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SECONDARY SCHOOL IN KISUMU, KENYA.

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PROPOSAL FOR A MODEL, COMMUNITY-BASED  
SECONDARY SCHOOL IN KISUMU,  
KENYA

by

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## CHAPTER I

### INTRODUCTION

#### The Problem of the Dissertation

The problem is to design a curriculum for a community-based model secondary school in Kisumu, Nyanza Province, Kenya.

The school will perform three main functions:

1. Provide a broad-based general education with the alternatives of building on this for (a) academic preparation, or (b) skill-centered work-study.
2. Retrain experienced teachers and train new teachers in the use of a battery of innovative techniques to foster a uniquely Kenyan-focused education.
3. Involve the entire community in a mutual helping, teaching and learning relationship with the school.

In a specific sense, the goal of this thesis is to design a demonstration school which, if successful, may be emulated throughout Kenya, which has, as yet, no model school.

#### The Critical Need

Even though this young nation has made great strides since attaining independence in 1963, it is woefully short of trained manpower to fill the slots in government, education, business, and industry. Traditional education, based on the British "gentleman" principle, does not equip the graduate with usable skills. Education,

which could bridge the gap, is shackled by: (a) an outmoded, irrelevant curriculum; (b) a shortage of teachers.

Today, only ten percent of adult Kenyans are in full-time income-producing jobs. The majority of business and trade is conducted by Asiatics; the majority of teachers are imported at great cost to the government. Further, these teachers lack the Kenyan background which would enable them to adapt a curriculum specifically for Kenya.

The inability of Kenyans to work in their economy, which has been growing at the rate of six percent a year, means that much of the income generated is lost to the nation, thereby hampering the development of schools and teachers, health facilities and health personnel, and social services.

Thousands of youths leave elementary and secondary school, over-educated in terms of their villages, and seek the lively excitement of Nairobi. There they are unable to find work because they've not been trained. As their numbers increase this presents a socially alarming situation: young, vigorous, eager males who cannot find a place in society, who daily are made aware of the growing gulf between the haves and have-nots.

### Nation Building

In its largest sense, this proposal aims to help Kenya, with its rich human and natural resources, to attain its full potential as a nation within the family of nations. This, the author advocates, can best

be accomplished through an educational system and curriculum geared to the economic, social, and cultural needs of the land.

One of the most dynamic social forces in the country is tribalism. It can and has been destructive. It can be constructive. During the Mau Mau emergency tribal hostilities were shelved to present a common front against the colonists. Again, Kenya is in an emergency and the energies of tribalism could be centered on competitions to create the best schools.

Certainly the Kisumu model school will depend heavily upon tribal strengths. It will build upon the tradition of responsibility within the family and clan, the sense of brotherhood in the tribe. From the school these loyalties could grow to encompass the nation.

### School Building

The Kisumu model will depend also upon the introduction of radical, flexible, innovative content and method. Much of this will be transplanted from other lands. Those Kenyan traditions which continue to be viable will be kept and incorporated in the curriculum.

The author's goal from the time he left Kenya ten years ago was to equip himself so that upon his return home he might make a better contribution to the development of his country. As a student, learner, and teacher, both in Kenya and the United States, he has familiarized himself with a wide range of techniques, mechanisms, interpersonal dynamics and curriculum development so that he might select those most

appropriate to the needs of Kenya. He has kept in close contact with his homeland through yearly visits, through contact with Kenyans at home and in the United States, and through communications media.

The writer considers himself fortunate to have been learning and teaching in the United States during a time when education was in a ferment of innovations in response to continuous critical attacks by a disenchanted society. This provided the writer with exposure to a great deal of experiment and, perhaps most importantly, with exposure to the willingness to take chances, with a risk of failure. This is surely a fairly new notion within the United States education establishment.

Kenyans find particularly attractive those educational innovations which seem closest to the spirit of the national motto, Harambee, which means both "self help" and "let us pull together." For one of the grievances of colonial rule was that while the European may have done something for the African, he never did anything with him. This was a demeaning and dehumanizing attitude.

On the contrary, United States innovations have emphasized the sharing of resources, as have the Harambee schools which sprang up as independent African schools. They were a mechanism designed by the Mau Mau, for politicizing the people for revolution.

It is in the spirit of Harambee that the Kisumu school is designed. It will draw upon the resources of its students, teachers, parents, community, region and country. In turn it will contribute to their needs.

While it will utilize the most promising innovations from other countries, the school will be firmly based on Kenyan culture and traditions.

