, as elsewhere in the world, secondary teachers come from homes of higher status than do primary teachers.

Many essential differences among sets of teachers come into focus when one examines their comparative stability or persistence in the occupation. Of the Europeans teaching in European schools, four-fifths had at least ten years total professional experience, a figure that was undoubtedly distorted upward by the anticipation of independence, which was already cutting into the pupil population in European schools, discouraging recruitment of new teachers. Among Europeans teaching in secondary schools for African pupils, only the headmasters manifested comparable experience in the profession. The majority of Asian male headmasters of elementary schools and of Asian males teaching in secondary school were also experienced. African teachers typically had only a short professional experience, as we should expect in view of the fact that Kenya had only recently carried more than a handful of youth beyond the lowest grades; even persons who had completed intermediate school were decidedly few among any but the youngest of African adults despite a few older men who had been schooled by the missions. Ethnicity aside, it should be noticed, however, that long tenure in the profession and in service within Kenya was by no means uniformly reflected in long tenure of a position in a given school (see Appendix Table D-4).

The operation and administration of the primary and intermediate schools of Kenya was distributed over some thirty districts, with varying combinations of "managers" in each district. The Ministry generously turned over to us great quantities of information about individual districts; unfortunately only consolidated reports of those data can

be used here without revealing the identity of particular districts. Table II-3 presents frequency distributions for the thirty districts in 1961 with respect to sex and qualifications of teachers in African sub-secondary schools. In one district, for example, nearly nine-tenths of the male primary teachers held a certificate of T3 quality or better and in one district nearly as large a proportion of female primary teachers were as well trained. But for primary male and female teachers in the median district barely two-fifths of the teachers were T3 or higher in certificate. (Qualifications below T3 implied that the individual had not passed the KPE examination for successful completion of the intermediate school, then for most pupils Standard VIII.) Nearly all intermediate districts had more T3 teachers than did the best-staffed primary district. It is of interest (though not shown in a table) that, with the exception of Nairobi City, in no district were more than 35 per cent of the teachers women. For both primary and intermediate schools, the median district percentage was in the 15 to 19 per cent bracket. Of more interest, simple scattergrams display a modest positive correlation between femaleness of teachers district by district at the two levels, primary and intermediate. One suspects that this correlation reflects the past history of attendance of girls in the local schools and the associated availability of young women with qualifications to teach.

When we plotted the 1961 district proportions who held a T3 or better certificate among African teachers in primary against those in intermediate schools, we found no association. But the T3 level is not very discriminative with respect to intermediate teachers. More surprising may be the lack of any relationship between the tendency of a district to use a relatively large proportion of primary teachers with a

	Qualification Category					Total
	T1	T3	T2 Not Form 4	Form 4 or More	NR	
	N=57	N=286	N=54	N=44	N=71	
Teaching experience						
1 year or less	...	15	2	23	35	15
2-4 years	5	34	20	27	28	28
5-9 years	27	29	56	39	16	31
10-14 years	32	12	17	11	9	14
15 years or more	36	9	6	...	9	11
NR	...	1	...	...	4	1
Total	<u>100</u>	<u>100</u>	<u>101</u>	<u>100</u>	<u>100</u>	<u>100</u>
Age						
Under 25	9	38	24	25	51	34
25-29	16	34	43	50	18	32
30-34	21	12	22	20	14	15
35 and over	54	15	7	5	13	17
NR	...	2	4	...	4	2
Total	<u>100</u>	<u>101</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Vacation jobs and income supplements						
Farm	18	20	39	24	30	21
Other	7	5	2	4	4	5
None, NR	75	75	59	72	66	74
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Occupational preference						
Teaching preferred	82	69	48	59	79	69
Other preferred	7	24	50	34	16	25
NR	11	7	2	7	6	7
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>	<u>101</u>
Upgrading efforts						
None, vague	54	30	26	36	42	34
Applied teacher training	7	34	6	2	24	24
Kasse, Cambridge exams	4	17	46	45	6	19
Other present	16	1	4	...	4	4
Past only	5	10	7	7	14	10
NR	14	8	11	9	10	10
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>

TABLE II-6

UPGRADING EFFORTS, EXPERIENCE AND OCCUPATIONAL PREFERENCES OF
MALE AFRICAN PRIMARY SCHOOL TEACHERS BY QUALIFICATION
CATEGORY, 1961

	Qualification Category					Total
	T4	T3	T2 Not Form 4	Form 4 or More	NR	
	N=57	N=286	N=54	N=44	N=71	
Teaching experience						
1 year or less	...	15	2	23	35	15
2-4 years	5	34	20	27	28	28
5-9 years	27	29	56	39	16	31
10-14 years	32	12	17	11	9	14
15 years or more	36	9	6	...	9	11
NR	...	1	...	...	4	1
Total	<u>100</u>	<u>100</u>	<u>101</u>	<u>100</u>	<u>100</u>	<u>100</u>
Age						
Under 25	9	38	24	25	51	34
25-29	16	34	43	50	18	32
30-34	21	12	22	20	14	15
35 and over	54	15	7	5	13	17
NR	...	2	4	...	4	2
Total	<u>100</u>	<u>101</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Vacation jobs and income supplements						
Farm	18	20	39	24	30	21
Other	7	5	2	4	4	5
None, NR	75	75	59	72	66	74
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Occupational preference						
Teaching preferred	82	69	48	59	79	69
Other preferred	7	24	50	34	16	25
NR	11	7	2	7	6	7
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>	<u>101</u>
Upgrading efforts						
None, vague	54	30	26	36	42	34
Applied teacher training	7	34	6	2	24	24
Kasse, Cambridge exams	4	17	46	45	6	19
Other present	16	1	4	...	4	4
Past only	5	10	7	7	14	10
NR	14	8	11	9	10	10
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>

TABLE II-3

QUALIFICATION AND SEX CHARACTERISTICS OF AFRICAN TEACHERS,
1961: DISTRIBUTIONS AMONG DISTRICTS

Percentages	Primary School Teachers with T3 or Better Qualifications			Intermediate School Teachers		Percentages of Teachers who were Female	
	Male	Female	All	With T3 or Better	Completed Secondary or More	Primary	Intermediate
95-100				2			
90-94				3			
85-89	1			4			
80-84		1		3			
75-79		1	1	11	1		
70-74			1	4		1	
65-69		1		1			
60-64	1			1			
55-59	3	2	2				
50-54	7	4	6	1			
45-49	4	5	7				
40-44	7	4	7		1		
35-39	3	3	1				
30-34	1	3	2		1	1	1
25-29	1	3	1		2	3	3
20-24	2	2	2		2	7	6
15-19					1	6	8
10-14					10	9	8
5-9		1			6	3	2
0-4					6		2
Total districts	30	30	30	30	30	30	30

T3 certificate or better and its propensity to employ African teachers with completed secondary training (Form 4) as intermediate-school teachers. Finally, the correlation is virtually nil between a district's propensity to relatively high qualifications among the female and the male teachers. District behavior with respect to teacher qualifications displays few systematic patterns; whether there would be a higher correlation between the educational and the non-educational features of individual districts (such as, percentage of farmers making cash sales) is a problem that this report cannot take up.

Looking at the distributions of teachers by types of schools and types of qualifications (as given in Table II-1), for example, should prepare a reader to find that there is very little uniformity to be found among the teachers of Kenya, even within an ethnic group. Indeed, one of the main contributions of this analysis may be to demonstrate that undifferentiated pronouncements or generalizations about "teachers" in a developing country are virtually meaningless.

In the remaining chapters we will concentrate primarily on the large category of male African primary teachers, since they make up the vast majority of all Kenya teachers. Their family backgrounds and qualifications will be examined in detail and in relation to numerous correlates. The job preferences of the various sorts of teachers will be examined, and a long chapter will deal with their reading habits. Finally, the problems of teaching in Kenya, as seen by the teachers, will be presented along with numerous quotations volunteered by our respondents. As with the students, the sampling difficulties of the inquiry will be set forth in an appendix.

CHAPTER IX

THE SPECIAL CHARACTERISTICS OF AFRICAN MALE

PRIMARY TEACHERS

Much of the analysis in the following parts of this report will be devoted to tracing out the characteristics of the African men who are teaching in primary or intermediate standards (or both in some cases).¹ Occasionally for contrast some figures will be given for women teachers, for non-Africans, or for secondary teachers. But the group chosen is very populous, comprising nearly three-fourths of the nine-tenths of all teachers who are in sub-secondary classrooms. Many of both the defects and the triumphs of the Kenya school system in recent years must be attributed to these men. Some, even of the group we studied in 1961, will have achieved responsible positions of greater eminence, but most of them (if they still be teachers) will deplore their fate in the words of the many quotations introduced later in this report.

Different paces in the diffusion of schooling have meant also differences in demands for teachers and in the supplies of men (and women) potentially available to the schools. The tribal distributions of African male primary (and intermediate) school teachers in our sample, shown in the first columns of Table II-4, reflect these historic differentials along with the sheer size of the base tribal populations.

¹For simplicity in exposition, normally when "primary" is used hereafter, we mean primary plus intermediate teachers; the term "elementary" is not well established in Kenya. The context or the table will make clear if intermediate are being distinguished from primary teachers.

TABLE II-4

TRIBAL SELECTIVITY OF MALE AFRICAN PRIMARY SCHOOL TEACHERS
AND MALE AFRICAN STUDENTS IN FORM 4, 1961^a

	Percentage Distributions			Selectivity Indices	
	Total Male Population	Male Primary Teachers	Male Form 4 Students	Male Primary Teachers	Male Form 4 Students
Hamitic; Nilo-Hamitic	30.4	17.3	11.1	0.6	0.4
Kikuyu	29.1	28.4	50.3	1.0	1.8
Embu, Meru	10.6	9.7	8.1	0.9	0.8
Luyia	19.1	30.7	21.0	1.6	1.0
Coastal tribes	10.9	13.9	9.5	1.3	0.9
Total: Per cent	100.1	100.0	100.0		
Number		452	630		

^aExclusive of the Kamba and the Luo and Kisii; these tribes were under-represented because of severe floods.

Expressing the tribal percentages among teachers as ratios to tribal percentages of the total populations gives us selectivity ratios that can be compared with those for male secondary school students of Form 4. The table is set up to exclude the Kamba and the Luo-Kisii groups because these tribes were under-represented in the teacher samples due to disruption of mail by floods in the Machakos and southern Lake Victoria areas in late 1961. (There were no Ministry or other official data on tribal distributions of teachers.) For the tribes included in Table II-4, what stands out most clearly are the teacher-student contrasts in Kikuyu

and Luyia selectivity indices. The Luyia are heavily over-represented among the teachers, a fact that will show up in other guises in some of the analyses to follow. The Kikuyu, on the other hand, appear among teachers in almost their exact proportion of the total male population; however, they were found to almost twice expectancy among the African Form 4 boys. This Kikuyu pattern cannot be attributed to sample bias; however, sample bias in favor of the Nilo-Hamitic teachers overstates their share in the primary teacher cadres; the selectivity ratios for Nilo-Hamitic teachers were probably in fact about the same as for Form 4 students. (See Appendix E3.)

Clearly, if primary classes are taught in a vernacular while upper grades use a national or adopted-foreign medium of instruction, the pattern of tribes represented among teachers will vary from that to be expected if the language policy were different. And since Kenya's policy about a teaching medium has been undergoing changes, some discrepancy between 1961 and 1966 situations would be expected.

The varying qualifications for teaching held by men from different tribes, irrespective of whether they are teaching in their "native" area or not, are displayed in the first part of Table II-5. As would be expected, the groups most advanced in spread of literacy generally (the Kikuyu, Kamba and Luo) had the smallest proportions of teachers with no better than a T4 certificate (failure on the KPE examination with or without pedagogic training). Under the rubric T2 or better we include also all teachers (with or without "training") who at least completed the School Certificate. Again, the Kikuyu, Kamba and Luo (with a third of their elementary teachers at T2 or higher) are demonstrably excelling, especially in contrast with the Luyia and the Nilo-Hamitic teachers.

TABLE II-5

SCHOOLING, EXPERIENCE AND OCCUPATIONAL PREFERENCES OF MALE AFRICAN PRIMARY SCHOOL TEACHERS BY TRIBE, 1961

	Hamitic and Nilo- Hamitic	Kikuyu	Embu, Meru	Kamba	Luyia	Coastal	Nilotic	Total
	N=78	N=129	N=44	N=28	N=137	N=62	N=34	N=512
Qualification category								
T4	16	7	14	4	7	19	3	13
T3	72	61	62	61	69	58	67	65
T2 or more	12	32	24	35	14	23	30	22
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Number reported	68	102	42	23	124	52	30	441
NR	10	27	2	5	13	10	4	71
Per cent NR	13	21	5	18	10	16	12	14
Years of experience								
1 or less	15	21	16	18	10	16	12	15
2-4	28	34	30	21	26	18	32	28
5-9	28	31	27	29	32	34	29	31
10-14	15	5	16	21	19	13	15	14
15 or more	9	8	9	11	13	18	9	11
NR	4	1	2	...	...	2	3	1
Total	<u>99</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Age								
Under 25	39	44	43	43	18	36	23	34
25-29	32	34	27	18	34	27	38	32
30-34	10	10	11	21	20	18	18	15
35 and over	13	9	13	13	24	19	15	17
NR	1	2	...	...	4	...	6	2
Total	<u>100</u>	<u>99</u>	<u>99</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Vacation jobs and income supplements								
Farming	31	17	32	32	19	8	23	21
Other	3	2	9	4	6	6	6	5
None	66	81	59	64	75	86	71	74
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Occupational preference								
Teaching preferred	72	71	73	68	69	64	59	69
Other preferred	23	22	20	29	26	23	38	25
NR	5	7	7	3	5	13	3	6
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Upgrading efforts								
None, vague	31	31	36	32	32	50	29	34
Applied teacher training	34	25	9	14	29	13	26	24
Kasse, Cambridge exams	14	21	34	14	15	21	24	19
Other present	1	5	5	...	4	3	3	3
Past only	6	11	7	25	10	7	6	10
NR	14	7	9	14	10	6	12	10
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>99</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

The reported years of experience in teaching testify both to a rapidly expanding system of schools and one marked by heavy turnover among teachers, a situation that would assuredly stultify even the wisest plans of officials. Only to a slight degree could one attribute the greater frequency of good qualifications among Kikuyu teachers to either youth or freshness in the work (i.e., shortness of experience). Indirect evidence suggests that among the Kikuyu and the Embu there may have been a relatively high incidence of mobility out of teaching, the first step in a career having been a brief period of teaching. Such mobility is more likely to have depressed than to have improved the overall quality among those who remain in teaching, even as it has contributed also to the observed youthfulness of the teaching corps. Whether this will prove to be a continuing phenomenon remains to be seen.

Over and over we will come back to one of the basic questions we asked Kenya teachers (and discussed briefly in the preceding chapter), which was in essence: do they prefer teaching over any other occupation? (There is no need to repeat the cautions that must accompany use of responses to that query.) What is most interesting on this point (from the data of Table II-5) is the consistent 70 per cent across tribes who do prefer teaching. Only the Southern Nyanza teacher (Luo and Kisii) and possibly some of the Coastal people deviate substantially. Moreover, this pattern of answers seems to make sense in the light of both the circumstances of life common to various tribal groups at that time and their respective opportunities to teach. Kenya in 1961 was (and will be for some years yet) a country in which teaching is a male vocation. It has been the best occupational choice for men with some but limited schooling, and it also offered opportunities (even if mismanaged as badly as some of

our respondents contended) for self-improvement on the job. We do need to take note, however, of the fact that tribal differences in inclination toward teaching over some other occupation would have been attenuated by the selection into teaching in the first place.

More variable among tribes than expressed job preferences, are other occupational experiences. Thus (Table II-5) it is the Coastal and Kikuyu teachers among whom vacation jobs and income supplementation in other respects was least common; less than a fifth of the Kikuyu and only one in seven of the Coastal teachers report either farming or some other income supplementation, whereas a third of the Embu, the Kamba, and the Nilo-Hamitic teachers report supplementary income. The Embus stand out for having nearly a tenth with supplementary earnings from non-farm sources; by contrast only 2 per cent of 129 Kikuyu teachers had non-farm income. There are many factors at play here, perhaps even political encouragement of underreporting in some cases. We can speculate about decisions by these teachers in use of time for immediate income supplementation or for "investment" in augmenting human capital, and how these decisions affect their pursuit of goals. And certainly objective immediate opportunities for earning varied greatly among localities.

Looking first at immediate alternatives only and setting other things equal, we might find the low involvement of coastal teachers in farming plausible. Yet if opportunities to make use of farming are important, we should have expected more Kikuyu to use that route to additional income; perhaps reorganization of Kikuyu agriculture following the Mau Mau episode had discouraged traditional farming and teachers involvement in it on the side, but, as we will show later, the teachers

who supplemented their incomes by farming were not the most traditional. Again, if we hypothesize immediate opportunity as explaining supplementary economic activity among teachers, we should have expected a high proportion of non-farm sources among Kikuyu. Yet what we find is that the Embu are high on this (as we would predict) but the Kikuyu are at the bottom.

One could give literally hundreds of quotations from teachers on these financial aspects of teaching, but we will be content with two.

Here teachers are underpaid and therefore to meet their personal needs, they have some other jobs besides. There is hardly a primary teacher in Embu who does not own a small coffee garden or a small shop. These "other activities" take up much of the teacher's thoughts and time. As soon as it is 4 P.M. they all go away [Schedule 2025].

Let it pass that this comment is not wholly congruent with other complaints about overwork on lessons so teachers have not time to supplement salaries. But some of the tensions over this matter also involve administrative rules (as teacher 2908 indicates): "I think that either the teachers should be allowed to carry on a business during holidays instead of keeping guard at the school."

Perhaps we are over-emphasizing immediate opportunities for getting supplementary income and underplaying the longterm career-mindedness of youth from different subcultures. Some groups did display a more planful orientation to the future, doubtless based on more contacts with urban society; and among Kikuyu and Embu teachers there were unquestionably relatively more such men. This need not be accompanied with a greater degree of professionalization among teachers; the same initial means may further a man's progress either within teaching or when other career goals are envisaged. A man may see teaching as a self-contained career or he can view improvement of educational prospects as a better way to

enter other favored occupations. Certainly, a long-sighted calculation would have led the ambitious African male teacher to invest time in building up his own human capital rather than in diverting energy into immediately profitable farming or some other activity. Our data are inadequate to sorting out these situations, but they are consistent with the decisions by many teachers to concentrate time on upgrading themselves instead of putting any spare time into supplementary income activities. Some indirect support for this interpretation of Kikuyu and Embu behavior is found in Jerry B. Olson's study of Form 4 students of 1961, as reported in an earlier chapter. But the alternatives are not mutually exclusive with reference to entire sub-populations. Thus a high proportion of Embu teachers were preparing seriously for or currently taking one of the academic examinations, which speaks to the strong long-term ambitions of a large fraction of this group; yet many Embu also invested heavily in current supplementation of incomes and had strong preferences to remain a teacher while displaying comparative disinterest in the short-term practical courses open to teachers.

The Kikuyu pattern in the last section of the table must be interpreted in the light of their existing levels of qualification; so seen, the 21 per cent taking academic examinations is more impressive than a simple comparison across tribes might suggest. At the same time, this group is solidly represented among applicants to teacher-training programs suitable for quick upgrading, in this respect matching the generally less qualified Luyia and Nilo-Hamitic teachers. Yet when all is said about the many details of Table II-5, it is the basic similarities among tribes that are most impressive.

It is appropriate at this point to demonstrate to what extent variations in the formal qualifications of these African primary teachers may be associated with other characteristics. One basic feature of the Kenya school system, as of most rapidly expanding systems, is that teachers with longest experience are likely to have lower qualifications (Table II-6). This relationship is not quite as close with age, despite some inevitable correlation between age of teacher and years of experience, shown below in Table II-7. Few young men could have very long experience, to be sure, but only the classroom veterans contain older men; rarely does a man start teaching after the age of thirty. Once more, one infers that teaching resembles farming in most countries in that few individuals enter teaching after a prior career but many desert it for another vocation. It is no less impressive that the group who had received full secondary schooling (successfully completing Form 4 whatever their other training) were somewhat less experienced than teachers who reached T2 level but failed to finish Form 4. Progress toward an improved quality-mix of teachers is evidenced in these 1961 cross-section data. The whole problem of "educated" versus "trained" versus "qualified" has been the source of innumerable heartaches and of thousands of official hours of conferences. One side of the issue is neatly put by the teacher filling out schedule 2014:

I am not a trained teacher, and I do not think I need it because I have had enough experience to know how to go about my job. I would be very interested however to know the education systems of other countries from a first-hand experience.

In the very nature of things, we should expect current upgrading efforts by teachers in service to be more frequent among those having the lower qualifications (bottom of Table II-6).