Delimitation of the Thesis

This thesis will focus on curriculum, its application and changes, in a community-centered, comprehensive secondary school located in a provincial capital of Kenya. Ways of training teachers within the school will be explored.

The emphasis will be on attempting to create a distinctively Kenyan curriculum for Kenyans.

Limitation of the Thesis

This thesis does not include means of financing or amounts of government appropriations for education; salaries of teachers, differentiation of pupils by sex, age. Neither does it include the size or qualification for the teaching staff.

Actual board and community institutional structures and the relationship with teaching colleges and universities have not been discussed. These require mutual participation in helping to create a viable working basis.

The usual complex of physical facilities are not considered because they are not a first order need. However, as the school develops it is assumed that the community will provide necessary structures as has been done for other Harambee schools.

Definitions

- Curriculum-- Total environment for learning.
- Swahili terms-- Harambee--Let us pull together or Self Help.
- Uhuru--Freedom.
- Mau Mau--Wind of change.
- Emergency-- Revolution (or Mau Mau)
- C.S.C.-- Cambridge School Certificate-- Examination taken at end of twelfth grade, necessary for graduation. Sent from England. Corrected in England.

## Resources

Resources for developing this program are necessarily limited to those available in Pittsburgh; much literature about strategies and rationale for curriculum changes in other countries is available both in libraries in Pittsburgh and from persons in Pittsburgh. The Learning Research and Development Center in Pittsburgh has been a valuable resource.

The prime source for information and philosophy related to Kenya today was found in two exhaustive reports: The Kenya Education Commission Report, Part II, 22nd July 1965 (this work is often termed the Ominde report after its chairman, S. H. Ominde) and New Directions in Teacher Education, proceedings of the Second Kenya Conference, 1968.

The prime experience in designing the curriculum was the writer's work in Pittsburgh ghetto schools with the Teacher Corps.

## Organization of this Thesis

Following assumptions made by the author as to the need and direction for an innovative curriculum, this thesis is organized into four main chapters. A description of the contents of these chapters follows:

The first chapter, which is in three sections, is concerned with the background to the problem. The first section describes the land of Kenya and its many different people with their traditional tribal methods of education. A short history of invasion and colonization prefaces the beginnings of European education under the auspices of missionaries and the British. An analysis is made of colonial educational policies.

The second section discusses secondary education in Kenya today, and its effect upon society. The major recommendations of two Kenyan government commissions are given along with data relating to school enrollments and the preponderance of expatriate teachers.

The third section deals with the social imperatives for Kenya's future and how education may meet these needs. Nation building problems are analyzed from the viewpoint of industry, labor and agriculture. Specific attention is directed toward an examination of the needs of Kenya's youth.

The second chapter is concerned with the background for change. Following general curriculum considerations there is a review of new methods and programs. These include: team teaching, flexible scheduling, programmed materials and instruction, acceleration and enrichment, vocational and general education, and guidance and counseling.

The third chapter is devoted to the development of Kisumu Model School as the proposed solution to the problem. First, the community, in its physical and social dimensions, is described with a rationale given for the selection of a Harambee school for the model. Then the new curriculum is defined, utilizing both innovative and traditional methods, and changing the content to reflect Kenyan values. How the students move through the curriculum, how the teachers, interns, and their back-up personnel function, and the inter-relationship with the community is described in detail.

The fourth chapter summarizes the findings discovered during the development of the model, and makes an analysis of the probable influences of curriculum change upon the students, parents, teachers, and community. In conclusion, the author advocates the implementation of this model as one basic means of attacking the multiple problems of the developing country of Kenya.

#### Assumptions

Certain assumptions are stated as the basis for a radical change in the curriculum. These assumptions will serve to emphasize (or re-emphasize) goals of education in the Kenyan context.

The first assumption is that the content of the secondary education curriculum lacks an African orientation; it is too European in outlook and orientation, and therefore basically irrelevant to Kenya's needs. The main function of European-African schools has almost always been the preparation of children and youth for life outside their own local communities, and those schools are still valued for this function today (Batten, 1968, p. 6).

Fafunwa asserts the necessity for change:

The attainment of independence in Africa now makes it necessary to re-examine a type of education which in many African countries was formerly designed to assimilate young Africans (to the culture of the metropolitan countries). Curriculum reform is thus a corollary of political emancipation . . . cultural emancipation being the means by which African personality can be asserted. This calls for the re-discovery of the African heritage and the transmission of that culture to African adolescents in secondary schools.

(Fafunwa, 1963, pp. 66-70)

Kimble, however, argues that in curriculum as well as in all other areas of change in Africa, care should be taken not to eliminate the good existing in traditional education patterns. He points to deep-seated resentment following wholesale change of African institutions (Kimble, 1960, pp. 37-43).

The second assumption is that the present educational structure in Kenya is too inflexible to cope with the changing needs of the Republic of Kenya in terms of rapid development of the much needed manpower.

A relatively small percentage of primary school leavers has an opportunity for post-secondary education. In Kenya only those whose parents can afford education at that level benefit by it. Solarin makes a strong plea for relevant curricula in the secondary institutions in Africa. "Certification graduates" as he calls them, do not have much common sense. He also urges a practical approach to teacher education (Solarin, 1963, pp. 77-79).

The third assumption is that a comprehensive guidance program must be developed. Very little is known about the Kenyan child, his aptitude and ability, his potentialities and personality; there is an urgent need for measuring devices the results of which could guide a child in making choices. Moreover, a child with a talent or skill does not presently know what his options are for applying his ability for the promotion of national culture. Hanson recognizes the importance of an education in which the students are to make choices, and proposes changes in the educational system to this effect; moreover, he asserts, the changes would promote national political strength, national social solidarity, aesthetic awareness, healthy individuality, and a self-renewing society (Hanson, 1965, p. 125).

The fourth assumption is that the method of teaching is largely old-fashioned. Learning by rote is the traditional method in most parts of Africa, Kenya included. Teacher education should be radically modified to cope with new educational trends the world over. Even the

best curriculum will have a negative effect if teachers are not adequately trained. Most African teachers have little more than elementary education. New teachers may be more quickly and relevantly trained within a model community school, using innovative methods, than they can be trained in teacher's colleges alone.

Cammaerts notes that "many colleges stressed the need for a model school . . . the essential point is that colleges should have a school or schools situated either on the college grounds or very close to the college" (Cammaerts, 1968, p. 71). Siriba Teacher's College is in the district of the proposed model school. Experienced teachers would benefit from the sharing relationship with new teachers.

The fifth assumption is that any system of external examinations is harmful to the education of the African child. Until all the examinations are locally set, adjudicated and marked internally, the African child will continue to be a product of an alien culture and tradition. Fafunwa believes that the "undue importance given to the examination and certificates in English-speaking Africa is so alarming that one wonders whether what is obtained in most countries of Africa today can be called a system of examinations" (Fafunwa, 1963, pp. 66-70).

The sixth assumption, and to the writer the most important, is that "the test of a school lies in the extent to which the school really serves as an institution for the fulfillment of the ends sought by the people who live in that particular community" (Taylor and Alexander, 1963, pp. 5-6).

Lewis stresses the interdependence of community and school:

By virtue of their separate origins the school and the community it serves are separate identities, yet the intimate dependence of educational activity on the environment the community provides is an ever-present factor, and not least in importance in that environment is the opinion of the community about what it expects of the school. The school reflects the social environment, is part of it, and yet it is separate and accountable to forces and goals transcending the immediate community.

(Lewis, 1968, p. 61)

## Background to the Problem

### Land and People of Kenya

Kenya is one of the newest of nations, born free in 1963, and one of the oldest of inhabited lands. Fossil and implement remains indicate man or his precursor lived in the Victorian Basin 14 million years ago. Kenyapithecus wickeri is the name given our early ancestor (Fisher, 1969, p. 197).

Kenya is twice the size of New Mexico with a terrain and climate dramatically varied. From the hot, humid coast the equatorial land rises through dry bush country to grasslands, and fertile, well-watered green highlands. The Great Rift Valley slices Kenya in half and beyond its western rim the land slopes down to Lake Victoria, the world's second largest lake and source of the White Nile. Kenya's climate is governed by altitude with temperate weather in the third of the country consisting of the highlands a mile above the sea.

The 1970 estimate for Kenya's population is 10,850,000. The overwhelming majority are Africans who represent four different ethnic groups (Bantu, Nilotic, Nilo-Itanitic and Hanutic) and some fifty tribes (Ominde, 1968, pp. 1-7). The Asians are a quarter of a million in population; their origin is chiefly Indian and Pakistan. It was this

group that until recently supplied Kenya with clerks and artisans, dominated retail trade, and played an important role in the leadership of commerce and industry. European population numbered 70,000, the majority of whom were British.