TABLE II-6

UPGRADING EFFORTS, EXPERIENCE AND OCCUPATIONAL PREFERENCES OF
MALE AFRICAN PRIMARY SCHOOL TEACHERS BY QUALIFICATION
CATEGORY, 1961

	Qualification Category					Total
	T4	T3	T2 Not Form 4	Form 4 or More	NR	
	N=57	N=286	N=54	N=44	N=71	
Teaching experience						
1 year or less	...	15	2	23	35	15
2-4 years	5	34	20	27	28	28
5-9 years	27	29	56	39	16	31
10-14 years	32	12	17	11	9	14
15 years or more	36	9	6	...	9	11
NR	...	1	...	...	4	1
Total	<u>100</u>	<u>100</u>	<u>101</u>	<u>100</u>	<u>100</u>	<u>100</u>
Age						
Under 25	9	38	24	25	51	34
25-29	16	34	43	50	18	32
30-34	21	12	22	20	14	15
35 and over	54	15	7	5	13	17
NR	...	2	4	...	4	2
Total	<u>100</u>	<u>101</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Vacation jobs and income supplements						
Farm	18	20	39	24	30	21
Other	7	5	2	4	4	5
None, NR	75	75	59	72	66	74
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Occupational preference						
Teaching preferred	82	69	48	59	79	69
Other preferred	7	24	50	34	16	25
NR	11	7	2	7	6	7
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>	<u>101</u>
Upgrading efforts						
None, vague	54	30	26	36	42	34
Applied teacher training	7	34	6	2	24	24
Kasse, Cambridge exams	4	17	46	45	6	19
Other present	16	1	4	...	4	4
Past only	5	10	7	7	14	10
NR	14	8	11	9	10	10
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>

TABLE II-7

RELATIONSHIPS BETWEEN TEACHING EXPERIENCE AND
 REPORTED AGE; MALE AFRICAN PRIMARY SCHOOL
 TEACHERS, 1961

Age	Years of Teaching Experience					
	1 or Less	2	3-4	5-9	10-14	15 or More
Under 25	85	70	57	9	1	...
25-29	12	28	38	63	9	2
30-34	3	2	5	25	40	11
35-44	..	..	..	3	48	65
45 or more	..	..	..	..	1	22
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>99</u>	<u>100</u>
Number reported	78	53	87	155	67	55
NR on age	1	1	2	1	4	1

On the other hand, such individuals are older; they have less energy, their notions of a prepared teacher are perhaps antique, and many will have lost hope. As Table II-8 shows, diligence in trying to get a better certificate was displayed mainly by younger teachers, and almost of necessity by men with very short experience in teaching. The older men and/or those with more experiences were not very enterprising in those directions. Among the alternative routes to upgrading, the younger men most often sought entry to a training college for a one- or two-year upgrading course (the "Applied Teacher Training" rubric); such attempts dropped off sharply after age 30 though a few older men still hoped for or even actively sought such chances. Proportions actively working toward the more strictly academic examinations were remarkably high right up to age thirty-five, though rare beyond that age. One cannot fail to be impressed with the majority of teachers who are seeking to improve themselves, even if we make substantial allowance for exaggeration.

As a trained T3 teacher, I do not see the reason why I was not to be taken back again to the T3/T2 upgrading course, in a teacher training college since 1958 until 1961 to be improved in my academic work by the staff members in a training college, just after the very many times that I have been sitting for the very previous mentioned selection tests and examinations. Or otherwise I might have been doing all these selection tests and examinations as punishments of discouraging me by so doing the whole much work during all the above mentioned years [Schedule 2680].

One could hardly put the teacher's dilemma more clearly.

But others are wary of the whole idea of qualification hurdles, seeing them sometimes as related to the political insurrection of a few years previously (as teacher 2804). "Although I am untrained teacher I just feel in my heart that I can not stop teaching due of being interned."

TABLE II-8

DISTRIBUTIONS OF UPGRADING EFFORTS OF MALE AFRICAN PRIMARY SCHOOL TEACHERS
BY EXPERIENCE AND AGE, 1961

	None or Vague	Past Only	Applied Teacher Training	Kasse, Cambridge Exams	Other and NR	Total (%)	Total
	N=174	N=49	N=123	N=99	N=67		N=512
Teaching experience							
1 year or less	39	6	24	20	11	100	79
2 years	32	13	26	17	12	100	54
3-4 years	18	16	33	24	9	100	89
5-9 years	30	9	26	24	11	100	156
10-14 years	42	7	14	17	20	100	71
15 years or more	57	5	14	5	18	99	56
Age							
Under 25	32	12	25	18	13	100	173
25-29	24	10	33	25	8	100	163
30-34	35	10	14	26	15	100	77
35-44	52	7	11	9	21	100	75
45 or more	69	..	8	..	23	100	13

Just from the English of some of these comments we perceive why the teacher is content or feeling put upon. And different teachers fix upon quite distinct features of the whole upgrading and quality problem. Thus teacher 2405 gives us a kind of populist viewpoint:

I preferred the promotion of teachers be carried according to how a teacher is able to teach his own pupils during school lesson time in the presence of the Examiner.

Or (2786):

All untrained teachers should be given chances of promotion as I have noticed that Training College gives only what I call Methods and there [are] other teachers born teachers whom the Government never considers them.

One can find optimism amidst a flood of paranoid comments (as from teacher 2006):

I feel that I must try further education. So far I have not yet found the means of doing so, except by correspondence. I think that the more a teacher knows in his subject the better he enjoys the profession.

The almost rugged academicism of the "qualification system" is accepted by most teachers, seemingly, and sometimes defended quite eloquently (as by teacher 2429):

My one wish, for the last five years, has been farther and higher Education. Home affairs made me stop before I had a chance to do School Certificate; and so, as soon as I could earn, my first duty was to enrol as a student with the B.T.C. After three years of hard work I sat for and passed School Certificate. Still I am not satisfied; I have, several times, tried to get a bursary for oversea education, with little success. If only I could get that, I am prepared for whatever hardships.

But many others totally reject the "certificate bound" character of the teaching occupation (as teacher 2709):

Promotions--in teaching profession are very poorly given--unless a teacher passes the next examination--he cannot get a promotion. In other departments promotions are given on capability and sense of duty basis--why not likewise in teachers?

Turning back to the relationships with qualifications (Table II-6), the teachers least attracted to remaining in the occupation are those who had aspired to high academic preparation but had been blocked in their aims (T2 but not completion of Form 4); half of these were ready to take up a different line of work. Setting this category apart, the better a man's qualifications the weaker his attachment to teaching as a life career. Herein, as we have emphasized in so many other publications, lies the dilemma of relying upon improvement of teachers' qualifications as the road to improvement of a school system. Correspondingly, it is not without import that it is the least well-prepared teachers who display no marked interest in any particular road to a better certificate. The "blocked secondary group," just discussed, are an exception; one suspects that they are often expressing merely wishful thinking. The special importance of income-supplementation or of farming as an income source among this "blocked" set of men finds no obvious explanation, though it may testify to their half-professional character and is certainly associated with their relatively low degree of career commitment in teaching. This pattern provides some slight support, at least, to our earlier interpretation of the low incidence of income supplementation found among the Kikuyu teachers. But it is linked also with the experiences of struggle, disappointment, and interrupted education of many T2 (now P2) teachers (as shown later in Table II-10).

In questioning teachers about their views of teaching compared to other occupations, we sought to go beyond mere expressions of preference or sentiment and to elicit whether the individual had taken some concrete step toward locating an alternative vocation (see Table II-9). Considering first the contrasts among tribes, it is only the Luo-Kisii

TABLE II-9

CHARACTERISTICS ASSOCIATED WITH JOB PREFERENCES AND RELATED BEHAVIOR OF MALE AFRICAN
PRIMARY SCHOOL TEACHERS, 1961

	Percentages Expressing Preference for Some Other Occupation		Percentage Reporting Steps or Kinds of Steps			Total Numbers (at 100%)
	Total Reporting Some Preference (a)	Total Reporting Some Step (b)	Active	Essentially Passive	Ambiguous	
Tribe						
Hamitic and Nilo-Hamitic	23	26	8	13	5	73
Kikuyu	22	21	3	3	5	129
Erbu, Meru	21	16	5	7	4	44
Kamba	29	22	..	13	4	28
Luyia	26	27	10	12	5	137
Constal	23	16	5	3	3	62
Nilotic	36	39	21	12	6	34
Qualification category						
T4	3	6	4	2	..	57
T3, Form 1-3	24	23	6	11	6	236
T2, Not Form 4	50	43	17	22	9	54
Form 4 or more	34	36	20	11	5	44
NR	16	13	6	4	3	71
Teaching experience						
1 year or less	14	15	4	9	2	79
2 years	15	15	6	6	4	54
3-4 years	23	23	9	15	4	89
5-9 years	30	29	11	10	7	156
10-14 years	23	27	7	14	6	71
15 years or more	27	23	11	9	4	56
Age						
Under 25	17	18	5	9	4	173
25-29	29	28	12	10	6	163
30-34	31	26	9	12	5	77
35-44	24	22	7	11	4	75
45 and over	23	24	3	3	3	13
Upgrading efforts						
None	23	22	9	10	3	174
Past only	33	29	10	10	3	49
Applied teacher training	23	26	3	12	6	123
Kasse, Cambridge exam	29	26	11	10	5	99
Vacation job or income source						
Farm	41	37	15	10	12	103
Other	25	21	4	17	..	24
None	20	20	7	10	3	380

Among those with continuous full-time schooling, 21 per cent expressed preference for a non-teaching job as against 31 per cent for those with one or another discontinuity or part-time schooling intervals.

group who stand out both for lack of interest in teaching and for taking active measures to find another sort of work. In Table II-9 we may observe once again that teachers with the poorest qualifications display little interest in any other work and have made weak efforts to find it. Half of the men with a middling-good academic training (T2 without finishing Form 4) wish to leave teaching and have been looking for an alternative, though the proportion whose efforts could legitimately be designated as "active" was not impressive relative to the expressed discontent. By contrast, though only about a third of the men with the best certificates wish to find another career, these were the men who were most likely to take (and had taken) definite steps to open up new opportunities. One suspects that the "blocked" group as we have called them (T2 without Form 4) possessed a particular combination of personality traits as well as ambiguous qualifications--a situation that allowed them some realistic hope of making a satisfactory transfer of employment but by no means ensured success in the new endeavor. Classifying by experience we find that men newest to teaching are, at least for the time being, the most satisfied with that choice. Once the first two or three years have passed there seems to be a growing tendency to look around; this attitude is sustained at the same level (28 per cent non-teaching preference and 10 per cent active search) up to and including men with the longest experience in teaching. When we consider age instead of experience, this pattern is modified, however, with the peak of active search around thirty years of age and dropping off later.

In view of the previously remarked fact that investment in improving one's academic qualifications may be the best strategy, whether a man's goal is to rise within teaching or to enter another vocation, it

is interesting to relate upgrading efforts both to expressed preferences and to evidence of efforts made to find another job (next to last section of Table II-9). What we observed is no correlation at all with two very minor exceptions: (a) a slightly higher preference for other jobs among men taking the academic road to self-improvement and (b) a slightly lower level of active search for non-teaching jobs among those who had requested admission to a training-college upgrading course. These deviations are in the expected direction but are hardly impressive in magnitude. Unexpected a priori, though easily rationalized post hoc, is the finding that those who supplemented their pay by farming were the most interested in and the most active searchers for other jobs; that this ties in also with the T2 "blocked" category has been remarked above.

The alternative paths toward higher certification that have been mentioned, whatever a man's ultimate occupational destination, refer typically to efforts that would not interrupt an income-yielding position even though they may delay entry into teaching, and depend on subsistence allowances in training. Indeed it has been (and probably still is) to the interests of the Ministry to devise ways for improving qualifications of teachers before they begin to teach if possible, even though upgrading efforts have also been important in maintaining and improving the quality of teachers. Continuation of training at an early stage is the best investment of time from the teacher's point of view as well. Despite the enthusiasm of many in-service teachers for upgrading activities that would bring them back into the training colleges, we should not be surprised at the paths delineated by Table II-10. But that many teachers have been frustrated by trying to make the wisest decisions in these matters was pointed out by many of them (e.g., teacher 2013):

To give an example, since I left training I have never been able to attend any kind of a short course like the one they have in Makerere during vacation simply because the Ministry is not willing to meet the expense or else there are no such course.

The first section of Table II-10 shows that most teachers indeed have been able to move ahead in their careers without undue interruptions--apart from the special category of instructors in trade schools. (By "continuous full-time" we mean a man went straight through school in what we think of as the conventional manner. The "interrupted full-time" went so far in his schooling, broke off, perhaps to earn some money, and then resumed full-time training.) Women were especially prone to be regular and continual students, but for two quite distinct reasons: they were most often the untrained graduates of intermediate school only, on the one hand, but more women came from less poverty-stricken homes, on the other hand, and were able to pursue an uninterrupted course when they did begin it. Among men it was the best-educated male secondary-school teachers whose schooling had most often proceeded without interruptions, and among male primary teachers the headmasters had experienced uninterrupted schooling more often than others despite their somewhat greater age.

That there are many crosscutting forces at work, however, is shown by the data relating to teaching experience (third section of Table II-10). Uninterrupted schooling is becoming the usual thing, but the men who had been teaching for at least five years were as likely as not to break off their preparatory courses. The last part of the table confirms that it is the youngest teachers who have been able to move ahead without interruption, but beyond a fairly young age (which is also after a short teaching experience) vicissitudes of study have been as much individual as characteristic of whole cohorts of teachers.

TABLE II-10

CONTINUITY OF EDUCATION: AFRICAN TEACHERS BY TEACHING POST AND SEX; MALE AFRICAN PRIMARY TEACHERS BY QUALIFICATION CATEGORY, TEACHING EXPERIENCE AND AGE, 1961

	Full Time Continuous	Full Time Discontinuous	Other	Total		NR	Per Cent NR
				Per Cent	Number Reported		
Sex and Position							
Female Primary	79	14	7	100	57	3	5
Male Secondary	65	21	15	101	34	..	..
Male Primary: Head	51	39	10	100	148	6	4
Not Head	65	27	8	100	346	17	5
Male Trade	49	11	40	100	34	6	15
Qualification Category; African Male Primary Teachers							
T4	67	33	..	100	55	2	4
T3	68	24	8	100	274	12	4
T2, not Form 4	17	83	..	100	52	2	4
T2, Form 4	44	25	31	100	16	..	..
KT1 and other Form 4+	69	27	4	100	27	2	7
NR	80	14	6	100	66	5	7
Total	61	30	9	100	489	23	4
Teaching Experience; African Male Primary Teachers							
1 Year or less	85	12	3	100	76	3	4
2 Years	79	19	2	100	52	2	4
3-4 Years	64	31	5	100	86	3	3
5-9 Years	51	34	15	100	150	6	4
10-14 Years	47	43	10	100	69	2	3
15 Years or more	53	33	14	100	51	5	9
Age; African Male Primary Teachers							
Under 25	80	16	4	100	169	4	2
25-29	56	32	12	100	156	7	4
30-34	48	40	12	100	73	4	5
35-44	49	41	10	100	68	7	9
45 and over	50	42	8	100	12	1	8

To summarize the materials of Tables II-6 through II-10 seems to call for a mixed emphasis on shifts over time and on differential allocations of roles within schools based on both the quality and intensity of the teacher's academic exposure and his experience in and commitment to the schools (Tables II-6 and Appendix Table D-7). Quality and intensity of training was greater generally for those who had an opportunity to continue without interruption, rather than having to return to upgrading courses (even if full-time) after beginning to teach with only intermediate schooling or a bit of secondary work. Nor can various part-time alternatives compensate readily for gaps in systematic full-time study. But on each point there are exceptions: a third of the male headmasters, for example, had pursued interrupted careers (full or part time). When a society is beginning to undergo an explosion of educational ambitions, the situation contains many potentials. Different kinds of teachers will make different and multiple efforts and they will experience various combinations of frustration before rising standards become the usual thing and career lines become conventionalized. One African teacher, who was by no means depressed or complaining, summed it up with "I like teaching very much but it seems as if teaching hates me."

CHAPTER X

FAMILY BACKGROUNDS AND THE QUALIFICATIONS OF AFRICAN MALE PRIMARY TEACHERS

In Part I of this report it was brought out that there is not a neat and intimate relationship between Form 4 students and their social backgrounds such as we have come to take for granted in so many western societies. We expect to observe the assorting of families into economic sectors, occupations, educational traditions, and so on, a process that has been going on for generations. By contrast, the very structure of African Kenya during the pre-colonial period normally precluded a comparable selectivity, as certainly was the case with respect to the social origins of Kenya African teachers in 1961. But we might anticipate that, nevertheless, there would be systematic differences between such limited selectivity as did occur with respect to recruitment of primary and intermediate teachers and selectivity in the social origins of Form 4 students. For one thing, teachers are offspring of an older cohort of parents. Second, few of the present teachers could expect to attain as much education or as good an occupation as the Form 4 students of 1961; the typical teacher of 1961 taught younger children and he was far less schooled than the youth who virtually had finished his fourth year of secondary school. No doubt also, recruitment to teaching or persistence in that occupation was affected in some measure by the approach of national independence, although both societal room for

maneuver in teacher recruitment and the range of alternatives open to individuals who became teachers under the demand and supply situation of that time (and even today) were narrowly circumscribed.

A broad overview of the family backgrounds of Kenya teachers (by ethnic group, sex, and position in the school system) was presented in Table II-2 of Chapter VIII. (Additional details are included in Appendix Tables D-7, D-8, and D-9 for teachers of each ethnic group.) To put what follows into perspective, a recapitulation of education of the teachers' fathers is given in Table II-11. Although the contrasts by sex and level of school within any major ethnic category do indicate differences in social selectivity, differences between ethnic groups cannot be interpreted in the same way. For the contrasts among ethnic groups are in large degree indicators of the varying speed in the spread of education among the various subpopulations from which teachers are drawn.

So far as Africans are concerned, the figures for male primary teachers are close to estimates for the total population (Table II-12), although these teachers were much more likely to have fathers who had just a smattering of schooling than the population at large. The fact that selectivity is substantially greater for male African Form 4 students than for African male teachers in secondary schools is striking, even when we allow for the unreliability of a small sample; this reflects real situations (and very real problems for the staffing of secondary schools) in a period of political transition. Female primary school teachers have family backgrounds, as measured by parental education, that approximately match in selectivity those of the Form 4 boys. Female Form 4 students

TABLE II-11

SUMMARY RECAPITULATION OF EDUCATION OF FATHERS OF
KENYA TEACHERS BY SEX, ETHNIC GROUP, AND
POSITION, 1961

Ethnic Group and Type of School	Percentages of Fathers Illiterate		Percentages of Fathers Who Completed Secondary School or More	
	Male Teachers	Female Teachers	Male Teachers	Female Teachers
African in primary	62	31	0.2	None
African in trade	53		None	
African in secondary	42		None	
Arab in primary	48		16	
Indian in primary	15	9	40	65
Indian in secondary	8	5	56	57
Goan in secondary	5	None	28	60
European in European primary	None	None	45	81
European in European secondary	(10)	None	(60)	80
European in African trade	None		(20)	
European in African secondary	None	None	41	54

TABLE II-12

SELECTIVITY BY PARENTAL EDUCATION; AFRICAN TEACHERS
AND FORM 4 STUDENTS COMPARED, 1961

	Amount of Schooling				Total	
	None	Standards I to IV	Standards V to VIII	Beyond Intermediate School		
					%	N
Percentages						
Total male African population age 35-59	72.7	18.0	8.4	0.9	100.0	...
Male primary teachers	60.0	31.2	8.1	0.6	99.9	479
Male secondary teachers	45.1	38.6	16.2	...	99.9	31
Male students (Form 4)	34.0	42.0	20.6	3.4	100.0	624
Female primary teachers	34.4	44.3	18.0	3.3	100.0	61
Female students (Form 4)	5.7	48.8	35.3	10.2	100.0	88
Selectivity Indices						
Male primary teachers	0.8	1.7	1.0	0.7		
Male secondary teachers	0.6	2.2	1.9	...		
Male students (Form 4)	0.5	2.3	2.5	3.7		
Female primary teachers	0.5	2.5	2.1	3.7		
Female students (Form 4)	0.1	2.7	4.2	11.3		

are recruited considerably more selectively again, as was shown earlier, in Part I.

Before looking further into social selectivity of African primary teachers, or the relationships between family backgrounds and teacher characteristics, we would do well to examine how the parental traits themselves are patterned. And such an analysis is in itself of interest, for it gives us a window through which we may glimpse a pre-urban society in its accommodation to late colonial conditions and at the same time (for Kenya) observe the first steps toward westernization of economic life. Table II-13 was set up, accordingly, to highlight some potentially interesting relationships, as those between education and occupational status. At the same time, this table should make clear the extent to which certain measures are inherently overlapping. Two indices require specification at this point.

For this study, "parental leadership" was defined with a deliberate western bias: There are (a) various ranks of chiefs, court elders, location-council members, etc., positions that were in effect created by the British seeking to mould local government into western patterns. All of these were male. Presumably most of the "chiefs" had possessed at least informal leadership status in traditional circumstances, although this was by no means always the case. (b) There were various ways in which parents of our teachers might exercise leadership in one or another sort of adult education, formal or informal. Thus, for example, there was a Kenya African women's club (Mendelea ya wanawake), the members of which were actively fostering the diffusion of literacy and knowledge of western etiquette among African women, and there were the "better farmers" who served, along with junior agricultural-extension men in spreading

TABLE II-13

RELATIONSHIPS AMONG CHARACTERISTICS OF PARENTS OF MALE AFRICAN PRIMARY SCHOOL TEACHERS, 1961

	"Leaders"		Religious Affiliations			Father Ever Taught		Father's Education ^a		
	Yes	No	Direct	Fringe	No	Yes	No	Illiterate	Lower Primary	Inter-mediate Plus
	N=109	N=403	N=63	N=31	N=418	N=57	N=438			
Type of occupation (present)										
Farming	29	254	21	13	249	18	261	74	52	19
Artisan, tech., manual	9	71	7	6	67	6	73	12	17	19
White collar	40	28	10	6	52	10	57	13	25	26
Other	27	1	22	4	2	21	7	1	6	36
	G = -.762		G = -.558			G = -.597		G = .492		
Father's employer										
Religious	27	7	24	10	...	18	16	2	10	27
Government	44	50	11	5	78	12	82	15	25	43
Self	35	250	25	13	247	24	256	70	54	25
Farm	1	51	1	2	49	1	50	13	11	5
	G = .768		G = .645			G = .607		G = -.559		
Father ever taught										
Yes	55	2	39	13	5			*	25	45
No	53	385	24	18	396			100	75	55
	G = .990		G = .943					G = -.766		
Father's education										
Illiterate	24	16	10	9	263	1	279			
Lower primary	48	97	32	15	98	37	109			
Intermediate plus	28	254	16	5	19	18	22			
	G = .638		G = -.675			G = -.841				
Father's occupational status (present)										
1,2 (high)	36	5	9	3	29	9	32	9	7	11
3	43	54	34	8	55	25	72	9	33	60
4	14	74	8	9	71	10	75	16	26	18
5	12	221	9	9	215	11	219	66	34	11
	G = .830		G = .535			G = .545		G = -.511		
Parental leadership										
Yes			59	16	34	55	53	10	32	60
No			4	15	384	2	385	90	68	40
			G = .966			G = .990		G = -.795		
Mother's education										
Illiterate	62	314	27	11	57	28	343	99	55	40
Literate	39	56	32	18	326	27	68	1	45	60
	G = -.559		G = .627			G = -.724		G = .750		

^aNormalizing each column to the base 100.

information about agricultural improvements among practicing African farmers. (c) Catechists, church elders, lay preachers and evangelists, who received a cachet from the missions, also performed a communication role bridging from traditional to western culture. (d) Included also as "leaders" in westernization would be most of the men (of that earlier generation) who taught in regular schools, along with the few such women.