The Bantu group, which is the largest single ethnic grouping in Kenya, includes the Kikuyu, Embu, Meru, Kamba, Kisii, Abaluyia, Teita, and coastal Nyika tribes. They live primarily in the so-called uplands area. The southwest and southern parts of Kenya are fertile, and most of the inhabitants are farmers.

The Nilotic people are the Luo who live near the shores of Lake Victoria. They came originally from the Nile Valley.

The Hamitic group is nomadic, wandering over arid wastelands of the northern section of Kenya and representing the Somali-speaking tribes. They include the Boran and the Revdilie cattle-owning tribes, whose territorial wanderings embrace the north-central area, the Turkana, and Gobbra groups, who live close to the Sudanese and Ethiopian borders.

The Hamitic extend toward the south and are represented in that area by the Galla (now known as Orma; they are considered camel people who are migratory cattle people).

The Nilo-Hamitic peoples are found primarily in southern Kenya and include the Masai, once a warrior tribe who only in the last ten years have turned to animal husbandry as a means of making a living.

Towards the south-central section are the Samburu, to the west are the Suk. - The most prosperous and settled of the Nilo-Hamitic are the Nandi, Kipsigis, Elgeyo, and Kamasia who have become farmers and live in the south-central section of Kenya.

Oral history tells of an early Bantu tribe on Lake Victoria who had a king, prime minister and parliament.

Since time immemorial, Kenyan tribes have educated their children for life within the tribe. Children were trained in ways of getting a living, as well as in morals, and in modes of conduct governing their relations with other members of their communities. This training was deepened and reinforced through the creative expression of the cultures: graphic and plastic arts, the dance, spoken verse, and narratives.

Often the training consisted of the child's watching his parent, who then helped him perform a task until proficiency had been acquired. In other cases, a child sat quietly by, listening to his elders as they told the tales and myths that set forth and explained the workings of the universe, and the system of values by which the people lived.

During the Middle Ages, Kenya was an Arab sultanate, followed by Portuguese settlers who expelled the Sultan in 1505. The Arabs returned to expel the Portuguese in 1696 and ran a flourishing slave trade until they were stopped by the British in 1897. The English

settlers came and the land was opened for settlement in the early 1900s when a railroad was built from Mombassa to Kisumu, Lake Victoria. Kenya became a British colony.

### Beginnings of European Education

The missionaries preceded the settlers. The first came from Germany in 1844, followed by European Catholics and many Protestant sects. The missionaries began the education of Kenyans, mainly for conversion purposes, with Bible schools held outdoors, under trees. Their pupils were apt for today there are one million Christians in Kenya.

All of the missionaries established schools and all early African education rested with them. In their early days, missionaries offered elementary education, but Protestant missionaries cooperated in opening Alliance High School, the first secondary school, in 1926 (Askwith, 1958, p. 123).

"The British government, in 1911, set up the education department, and provided grants-in-aid to approved mission schools but did not become more directly involved in educating Africans until the fourth decade of the twentieth century," Askwith said.

In developing an educational policy, the British and colonial governments were deeply influenced by two studies of African education, usually referred to as the Phelps Stokes reports made by British

missionaries and American educators and missionaries. The reports developed a philosophy of "adaptation" and argued that education "must be of a character to draw out the powers of the native African and fit him to meet the specific problems and needs of his individual and community life."

The report had good intentions for educating Africans, in theory and on paper, but not in practice because they were not implemented and administered according to their original intent due to the colonial settlers' antagonism toward upgrading Africans.

The reports said that, "along with training Africans in the three R's, there should be stress on health and hygiene, agriculture, and gardening, industrial training and home economics." The Africans had regarded the study of agriculture, etc. as a sort of punishment, rather than as a learning experience. The importance placed on agriculture or any hand-work had been low compared to academic discipline, and no student wanted to have anything to do with gardening.

Also recommended was that "the education of Africans include the training of African leaders in agriculture, medicine, theology, and teaching." A few Africans had gone to Europe and America for technical and professional training, but the report recommended that the native leaders should have access to higher education at home.

The Phelps Stokes report, in a second white paper, entitled Educational Policy in British Tropical Africa, reiterated the adaptation theme and at the same time recommended the transfer of British educational objectives to Africa. It proposed that:

Education be adapted to the mentality, aptitudes, occupations, and traditions of the various peoples, conserving as far as possible all sound and healthy elements in the fabric of their social life; adapting them when necessary to changed circumstances and progressive ideas, as an agent of natural growth and evolution. Its aim should be to render the individual more efficient in his or her condition of life, whatever it may be and to promote the advancement of the community as a whole through the improvement of agriculture, the development of native industries, the improvement of health, the training of the people in the management of their own affairs, and the inculcation of true ideals of citizenship and service.