The last of these leadership categories, teachers, directly overlaps with the designation "father ever a teacher," but it should be noted that father now a teacher (or if not living, formerly a teacher mainly) and "ever taught" are not identical. Just how different these specifications actually are is shown by the first four entires under "yes" in respect to whether the father ever taught. Out of fifty-seven teachers reporting that their fathers had at some time taught, about equal numbers were classified occupationally as farmers or in some non-farm manual or white collar job, leaving at most twenty-one "other" who could have been mainly teachers.

Similarly, although there is overlap between category (c) of "leadership" and inclusion under religious affiliation, it was possible to be counted in the latter and not in the former. Category (c) of leadership was what we classed as a "direct" religious affiliation, while "fringe" affiliation referred to persons working for or with a mission or church but in a non-religious capacity. The extremely high gamma values for ordered associations between leadership and teaching or leadership and religious affiliation, respectively, stem in part, though only in part, from overlapping specifications. However, the tight relationship between religious affiliation and ever having taught is actually a manifestation of the crucial role of missions in education for the generation

of fathers of Kenya teachers of 1961; it is not due to overlapping specifications of variables.

Table II-12 contains several other interesting patterns. In the first block, relating types of occupation to leadership, there is a partly built-in association, but definitional overlap was not sufficient to have brought about the very high incidence of leadership among men reporting white-collar occupations. The association between type of occupation and religious affiliation, though still strong and with a similar ordering, is considerably less. The lowest gamma coefficient involving type of occupation is with education, computed this time to standardize for numbers in the columns on education. (The entries in every set of the last three columns for father's education total to 100 per cent, whereas all other entries in Table II-13 are numbers of cases.) As interesting as the association between occupational type and schooling are some of the deviations; e.g., 13 per cent of the illiterate fathers were in white-collar jobs. At the same time, although African men who had completed intermediate school are rare, a fifth of them were farmers and another fifth in manual jobs. It is interesting to notice, however, that 45 per cent of the fathers who had finished intermediate school had at some time been a teacher, as had a fourth of the fathers who did not get beyond Standard IV. Generally, however, we could predict the characteristics heading the columns of Table II-12 from the characteristics of the father's employer better than from the father's own occupational type. Most self-employed fathers were of course farmers, although quite a few were small traders. A few worked as hired men on European farms, and only one of the fifty-two who worked for farmers was included in our

count of leaders; educationally, however, these men were very like the self-employed.

Little has been said thus far about the mothers of our teachers. Table II-13 showed a close relationship between schooling of father and literacy of mother. (For base numbers and the infrequency of literate mothers, see Appendix Table D-7.) Few mothers of the male teachers were "leaders" and few had any connection with western churches; the fact that we counted either parent as warranting a "yes" in the leadership column made little difference in the total count. This would not have been quite the case had our data referred to mothers of female teachers; Table II-14, which distinguishes teachers in various kinds of African schools, orders the columns by degree of selectivity of origin.

TABLE II-14

PARENTAL LEADERSHIP AND RELIGIOUS AFFILIATION BY
SEX AND TYPE OF TEACHING POST; AFRICAN
TEACHERS, 1961

	Female Primary	Male Secondary	Male Primary		Male Trade
			Head	Not Head	
Percentages					
Parental leader (father and/or mother)	38	27	23	20	15
Parental religious affiliation (father and/or mother)					
Total with religious affiliation	37	24	21	17	10
Percentage direct	22	18	11	12	10
Percentage fringe	15	6	10	5	..
Proportions of mothers					
Leaders	13	6	4	2	..
Religious affiliations	7	6	2	2	..

Female teachers were again unambiguously first. As we should expect, male secondary teachers again lead primary headmasters who in turn lead ordinary primary male teachers. But all these male differences with respect to parental leadership or religious affiliation are minor compared to the contrast by sex of teacher. That African teachers in trade schools have been exposed to little of the more clerical tradition in their background is evident, whichever sense of "clerical" we stress.

The cross-section data relating teachers' age and experience to parental traits provides one sort of time perspective (see Table II-15). Younger men display social background features parallel to men with little experience in the classroom. Over-all, literate fathers and mothers (i.e., individuals with at least some schooling) made up roughly two-fifths and one-fifth respectively for the entire sample, with proportions slightly higher in the middle experience and age ranges, distinctly lower among men over thirty-five years of age. Teachers whose father has also been teacher tend to be the most characteristic of the middle categories in age and experience. Parental leadership was found most often among the more experienced teachers but definitely not among the men who today are oldest; there seems to have been one distinctive generation that is being identified in our tables. Attachment to western religion by parents falls into rather the same pattern.

The types of leadership exercised by the fathers of the 1961 teaching cadres reflect a particular stage in an historical transition. To draw inferences for the future requires a more generalized interpretation, considerable temerity, and many cautions to the reader. It seems clear, however, that still for some time there will be little selectivity of social origin for the bulk of the African primary teachers, that larger

TABLE II-15

RELATIONSHIPS BETWEEN CHARACTERISTICS OF PARENTS OF MALE AFRICAN PRIMARY SCHOOL
TEACHERS AND TEACHER'S AGE AND EXPERIENCE, 1961

	N	Percentage of Fathers Literate	Percentage of Mothers Literate	Parental Leaders (%)	Parental Religious Affiliation (%)	Father Ever a Teacher (%)	Father's Employer (Selected Categories)		
							Self (%)	Government (%)	Farm (%)
Years of teaching experience									
1 year or less	79	38	18	15	11	8	54	22	9
2 years	54	45	28	18	18	11	50	13	20
3-4 years	89	35	16	22	16	8	46	24	12
5-9 years	156	45	23	24	22	15	56	19	10
10-14 years	71	38	13	25	28	18	58	16	7
15 years or more	56	11	4	18	9	2	73	14	4
Age reported									
Under 25	173	39	21	17	13	7	53	19	12
25-29	104	41	20	23	21	15	53	20	11
30-34	77	42	21	32	32	23	56	14	10
35-44	75	17	5	15	11	4	67	16	7
45 and over	13	31	15	15	8	..	77	15	..

N.B. Differences in various other paternal occupational traits were virtually unrelated to teacher's age or experience.

proportions of them will be coming from homes in which one or both parents are literate simply because literacy is spreading rapidly, and that a rise of female literacy and female participation generally will be reflected in a slowly growing number of women teachers.

Each time that we explore the parental characteristics of teachers (as earlier of pupils) from different tribal backgrounds, we are faced with a mixture of obvious and of elusive features (Table II-16). Kikuyu, Luyia, and Luo teachers have relatively high proportions of educated mothers; however, only among the Luyia and Luo-Kisii groups have a majority of fathers even entered a schoolroom. Parental occupational status is unusually high among the Luyia, which in part reflects the large number of teachers among Luyia fathers. Kikuyu, Luyia, and Luo-Kisii parents include somewhat fewer farmers than among teachers of other tribal groups, somewhat more artisans and white-collar workers. In both instances these figures reveal long association with government, but the Luyia had also a distinctively high incidence of paternal association with missions. Leadership among parents is less observable than one might expect among the Kikuyu, and they do reject western churches; both features may be reverberations from the Mau Mau events of the mid-1950's.

The role of missions has had many chroniclers and the attitudes about missions are very diverse among Africans. Indeed, much of the tension over mission administration of schools all over sub-Saharan Africa far pre-dates Mau Mau or any other dramatic or well-reported controversies. Both views about missions in relations to schools can be found among our informants. On the positive side (schedule 2789),

TABLE II-16

PARENTAL CHARACTERISTICS OF MALE AFRICAN PRIMARY SCHOOL TEACHERS BY TRIBE, 1961

	Hamitic and Nilo- Hamitic	Kikuyu	Embu, Meru	Kamba	Luyia	Coastal	Nilotic	Total
	N=78	N=129	N=44	N=28	N=137	N=62	N=34	N=512
Father's education								
Illiterate	76	58	59	68	42	55	35	35
Lower primary	14	29	32	14	38	31	35	29
Intermediate or more	1	9	2	14	10	8	9	8
NR	9	4	7	4	10	6	21	8
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Mother literate or more (per cent)	8	22	14	7	25	10	24	18
Father's occupational status								
High (1,2)	11	6	5	..	12	5	9	8
Moderately high (3)	8	16	11	18	28	18	32	19
4	18	19	16	11	18	14	18	17
5	54	51	57	61	32	53	18	46
NR, unclassified	9	8	11	11	10	10	23	10
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Father's type of occupation								
Farming, etc.	59	58	73	68	44	61	38	55
White collar, adm.	23	12	14	7	15	6	6	13
Artisan, tech.	8	19	2	11	21	13	27	16
Other	1	4	..	4	10	10	6	6
NR, unclassified	9	8	11	11	10	10	23	10
Total	<u>100</u>	<u>101</u>	<u>100</u>	<u>101</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Father taught at some time; per cent	5	5	2	4	24	15	9	11
Father's employer								
Self	74	40	77	75	50	63	35	56
Farm worker	3	26	7	..	4	5	12	10
Government	14	22	9	4	26	10	26	18
Other	4	5	..	14	13	18	12	9
NR	5	6	7	7	7	5	15	7
Total	<u>100</u>	<u>99</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>	<u>100</u>	<u>100</u>
Parental leadership Father and/or mother	18	13	5	4	42	19	18	21
Parental religious affiliation								
Yes	8	2	2	7	28	15	9	12
Fringe	4	6	..	..	9	3	9	6
None	88	92	98	93	63	77	82	82
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

Without teachers there would be no progress in the country. I thank the government and the Missionaries who started Teacher Training Centres which have trained most of the teachers we have in Kenya today.

But quite an opposite view was set forth by teacher 2426 (as the schedules were numbered) who said,

An African teacher is a slave, at all levels especially the low grade teachers, who seem to be at the mercy of either the school Community or Committee. A teacher seems to be the one bound by all sorts of rules some of which have nothing to do with his duties such as what a teacher does after duty in the evening or night. The source of these trifling ideas is the Mission Managements.

In many respects, the Ministry has been prudent to focus its educational policies upon raising the qualifications of the teachers. Not only are the categories of teachers simple and direct and easily used by Treasury officials, they offer also a powerful incentive for improvement by individual teachers of their own skills. Intergeneration effects can be important allocators of men and can encourage improvement of teachers' quality; these facts are indicated with surprising clarity in Table II-17 when the historical context is taken into account. There are unambiguous tendencies toward "social heredity"; for example, failure of the father to even enter school was much more frequent (by about a 75 per cent excess) among men now holding the lowest quality of certificates; using the percentages from this table we find a gamma of .420 between grade of certificate and father's schooling. Men holding the best certificates as primary teachers today were several times as likely to have had a mother who possessed some schooling. The correlation of son's certificate with level of father's occupation was tenuous, though in the direction expected (for the way the data of Table II-17 are arranged, gamma is $-.123$). Teachers holding the best certificates were the least

TABLE II-17

PARENTAL CHARACTERISTICS OF MALE AFRICAN PRIMARY SCHOOL TEACHERS
BY TEACHER'S QUALIFICATION CATEGORY

	Qualification Category					Total
	T4	T3	T2: Not Form 4	Form 4 Plus	NR	
Father's education						
Illiterate	73	52	59	41	59	55
Lower primary	11	31	28	45	27	29
Intermediate plus	...	8	9	14	7	8
NR	16	9	4	...	7	8
Total	100	100	100	100	100	100
Mother literate or more (per cent)						
	7	19	17	30	15	18
Father's occupational status						
High (1,2)	10	7	6	14	9	8
Moderate high (3)	11	20	13	25	21	19
4	16	19	18	18	11	17
5	51	43	54	36	52	45
NR	12	11	9	7	7	11
Total	100	100	100	100	100	100
Father's type of occupation						
Farming, etc.	56	55	63	45	58	55
White collar, adm.	11	14	9	16	13	13
Artisan, tech.	18	15	13	20	17	16
Other	4	5	6	11	6	6
NR	12	11	9	7	7	10
Total	101	100	100	99	101	100
Father taught at some time (per cent)						
	7	12	15	23	3	11
Father's employer						
Self	55	59	63	41	47	56
Farm worker	5	11	6	9	17	10
Government	19	15	18	27	24	18
Other	9	9	6	18	7	9
NR	12	6	7	5	6	7
Total	100	100	100	100	101	100
Parental leaders (father and/or mother)						
	18	22	20	30	18	21
Parental religious affiliation						
Yes	9	15	7	16	7	12
Fringe	5	5	6	11	7	6
None	86	80	87	73	86	82
Total	100	100	100	100	100	100

often sons of farmers but somewhat more often sons of men in white-collar jobs, semi-professional work, or teaching.

Summarizing these assorted and by no means independent characteristics of the families of origin of variously qualified (or unqualified) teachers, it is noteworthy that the proportion of fathers who had themselves taught tripled with the rise in quality of the son's certificate. And, as much evidence now prepares us to anticipate, if a son has taken his own school certificate, one or the other parent is more likely to be a community leader (though at best fewer than a third of all parents were leaders) and to have at least a weak attachment to western religion (though again in the aggregate this was uncommon).

Once more we return to examining the correlates of the upgrading efforts made by male primary teachers. The first four columns of Table II-18 are ordered according to the level of achievement implicit as goals of the current and past upgrading efforts reported. Illiteracy of either parent is contraindicative of efforts to improve qualifications by the individual teacher (gamma of .222 for literate versus illiterate father and .197 for mother). Using fuller information on fathers to distinguish those completing intermediate school or more increases the relationship a little ($G_{abc} = .371$). Greater parental contact with missions and having a father who at some time taught increases somewhat the likelihood a teacher will engage in efforts to upgrade his qualifications and it increases the level of attainment to which these efforts are directed. On the other hand, given the overlap between teaching and parental leadership, the most striking fact about the latter is its low association with upgrading efforts. The types of leadership we were able to distinguish among fathers clearly contributed at one stage of development

TABLE II-18

DISTRIBUTIONS OF UPGRADING EFFORTS BY PARENTAL BACKGROUND; MALE AFRICAN
PRIMARY SCHOOL TEACHERS, 1961

	None or Vague	Past Only	Applied Teacher Training	Kasse, Cambridge Exams	Other and NR	Total		Gamma
						%	N	
Father's education								
a) Illiterate	39	10	21	18	12	100	282	$G_{a/bc} = .222$
b) Lower primary	30 } 25	10 } 11	26 } 28	22 } 23	12 } 13	100	149	$G_{abc} = .371$
c) Intermediate or more	7	13	37	28	15	100	40	
Mother's education								
Illiterate	36	9	23	19	13	100	376	$G = .197$
Literate	23	13	28	24	12	100	95	
Father ever taught								
Yes	26	14	25	28	7	100	57	$G = .202$
No	36	9	24	18	13	100	438	
Father's employer								
Farm	23	15	23	19	20	100	52	$G = .151$
Self	38	8	25	17	12	100	285	
Government	33	21	28	11	7	100	94	
Religious	18	15	15	44	8	100	34	
Father's occupation type								
Farming	39	9	22	18	12	100	283	$G = .185$
Artisan, tech., manual	31	9	25	21	14	100	80	
White collar	25	12	34	19	10	100	68	
Other prof.	14	25	18	32	11	100	28	
Parental leadership								
Yes	33	10	27	26	4	100	109	$G = .116$
No	34	9	23	18	16	100	403	
Parental religious affiliation								
a) Direct	30	11	27	27	5	100	63	$G_{ab} = .013$
b) Fringe	32	7	26	29	6	100	31	$G_{bc} = -.173$
c) None	35	10	23	18	14	100	418	$G_{ac} = .164$
								$G_{abc} = -.104$

in Kenya to the likelihood that sons and daughters would become teachers. But this kind of leadership was for a brief epoch, and in the perspectives of emerging independence it was a tie to the past even as it had served earlier to bridge between cultures. Although even the educational associations are moderate, with little predictive power for individual cases; in general the attribute of the father that seems to have contributed most to fostering educational ambition in sons was education itself rather than any particular role in the larger social and occupational structure.

A man's family background does not seem to make much difference with respect to his job preferences or his efforts to obtain employment other than teaching (see Table II-19). If we know that a man's parents are leaders, that his father has been or is now a teacher, that he has had experience beyond his tribal territory, and so on, we may be able to predict that he is more likely than otherwise to be a superior teacher. But this cannot be turned around to suggest that most of the better teachers can claim such origins. Indeed, the best qualified teachers do not come in populous clusters from particular tribes or from particular kinds of socio-economic home situations. As Table II-18 makes clear, whether parents are leaders neither ties a man to nor weans him away from teaching, and teachers whose fathers have taught are somewhat more, not less, inclined to look to other jobs or occupations as preferable to teaching. They are decidedly more active in pursuit of such ends than other primary teachers, just as they were also likely to have higher qualifications to start with, and more ambitious and academic self-improvement goals.

TABLE II-19

RELATIONSHIPS OF PARENTAL BACKGROUNDS TO JOB PREFERENCES AND RELATED BEHAVIOR
OF MALE AFRICAN PRIMARY SCHOOL TEACHERS, 1961

	Percentages Expressing Preferences for Some Other Occupation		Percentages Reporting Steps or Kinds of Steps			Total N (at 100%)	Gamma for Preference Dichotomies Using Absolute Numbers
	Total Reporting Some Preference	Total Reporting Some Step	Active	Passive	Ambiguous		
Father's education							
Illiterate	22	21	6	10	5	282	G = .036
Lower primary	27	26	10	13	3	149	
Intermediate plus	38	33	17	8	8	40	
Father taught at some time							
Yes	35	36	25	7	4	57	G = -.320
No	24	22	6	11	5	438	
Parental leader							
Yes	28	27	17	6	4	109	G = .003
No	24	23	6	12	5	403	
Parental religious affiliation							
a) Direct	27	26	13	11	3	63	G _{ab} = .079
b) Fringe	39	32	16	16	..	31	G _{bc} = .076
d) None	23	22	7	10	5	418	G _{ac} = .003 G _{abc} = .006

CHAPTER XI

READING HABITS OF KENYA TEACHERS

It is least arguable that the quality of a teacher is indicated better by what he **reads** than by his certification. Reading patterns may, therefore, be of particular interest in sorting out the more and the less promising teachers among a large cadre of whom the majority have only the most limited of formal schooling. Furthermore, reading is critical in any program for upgrading teachers during service. The Ministry operated or sponsored a variety of schemes for self-improvement, the rewards of success being tangible improvements in pay or position. Reading habits are of interest also as they may reflect or implicitly reject the historic link between missions and schools and the tie of reading to the Scriptures. The questionnaires accordingly included questions concerning ownership of books and readership of magazines and newspapers, the responses to which were intensively analyzed. (The magazines listed were classified with the assistance of locally-resident anthropologists and editors.)

Several of the main ethnic differences in book ownership and in magazine reading are summarized in Table II-20 (and in greater detail in Appendix Table IIA-16). Ethnic contrasts are conspicuous, both between and within the groups. Only a handful of the African **male** teachers (mainly headmasters in primary schools and, especially, teachers in secondary schools) have yet acquired a habit of reading

TABLE II-20

SUMMARY OF TEACHERS' READING HABITS BY ETHNIC GROUPS, POSITIONS AND SEX

	Percentages Owning Less than 50 Books	Percentages Owning 100 or More Books	Percentages Reading Magazines Classified			
			News	Religious	Literary	Education
<u>African teachers in African schools</u>						
Primary schools						
Male head	62	14	16	28	8	13
Male non-head	67	13	13	18	7	7
Female	81	..	12	23	11	5
Secondary schools						
Male	19	61	33	21	19	36
Trade schools						
Male	56	..	9	24	43	3
<u>Teachers in Arab primary schools</u>						
Male	21	61	33	5	30	35
Female	53	10	21	..	6	43
<u>Indian teachers in Indian schools</u>						
Primary schools						
Male head	19	66	28	16	56	56
Male non-head	15	56	47	15	69	44
Female	39	31	34	8	65	52
Secondary schools						
Male	11	72	44	9	62	39
Female	17	60	34	22	66	37
<u>Goan teachers in Goan secondary schools</u>						
Male	20	47	40	..	40	25
<u>European teachers in African schools</u>						
Secondary schools						
Male	2	95	55	32	44	24
Female	..	100	64	48	56	20
Trade schools						
Male	36	54	31	..	38	..
<u>European teachers in European schools</u>						
Primary schools						
Male	..	100	7	7	21	57
Female	..	100	39	6	28	28
Secondary schools						
Male	..	92	36	..	50	21
Female	3	92	26	7	51	21

books. Given the low salaries paid African teachers, to many the cost of a book is an insupportable drain on a tiny salary; others hesitate to buy books when there is no secure place in which to keep them. It is in terms like this that one should try to accept the complaints about pay scales or housing facilities, a few quotations about which are included later.

Since more of the non-Africans have spent a long period in school, their higher rate of book ownership is in part a reflection of opportunity to acquire more textbooks, costs aside. Women owned many fewer books than did men, except among Europeans, again in part due to shorter tenure and lower salaries. Table II-21 gives the distributions of book ownership by ethnic group in more detail, allowing one to identify the larger holdings, which are almost restricted to Europeans. Judged by this criterion, as by their educational background, European teachers serving in African schools are not inferior. Few Africans, except a few secondary teachers, own over a hundred books. Indians, Goans, and Arabs tend to fall in the intermediate categories, males usually possessing more books than female teachers and secondary more than primary teachers.

As has so often been reported from investigations in western countries, reading and communication generally are cumulative (Table II-22). Those teachers who own relatively few books were also least likely to read a newspaper or news magazine. Teachers who confined their reading to African news outlets became consistently fewer as number of books owned increased, a pattern that unquestionably reflects a high association between facility in use of English and ownership of books. Choice of English-language newspapers or news magazines

TABLE II-21

NUMBER OF BOOKS OWNED BY TEACHERS; DISTRIBUTIONS COMPARED BY ETHNIC COMMUNITY AND TYPE OF SCHOOL, 1961

Number of Books Owned	African					Arab	
	Primary			Sec.	Trade	Primary	
	Males		F	M	M	M	F
	H.	N.H.					
	(N=148)	(N=372)	(N=63)	(N=33)	(N=38)	(N=38)	(N=14)
	<u>100</u>	100	100	100	100	100	100
Under 10	2	9	6	3	7	...	21
10 - 24	28	24	35	9	5	5	14
25 - 49	24	25	14	6	28	13	7
50 - 74	17	13	10	12	25	13	7
75 - 99	4	4	3	6	7	3	...
100-199	7	8	...	27	...	32	7
200-499	5	3	...	30	...	13	14
500 or more	...	...	...	...	...	8	7
NR	13	14	32	6	28	13	21

	Indian Primary			Indian Sec.		Goan Sec.	
	Males		F	M	F	M	F
	H.	N.H.					
	(N= 18)	(N=134)	(N=71)	(N=106)	(N=39)	(N=20)	(N=10)
		<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Under 10	...	...	...	1	3	...	10
10 - 24	...	3	14	3	5	5	10
25 - 49	16	11	17	6	5	10	10
50 - 74	6	19	20	12	15	15	...
75 - 99	6	7	4	4	3	...	...
100-199	28	22	17	26	21	5	20
200-499	11	21	7	31	15	25	10
500 or more	16	8	1	9	10	5	...
NR	17	9	20	8	23	25	40

	European Primary		European Secondary		Europeans in African		
	M	F	M	F	Secondary		Trade
					M	F	M
	(N= 16)	(N= 20)	(N=15)	(N=46)	(N=52)	(N=30)	(N=15)
		<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Under 10	...	...	...	...	...	...	7
10 - 24	...	...	...	2	...	...	20
25 - 49	...	...	...	...	1	...	...
50 - 74	...	...	...	2	4	...	7
75 - 99	...	...	7	2	...	...	...
100-1	...	20	...	7	8	23	7
200-499	50	55	46	35	37	35	20
500 or more	38	5	40	30	38	19	13
NR	12	20	7	22	12	23	26

alone was somewhat more frequent among teachers with the largest investment in books. Overall, the highest gamma, of $-.180$, was obtained with the ordering used in this table, an ordering that was statistically most effective for other associations in later tables as well. (Shifting "none" below "African" reduces gamma slightly in this case, to $.165$.)

TABLE II-22
 PERCENTAGES READING DESIGNATED MAGAZINES BY NUMBER OF
 BOOKS OWNED; MALE AFRICAN PRIMARY SCHOOL
 TEACHERS, 1961

	Number of Books Owned			
	Under 25	25-49	50-99	100 and Over
	(N=164)	(N=131)	(N=89)	(N=56)
Newspapers and/or News Magazines				
English language only	23	23	20	32
English and African	35	50	60	39
None mentioned	34	15	15	21
African language only	18	12	6	7
Total	<u>100</u>	<u>100</u>	<u>101</u>	<u>99</u>
Religious Magazines	20	24	25	25
Negro Racial Magazines	8	15	16	25
African Language Local Magazines	29	24	23	18

Reading of religious magazines was quite unrelated to book ownership except for a slightly lower incidence among men with fewer than twenty-five books. Preference for the more obscure African-

language magazines paralleled the negative association with book ownership noted with respect to reading African-language newspapers only. Popularity of the Negro "racial" magazines (see Appendix J for a listing), which are international and usually published in English, occurred more commonly among those teachers who were best read as judged by large holdings of books.

Table II-20 distributed the reading of magazines among the Kenya ethnic groups along with the previously noted summarization on ownership of books. In all the secondary schools, news magazines are favorites. Indian teachers generally are heavy readers of this kind of publication. Literary magazines were widespread among Indians and among European secondary teachers, but almost ignored by African teachers (who at that time were seldom to be found outside a primary or intermediate classroom). Perhaps more surprising, Africans (except the handful who were secondary teachers) disdained the specifically educational magazines; the Indians claimed to find them useful, as did Europeans who were teaching primary classes for children of their own ethnic group. The Indian figures presumably reflect not only the advantages of Indian over African teachers with respect to educational qualifications, but also their higher incomes and their frequent residence in towns. Among Indians there was also a very intensive effort to develop and diffuse English as a medium of instruction at the time the survey was made. The marked emphasis on religious magazines among Europeans in African schools no doubt is a residue of mission influence, reflected also among African teachers.

In Appendix Table D-16 we bring together the details about reading, with emphasis upon ethnic differences. Materials published

especially for Africans are virtually ignored by other groups--perhaps an imprudent disdain in view of the then-approaching independence. Newspaper reading was reported with about the same frequency in all groups although concern with events outside Africa is displayed by only a handful of Africans, primarily by men whose interests have been broadened by teaching in secondary schools. The many specialized publications have the sorts of audience one would expect in most instances.

The various tribes differ but little in their magazine reading practices (Table II-23). In all tribes most of the male African primary teachers read English-language newspapers, often in addition to an African-language paper, but they seem to do little reading of news magazines. The low proportion of Kikuyu and Embu reading African-language newspapers only is consistent with the earlier observation about their relatively high educational level and their frequent attempts to upgrade themselves through the more orthodox academic channels. However, other than the extremes in members of Coastal tribes who possess few books and the Luo and Kisii who had the best record, ownership of books displays about the same pattern across tribes (with a median somewhat below fifty books per teacher). The relatively high incidence of religious magazines among the Luyia and the Nilo-Hamitic teachers matches other evidence testifying to their stronger affiliations to missions.

If we relate readership to a teacher's qualifications (rather than to his tribal affiliation), we observe that there is a loose tendency for newspapers and/or magazines to be more widely used by those teachers holding the better certificates (Table II-24), but of course the certificate is partly a proxy for amount of schooling.

TABLE II-23

BOOK OWNERSHIP AND MAGAZINE READING OF MALE AFRICAN PRIMARY SCHOOL
TEACHERS BY TRIBE, 1961

	Hamitic and Nilo- Hamitic	Kikuyu	Embu, Meru	Kamba	Luyia	Coastal	Nilotic	Total
	N=78	N=129	N=44	N=28	N=137	N=62	N=34	N=512
Books owned								
Under 25	32	29	39	32	29	45	23	32
25-49	32	26	34	14	24	19	23	26
50-99	18	18	14	14	20	10	23	17
100 or more	10	11	5	14	13	7	18	11
NR	8	16	9	25	13	19	12	14
Total	<u>100</u>	<u>100</u>	<u>101</u>	<u>99</u>	<u>99</u>	<u>100</u>	<u>99</u>	<u>100</u>
Newspapers								
English only	28	33	34	25	10	11	26	23
African only	11	9	9	18	13	23	..	12
Combination	44	31	36	32	59	31	59	43
No mention	17	27	21	25	18	35	15	23
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>
News magazines								
English only	5	7	9	...	7	6	21	7
African only	5	5	...	4	4	13	3	5
Combination	...	1	2	7	...	2	3	1
No mention	90	87	89	89	89	79	73	86
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>99</u>
Newspapers and/or News Magazines								
English only	27	33	36	25	10	13	29	23
African only	10	12	9	18	15	26	3	14
Combination	46	32	37	36	58	31	59	43
No mention	17	23	18	21	17	31	9	20
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>	<u>100</u>	<u>100</u>
Negro Racial Magazines (per cent mentioned)	13	15	7	25	15	3	12	13
Local African Magazines (per cent mentioned)	31	21	32	21	15	50	18	25
Religious Magazines (per cent mentioned)	26	22	25	7	26	18	18	22

TABLE II-24

BOOK OWNERSHIP AND MAGAZINE READING OF MALE AFRICAN PRIMARY SCHOOL TEACHERS BY QUALIFICATION CATEGORY, 1961

	T4	T3	T2 Not Form 4	Form 4 Plus	NR	Total
Books owned						
Under 25	41	33	15	9	49	32
25-49	21	28	26	20	21	26
50-99	12	18	24	32	7	17
100 or more	2	10	18	25	6	11
NR	23	11	17	14	17	14
Total	<u>99</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Newspapers						
English only	9	22	35	25	28	23
African only	28	11	•••	•••	20	12
Combination	37	48	46	45	22	43
No mention	26	20	19	30	30	23
Total	<u>100</u>	<u>101</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>
News Magazines						
English only	5	6	11	20	1	7
African only	5	3	6	9	11	5
Combination	•••	1	2	2	•••	1
No mention	90	89	81	69	88	87
Total	<u>100</u>	<u>99</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Newspaper and/or News Magazines						
English only	11	22	35	30	27	23
African only	30	11	6	2	22	14
Combination	37	49	46	45	24	43
No mention	23	18	13	23	27	20
Total	<u>101</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Negro Racial Magazines	5	15	18	11	7	13
Local African Magazines	30	26	15	15	35	25
Religious Magazines	19	22	26	23	24	22

A language hiatus with respect to newspaper reading occurs between the two lower levels of certificate (T4 and T3) as well as between T3 and T2, but in most other instances the contrast appears to be sharpest at a higher cutting-point on the scale of certificates. Ordering the newspaper reading as (a) English only, (b) both languages, (c) none, and (d) African only, we obtain a gamma coefficient of $-.304$. For news magazines, however, the main association with level of teachers' certificate is simply readership in any language. The closest relationship for Table II-24 is that between book ownership and type of certificate (gamma of $.527$). Yet the overlap is also impressive. More surprising, given the history of education in Kenya, is the lack of any positive relationship between patronage of religious magazines and level of teaching certificate. Undoubtedly, the clue on this point lies in the complex politics of the period and the associated secular shift among the more urbanized groups. A good many men listed nothing but one of the small, localized African-language magazines; this was more frequent among men with the lower qualifications (T4 and T3).

The distribution of patronage for English-language Negro "racial" journals is particularly interesting, in that they appear to be favored mainly by people who have expressed partial failure or frustration in their professional advance, the T2 certificate holders who had not completed Form 4. This is a group of whom we have spoken at several points; perhaps their frustrations turned them toward the "Afro-nationalistic" movements.

Some of the relationships between readership and experience or age are at the same time both interesting and puzzling, raising more

questions than we at least have so far been able to answer (Table II-25). Readership of the "racial" magazines appears to be unrelated to amount of teaching experience, although those journals are favored by the younger teachers, as we might expect. It does seem surprising, however, that such association as appears between reading of religious magazines and age also indicates that religious journals find most of their readers among the young. (To sort out some of these relationships must await a later multi-variate analysis.) Disdain for all newspapers and all news magazines is unrelated to either age or experiences, whereas the reading of newspapers and/or news magazines in African languages only occurs most frequently among older men and among those who are either very experienced or almost inexperienced at teaching. (This indicator of severely limited horizons among the newest teachers repeats other evidence to the same effect, and probably reflects the recruitment problems that plagued efforts at rapid expansion in school places at that time especially. The "new" were by no means all young.) Younger men were the most likely to confine their news reading to the English-language media, but a strong contingent of supporters of the English-language papers and magazines showed up among older African teachers who read African news media as well. Table II-26 brings together a variety of correlates of bookholding among African male primary teachers. New teachers have less time in which to acquire books, but holdings do build up rapidly during the early years among men who are determined to become owners of books. Among the most experienced teachers, however, a considerable proportion seemingly have become victims of "book fatigue," or perhaps their financial obligations are peculiarly onerous. Taking age separately from experience, we find a much looser association

TABLE II-25
MAGAZINE READING BY TEACHING EXPERIENCE AND AGE

	Years of Teaching Experience						Age				
	1 or Less	2	3-4	5-9	10-14	15 or More	Under 25	25-29	30-34	35-44	15 or More
	N=79	N=54	N=89	N=156	N=71	N=56	N=173	N=163	N=77	N=75	N=13
Percentages											
Newspapers and/or news magazines	24	30	31	23	17	11	30	27	18	4	15
English only	29	46	43	49	42	48	36	46	51	49	39
English and African	27	17	18	19	17	20	22	18	17	24	8
None mentioned	20	7	8	8	24	21	12	9	14	23	39
African only											
Religious magazines	25	22	24	22	27	11	22	26	25	15	15
Negro racial magazines	10	13	15	13	16	11	15	12	12	8	..
Local African magazines	25	24	20	22	24	39	27	20	30	24	62

TABLE II-26

RELATIONSHIP BETWEEN BOOKS OWNED AND SCHOOLING, EXPERIENCE AND OCCUPATIONAL PREFERENCES
OF MALE AFRICAN PRIMARY SCHOOL TEACHERS, 1961

	Number of Books Owned				Total			Gamma
	Under 25	25-49	50-99	100 or More	%	N	NR	
Teaching experience								
1 year or less	64	19	14	3	100	67	12	
2 years	43	39	14	4	100	51	3	
3-4 years	31	37	19	13	100	84	5	
5-9 years	32	22	23	23	100	132	24	
10-14 years	26	31	26	17	100	54	17	
15 years or more	38	41	19	2	100	47	9	
Age								
Under 25	45	32	17	6	100	155	18	
25-29	30	30	21	19	100	149	14	
30-34	36	25	21	18	100	56	21	
35-44	40	33	18	8	99	60	15	
45 and over	45	27	27	..	99	11	2	
Upgrading efforts								
a) None, vague	45	27	20	8	100	140	34	$G_{ab} = .011$
b) Past only	45	27	9	18	99	44	5	$G_{ac} = .168$
c) Applied teacher training	38	24	24	13	99	110	13	$G_{ad} = .423$
d) Kasse, Cambridge exams	17	40	22	22	101	88	11	$G_{cd} = .253$ $G_{abcd} = .241$
Interrupted education								
No interruptions	40	32	18	9	100	260	40	
Interrupted full time	35	26	23	16	100	124	22	$G = .376$
Other	29	21	26	24	100	38	5	
Steps to preferred occupation								
Active	26	26	26	23	101	35	7	
Passive or uncl.	30	27	26	17	100	100	18	$G = .227$
None or no other occupation preferred	41	31	18	10	100	305	47	
Vacation jobs and income supplements								
Farm	24	36	19	21	100	91	17	
Other	45	30	10	15	100	20	4	
None, H.F.	41	28	21	10	100	329	51	
Occupational preference								
Other preferred	30	25	26	19	100	105	21	
Teaching preferred	40	31	18	10	99	307	45	$G = -.221$

with book ownership, which is highest in the age range 25-35. Looked at either way, it seems clear, however, that the larger proportion of T4 teachers among the oldest men (and to a lesser extent among the most experienced teachers) may well account for the decline in book ownership at the older ages. The eagerness with which some young teachers are striving to acquire books was poignantly expressed by one (unquestionably exceptional) who wrote in the margin, "With my salary I have managed to buy 75 books during my two years."

Positive relationships between upgrading efforts and book ownership are to be expected, and they emerge clearly. Those teachers who have been making no recent or definite efforts to improve their standing in the profession tend to own only tiny sets of books. At the other extreme, teachers who have been striving to raise their qualifications by taking set academic examinations are heavy owners of books. As one of the African teachers put it in his free comments (2843), "My problems and needs as a teacher I need to be given a pass. And I need many books so that I may increase my knowledge. Therefore I may get a higher grade."

It is almost certainly no paradox that the teachers who have not tried to shift into another occupation but choose to remain teachers are slightly less likely to buy books. Individuals who rely on farming to supplement their income are heavier owners of books than men with non-farm connections. Casting a glance back on the many relationships displayed in the tables of this chapter, one may say that most of the associations are plausible in direction. But most associations are loose enough also to permit a high degree of independence among the

TABLE II-27

UPGRADING EFFORTS AND READING HABITS OF MALE AFRICAN
PRIMARY SCHOOL TEACHERS, 1961

	Upgrading Efforts			
	None or Vague	Past Only	Applied Teacher Training	Kasse, Cambridge Exams
	N=174	N=49	N=123	N=99
Books owned				
Under 25	36	41	34	15
25-49	22	25	22	35
50-99	16	8	22	19
100 or more	6	16	11	19
NR	20	10	11	11
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>99</u>
Newspapers and/or News Magazines				
English only	14	18	26	35
English and African	42	45	47	42
None mentioned	25	20	15	17
African only	19	16	12	5
Total	<u>100</u>	<u>99</u>	<u>100</u>	<u>99</u>
Per cent reading				
Religious magazines	21	20	30	20
Negro racial magazines	8	16	15	17
Local African magazines	32	27	24	16

observed traits, and an associated diversity of performance within any given category of teachers.

Up to this point in analyzing the reading of teachers we have emphasized internal components of the teacher's role, but with Table II-28a we enter upon an examination of how the background of individual teachers is reflected in their reading habits. Beginning again with book ownership, the relationships portrayed differ greatly in tightness. Thus, though mother's literacy outweighs that of father, sons of better-schooled parents definitely own more books. Father's occupation generally has little weight, though if the father had himself ever been a teacher there was a definite positive influence. As in many other tabulations, the fact that a teacher's father had worked for a man in government or for a religious or social semi-public employer had an additive effect. Sons of parents who were community leaders and who had direct responsibility in mission activities were the more prone to put part of their modest salaries into books.

The same background factors that favored ownership of books also favored teachers' use of periodical media (Table II-28 b), though with less effect than on purchase of books. Thus, while paternal education (or having taught) had no effect upon whether a man read a news magazine, sons of the better-schooled fathers were more likely to read both the English and the African-language sources for news; rarely did they read African-language news media only. Parental leadership had parallel effects. The obscure African magazines with limited localized circulation were more often specified by sons of less-educated parents and by teachers whose parents were not leaders. The politically active but less provincial who favored the Negro racial journals were somewhat

TABLE II-28a

RELATIONSHIP BETWEEN BOOK OWNERSHIP AND PARENTAL BACKGROUNDS
OF MALE AFRICAN PRIMARY SCHOOL TEACHERS, 1961

	Number of Books Owned				Total		
	Under 25	25-49	50-99	100 or More	%	Number Reported	NR
Father's education							
Illiterate	40	31	20	9	100	249	33
Literate	32	27	22	19	100	157	32
Mother's education							
Illiterate	40	31	17	11	99	331	45
Literate	22	21	36	21	100	76	19
Father's occupational status							
1,2 (high)	30	36	9	24	99	33	8
3	26	43	22	9	100	86	11
4	43	25	17	16	101	77	11
5	42	24	23	11	100	200	33
Father's type of occupation							
Farming	40	26	22	12	100	245	38
Artisan, tech.	32	29	29	10	100	59	9
White collar	41	34	5	20	100	69	11
Other prof.	26	52	13	10	101	23	5
Father taught at some time							
Yes	25	32	18	25	100	44	13
No	39	29	20	11	99	382	56
NR	21	36	21	21	99	14	3
Father's employer							
Farm worker	45	28	16	10	99	44	3
Self	39	27	20	13	99	244	41
Government	28	37	20	15	100	81	13
Other	30	32	24	14	100	37	10
Parental leaders							
Father and/or mother	26	40	15	18	99	87	22
Neither	40	27	22	11	100	353	50
Parental religious affiliation							
Yes, direct	25	37	20	18	100	51	12
Fringe	27	23	23	27	100	26	5
None	40	29	20	11	100	363	55

TABLE II-28b

PARENTAL BACKGROUND AND MAGAZINE READING OF MALE AFRICAN PRIMARY SCHOOL TEACHERS, 1961

	Father's Education		Father Ever Taught		Parental Leaders		Parental Religious Affiliations		
	Literate	Illiterate	Yes	No	Yes	No	Direct	Fringe	None
	N=189	N=282	N=57	N=438	N=109	N=403	N=63	N=31	N=418
Newspapers and/or news magazines									
English only	20	27	11	25	18	25	17	23	24
English and African	51	38	61	42	50	42	56	45	41
None	20	20	19	20	20	20	17	16	21
African only	9	16	9	14	12	14	9	16	14
Total	100	101	100	100	100	100	100	100	100
Religious magazines									
Yes	24	21	25	22	27	21	21	39	21
No	76	79	75	78	73	79	79	61	79
Total	100	100	100	100	100	100	100	100	100
Negro racial magazines									
Yes	16	11	14	13	16	12	17	23	12
No	84	89	86	87	84	88	83	77	88
Total	100	100	100	100	100	100	100	100	100
Local African magazines									
Yes	20	27	14	27	16	27	17	26	26
No	80	73	86	73	84	73	83	74	74
Total	100	100	100	100	100	100	100	100	100

more frequent among sons of better-schooled parents, as were the slightly larger number who read rather than ignored the religious press.

As has been reiterated in earlier pages, there are many reasons for seeking to identify those teachers who prefer teaching as an occupation, or alternatively are seeking to leave it. Table II-29 displays a somewhat disturbing fact, that the less committed teachers own more books, though they do not differ as a group in their preferences among the news magazines. Total disinterest in newspapers or news magazines was, paradoxically, most frequent by a wide margin among the teachers who had developed economic ties with the non-farm sector of the economy. Of the three target-focused magazines in the table, only the English-language Negro "racial" journals are favored more by the men hoping to leave teaching. Moreover, few teachers even lay claim to regular reading of any sort of periodical (other than newspapers). Nor is commitment to teaching clearly associated with individual efforts at professional upgrading; if anything those uncommitted to teaching make slightly more effort. And there is even a slight excess of leaders and adherents of western churches among parents of the men who are displaying more restlessness about having chosen to be a teacher; the second generation effect here is evidenced in a tendency to shift further toward urbanization and secularization of attitudes and orientations.

African primary school teachers view themselves as an underpaid occupation and they are indeed "underpaid" relative to the economic aspirations that have been opened to them by even their limited schooling. Perhaps they are not wholly myopic in setting forth the standards of living they need to perform their teaching roles effectively.