(Phelps Stokes, 1924-1926, p. 3)

If the above policy had been practiced in good faith or even with greater skill, through religious teaching and moral instruction that were related to his condition of life and daily experience, the African might have been uninjured in his contact with western education. His responsibilities to the tribal community and his loyalty to the old beliefs, could have been strengthened. Instead, as soon as he had some education, he rushed to the city, leaving his community to return only on visits. There were not enough schools; the partially-educated African became a drop-out from his own society.

If there had been an opportunity to continue, through the discipline of classroom work and through games and recreation, he would have developed . . . habits of industry, truthfulness and disciplined cooperation. . . . The effective setting for achieving these ends, particularly for those who are to be trained for leadership, is the home and village, the residential school where the example and influence of teachers and leadership of older pupils create a social elite and a tradition in which standards of judgment are formed and right attitude acquired almost unconsciously through imbibing the spirit and atmosphere of the school.'

(Stabler, 1969, p. 7)

One reason, of course, that the African seldom achieved the "right attitude" was the way in which he was regarded by the government. In the same year as the publication of the Phelps Stokes recommendations, the Kenyan (British) Education Department in its 1926 Annual Report showed its true colors:

Generally speaking, the African man in Kenya has reached the stages of sense perception. The imagination and the emotions are both highly developed, but the development of the reasoning faculties must be slow. Just as hand-work has been found useful in the training of mentally defective children, so the most useful training which the African can receive in his present condition is contact with material processes--increasing emphasis is being placed in education in Kenya on contact with material processes such as agriculture, handicrafts, sanitation, housework--and the classroom will become more and more a place where the ideas and thoughts arising from practical experience can be coordinated and applied.

(Annual Report, 1926)

The British colonial policy was one of "elasticity." It was described by Lord Hailey as being "based on the principle that the maximum of initiative and responsibility should rest with the colonial administration" (Hailey, 1947, p. 92). In Kenya, the presence of a substantial European population appreciably influenced the education policy. For example, Governor Sir Edward Northey authorized government officials to "exercise every possible lawful influence to induce able-bodied natives to go into the labor field." Missionary leaders in Kenya and Britain protested this decision to allow government officers to act as recruiting agents for European farmers, and requested some assurance of protection for Africans and for a clear policy directed to "the fostering of native life and institutions."

At about the same time, feeling was running high in Kenya between the Indian community and European settlers. When in England it was proposed to give political parity to the Indians, the settlers raised a stormy protest, formed a vigilante committee, and began making plans to kidnap the governor and set up a republic of Kenya ("Indians in Kenya," 1923). The British government sensed the need for a statement of policy to clarify the question as to whether the interests of the Africans or those of the immigrant races were to be paramount in Kenya. This is why the British government sent Phelps Stokes to report on the educational policy in Kenya.

Secondary Education in Kenya: 1926-1963

Foundations of secondary schooling, like all other levels of schooling in Kenya, were laid through the efforts of Christian missions. Buxton High School, Mombasa, was established in 1904 as a multi-racial secondary school, and although many prominent citizens of all races throughout East Africa are said to have received their education in this school, African secondary education as such did not begin until 1926 (Dain, 1960, p. 18).

The Alliance of Protestant Missions (established in 1918) opened the Alliance High School at Kikuyu in 1926. At the same time the Catholic Missions opened a secondary school for boys at Kabaa which was transferred to Mangu in 1940. These were the only secondary schools that served Africans until 1947 when the Catholics started another secondary school at Yala. At the same time Protestants started a secondary school at Maseno in Nyanza Province. In 1940 the Kenya government embarked on a program for building African secondary schools. The government schools built were Kagumo, Kisii, Kakamega and Shimo-la-Tewa (Triennial Survey, 1958-60, p.9).

In 1930 the British Government had adopted a policy of educating adults as well as children, and by 1935 a plan for "social education" (Memorandum on the Education of African Communities, Col. No. 103, 1935) was proposed as a means of preparing Africans

for semi-professional jobs and integrating African education with changing community life. Eventually the government accepted a program of mass education with a view to reducing illiteracy and improving cultural and employment conditions for the Africans.

By 1941, there were sixteen government schools for Europeans with an enrollment of 1,077 while the number of schools for Africans had increased to thirty-four with 2,936 students.

Although, for some years a few girls had been taught at the Alliance High School, it was not until 1948 that the Christian Council of Kenya (the successor to the Alliance of Protestant Missions in 1943), started a sister school for girls adjacent to it.