TABLE II-29

DIFFERENCES AMONG INCOME SUPPLEMENTATION AND JOB PREFERENCE CLASSES
IN READING PATTERNS, INCIDENCE OF MARKET-ORIENTED COMMENTS, AND
PARENTAL LEADERSHIP; MALE AFRICAN PRIMARY SCHOOL
TEACHERS, 1961

	Vacation Job or Income Source			Occupational Preference	
	None	Farm	Other	Teaching	Other
	N=380	N=108	N=24	N=352	N=126
Open-end comments on					
Labor market and students	12	11	4	12	12
Labor market and teachers	17	23	17	16	25
Newspapers and/or news magazines					
English only	22	28	17	23	25
English and African	24	45	25	44	43
None mentioned	20	14	46	20	18
African only	14	13	12	14	14
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>	<u>100</u>
Religious magazines	25	16	12	24	17
Negro racial magazines	12	18	8	11	19
Local African magazines	27	20	12	26	22
Books owned					
Under 25	35	20	38	35	25
25-49	24	31	25	27	21
50-99	18	16	8	16	21
100 or more	9	18	12	9	16
NR	23	16	17	13	17
Total	<u>99</u>	<u>101</u>	<u>100</u>	<u>100</u>	<u>100</u>
Upgrading efforts					
None, vague	29	29	36	35	32
Past only	17	8	10	8	13
Applied teacher training	29	23	24	26	22
Kasse, Cambridge exams	12	28	17	18	23
Other and NR	13	12	13	13	10
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Parental leadership	19	30	21	20	24
Parental religious affiliation	18	18	25	16	23

Consequently, as we have seen, many do engage in supplementary activities or seek out vacation jobs as a source of supplementary income. If we think of the reading patterns, book ownership, and various up-grading programs as in part complementary roads and to an improved professional status, not merely substitutive uses of time, one can see these supplementary income activities in a new light. That it takes money to prepare for Cambridge examinations was indeed remarked by teachers, though not usually in conjunction with comments about supplementing teacher pay by outside or vacation activities. Thus we find personal pleas such as these (teachers 2644 and 2618):

Since Secondary Schools could not take all the pupils because they were or are few then I was not one of the lucky ones. Now that I am a teacher and I have an opportunity for private studies there is no sufficient money to allow me enjoy both my studies and leisure hours.

How can I pass Cambridge. Passing this needs money but I have less money to spend on it. Why can't Education Department promote some capable teachers automatically. I have been teaching the higher classes since ever I began teaching 1956 up to now and I teach them better than other T.2's and K.T.1's but I cannot even be considered for up-grading. Can you do any coaching of any examination. Since the C.E.E. (Competitive Entrance Examination) is now being abolished in most parts of Kenya, why can't the teachers also be promoted according to their ability, without doing exam.

Returning to the statistical evidence, we found, somewhat to our surprise, that teachers who obtain supplementary income from farming are the most likely to have relatively large libraries and the least likely to have under twenty-five books; men with other income sources differ very little from those with none so far as book ownership is concerned. Furthermore, it was teachers with income from agriculture who were most frequently readers of English-language newspapers and news magazines. This strongly supports the notion that for a significant fraction of teachers there are indeed complementary as well as substitutive factors

in the choice of immediate income supplementation vis-a-vis investment in learning via acquisition of a personal library. The fact that men with attachment to the land are markedly more inclined to upgrade themselves by working toward the Cambridge examinations, which also presuppose the highest levels of achievement, is a further measure of this complementarity of means. This complex situation with respect to income from farming becomes somewhat more understandable when we take notice of the fact that, among men with some farm income beyond their salary, parents were more likely to be leaders, while reliance on non-farm sources is weakly associated with parental religious affiliations. Again, teachers who seem to retain closest ties with the land are somewhat more prone to read the Negro racial magazines while the more strictly committed group of teachers favor the religious magazines.

As we probe further into these relationships, it becomes evident that the supplementation of salaries by farming is not on the whole a traditionalist phenomenon but rather one associated simultaneously with secularization and with particularly favorable family circumstances and may even contribute indirectly toward community progress in the modernization of African farming practices.

CHAPTER XII

THE EXPRESSED PROBLEMS OF AFRICAN TEACHERS

At the end of each questionnaire there was extensive space in which each teacher was requested to make comments: "Use this page to tell us of your problems and unfilled needs as a teacher and how you feel about educational issues you consider especially important?" The teacher might emphasize mainly personal concerns or discuss mainly the problems of the whole educational system; most teachers made some comment and if they said more than a few words tended to organize their comments systematically under the two headings. The authors are deeply indebted to Kusum Misra for her painstaking and skillful analysis of these responses, as well as for her assistance on other parts of this report. What follows is a limited summary presentation of her detailed coding of the open-end remarks.

Although a large majority of all types of teachers did make some response to the invitation, lack of comment was considerably more frequent in some groups than in others (see last line of Table II-30 on page 178). Most disinclined to write something down were European women teaching in African secondary schools, of whom a third did not comment; non-response ranging from 17 to 23 per cent was found among male teachers in secondary schools, matched at the primary level only by Arab women. The familiar recalcitrance of British citizens to census and similar inquiries was exacerbated among some of the teachers in European schools because of the timing of the study. The higher

non-response rates of Europeans in secondary schools reflected also a restraint in making personal pleas that was less operative in other groups with lesser cultural reticence and/or survey-wise sophistication--accompanied, perhaps by relatively lesser degrees of dissatisfaction with "the system," their place in it, and the amenities open to them. In lesser degree, some of these same factors may have slightly damped response rates among Asian and African secondary-school teachers as well. European primary teachers acted quite differently, and among these it was the women who had most to say, especially about what they saw as sex-discrimination in pay or conditions of work. Some grumbled at the special handicaps of married women seeking suitable work in a limited labor market. Every one of the European women teaching in primary schools made some complaint.

The response rate among African teachers was very high and comments were usually fullsome, often running to two folio pages; indeed, a few individuals came to the Mission office for further discussion of their problems. There was a poignancy in some of these pleas that underlined the isolation of many African primary teachers, who saw this chance to put down their ideas as a unique opportunity to communicate with someone of status and a possible source of improvement in the situation for themselves or their schools. Many asked for personal intervention to aid them in entering a training college, in obtaining a scholarship for overseas study, or to remedy some pressing personal problem. On occasions we could not be other than touched by the gratitude expressed to us for opportunities to set attitudes on paper.

As a teacher I should thank you very much to spare me this chance to express my views on educational issue (schedule 2652).

I am very much pleased to fill or state unfilled needs as teacher in this paper. But before this, I would like to thank whom he or she concerned who send all these forms to be filled by all teachers in the colony [schedule 2836].

And

I personally feel that there should be a body apart from teacher training who advice teachers and help them on their individual problems. Plus finding out of same, in many ways such this Questionnaire, which I liked and enjoyed filling it for the first time in life [teacher 2593].

One could identify some comments as surely grumbling, but in most instances the writers were obviously telling about real and urgent problems. They were also, often quite avowedly, testifying to the great information gap and the chronic misunderstanding between teachers and the administration of the school system. These freely written comments were as revealing of the conditions of teachers in a lagging though developing country and of the communication gaps that plague such a country as any study specially designed to study communication could have been.

Inevitably we have anticipated in some measure the substance of the responses while describing the response behavior of the teachers, but only cursorily, and in the most general terms. In Table II-30 the comments have been categorized under ten main rubrics. We begin by looking at impersonal judgments concerning curriculum, acculturation of pupils, and teaching methods.

As has been implied already, few other than European teachers were inclined (or, perhaps, qualified) to comment in detail on pedagogical issues; for this and other reasons this rubric is not retained in subsequent cross-tabulations. Complaints about rote learning were most frequent (40 per cent) among European men teaching African secondary boys, perhaps a rather natural reaction to the pressures those teachers

TABLE II-30
 PERCEPTIONS OF TEACHERS OPERATING ON ESTABLISHED TEACHING SCHEDULES: SOME SECONDARY TEACHERS FROM CONTEMPORARY ANALYSIS OF OPEN-END RESPONSES, 1961, BY ETHNIC
 COGNITION, SEX AND TYPE OF SCHOOL

	Africans						Arabs in:				Indians or Jains in:				Europeans in:			
	Primary ^a			Sec.	Trade		Arab		Indian		Indian and Jain		European		European		African Schools	
	Males		F	M	M		M	F	M	F	M	F	M	F	M	F	M	F
	H.	N.H.																
	(N=176)	(N=351)	(N=68)	(N=33)	(N=10)	(N=38)	(N=14)	(N=12)	(N=75)	(N=52)	(N=13)	(N=16)	(N=15)	(N=52)	(N=26)	(N=15)		
1 Interaction; education hierarchy and community Total complains Authority relations Other	29 16 13	31 20 11	37 29 8	67 40 27	23 17 10	63 60 3	43 29 14	51 44 7	71 59 12	50 40 10	54 39 15	50 50 ..	63 63 ..	79 79 ..	42 34 8	23 21 2	24 21 3	53 46 7
2 Discrimination: favoritism (except sex)	6	10	..	42	..	24	..	5	3	13	4	..	..	..	..	..	..	..
3 Pay, fringe benefits etc. (except housing)	79	71	62	76	52	71	22	54	63	55	54	44	42	79	33	37	41	47
4 Teacher quality deficiencies	22	24	22	15	32	37	23	43	67	44	50	44	25	63	40	49	48	53
5 Upgrading of teachers	35	33	13	33	32	32	14	22	5	17	10	..	..	..	2	4	..	..
6 Lack of reading materials	9	7	3	6	7	6	7	3	3	10	4	11	..	5	14	11	14	..
7 Labor markets and students	10	13	24	21	15	..	32	33	32	32	36	28	..	79	32	23	14	47

TABLE II-30 Continued

	Africans						Arabs in:			Indians or Goans in:				Europeans in:			
	Primary ^a			Sec.	Trade		Arab		Indian		Indian and Goan		European		African Schools		
	Males		F			Primary	Primary	Primary	Primary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Trade	
	H.	N.H.				(N=38)	(N=14)	(N=153)	(N=75)	(N=124)	(N=52)	(N=13)	(N=19)	(N=15)	(N=46)	(N=26)	(N=15)
3	21	19	2	27	10	..	2	1	..	1	2	..	..	..	2	2	..
9	..	3	2	12	3	..	..	1	4	..	..	..	8	..	2	..	7
	4	1	2	9	10	3	..	..	4	..	..	..	8	..	2	..	13
	1	3	..	6	..	..	..	3	6	6	..	..	8	..	9	3	27
	..	..	..	..	..	..	..	6	10	..	..	..	..	..	23	15	..
	1	1	2	9	..	..	..	..	..	..	..	..	..	..	4	..	..
10	12	12	4	23	5	..	..	4	4	..	..	16	8	8	40	13	..
11	..	..	..	..	..	..	..	10	3	17	13	11	..	17	12	19	34
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

3 Labor markets and teachers

9 Recommendations concerning curriculum; more:
 a) Math and Science
 b) Technological
 c) Trades (artisan)
 d) Character formation (whole man)
 e) Agriculture

10 Rate learning; too much exam emphasis

11 Per cent no open-end comments

^a Includes intermediate schools with no standards below V.
^b Includes teacher training.



faced in preparing pupils for tests administered from abroad. That it was European teachers who most often commented about the need for more stress on character formation is also not surprising. Both of these responses reflect a problem voiced to us frequently by European headmasters whose schools were visited in 1961. The headmasters often were concerned less by deficiencies in academic performance, which was on the whole respectable, than by the tense, single-minded preoccupation with books and examinations among their students. It had proven easier to convey an "examination culture" than the idea of the British school as a social institution concerned with the whole man, including school loyalties, athletics, and so on. The examination cult and its constraints on scope for freer expression among both teachers and pupils brought a number of comments such as:

Teachers are used like teaching machines. This is so much so that we teach for examinations instead of future life of our present pupils [schedule 2973].

But concern with socialization and laments about rote learning were voiced also by a fair proportion of the few male teachers in European primary schools. The 10 per cent of Asian male secondary teachers who commented about inadequate character formation must be given a slightly different interpretation still, in view of the many subcultures among them. Other associations between comment on curriculum and position in the schools or in an ethnic group were either minor or obvious. The African teachers were more apt to stress deficiencies in mathematical or scientific teaching and learning, and teachers in trade schools were understandably prone to stress the need for more emphasis on technical and trade subjects in a developing country.

Other comments relating to educational quality were directed mainly to deficiencies of teacher quality or, occasionally, to inadequate reading material for either pupil or teacher. Still less frequent (not itemized in Table II-30) were complaints about the obviously wretched physical conditions of school buildings (other than the few with boarding facilities for secondary pupils). Quite rightly, teacher 2025 said,

Most of our primary schools look like Stables. Educate the local community to see the value of good school buildings.

Some teachers (as 2899) brought the problem down to daily routines:

Water. As a teacher we teach children in Schools to keep clean always; now, if water is not near the school, what is the use of teaching cleanliness in the school while teachers as examples do not have water to keep themselves clean first, then teach the pupils?

Deficient library facilities were mentioned more often by those who in fact suffered least: teachers in secondary schools. That only a trivial percentage of African teachers in primary schools alluded to this problem is indicative not of satisfactory conditions but of failure among those teachers to realize how starved their pupils and themselves were for reading matter.

Some teachers were very conscious indeed of this problem, both from the point of view of teacher study and preparation and use by the children.

For example in the school I am teaching the staff is compelled to use one exercise book of 48 pages for Nature Study, Science, Agriculture, and Hygiene for a period of three months. While there is such a shortage the teacher cannot help to prepare oral lessons which are forgotten very easily by the weak pupils leading to bad results at the end of the course [Schedule 2732].

The problems I have encountered as a teacher are that sometimes a teacher goes to a new school and finds that there are no textbooks at all. I think it would help if the D.E.O.'s made sure that a school has all the required books before a year begins [Schedule 2908].

Library Books for Teachers: We get only for pupils, but not for teachers for further studies. We as teachers we want many books in school library to study "Schedule 2403].

They supply more books, of which most of them are not used in classes. However, they increase childrens knowledge. Apart from that it is a fact that, some things they hear or read from these books are definitely to occur in their lives, thus they greatly develope their minds [Schedule 2685].

Some of the remarks about books are tied in with comments on the syllabus and concern about either too rapid changes in it, or its ineffectiveness pedagogically, or the formal requirements in writing up lesson plans for the possible visit of an inspector. Thus teacher 2916 said,

Each time the education in Kenya has been altered and new syllabuses be made with new books be selected, but before the books are out the syllabuses are forced to be followed. When we ask for books we are told that they are out of print. How can we enjoy such condition in our teaching? Surely we have faced difficults in getting the books and equipments. Sometime when the books come to be out then it is followed by the change of syllabus and then such books become useless.

On the syllubus, some of the materials sujested for arts and crafts are difficult to get in some places and again some of the teachers have no idea of the patterns sujested in them. How can you give a better explanation than the one on the syllubus for intermediate schools? How can that syllubus be done to fit all the schools in Kenya? [Schedule 2769]

Planning of lessons: you may call me a lazy teacher but I'm not. The way that this is done at present is a very tiresome one. You find a teacher planning eight to ten lessons every day. So, putting all details to each and every lesson makes one very tired and cannot study anything else. To my own opinion it's a good idea to improve this system. This can be done in two ways. (1) Increase the number of teachers so that every teacher have few lessons to plan or (2) allow teachers to write all lessons in short form. So as to get them time to improve their standards of Education by Reading text books [Schedule 2684].

In quoting these statements, it should be stressed, however, that they are remarks by a small number of teachers. Nor do we always believe them wholly. On the other hand, the personal pedagogic

deficiencies of teachers were often cited by Africans as by other teachers, though on the whole the Africans were either more generous or less aware of the shortcomings of fellow teachers. At the same time, it was particularly the Africans and Arabs, and in lesser degree the Asians, who were willing to take that shortcoming as a personal charge to improve their own competence. The large proportions of African and Arab males who mentioned the problems of upgrading teachers often went into this subject at length, both in general and in more immediately personal terms. Since we cited a number of examples in an earlier chapter, we will not illustrate further here, with two notable exceptions--notable because of the breadth of perspective of the writers and their concern with pupils:

My first problem is need of further education, because as a teacher as I am it is very difficult to teach fully because my education which I was given when I was in school was not very much enough although I know something I ought to know more and more about my education, so as to transfer my knowing to children and they will know more [schedule 2770].

Educational Issues: I should like to give gratitude to the Government to have provided the country with the present educational facilities. At the same time I wish the Government should provide some more Training Colleges and Trade Schools to cater for the K.P.E. failures and other pupils who have been unable to carry on with some further Education [schedule 2436].

Similarly bridging between general and personal were many remarks about conditions in the labor markets. Teachers from all groups, but especially those in trade and in secondary schools, noted the importance of education for the supply of a labor force to undergird development. Concern with the problems that students face in finding jobs was also widely expressed by all respondents, though usually with reference to somewhat different categories of students (Asians generally and Africans with only a primary schooling). However, the obstacles

confronting teachers and their job alternatives in and outside of the profession were seldom mentioned except by Africans. That contrast partly reflects the poor qualifications of so many African teachers (even in secondary schools), but no doubt it is also a shadow of colonialism persisting to the edge of independence.

Europeans quite candidly knew that they did not suffer from "discrimination," that experience being reported most strongly by African secondary teachers (42 per cent), though expressed also by a fourth of the male Arab primary teachers and a fifth of the Asian males teaching secondary pupils.

The two most frequent categories of comment were of course expressions of those desires and resentments closest to the everyday lives and self-interests of all employed persons. (The only exception, a marginal one, was among male European teachers in African secondary schools--a very special and strongly committed group of men.) Comments referred either to pay and fringe benefits of various kinds or to interpersonal relationships and the educational hierarchy, racial or ethnic discrimination aside. As teacher 2746 put it,

The present scale of teachers' salaries is quite inadequate as teachers are expected to show a high standard of living in order to prove what they teach.

But ethnic groups differ considerably in the relative frequencies of these types of comment. The frequency of complaints about pay tended to appear in inverse relation to average levels of salaries in the ethnic, sex, and school type categories; women were slightly more acquiescent, other things equal. Complaints about the ministerial and administrative system bore no systematic relation to position within that system. Among African primary school teachers, such

complaints were often more incidental to a particular experience in what might be termed non-communication, taking a very personalized view, than the expression of more general malaise. Thus, for example, we hear this story:

I went to Mombasa to see the Education Secretary again about it and he said that he was very sorry that the Certificates were lost and he gave me a letter with some forms to send them to my Education Officer Kilifi and I did so. From that time up to now I have never heard anything from this officer. These matters worry me everyday and I have not got the way to solve this problem [Schedule 2904].

It would be quite naive to assume that because the British held the best positions and "owned the country," English teachers would be content with how their countrymen ran the Ministry of Education that employed them, however indirectly through arrangements with various missions. European women were somewhat more dissatisfied than the men, and men teaching in the premium secondary schools for European boys were least likely to grumble about administration. For some reason, conditions in the European primary schools gave rise to a large volume of complaint, as also (but for more understandable reasons) did work in trade schools. The majority in every Asian category made some specific charge against how authority was being handled within the Asian community vis-a-vis themselves, and many were prolix on the theme. Among Africans the picture was quite different. It is of particular interest that African primary teachers were comparatively willing to allow government to go on running the system in about the same way as hitherto, so far as concerns the pressures of authority upon the teacher at his work. Among Africans it was only the secondary teachers, most of whom were in an equivocal position vis-a-vis their direct associates, who were strongly sensitive on the authority issue.

What for an Asian became resentment of authority relationships was more likely among African primary teachers to find expression in a sense of helpless injury in the judgments he must face, or a resentment of what were regarded as unduly privileged other tribal groups. The resentments of inter-racial discrimination were more often linked with complaints about pay or housing. An example of the latter states (2026):

At the moment European occupied houses are provided with baths and electricity, but African occupied house of the same type is provided with neither of these facilities. This sort of attitude makes me feel frustrated and leads me to think that I am only here because no European Missionary teacher is available to fill my place.

Some writers were especially prone to comment on discrimination between tribes in the running of the schools (respondent 2639):

The problem in this U.G. district is tribal discrimination, and most of the headmasters in the district are Kikuyu, and are advised to find faults from especially we teachers from Nyanza Province. After they have done all this the final thing is termination of employment as teachers in the district. If I am not wrong, in other districts this particular problem is not very much practised.

Whereas Asian complaints about authority relations were on exactly that, when African teachers made explicit reference to interactions in an authority hierarchy, they were much more likely to do so in a way that revealed more psychological distance than conflict, more insecurity than challenge. And there is an ever-present feeling that ceilings on opportunity are low while the threat of replacement is ever present. One remark, which might have come from a man of any ethnic membership, points to the universal gap between the roles of administrator and teacher with a plea that to narrow the gap administrators should be chosen from the ranks of teachers.

Administrative posts, especially at the top should not go to men who have not tasted the job of teaching--if they do these men will be administrators of what they have no experience [schedule 2020].

More poignant are the comments that wind up like this one (2749):

In a certain work of government we see many people moving higher and higher according to their experiences in the work or the good result in it, but in teaching a teacher is expelled when a new teacher of a higher grade wants to get a place.

Or (he goes on),

Another difficulty in this work is that sometimes there are some of the teachers who works hard and complete their duties alright but although sometimes they are not considered as if they are doing something, their consideration will be just the same as one of the lazy teachers.

Looking along a different perspective we find this comment from teacher 2493,

A teacher seems to have no direct employer, because he is sometimes penalized unfairly by a false report from a community member to a higher authority.

This sort of remark is stated more fully at the end of an exceptionally long response. As his last point, this teacher (2762) underlined:

STAFFING AND SUPERVISION BY OLD MEN: This has recently been introduced in Presbetrarian church of East African schools in Meru. People engaged by this mission are grumbling too much for whenever they go out of school the old men claim that they are leaving school even if they are going out to attend the officer's or supervisors call. This method is horrible and if it continues, there is no doubt that many teachers will dislike teaching for they wont prefer to be ruled by unlearned people.

Finally, there is of course also the resentment of discipline, the other side of the concerns among European (and African) supervisors about the high incidence of drunkenness among African male primary teachers in some areas at the time of the study. Understandably, this sometimes evoked complaints of missions; an example was quoted in an earlier chapter. As a resolution to teacher discipline, one respondent

suggested that a code of ethics be established by the teachers themselves (2778):

Code of discipline: This should be formulated by the Kenya National Union of Teachers and not by a Government body which does very little as far as the classroom teacher is concerned.

Among Africans especially, remarks that border on the topic of authority quickly shift over to promotion and then, again, either to upgrading or to pay and fringe benefits. Frequently housing is an explicit complaint, or the question of pay is linked to remarks of how hard the teacher must work in preparing his lessons--as well as about the example he must set (schedule 2624).

I am really cut off from social activities, e.g. If I am a friend of a clerk and I work with him, the following day he will continue his work normally while my work will not be carried out properly as I did not prepare my daily notes and I failed to do the corrections of the books that I took home with me. I have also to see the parents who come to see me because of childrens affairs and all these I have to deal with in my leisure time. In some jobs if one is found quite capable, he is promoted to a higher grade, but I, in the teaching profession however good I may be I will remain just where I begun, I am bounded by academical qualification. Things change from time to time and you may find that some of the experienced teachers have no jobs simply because they can not catch up with the new things while in other departments they say that experience is the best teacher. A teacher with my case, how can I be an example to the people who are better paid than myself?

I should say that teachers are not well paid because, what we get as our salaries never fulfil our needs. Another thing is that teachers never get enough time for resting at night after a hard working during the day because of planning very many lessons [schedule 2679].

7 years education must be prepared well so that it fits all children who will be completing Std VII under the age of 18 yrs./ A thirty years is a very long time to a teacher to wait in order to get pension and I think instead of 30 years time, the age could judge./ Industrial jobs - means more schools of these kind could be established - (see no. 1)./ African teachers are over worked. e.g. (a) headmasters with a Std IV etc. is fully engaged in all subjects - when all correspondents are laying is his cupboard waiting to be returned or to be filed. (b) He is also to meet the school committee and other activities while he is supposed to have his lesson notes prepared before he goes to his class next day./ The salary which the teacher get is not enough to a teacher who is supposed to be an example to the pupils

and to the communities (a) educating his/her children - which Gov. does not help him/her. (b) Buying clothes, for his wife, children and for himself as an example. (c) When his family is not in good healthy he consume a lot in matters of sickness and (d) Travelling allowances for teachers./ Schools in farms should be improved rather than to be closed when the owner thinks that the school is not fit - where those children will be schooling if all other schools are filled up?/ Teachers are not promoted if they have worked for a longtime neither their pay raise a bit. Allowance for teachers outside their districts, and also the "Headmasters and Headmistresses ALLOWANCE./ Teachers would be allowed to borrow money from Edu. Depart. if they need something./ Teachers should have refresher courses outside their districts, etc. [schedule 2670].

Many of the problems and the feelings of injustice among the African teachers who compare themselves with other civil servants are summed up in the following well-organized response (teacher 2762):

ALLOWANCES: These allowances are night allowance, Transport allowance etc. When teachers esp. go purposely to the Education office asked to do so by the Education officer or Supervisor they are never paid their travelling allowance or night allowance if they happen to put up for the night. Sometimes a teacher spends in a hotel and pays a pound and yet he didn't get into such a wasteful situation through his will. **HOLIDAYS:** During the holidays in other Departments office-boys are left to check the safety of the office. But in Education department teachers are asked to act as watchmen during the holidays without any allowance, they put up at the school and spend their money and as well waste their resting time. Therefore I feel I should be glad of watchmen are employed to guard the Safety of the School during the holidays. **HARD WORK--LESS PAY:** Teachers have a lot of work to do, they especially prepare a lot of lessons at the same time, while a clerk if at all engaged in accountancy or typewriting doesn't interfere with any other work. **MEDICAL TREATMENT:** It is wonderful to find a Dept. which is not paid for Medical treatment, I cant just understand why? and if I were to be answered I would just like to know and would be pleased. **UNSATISFACTORY SMALL HOUSES:** Teacher's houses are built, I think, enough to keep the family in if one has, but this is never done. The houses are always too small & a teacher cannot get a bedroom for him, children & the tableroom & as a result of these unsatisfactory houses you find a teacher cooking beside his bed. Again these houses are not at all modern but ancient type of houses with walls smeared with mud.

Housing, although mentioned less often than pay, and rarely mentioned without comments on salary as well, was a particularly sore point among our respondents, especially among the primary African teachers. Not only was their housing often inadequate even to protect

their tiny libraries and working materials (which would be quite insecure even in the headmaster's "locked" office in the mud-and-wattle schoolbuildings. Probably worse, as relates to their feelings, was the fact that better and subsidized housing was provided for some of the teachers' reference groups.

I have been the Headmaster in Primary school for a year and in Inter school for 3 years and during these years I had no any headmaster allowances except difficulties in managing school. This is really quite an embarrassing task [schedule 2764].

Housing: African teachers especially in Meru where I am living are very poorly housed. Because of lack of good houses at school I always walk ten miles. The houses available in most schools are so poor that one cannot live with family [schedule 2756].

Education is a good thing to both parents and children but unfortunately the education department does not treat teachers well as other departments treat their employees. Teachers have the poorest lodgings. When considering of a school, the department considers of classrooms only and ask parents to build "bandas" sheds for teachers. The teachers' houses are then built of wattle and daub and roofs of dry banana bark [schedule 2768].

Less representative but very tidy in its summing-up of westernization of goals and standards of living was the following comment from respondent 2775:

There are two things I should like to do: I should like to further my education and still remain as a teacher. I should like to drive a car but I feel we are not paid well and that is the reason why I haven't been able to drive a car even after saving as far as I could.

A reasonable point at which to begin a review of the relationships between complaints and other characteristics of male African teachers in primary schools is the teacher's satisfaction with his occupation and his sense of financial strain (Table II-31). At a glance one discerns that those teachers who said they were more committed to remaining as teachers were least likely to lament the weak position of teachers in the labor market (Item 8) or to complain about discrimination (Item 2).

TABLE II-31

CONTENT ANALYSIS OF OPEN-END RESPONSES; MALE AFRICAN PRIMARY
SCHOOL TEACHERS BY OCCUPATIONAL PREFERENCES
AND EXPERIENCES, 1961

	Other Occupation; Preferences and Experience				
	Preference		Vacation Jobs or Income Supplements		
	None Preferred	Other Preferred	Farm	Other	None
	N=352	N=126	N=108	N=24	N=380
	Percentages				
(1) Interaction: education hierarchy and community					
Total complaining	28	36	39	34	27
Authority	17	21	23	17	17
Other	11	15	16	17	10
(2) Discrimination; favoritism					
Total complaining	6	12	13	8	6
Racial (and/or tribal)	5	10	10	8	5
Other	1	2	3	..	1
(3) Pay, fringe benefits, etc. (excl. housing)	71	79	78	83	71
(4) Teacher quality deficiencies	22	22	24	8	23
(5) Upgrading of teachers	27	29	21	17	29
(6) Lack of reading materials	6	9	8	4	8
(7) Labor markets and students	12	12	11	4	12
(8) Labor markets and teachers	16	25	23	17	17

On each of the other topics as well, the less-committed teacher more often found fault with the situation of the teacher, but differences were small. Only the item relating to pay elicited mass protest.

The same table also relates the frequencies of various comments to the holding of vacation jobs or other sources of supplementary income. As by now we might expect (in view of the patterns that have emerged, especially at the end of the immediately preceding chapter), it is the men who supplement their incomes from farming who most often voice criticisms of teachers' working conditions. Men who supplemented their incomes in other ways were the most sensitive to their financial disadvantages as teachers, but often the least exercised on other topics

Although, as pointed out just a moment ago, the less committed African teachers more often lamented their weak position in the labor market, they were not distinctively concerned about whether their pupils would have good or bad prospects in finding jobs. Other groups showed equal or greater concern about their pupils' welfare.

As in earlier portions of this report, it is of interest once again to explore the relationships of other traits to the qualifications of teachers and their family backgrounds or qualifications. Qualification levels have proved to be quite predictive of a teacher's viewpoints. Table II-32 confirms that (among African men in primary schools) those with better certificates, while not especially resistant to authority relationships within the educational system, were somewhat more prone to complain about lack of community appreciation and about local interference in school affairs. (Fortunately a small but important minority whose views are not recorded in Table II-32 were actively urging a more positive and creative school-community relationship.)

TABLE II-32

CONTENT ANALYSIS OF OPEN-END RESPONSES OF MALE AFRICAN PRIMARY SCHOOL
TEACHERS BY QUALIFICATION CATEGORY, 1961

	Qualification Category								Total
	T4	T3; F1-3	T2 NF4	T2 F4	KTL	F4 Other	NR		
	N=57	N=286	N=54	N=16	N=23	N=5	N=71	N=512	
(1) Interaction; education hierarchy and community Total complaining Authority Other	25 20 5	32 20 12	30 15 15	44 19 25	42 17 26	20 .. 20	20 17 3	30 18 12	
(2) Discrimination; favoritism Total complaining Racial (and/or tribal) Other (excl. sex)	.. .. ..	8 6 2	13 11 2	19 19 ..	22 22 ..	.. .. ..	1 1 ..	8 6 2	
(3) Pay, fringe benefits, etc. (except housing)	72	73	89	100	87	..	61	73	
(4) Teacher quality deficiencies	19	22	32	31	30	20	20	23	
(5) Upgrading of teachers	16	27	22	19	44	60	37	28	
(6) Lack of reading materials	2	8	13	13	13	20	4	8	
(7) Labor markets and students	17	12	7	..	9	..	13	12	
(8) Labor markets and teachers	9	17	30	31	48	..	11	18	

The best qualified men most often believed they were victims of discrimination, particularly on racial grounds, and though receiving the higher salaries, the best certified teachers were most likely to feel that their pay should be even better relatively. Those are responses we might expect, for discontentment normally is relative to familiar standards of reference. Also, as we might anticipate, the best-qualified teachers did express more than the usual sensitiveness to deficiencies in teachers generally, and they more often perceived the handicaps arising from scarcity of teaching and reading materials. On the other hand, better prepared teachers (except those superlatively prepared) were not markedly more aware of the need to upgrade teachers. Some may have been thinking of the airlift to American universities that was much in the news at that time, and there is always the European overseas allowance and vacation in England as an image of the good life.

People working in other departments are often taken to overseas for short courses- Teachers who teach about River Thames etc. which they have never seen should be made to visit such countries like England, Australia, Scotland, etc. so that when they come to teach such places, they will have a better teaching of a place they have been. Teachers should be made to make touring in civilized countries to broaden their minds [schedule 2709].

On basic educational issues, including strictly curricular items, those of the primary school teachers with the best preparation displayed the more positive attitudes. However, few of these differences were marked or noteworthy. The best qualified teachers revealed little tendency to generalize concerns for themselves to others, so far as economic prospects were concerned: sensitive as they were about their own financial situations, they generally displayed indifference to the job prospects of students who would not gain entry to secondary schools. They were somewhat more likely to turn this around, to compare their own situations

unfavorably with the more promising prospects of their students. One of the many interesting responses on the last pages of the questionnaire, this time from a comparatively well educated African woman (schedule 2418) points up some of the interconnecting facets of this latter point of view (which contrasts sharply with expressions of concern for pupils' future economic welfare):

I feel that to train primary and intermediate children to a higher standard is really a great and yet a very hard task. We prepare children for their future by teaching them to be able to earn their living, to be good citizens, teaching them to be obedient and good farmers who work hard for their food. I'm not wrong to state that it is very unfair indeed for the teachers who teach these uncontrollable children, being disturbed all, the teaching hours long, and yet receive the lowest salary possible.

The Present Government of Kenya should increase the teachers' salaries to encourage them rather than discouraging them. Very many teachers try to resign from the teaching profession because of the low salary that they get. Thus, some are resigning this year.

We have very many professions in this world, and I'm only going to give four as an example concerning my subject on salary. There were thirty six children in a certain class. They all sat on the Kenya Entrance Examination. Fortunate enough, they all went through. They decided to join different departments. Some became Mechanics, some Health Assitants, some Doctors and nurses, and others chose to serve as teachers. The Mechanics earned 1/2 percent per annum, the Health Assitats earned 1/4 percent per annum. The Doctors and nurses earned 3/ percent per annum and the teachers earned 1/16 percent per year. Who taught these nurses and the rest? It was the teacher.

This is very discouraging indeed to our best teachers who not only teach from known to unknown, but work hard to bring light to our poor country.

The increament of our salaries will enable us to travel or rather bly to U.K. or to the UNS U.S.A. for further education so that we get what we know not to our country: by copying good examples and ideas from them that know more.

Since the better certificates came disproportionately through pursuing an academic career that is in so many ways tied to books, it is useful to correlate the distribution of teachers' complaints to their ownership of books (Table II-33). We do, indeed, find that the owners of the larger libraries characteristically display awareness in the "proper" manner of the problems of Kenya schools, though with certain

TABLE II-33

CONTENT ANALYSIS OF OPEN-END RESPONSES; MALE AFRICAN PRIMARY
SCHOOL TEACHERS BY BOOK OWNERSHIP, 1961

	Number of Books Owned				
	Under 25	25-49	50-99	100 or More	NR
	N=164	N=131	N=89	N=56	N=72
	Percentages				
(1) Interaction; education hierarchy and community					
Total complaining	$\frac{25}{15}$	$\frac{35}{21}$	$\frac{25}{16}$	$\frac{39}{18}$	$\frac{31}{24}$
Authority	10	14	9	21	7
Other					
(2) Discrimination; favoritism					
Total complaining	$\frac{6}{4}$	$\frac{10}{8}$	$\frac{7}{6}$	$\frac{11}{9}$	$\frac{8}{7}$
Racial (and/or tribal)	2	2	1	2	1
Other (excl. sex)					
(3) Pay, fringe benefits, etc. (excl. housing)	70	77	73	82	69
(4) Teacher quality deficiencies	22	29	16	32	18
(5) Upgrading of teachers	32	24	25	32	24
(6) Lack of reading materials	5	8	8	16	7
(7) Labor market and students	11	15	10	7	14
(8) Labor market and teachers	13	19	18	29	21

solipsistic overtones. As with holders of good certificates, so owners of many books manifest even less concern than others about the prospects for the younger generation, but in all other respects (except anti-authoritarianism) they score at the top. Interest in matters affecting teachers' financial outlook grows in step with additions to their libraries, though not so markedly as in correlation with the grade of their certificate. Though book ownership is unrelated to resentments of authority, higher levels of book ownership do accompany and no doubt nourish resistance to lay contacts and intervention in the schools. The extent of book ownership is by no means consistently associated with concern about the deficiencies of Kenya teachers nor with the desirability of expanding or strengthening up-grading programs as an important way to cure the deficiencies of Kenya schools. In the responses recorded in Table II-33, these male primary school teachers reveal themselves once more as a hybrid group, some beginners and some veterans, some devoted teachers and some time servers. It would be instructive, though just now impracticable, to separate these species of pedagogues.

It was pointed out earlier that age, and length of teaching experience, are only in part interchangeable designations of individuals, and neither is tightly associated with qualifications. The categories of volunteered comments are tabulated against age and experience (for male African primary teachers) in Table II-34. With age, most of the associations are virtually zero; on some items (as that relating to consciousness of deficiencies among teachers) one suspects that there are sharp cross-pressures between groups who differ by age. For example, the rather erratic age-pattern for incidence of complaints about pay doubtless expresses judgments of men who hold quite varying positions;

TABLE II-34

CONTENT ANALYSIS OF OPEN-END RESPONSES; MALE AFRICAN PRIMARY SCHOOL TEACHERS
BY TEACHING EXPERIENCE AND AGE, 1961

	Teaching Experience						Age				
	1 Year or Less	2 Years	3-4 Years	5-9 Years	10-14 Years	15 Years or More	Under 25	25-29	30-34	35-44	45 or More
	N=79	N=54	N=89	N=156	N=71	N=56	N=173	N=104	N=77	N=75	N=13
(1) Interaction	23	44	30	31	25	25	26	36	27	27	23
Total complaining	15	26	19	17	14	20	17	19	17	20	8
Authority	8	18	11	14	11	5	9	17	10	7	15
Other	6	11	8	11	5	4	8	10	5	5	15
(2) Discrimination; favoritism	4	11	6	9	4	4	6	8	4	4	15
Total complaining	2	..	2	2	1	..	2	2	1	1	..
Racial (and/or tribal)	60	80	74	79	72	73	67	82	71	68	85
Other (excl. sex)	23	24	18	24	21	25	23	22	17	29	23
(3) Pay, fringe benefits, etc.	39	33	26	29	24	9	32	34	16	21	..
(excl. housing)	6	13	9	9	4	4	10	8	5	4	..
(4) Teacher quality deficiencies	9	13	8	11	14	14	9	12	10	19	8
(5) Upgrading of teachers	11	13	24	22	14	21	15	23	21	9	31
(6) Lack of reading materials											
(7) Labor markets and students											
(8) Labor markets and teachers											

Percentages



this is not just a contrast of older versus younger generation. Younger teachers, rather naturally, are more concerned with the upgrading of teachers, and sensitiveness to the volume of reading materials, not just whether any materials were available, impressed the younger teachers more.

In an educational system that has grown rapidly with a succession of pragmatic compromises, as has that of Kenya, teaching experience is not so neatly and sequentially related to other qualities (as age or type of certificate) as in those situations where expansion has been smoother and less explosive. One result is that associations between volunteered comments and length of teaching experience do not fully replicate associations with age, although there are general similarities. Emphasis of respondents upon providing arrangements for upgrading teachers and on the need for reading materials for both pupils and teachers did decline with experience, as with age, being perceived as less urgent (or less feasible) by the more experienced and the older individuals. Experience is not related in any orderly pattern to concern about labor markets for teachers, and longer experience no more than age sensitizes teachers to the outlooks that their pupils will have. In contrast to age, longer experience does not heighten anxiety about pay. Tension between the teacher and the authorities above him appeared as its maximum with two years of experience, but the only age distinction is for the few men over age forty-five (who rarely complain on this score).

Some readers might anticipate a priori that the attitudes of a teacher are connected more closely with his situation within the school than with his background--as was virtually the case for the Form 4

pupils on parallel points. However, Table II-35, which relates the viewpoints of teachers to the amount of schooling fathers had received, does not confirm that hypothesis so far as complaints about pay or lack of reading materials are concerned. Teachers whose fathers are relatively well-schooled definitely set themselves higher goals for salaries and were more actively concerned to get the best possible salaries and fringe benefits. Sons of men who had completed intermediate school were the most likely to write about inadequate supplies of reading materials. Tensions over authority with superiors did seem to become more frequent if the father had a good schooling, though the relationship here was not monotonic. On some other topics as well the patterns are mixed or consistent, and in any event few of the relationships leap to the eye. Upgrading of teachers and teachers' future job outlooks evoked greatest concern among teachers whose fathers had attended lower primary standards or who were illiterate, least concern among those whose fathers were KPE graduates or better. But given their non-linear patterns these associations must be viewed as very moderate and interpreted with caution.

Cross-tabulations against parental leadership and religious affiliation added virtually nothing to the foregoing summary, but there was one set of relationships with parental traits that manifested considerable consistency. That is the association of teachers' expressions of concern on one topic or another with whether the father had himself been a teacher (Table II-36, last two columns). (A similar analysis for mothers would have been futile since few of them had taught or held any paid job.) If a present-day (1961) African primary teacher's father had also been a teacher, this had an almost uniformly positive effect upon

TABLE II-35

CONTENT ANALYSIS OF OPEN-END RESPONSES; MALE AFRICAN PRIMARY
SCHOOL TEACHERS BY FATHERS' EDUCATION, 1961

	Father's Education				Total
	Illiterate	Primary (Lower)	Inter- mediate Plus	NR	
	N=282	N=149	N=40	N=41	
	Percentages				
(1) Interaction; education hierarchy and community					
Total complaining	28	30	28	44	30
Authority	18	13	23	34	18
Other	10	17	5	10	12
(2) Discrimination; favoritism					
Total complaining	8	11	10	..	8
Racial (and/or tribal)	6	9	8	..	6
Other (excl. sex)	2	2	2	..	2
(3) Pay, fringe benefits, etc. (excl. housing)	70	77	83	73	73
(4) Teacher quality deficiencies	22	21	25	34	23
(5) Upgrading of teachers	28	32	20	15	27
(6) Lack of reading materials	6	8	20	5	8
(7) Labor markets and students	10	10	13	27	12
(8) Labor markets and teachers	18	22	13	12	18

TABLE II-36

CONTENT ANALYSIS OF OPEN-END RESPONSES; MALE AFRICAN PRIMARY SCHOOL
TEACHERS BY SELECTED PARENTAL TRAITS, 1961

	Parental Leader		Parental Religious Affiliation			Father Ever a Teacher	
	Yes	No	Direct	Fringe	None	Yes	No
	N=109	N=403	N=63	N=31	N=118	N=57	N=438
Percentages							
(1) Interaction; education hierarchy and community	27	31	23	35	30	28	28
Total complaining	$\frac{14}{13}$	$\frac{20}{11}$	$\frac{17}{6}$	$\frac{19}{16}$	$\frac{18}{12}$	$\frac{14}{14}$	$\frac{17}{11}$
Authority							
Other	13	11	6	16	12	14	11
(2) Discrimination; favoritism	9	8	6	10	8	12	8
Total complaining	$\frac{8}{1}$	$\frac{6}{2}$	$\frac{6}{..}$	$\frac{10}{10}$	$\frac{6}{2}$	$\frac{12}{..}$	$\frac{6}{2}$
Racial (and/or tribal)							
Other (excl. sex)	1	2	..	..	2	..	2
(3) Pay, fringe benefits, etc. (excl. housing)	74	73	76	84	72	86	72
(4) Teacher quality deficiencies	22	23	25	16	23	28	21
(5) Upgrading of teachers	28	27	25	20	28	30	28
(6) Lack of reading materials	11	7	13	7	7	14	7
(7) Labor markets and students	11	12	14	10	12	16	10
(8) Labor markets and teachers	24	17	18	26	18	28	17

the son's responses on the open-end question. It is not that having had a father with teaching experience makes a man more self-sacrificing in his devotion to public affairs; sons of former teachers were the more likely to ask for higher pay and more prone to believe they had been victims of racial discrimination. But they also displayed more sensitivity to the problems of students. There was one exception: sons of teachers found the reins of authority upon them less irritating than did other teachers; presumably they had learned some of the unofficial lore of the profession at home and the cultural transition was less distressing. Most of the differences in these percentages are quite clear, but they would hardly serve for very useful individual predictions.

In any educational system that has raced through the 1950's in the fashion experienced in Kenya, as in so many other new nations, a prime element of policy must always be the devising of programs for improvement of teachers' ostensible qualifications (or resisting of drastic deterioration). The slow, academic route to competence could not be provided for many and the system could not wait upon the appearance of superior teachers before expansion was undertaken. Several aspects of this question are related in Table II-37 to the volunteered viewpoints of teachers upon which this section of the report is focused. Emphasis just here is on the efforts, if any, that the men teaching in the African primary schools had made or currently were making to improve their formal evidence of qualifications.

The by-no-means negligible group of African male primary school teachers that reported no efforts, past or present, to upgrade themselves were disproportionately either new and inexperienced or well

TABLE II-37

CONTENT ANALYSIS OF OPEN-END RESPONSES; MALE AFRICAN PRIMARY SCHOOL
TEACHERS BY UP-GRADING EFFORTS, 1961

	Upgrading Efforts						Total
	None or Vague	Present			Past Only	NR	
		Applied Teacher Training	Kasse, Cambridge Exams	Other			
	N=174	N=123	N=99	N=18	N=49	N=49	N=512
(1) Interaction; education hierarchy and community Total complaining Authority Other	25 17 8	28 16 12	30 20 16	39 22 17	34 18 16	37 25 8	30 18 12
(2) Discrimination; favoritism Total complaining Racial (and/or tribal) Other (excl. sex)	5 5 ..	5 2 3	16 14 2	6 6 ..	12 8 4	4 4 ..	8 6 2
(3) Pay, fringe benefits, etc. (excl. housing)	70	73	81	72	59	86	73
(4) Teacher quality deficiencies	24	14	30	17	31	22	23
(5) Upgrading of teachers	25	29	27	22	41	20	27
(6) Lack of reading materials	6	9	9	6	12	4	8
(7) Labor market and students	14	11	11	11	8	10	12
(8) Labor market and teachers	17	19	28	22	6	12	18

qualified (Tables II-6 and II-8). Bearing these facts in mind, it is not so surprising to notice that they were a little more alert to the upcoming vocational problems of students than were other teachers. They certainly were not unaware of the numerous teachers possessing deficiencies that prevent their doing a good job. By contrast, individuals who had made some efforts in the past but had given up the attempt were least concerned about what happened to students or even to teachers in the job markets. They were distinctly disinclined to raise issues of pay, but they were quite sensitive to racial discrimination, unusually aware of the defects of existing teachers, and strongly in favor of expanded provisions for upgrading teachers.

Going to the other extreme and considering the teachers who were actively at work trying to improve their qualifications by the academic examination route, we find them resistant to authority, resentful of lay or community intervention in school affairs, and they were the most touchy about discrimination. Of all the sets of teachers considered, they were by far the most interested in winning higher salaries and fringe benefits. Along with this, they see the economic situation of teachers in broader labor-market context.

Individuals who were seeking entrance to training colleges resembled the academic group just described in many respects, but their viewpoints were less strongly expressed. Broadly speaking, the most astute and intensive efforts for self-improvement (if an outsider may judge) were being put forth by those teachers who also were most observant of the deficiencies of the national educational system.

Finally, we return to a topic that has recurred through this report as it must for many countries: tribal membership. One can find

TABLE 11-38

CONTENT ANALYSIS OF OPEN-END RESPONSES; MALE AFRICAN PRIMARY SCHOOL
TEACHERS BY TRIBE, 1961

	Hamitic and Nilo- Hamitic	Kikuyu	Embu, Meru	Kamba	Luyia	Coastal	Nilotic	Total
	N=78	N=129	N=44	N=28	N=137	N=62	N=34	N=512
(1) Interaction; education hierarchy and community Total complaining Authority Other	32 <u>19</u> 13	26 <u>14</u> 12	36 <u>18</u> 18	25 <u>18</u> 7	35 <u>24</u> 11	23 <u>15</u> 8	30 <u>18</u> 12	30 <u>18</u> 12
(2) Discrimination; favoritism Total complaining Racial (and/or tribal) Other (excl. sex)	6 3 3	11 <u>9</u> 2	9 7 2	8 4 4	10 <u>9</u> 1	5 5 ..	3 .. 3	8 6 2
(3) Pay, fringe benefits, etc. (except housing)	71	78	82	68	77	61	65	73
(4) Teachers quality deficiencies	28	22	18	32	23	19	18	23
(5) Upgrading of teachers	20	34	27	18	11	37	35	28
(6) Lack of reading materials	10	11	5	14	4	5	6	8
(7) Labor markets and students	14	8	7	4	18	5	21	12
(8) Labor markets and teachers	18	19	18	14	17	26	12	18

Percentages

many differences in Table II-38, but few patterns emerge that could have been predicted on the basis of earlier information relating to the several tribal groups. It would be jejune to suggest that the Kikuyu are least complaining about educational authorities or the educational structure because they had been cowed by government reaction to the Mau Mau situation; on the contrary their somewhat greater sensitiveness to discrimination, on the other hand, undoubtedly reflects some of the same political factors that underlay the Mau Mau explosion, even as other tribes assert that the Kikuyu are favored and tribal discrimination is laid on their shoulders. At the same time, the Kikuyu awareness of the need to upgrade teachers, like that of the Luo on Lake Victoria and the teachers of Mombasa, is a highly rational and non-political response that reflects awareness of the part that educational achievement can play in getting a good job (of any kind) and in succeeding in it.

It was Ministry policy and policy of the Provincial education authorities to shift teachers about and to have them teach outside their home territories. That policy was not carried so far as to homogenize the teaching force tribe-wise. Indeed, it could not have been done for the earliest grades, where teachers were expected to understand their pupils' vernaculars, and there was no attempt to carry it to extremes at the intermediate level. But the policy had some reality, nevertheless, and it did affect the local tribal composition of teaching cadres-- a fact that is reflected in responses by many of the teachers. Some individuals simply comment on the local situation from the perspective of an outsider to it (as the teacher from Nyanza whom we quoted on the tribal issue). Others complain about travel costs or psychic burdens on the teacher of frequent and even arbitrary transfer. Less often did

teachers bring this problem explicitly into a focus on the pupils and their parents, though the theme of the following comment might have been read into other responses as well.

My problems and unfilled needs as a teacher is that:- Every year I get a transfer from the school which I had finished the year and the pupils and their parents had known me very well and they could work hard because they get no change from the work which we had been doing. But when they get a new teacher the teacher will stop what was going on and put his method which will be very new to the parents and the pupils [schedule 2745].

But not all teachers complain about transfers. To a few the challenge and widening of experience are enjoyed (as teacher 2689).

Looking back in the years past as a teacher I have found that a teacher's life is that of a very busy citizen. I have learned quite much through various transfers from school to school. I have enjoyed these transfers for one I have had to teach various different children with tribalistic differences. The problem here has been for one to learn as quickly as possible the different cultures, surrounding and environments of pupils but just as I thought I would stay at a station for a couple of years to learn more and make improvements in certain aspects I found to my surprise that I was transferred to a different new school to meet yet new and strange pupils again.

It is men such as the author of the last quotation who serve well in the very crucial role of the "culture bridge" function, and not only between the traditional citizen and the modernizing, urbanizing elements in the society but also across the many African cultures and peoples of a heterogeneous society. In such men we find a blending in which the ethic of devotion to teaching has been internalized; they go beyond the more frequent expression of commitment to the profession (so well expressed by teacher 2699, as follows):

I worked hard during my training and passed all my exams well. After the training I joined teaching within my locality and enjoyed happily with little children whom I liked very much. I am ever satisfied with teaching and feel that I like it heartily. I am still doing the job which is more important to my country at present. I hope I will do much in teaching and try to help the country with education

Teaching, to at least a few individuals, is a learning experience and a deeply satisfying one, whether locally constrained or in more diverse settings (as stated by teacher 2465).

As a whole I have liked this profession because I do learn more from the students; since they are human beings who can think, listen, and then make questions about the subject that has been taught to them. So I am glad that from their questions and expressions I do increase my mind and learn more when I always talk to them.

Obviously such teachers are not typical; unfortunately they are quite rare in any teaching corps, whatever the continent or the stage of development of the country. On the other hand, among the majority of teachers for whom teaching was the preferred job, there were frequent remarks about the importance of their profession to the nation and the need for more teachers to carry on that task. The following three comments were given by those numbered (for anonymity) 2909, 2649, and 2486, respectively--all of whom were African teachers of primary schools.

Once we have very well educated people in Kenya. The well being of Kenya lie on them; and if some will be convinced to join teaching we may get better teachers for our children as we have lack of teachers.

I like my job as a teacher but what discourages most teachers especially (African Teachers) are the low pay and the way they are treated. For example the housing is very poor and also they don't get necessary material for suitable teaching - e.g. apparatus, text books, travels and also their helath is neglected. I personally feel that if these things be improved, I hope many teachers will like their job and it can also attract many people to become teachers in order to improve the education of the country.

A teacher is a key to everything concerning future. A teacher is a light in the country.

CHAPTER XIII

CONCLUSION: KENYA PUPILS AND TEACHERS IN RETROSPECT AND IN PROSPECT

The spread of systems of formal schooling around the world, rapid in rate of expansion and impressive in accomplishment, has been a noteworthy development over the last two decades. Particularly because of an even more rapid spread of the techniques for reducing mortality, however, the hordes of children engulfing educational systems have stultified efforts to universalize schooling outside the hitherto privileged "West" and to utilize education in order to give more men a life protected from the historic scourges of mankind.

In Kenya in 1961 we made some of what are now conventional estimates of how widely and deeply the system of modern education was penetrating among the younger Africans (see Table I-2 in Chapter I). We guessed that more than half the girls and over a quarter of the boys in Kenya at that time would receive nothing of the "modern" type of education. (Due to undercounting of children, our estimates were unduly sanguine.) A quarter of all boys (but only a tenth of all girls) would gain entry to the second phase of the common school by entering Standard V. About a third of the African boys then in school (and many never even began any school) would get as far as their fifth year of school in contrast to less than a fifth of the girls. Forms 1-4 of secondary school would contain about 2 per cent of boys but only 0.3

per cent of girls; only 1 per cent of the boys but virtually no girls would reach Form 4 (the locus of our study). At that time only a handful of Kenyans of either sex had gone on to post-Form 4 schooling, and many of those few circumvented the British system to go elsewhere. The situation was on the verge of change, however, with the opening of new African Form 5-6 classes, and indeed nearly a third of the 1961 Form 4 boys did enter Form 5 the next year.

Parallel estimates were made by the Kenya Education Commission in 1964 (I:p.135). The numbers they worked out are perhaps more impressive than the ratios. Thus, of an estimated 103,400 youth who took the leaving examination at conclusion of intermediate school (by then almost everywhere at the end of Standard VII), 67,200 individuals would have neither any prospect of further schooling nor any likelihood of finding a wage job. (Due to retaking of the examination and other inadequacies of the records, this estimate cannot be precise, but we have no doubts about its broad accuracy.) In contrast to the figures of the preceding paragraph, this is not a full age cohort, for all the individuals about whom the Commission was speaking had already spent at least seven years in school. The Ministry estimated that there would be places for 12,000 to enter secondary school in 1965 and another 20,000 could find a job with cash wages. About 2,500 would enter some form of trade or technical training, plus 500 who would begin a teacher-training course. And 1,200 persons would immediately be put into classrooms as untrained teachers.

A commentator could start from either of these sets of estimates. One could, for example, proceed to emphasize the most widespread and most recalcitrant problems of education in Kenya. Alternatively, one

could speak in terms of how much had been accomplished in a half century and think as much of progress as of obstacles and challenges. In our discussion, and especially in this conclusion, we have tried to hold the balance between these contrasting interpretations.

This report originated in part in an effort to collect rapidly some basic data for the Ministry of Education in order that they might reply more cogently to queries from the World Bank's Mission then in Kenya. But the report is really dual: (1) a study of the characteristics of youth then completing Form 4 and the perceptions these pupils held about their educational and occupational careers, and (2) an assessment of the existing and prospective teaching cadre for what everyone expected would be a surging expansion of the schools. The data on teachers were virtually unique and remain so. Moreover, we now know much about the special multi-ethnic problems of schools, and especially teachers, in situations that are proving to be more common around the world than the first leaders of many "new nations" would like to have believed. The initial data on pupils are not greatly different in kind or in mode of presentation from studies in several other countries that have been carried out in recent years. However, our study of students was enriched by the fact that in 1968 Jerry B. Olson made a special follow-up investigation; he located over three-fourths of the males we had questioned in 1961, obtaining their subsequent educational careers and their present activities or vocations. Such data are rare. In addition, Olson is replicating (with more sophistication and care than we could then use), the study of secondary pupils. That material is not included in this report, but when his data on the pupils of 1968 have been analyzed (and when comparisons using better methods have been

effected with the 1961 data), we will then know much more than hitherto about educational aspects of the transition from the late colonial years into independent nationhood. As did we, he also received unstinting assistance and sponsorship from respondents and from officials of the Ministry.

In several respects this is a very broad study, the information about teachers being particularly unusual. In other respects, despite the mountains of "machine output" from which the writers have tried to distil a lucid account, even this study covers only a small part of a rounded investigation into the complexities of an educational system in a "new country." First of all, there are no financial data; many were assembled, analyzed, and presented to the Mission for its report on the development prospects of Kenya, and each annual report of the ministries contains additional figures; but finance was not a focal point in this study. Second, we have paid only scant attention to variations in enrollment or in teachers' qualifications among the thousands of schools in Kenya, but have been content with illustrating the contrasts among thirty educational-administrative districts. Third, no effort has been made to measure the quality of the output of the schools (beyond simple reports on the School Certificate examinations) nor to relate quality of pupils' performance to the qualifications of their own teachers. There is nothing in the follow-up data that would enable us to observe directly what has happened over the years since 1961 to the men and women who made up our sample of teachers in 1961. Nor can we compare behavior, attitudes, or perceptions among the teaching cadre today with that of 1961, though there is much indirect evidence that might be collated on some of these topics. Finally, our research touches only

incidentally on trade or technical schools, on-the-job training schemes, language of instruction, or many other strictly pedagogical topics of great importance.

The present report, then, deals mainly with the situation in Kenya schools just preceding independence. We have bits of information about what has happened in the first years of independence to one small, very fortunate and able, set of boys who were in 1961 enrolled in the Form 4 classes of Kenya. It is not wholly a drawback that we are describing mainly a pre-independence situation. At least for teachers, we have established in unusual detail a benchmark against which progress over the coming years in Kenya can be measured. There are officials in many countries who can find illumination on some of their most urgent problems by carefully studying the quantitative information assembled here about Kenya.

One reason these data can be of use to many scholars or officials who have little interest in Kenya as such is that our data and findings can be fitted into alternative schemes of interpretation. Clear signs toward some of the most promising lines of development and cautions against the most obstructive situations can both be found in the data. The design for the inquiry drew not at all upon what is usually perceived as data for a so-called "manpower approach," yet the data could be of service to a man who wanted to look at some of Kenya's educational changes from that or alternatively from another perspective. Considering that we were using data for a country with almost no second-generation university graduates (and even with few families of second-generation literates), the facts truly must be allowed "to speak for themselves"

to a degree that one would not hazard in a country possessing a wealth of statistical information on all topics.

At the same time, our data obviate the necessity to launch new inquiries on some topics and should dispose of some of the platitudes that circulate among the seekers of formulas.

It is not without interest that our extrapolations of enrollments and of numbers of teachers from 1961 to the present have come close to the accomplishments documented in recent ministerial reports. Not that we had any special insight--beyond assuming that educational systems possess great inertia--but we found it surprisingly adequate to focus upon what was happening to the flows of pupils through the schools, in a country in which so-called "social demand" exceeded availability of resources, manpower "needs" quite aside. Since (as one of us has written too many times) schools are multi-functional, one can gain a better understanding of what is happening by watching the ebb and flow of pupils and teachers than by seeking neat patterns in the swirling waters of "manpower needs" or aggregative production functions.

Every effort has been made to report facts conscientiously. In constructing questionnaires and in making plans for processing of data we were guided by what experienced educators in Kenya told us as well as by what we knew to be fundamental processes in all new educational systems. One major question, for example, is how far the educational and bureaucratic structures provide incentives for able youth to become teachers. Expansion of primary schools on a generous scale would be more justifiable, for example, if we could link the higher levels of education with service as a village teacher while also avoiding the disgruntlement and other disfunctionalities that always accompany any form of compulsory servitude.

Then there are the issues that arise from the dominant position of Government as employer and the special place civil servants hold as a reference group for teachers. In 1961 there seemed to be few African students who looked to private enterprise or who saw themselves as innovators in bringing about the new economy of Kenya. How far this situation has changed since 1961 remains to be ascertained.

In reporting these data the writers have tried to face up to those basic issues of "education and development" about which we had any information. We supplied some measure of how much schools vary over the geographic parts of Kenya and we related those findings to questions about equity, yet we declined to construe parity and "fairness" as preconditions of "an advancing society." Indeed, local variations are large within Kenya as in any nation, yet one can also emphasize how the Ministry (no doubt out of a mixture of wise and of unconsidered decisions of bold actions and of timorous evasions) did build up an educational system with impressive elements of equality--equality among ethnic groups (particularly since policies for desegregation began to be taken seriously), between tribes, among youth from comfortable and from wretchedly poor families, between boys and girls. But there are also signs of a new emerging elitism among Africans in access to the most eminent secondary schools. Meanwhile, Kenya remains a multi-ethnic society, with the resulting cultural enrichment and the tendencies to discrimination associated with its kind of diversity and its particular ethnic history. Throughout, we have given central place to the problems of the predominant, African citizens. Certain difficulties inherent in the schools of Kenya, as too few African secondary teachers, for example, have been set against evidence of what some

Africans have gained because they were the beneficiaries of traditions of commitment and high professional ethics among many of the Europeans teaching in secondary schools. We have given too little attention, on the other hand, to the ambiguities of fortune and misfortune that these circumstances have created for the Asian populations.

A basic finding from any study of a total school system, however dynamic the society, is that quality lags behind quantity; rapid expansion itself does not come easily, no matter how farsighted the goals of the founders. This is one reason why "planning" by formula is of so little utility when thinking about the trajectories of school systems. Effective planning calls for a continuous choice among strategies and tactics, and succeeds only as it takes the autonomous forces into account, modifying but working with them--unless massive cadres for the imposition of coercion through terror are at hand. Planning seldom can ensure the resources needed to expand a large sector of education, but it can analyze alternatives. One alternative (only in small part planned but widely manifest and often attacked in Kenya as elsewhere) has been to shift most current costs directly onto the local parents, except in the handful of hardship areas. Prior to independence, this policy was followed mainly for the primary standards, thus giving wide scope to expression of local differences in zeal for schools. More recently the free sector has thrown up growing numbers of "Harambee" secondary schools. Their standards are widely bemoaned and are certainly extremely diverse. But their doors are open to many youth for whom this is the best available option, and their families are ready to pay. If one looks at some features of United States history in secondary education, perhaps the most relevant comment is not how deficient the

new schools in Kenya are but how lax are the university people in showing communities how to improve their schools or in participating in that reform. Almost inevitably, a rapid expansion in the lower schools means that even if the proportion of untrained teachers may be slowly reduced, the number of untrained teachers in charge of classrooms will rise. The same phenomenon is repeated whenever there is an explosion of enrollments at secondary level as well.

We have perforce accepted the responses given by pupils or teachers to the questions we asked them. And, in some surprising ways, those responses are encouraging for an aspiring nation, for often they contradict platitudes in the literature on "education and development." Of special interest is the popularity among African boys of agriculture, whether directly from Form 4 or after further training. Kenya has benefited from the visibility of modern European farming as an occupation with status, but more important for these students is the national inheritance of a formidable apparatus for agricultural extension and research built up originally to serve European farmers. Engineering was more often a favored field among Asians. (That medicine enjoyed wide popularity can hardly be taken as having any bearing on the question of strength of vocational as against "academic" interests.)

Put in very broad terms, the courses taken in secondary school and university were roughly congruent with fundamental prerequisites for development, in that science is viewed with favor by African boys who remain aware also of how important it is to win command over tool subjects, as English and mathematics. Though teaching has been objectively a "good" position for several decades, by 1961 men were raising their sights and the most able often seemed disinclined to

choose or to remain in that vocation. However desirable it might be to reduce the pupil/teacher ratio in classrooms, the costs of training teachers or even of hiring untrained teachers precludes reducing the sizes of primary classes soon; for years to come the typical African primary pupil will have not a dozen or so but three or four dozen classmates.

That Mr. Olson was able to trace out the later fortunes of many pupils we had queried in 1961 brought us many benefits. He showed that the results of School Certificate examinations (taken just after we gathered our data) correlated closely with headmasters' ratings of pupils for their educational potentials. Indeed either the rating or the examination results were a better predictor of how well a pupil would do in later schooling or on the job than was the occupation or the schooling of the lad's father. Perhaps the curriculum in these ex-British schools was (or remains) unimaginative and in many ways irrelevant, yet the teachers seem to have judged pupils with great objectivity and cannily forecast how they would fare over the coming years. Some pupils were overly sanguine as to what they could accomplish, while others failed to perceive how high their capabilities really were. Consequently the correlation between the level of occupation a boy said he wanted and the one he actually worked at seven years later was not very close. Pupils with the best ratings or test scores did generally come out ahead, but the number of misses (in both directions) was large nonetheless. What kind of job pupils have and what in 1961 they said they wanted are correlated beyond the level of chance. While in school, as other studies have shown, there is a tendency for pupils to shift their "expectations" toward "reality," taking the latter to be indicated

by the drift in the profile of total employment. But by taking another step and seeing what individuals are actually doing some years later, we discover also that the profile of occupations may become more "suitable" or more "appropriate" though a complex series of cross-moves among initial plans and later jobs.

There was no mass evidence that Kenya African youth were making unsuitable choices of jobs or sticking to unproductive jobs too long under the stimulation of "western" notions of what is the best sort of work. It was impressive that the job markets were not acting to favor some or to handicap other tribal groups markedly. The "excess" number of Kikuyu in government and in certain lucrative private jobs, for example, seemed not to be much beyond what one might expect--given their residence near the economic pole of eastern Africa and their long (if often tense) business and governmental relations with Europeans, not to mention early access to the mission-run schools and early efforts to set up their own system of schools. Controlling for examination performance (which of course reflects the same history), there is little evidence of tribal discrimination in jobs.

A developing country needs certain sorts of skills (or of activities in schools that will produce those skills), not to mention opportunities for apprenticeship and on-the-job training. At the strictly "vocational" level, in Kenya as over much of the world, this training has been given by the public services: transport, communication, health, building, and even teaching that is linked to the role of catechist. It has been demonstrated nowhere among the developing countries that any formal "technical school" can do a better job at those kinds of training than the programs operated by the public agencies. The case for massive investment in "vocational" or "technical"

schools remains weak by comparison. Moreover, one cannot avoid asking two basic questions. First, who would staff these schools? From what other activities would staff be drawn? What kind of learning is best done in "schools" and what is learned more readily elsewhere? A second, related question is then: if we were to introduce major vocational training programs in secondary schools, would African boys or girls make more useful choices of vocation than they are now making? As Table I-13 shows, the leading choice of African boys was agriculture (no doubt mainly as government agricultural specialists, not as farmers) and nearly as many mentioned some sort of technical work in other fields, business, or teaching. The burden of proof is on anyone who contends that specifically vocational schools will enlist more men, and more stably, into "technical" fields at the middle (secondary) level than the present mix of schools and on-the-job programs.

In our day the idea has spread around the world that these opportunities for training and schooling should be made available on a "fair" basis. As a result, field studies (including this one) try to measure whether a given group (a tribe, girls, children of peasants, etc.) are receiving their proper share of opportunity. We adapted methods that we and others had used previously in assessing this "fairness." For Africa, perhaps uniquely among the great continental areas of "underdevelopment," we find, as others have, that the children of illiterate or almost unschooled parents make up a large proportion of the pupils at all levels. To be sure, since most parents are peasants or poor laborers, it would be strange if this were not the case, but the fact is no less important. A considerable part of the on-coming cohort of potential leaders (now studying in secondary or

higher schools) are children of such men. That children of those few parents who did have some schooling in their youth are present in considerable excess of their "share" is not, at this stage, so much evidence of elitism as it is evidence of parental alertness. All through this study, we have reiterated that the correlation of a boy's schooling or of his occupation with the social status of his father is "low." By our standards of judgment, based on much reading of these sorts of data for the countries of the world (judgments any reader may evaluate for himself in the light of the data given on earlier pages), the Kenya secondary schools of the late 1950's were comparatively non-selective. Preliminary examination of Olson's data for 1968 suggests that the situation has not changed much. This is not to deny, of course, that girls reaching secondary school or university come from better families than do boys, and of all groups in Kenya "selection" for schooling is strictest or most marked first for Arab and then for African girls.

When we ask parallel questions of teachers, we get essentially similar results. To be sure, if either parent (and especially the mother) has once been a teacher, this raised the child's chances to be in school all the way to the top, as it also raised the probability that he would become a teacher in turn. But here again, the overlaps are substantial. The general principle, that there is "occupational inheritance" beyond chance, is manifest in Kenya as in all the rest of the world. But for Kenya, and probably for most of sub-Saharan Africa, the coefficients are extraordinarily modest. Credit for this outcome must be shared by traditional status homogeneity of many African societies along with the intrusion of "universalistic" and peculiarly "western" notions fostered by the missions.

In this concluding chapter we have given little space to the many tabulations relating to the characteristics of teachers, although we have mentioned major points at appropriate places where we could make comparison with the Form 4 pupils. But when we do turn to teachers, many of the same conclusions emerge; one point already mentioned paralleled "unqualified" teachers and "illiterate" adults by pointing out that while the proportion of each is diminishing, the schools cannot operate at sufficient capacity to diminish the number in either instance soon. We observed that the qualifications of teachers, taken as a population, change with glacial slowness. The best-qualified are not uniformly those most devoted to the occupation, however important (as they may agree) teaching is for the future of Kenya. We investigated the reading habits of teachers in great detail. On the whole, whatever the feature under scrutiny, positive characteristics are positively correlated, but the correlation usually is moderate. Some of the best-qualified teachers (at least as officially evaluated) wish to remain but others seemingly indistinguishable from the first category want to move to some other occupation. On the whole, experience displays an equivocal relationship with both age and qualifications, mainly because we are taking a snapshot of a rapidly expanding educational system with perennial shortage of teachers, but also because of the complex factors that affect turnover of teachers and selectivity of transfers out of the occupation. Some outrageously unqualified and dubiously motivated individuals are among the highly experienced in the sense of having been in charge of classrooms for many years. But the newest recruits were also among those with poorest qualifications, and the most disinclined to read. In fact, much attention was paid to the

reading practices of teachers; numbers of books owned, number and sorts of newspapers and of magazines they at least profess to read. Particularly clear was the association between deficiency in knowledge of English and inadequacy of qualification as a teacher, especially but not exclusively among older men. Though T4 or lower qualifications are sufficient evidence of inadequacy (i.e., inability to pass the KPE examination at end of elementary school), relationships are by no means tight once a T3 level is reached.

There would be much to be said for establishing a major investigation of teaching quality that was cut free from the conventional criteria by which a Ministry classifies its teachers. But in the contemporary world it appears to be impossible to separate teachers' scales of pay from the broader civil service scales. Nor does it seem possible to defeat the teachers organizations and gain acceptance of new kinds of criteria for advancement. Moreover, if one may generalize from limited western research on this set of problems, we cannot be confident that qualifications of teachers warrant being singled out--however measured--as the predominant component in scales of pay.

Our most rewarding experience in this study in some ways was in experiencing the readiness of the teachers of Kenya from all ethnic communities to fill out questionnaires with great care. For many of the Africans and for a good proportion of the Asians, this activity brought to the surface problems for which no practicable course of action had been feasible. Many teachers took advantage of an invitation to express their views by writing short and sometimes very long commentaries. Individuals varied widely in their detachment or their self-centeredness, in naivete or sophistication, and in their technical

insight into the broad problems of the educational system as a whole. Much misery but also unbounded hope can be found in these statements. One can hardly avoid wondering whether it was a basic discourtesy by us to arouse anxieties and hopes that we could not possibly assuage; our questions must have given many teachers hope that at last they were to be rescued from a dire situation. Some of the comments were optimistic, but not necessarily naive (as from the teacher whose questionnaire carried the number 2781):

This is what I can say about education. Education is very important to every country especially ours. I know and I am sure that if anybody has no education he or she cannot do any good. That is the reason why I decided to be trained as a teacher so that I can teach my people to be good, polite and obedient.

Others, with or without dealing with seemingly "major" points focused upon the daily irritants and frustrations. Teacher 2921 provides an example: "Have to walk to school daily and as a result I do not have enough time to study or prepare lessons for the next day."

And again and again, as is to be expected, we encountered one or another expression of the feeling that teachers are insufficiently appreciated and that they are paid insultingly small salaries, along with other pleas (personal sometimes and very general at other times) for further opportunities to upgrade their own certificate status. These themes are perennial ones, inherent in the situation today as in 1961, despite continuous and often successful efforts by officials to meet exactly such demands and to better the quality of teachers under whom the children of Kenya study. But teachers can speak for themselves, and so we conclude by giving at length a sweeping commentary by one teacher who has touched directly or indirectly on many of the problems of education in Kenya. If he overnight became Minister

of Education, however, it does not follow that he would be any more adept in coping with the difficulties of so vast and so changing a system of schools (teacher 2480):

A teacher's difficulty is not met or heard instantly by Ministry of Education because the Ministry of Education is far way from most teachers. For example, a manager may suspend a certain teacher for the simple reason that he hates him or her naturally. As he does so, he knows full well that the next authority which is attached to the Ministry of Education is also far off. Then he writes to his next authority, then the next authority begins to write the matter to the Ministry of Education. Because the Ministry of Education lives far away like that, and does not know details of the matter which the manager reported, decides to impose a punishment on the teacher i.e. his her certificate may be cancelled for him or her or suspended like that. I think to avoid such false accusation of hardening teacher's life on this groundless point, closer Ministry of Education in Kenya should be established at Provincial levels, and P.E.O.'s on district, and D.E.O. divisional levels. So that the closer Ministry of Education can easily look into the teacher's difficulty getting the details at once.

It happens that a manager gives a teacher unnecessary transfer to go to teach into another school while parents or community are still satisfied with the work of the teacher at school; such a thing also develops dissatisfaction and anxiety or annoyance among the parents or community. So such a transfer can only be there if it is arranged between the parents or community or school committee and the manager in order to work for harmony and peace. In academic sense, it is necessary for Education department to give school committees more power of managing their schools or may be managed by bodies e.g. "Parents and teacher's association" whenever possible.

On careful consideration, a T3 teacher with K.A.P.E. and has passed a maximum number of 5 or 6 subjects beyond the K.A.P.E. by studies outside Kenya should automatically be upgraded T2. Or he should go in for oral interview in English to one of the Gvt T.T.Cs or to Provincial Education offices; but a T3 teacher with K.A.P.E. not having any certificate beyond the K.A.P.E. should go in for April test which has now been introduced by Kenya Education Department.

Although some teachers feel that it is difficult to teach a class of fifty pupils, I feel that it is better to teach more heads than one or a few. This class of fifty pupils will keep a teacher busy all the time in his class, which is a promotion in direction of undivided attention of the teacher. (2) Every teacher demands or is in a position to get high pay as so his pay should be in comparison with the labour that he does. (3) It is a good idea to have a class of fifty pupils because it avoids unnecessary Primary schools which might think of to start with a poor attendance on roll. The idea is quite good in such a way that some areas in Kenya are thickly populated and this allows the populated areas

to send in more children in school which have already been built, recruiting the pupils or children from radius of 2 1/2-2 miles in order to fill the class of fifty children. This brings peace among the populated areas which could demand to establish new schools, but where there might not have been enough land to establish them.

SUMMARY

In the latter part of 1961 the first-named author of this report was a member of the survey mission to Kenya of the International Bank for Reconstruction and Development as the specialist on education. A rewritten account of some of the findings of that Mission are to be found in the Bank's official report to the government of Kenya. In the nature of the case, few topics in that volume could receive more than cursory treatment since the principal focus had to be on fiscal matters.

Kenya already had an unusually complex system of education operating under an excellently staffed central authority. The amount of material made available to the education specialist was vastly greater than could be of interest to the Mission. Yet certain items of information were not available and on some of these points the Ministry was itself most desirous of obtaining data. They agreed to supply lists of schools and to assist in distributing a questionnaire. In return the specialist collected many items of information on which his international status would be more likely to insure prompt and full replies than a local ministry could count on. The senior author's wife (Mary Jean Bowman) was a specialist in economics of education and the Ministry was happy to have her assist in preparing the instruments and in laying out

the analysis. (Some items were hand-tabulated and reported quickly.) Unfortunately, the samples were distorted by the occurrence of unseasonable floods, but (explained in Appendix E) it is believed that damage to the study was small.

This report is divided into two distinct sections, one concerned with characteristics of the Form-4 class in 1961 and the other part with various groups of teachers. Both parts investigate the selectivity (or lack thereof) in recruitment to the groups studied: secondary school attendance on the one hand and various teaching roles on the other. Also, both parts are concerned with perceptions of occupational opportunities and with job preferences. However, the contexts of these two studies are quite different and so are the main themes. For one thing, the discussion of Form-4 pupils in 1961 is more focused on personal orientations to future education and to jobs or career prospects. That cohort of male African students was traced to their jobs and occupational status as of 1968. Although the initial data on pupils are not greatly different in kind or mode of presentation from studies in several other countries, the follow-up aspect of this research is distinctive (and was remarkably successful). No follow-up or replication was feasible for teachers, and the aim in Part II is much more to understand some of the little-recognized but central features of the early stages in developing a nation's teaching force. That analysis includes examination of teachers' attitudes toward and perceptions of their situation and of job alternatives, and the relationships

of those attitudes and perceptions to reading patterns and social origins. Again analysis of Africans is given primary emphasis.

In several respects this is a very broad study, the information about teachers being particularly unusual. In other respects, despite the mountains of "machine output" from which the writers have tried to distil a lucid account, even this study covers only a small part of a rounded investigation into the complexities of an educational system in a "new country." First of all, there are no financial data; many were assembled, analyzed, and presented to the Mission for its report on the development prospects of Kenya, and each annual report of the ministries contains additional figures; but finance was not a focal point in this study. Second, we have paid only scant attention to variations in enrollment or in teachers' qualifications among the thousands of schools in Kenya, but have been content with illustrating the contrasts among thirty educational-administrative districts. Third, no effort has been made to measure the quality of the output of the schools (beyond simple reports on the School Certificate examinations) nor to relate quality of pupils' performance to the qualifications of their own teachers. There is nothing in the follow-up data that would enable us to observe directly what has happened over the years since 1961 to the men and women who made up our sample of teachers in 1961. Nor can we compare behavior, attitudes, or perceptions among the teaching cadre today with that of 1961, though there is much indirect evidence that might be collated on

some of these topics. Finally, our research touches only incidentally on trade or technical schools, on-the-job training schemes, language of instruction, or many other strictly pedagogical topics of great importance.

The present report, then, deals mainly with the situation in Kenya schools just preceding independence. We have bits of information about what has happened in the first years of independence to one small, very fortunate and able, set of boys who were in 1961 enrolled in the Form 4 classes of Kenya. It is not wholly a drawback that we are describing mainly a pre-independence situation. At least for teachers, we have established in unusual detail a benchmark against which progress over the coming years in Kenya can be measured. There are officials in many countries who can find illumination on some of their most urgent problems by studying carefully the quantitative information assembled here about Kenya.

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changes from that or alternatively from another perspective. Considering that we were using data for a country with almost no second-generation university graduates (and even with few families of second-generation literates), the facts truly must be allowed "to speak for themselves" to a degree that one would not hazard in a country possessing a wealth of statistical information on all topics.

At the same time, our data obviate the necessity to launch new inquiries on some topics and should dispose of some of the platitudes that circulate among the seekers of formulas.

A basic finding from any study of a total school system, however dynamic the society, is that quality lags behind quantity; rapid expansion itself does not come easily, no matter how farsighted the goals of the founders. This is one reason why "planning" by formula is of so little utility when thinking about the trajectories of school systems. Effective planning calls for a continuous choice among strategies and tactics, and succeeds only as it takes the autonomous forces into account, modifying but working with them--unless massive cadres for the imposition of coercion through terror are at hand. Planning seldom can ensure the resources needed to expand a large sector of education, but it can analyze alternatives. One alternative (only in small part planned but widely manifest and often attacked in Kenya as elsewhere) has been to shift most current costs directly onto the local parents, except in the handful of hardship areas. Prior to independence, this policy was followed mainly for the primary

standards, thus giving wide scope to expression of local differences in zeal for schools. More recently the free sector has thrown up growing numbers of "Harambee" secondary schools. Their standards are widely bemoaned and are certainly extremely diverse. But their doors are open to many youth for whom this is the best available option, and their families are ready to pay. If one looks at some features of United States history in secondary education, perhaps the most relevant comment is not how deficient the new schools in Kenya are but how lax are the university people in showing communities how to improve their schools or in participating in that reform. Almost inevitably, a rapid expansion in the lower schools means that even if the proportion of untrained teachers may be slowly reduced, the number of untrained teachers in charge of classrooms will rise. The same phenomenon is repeated whenever there is an explosion of enrollments at secondary level as well.

We have perforce accepted the responses given by pupils or teachers to the questions we asked them. And, in some surprising ways, those responses are encouraging for an aspiring nation, for often they contradict platitudes in the literature on "education and development." Of special interest is the popularity among African boys of agriculture, whether directly from Form 4 or after further training. Kenya has benefited from the visibility of modern European farming as an occupation with status, but more important for these students is the national inheritance of a formidable apparatus for agricultural extension and

research built up originally to serve European farmers. Engineering was more often a favored field among Asians. (That medicine enjoyed wide popularity can hardly be taken as having any bearing on the question of strength of vocational as against "academic" interests.)

Put in very broad terms, the courses taken in secondary schools and university were roughly congruent with fundamental prerequisites for development, in that science is viewed with favor by African boys who remain aware also of how important it is to win command over tool subjects such as English and mathematics. Though teaching has been objectively a "good" position for several decades, by 1961 men were raising their sights and the most able often seemed disinclined to choose or to remain in that vocation. However desirable it might be to reduce the pupil/teacher ratio in classrooms, the costs of training teachers or even of hiring untrained teachers precludes reducing the sizes of primary classes soon; for years to come the typical African primary pupil will have not a dozen or so but three or four dozen classmates.

That Mr. Olson was able to trace out the later fortunes of many pupils we had queried in 1961 brought us many benefits. He showed that the results of School Certificate examinations (taken just after we gathered our data) correlated closely with headmasters' ratings of pupils for their educational potentials. Indeed either the rating or the examination results were a better predictor of how well a pupil would do in later schooling or on the job than was the occupation or the

schooling of the lad's father. Perhaps the curriculum in these ex-British schools was (or remains) unimaginative and in many ways irrelevant, yet the teachers seem to have judged pupils with great objectivity and cannily forecast how they would fare over the coming years. Some pupils were overly sanguine as to what they could accomplish, while others failed to perceive how high their capabilities really were. Consequently the correlation between the level of occupation a boy said he wanted and the one he actually worked at seven years later was not very close. Pupils with the best ratings or test scores did generally come out ahead, but the number of misses (in both directions) was large nonetheless. What kind of job pupils have now and what in 1961 they said they wanted are correlated beyond the level of chance. While in school, as other studies have shown, there is a tendency for pupils to shift their "expectations" toward "reality," taking the latter to be indicated by the drift in the profile of total employment. But by taking another step and seeing what individuals are actually doing some years later, we discover also that the profile of occupations may become more "suitable" or more "appropriate" though a complex series of cross-moves among initial plans and later jobs.

There was no mass evidence that Kenya African youth were making unsuitable choices of job or sticking to unproductive jobs too long under the stimulation of "western" notions of what is the best sort of work. It was impressive that the job markets were not acting to favor some or to handicap other tribal groups markedly. The "excess"

number of Kikuyu in government and in certain lucrative private jobs, for example, seemed not to be much beyond what one might expect-- given their / residence near the economic pole of eastern Africa and their long (if often tense) business and governmental relations with Europeans, not to mention early access to the mission-run schools and early efforts to set up their own system of schools. Controlling for examination performance (which of course reflects the same history), there is little evidence of tribal discrimination in jobs.

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schools, would African boys or girls make more useful choices of vocation than they are now making? As Table 1-13 shows, the leading choice of African boys was agriculture (no doubt mainly as government agricultural specialists, not as farmers) and nearly as many mentioned some sort of technical work in other fields, business, or teaching. The burden of proof is on anyone who contends that specifically vocational schools will enlist more men, and more stably, into "technical" fields at the middle (secondary) level than the present mix of schools and on-the-job programs.

In our day the idea has spread around the world that these opportunities for training and schooling should be made available on a "fair" basis. As a result, field studies (including this one) try to measure whether a given group (a tribe, girls, children of peasants, etc.) are receiving their proper share of opportunity. We adapted methods that we and others had used previously in assessing this "fairness." For Africa, perhaps uniquely among the great continental areas of "underdevelopment," we find, as others have, that the children of illiterate or almost unschooled parents make up a large proportion of the pupils at all levels. To be sure, since most parents are peasants or poor laborers, it would be strange if this were not the case, but the fact is no less important. A considerable part of the on-coming cohort of potential leaders (now studying in secondary or higher schools) are children of such men. That children of those few parents who did have

some schooling in their youth are present in considerable excess of their "share" is not, at this stage, so much evidence of elitism as it is evidence of parental alertness. All through this study, we have reiterated that the correlation of a boy's schooling or of his occupation with the social status of his father is "low." By our standards of judgment, based on much reading of these sorts of data for the countries of the world (judgments any reader may evaluate for himself in the light of the data given on earlier pages), the Kenya secondary schools of the late 1950's were comparatively non-selective. Preliminary examination of Olson's data for 1968 suggests that the situation has not changed much. This is not to deny, of course, that girls reaching secondary school or university come from better families than do boys, and of all groups in Kenya "selection" for schooling is strictest or most marked first for Arab and then for African girls.

When we ask parallel questions of teachers, we get essentially similar results. To be sure, if either parent (and especially the mother) had once been a teacher, this raised the child's chances to be in school all the way to the top, as it also raised the probability that he would become a teacher in turn. But here again, the overlaps are substantial. The general principle, that there is "occupational inheritance" beyond chance, is manifest in Kenya as in all the rest of the world. But for Kenya, and probably for most of sub-Saharan Africa, the coefficients are extraordinarily modest. Credit for this outcome must be shared by

traditional status homogeneity of many African societies along with the intrusion of "universalistic" and peculiarly "western" notions fostered by the missions.

We have noted that while the proportions of "unqualified" or poorly qualified teachers (as of illiterate adults) are diminishing, reduction in their absolute numbers while simultaneously engaging in a rapid expansion of the schools has not as yet been possible. Nor are the best qualified teachers typically the most devoted to the occupation, however important (as they may agree) teaching is for the future of Kenya. We investigated the reading habits of teachers in great detail. On the whole, whatever the feature under scrutiny, positive characteristics are positively correlated, but the correlation usually is moderate. Some of the best-qualified teachers (at least as officially evaluated) wish to remain; but others, seemingly indistinguishable from the first category, want to move to some other occupation. On the whole, experience displays an equivocal relationship with both age and qualifications, mainly because we are taking a snapshot of a rapidly expanding educational system with perennial shortage of teachers, but also because of the complex factors that affect turnover of teachers and selectivity of transfers out of the occupation. Some outrageously unqualified and dubiously motivated individuals are among the highly experienced in the sense of having been in charge of classrooms for many years. But the newest recruits were also among those with poorest qualifications, and the

most disinclined to read. In fact, much attention was paid to the reading practices of teachers; numbers of books owned, number and sorts of newspapers and of magazines they at least profess to read. Particularly clear was the association between deficiency in knowledge of English and inadequacy of qualification as a teacher, especially but not exclusively among older men.

Our most rewarding experience in this study in some ways was in experiencing the readiness of the teachers of Kenya from all ethnic communities to fill out questionnaires with great care. For many of the Africans and for a good proportion of the Asians, this activity brought to the surface problems for which no practicable course of action had been feasible. Many teachers took advantage of an invitation to express their views by writing short and sometimes very long commentaries. Individuals varied widely in their detachment or their self-centeredness, in naivete or sophistication, and in their technical insight into the broad problems of the educational system as a whole. Much misery but also unbounded hope can be found in these statements. One can hardly avoid wondering whether it was a basic discourtesy by us to arouse anxieties and hopes that we could not possibly assuage; our questions must have given many teachers hope that at last they were to be rescued from a dire situation. Some of the comments were optimistic, but not necessarily naive. Others, with or without dealing with seemingly "major" points, focused upon the daily irritants and frustrations.

And again and again, as is to be expected, we encountered one or another expression of the feeling that teachers are insufficiently appreciated and that they are paid insultingly small salaries, along with other pleas (personal sometimes and very general at other times) for further opportunities to upgrade their own certificate status. These themes are perennial ones, inherent in the situation today as in 1961, despite continuous and often successful efforts by officials to meet exactly such demands and to better the quality of teachers under whom the children of Kenya study.