To conclude the British educational policy, in outlining plans for education in Kenya, their point of view was clearly stated by Sessional Paper No. 77,

. . . very roughly, the European education problem is one of maintaining standards, the Asian problem is one of raising standards, and the African problem is one of creating standards and building up a system.

After forty years of the British protectorate, only 654 Kenyans had received a secondary school certificate (Davidson, 1964, p. 44).

### Colonial Heritage: Scorn for Manual Labor

Vocational or technical education was until very recently scorned by Africans, brainwashed by European colonists, largely for the following reasons:

1. It was believed that technical education was for those with lesser abilities so technicians were paid less than white collar workers who were often academically trained. Of the latter, the highest paid were those engaged in administrative, clerical or managerial work.
2. Vocational education was separated from literary or academic education by being put in special or segregated institutions.
3. Working with one's hands was for the stupid or outright illiterates. An educated African felt it was ignoble to tend his own garden, wield an axe or wash his own car or bicycle. These pursuits tended to discount or compromise his academic or social status. It was beneath an intellectual's dignity to get his hands dirty.

An African educator (Fafunwa, 1968, p. 76) recounted the following story, recorded by John Gunther in his Inside Africa:

Albert Schweitzer was a famous scholar, musician, philosopher and doctor who ran a hospital at Lambarene in Gabon. . . . Once when most of his helpers were ill, Schweitzer had to drag some heavy beams under cover before the outburst of tropical rain. This was tedious physical labor. The doctor noticed a Negro in a white suit--sitting near a patient whom he had

come to visit. Schweitzer called out, "Hello, friend! Won't you lend a hand?" The negro replied, "I don't drag wood about. I am an intellectual." Schweitzer replied, "How lucky you are. I tried to be an intellectual too, but didn't succeed."

For too long in Africa, the acquisition of secondary and university education was not desired by a person because he had a wish to serve the people but in order to be himself served by the less fortunate. It was a sort of insurance or pension for the few who were privileged to become educated. As African educator Fafunwa warned:

The survival of Africa during the next decade or two will depend on how much change has taken place in the new content of its education. It is clear that African reconstruction, rebirth, development, or whatever you may choose to call it, can become a reality only when Africa is prepared to place more emphasis on technical education. We do not know of any country or nation in the world that was developed by an army of clerks and administrators. The African builders of tomorrow will be drawn from an army of skilled technicians, engineers, scientists and the like, who have technical skills and a good general educational background, as well as from the millions of Africans with elementary, secondary or university education who are also able to turn screws, wield axes, tend gardens or fix tires. It is no virtue at all for an educated African to be called a 'Victorian gentleman': that statement dates African education, and the sooner the African moves rapidly from the nineteenth century to the twentieth, the better for African development.

(Solarin, 1963, p. 77)

## Today in Kenya

### Political and Educational Hierarchy

The Republic of Kenya has a President, who acts as the head of state and commander-in-chief of the Armed Forces. A unicameral National Assembly includes 158 members elected by the people from their districts, twelve members elected by people living in cities within the district, and the speaker and attorney general ex-officio. The President appoints his Ministers from the elected members of the National Assembly, and from his Ministers, he appoints a Vice-President.

The five geographic regions of Kenya, plus Nairobi, make up the six governmental provinces, each of which is headed by a Provincial Commissioner. Each province is divided into districts, and each district into locations; a District Commissioner administers a district, and a Chief Civil Servant (or, simply, Chief) administers each location. There are education officers at the district and location levels to assist the commissioners and chiefs. At the provincial level, the education officer acts independently of the Provincial Commissioner. However, the provincial education officer communicates with the district and location education officers through the district commissioners and location chiefs.

## Contemporary Secondary Education

### The Ominde Report

Beginning in 1963, the Kenyan government integrated the four previously separated school systems--British, Dutch, Indian, and African--but kept their basically British organization. In 1964, the government named a commission, chaired by Professor Simeon H. Ominde of the University of East Africa, Nairobi, to study national educational priorities. The commission was composed of members of the reigning political party, Kenya National Union, Members of the House of Representatives and the church, and educators from the University of East Africa and the Kenya National Union of Teachers.

In 1965, the commission published a report in two parts in which were identified five major problems, stated as needs, of Kenya today:

1. To achieve social change through an expression of the cultural values of the people.
2. To develop a relationship between church, state, and education.
3. To train manpower for economic development.
4. To build a united nation.
5. To have universal compulsory free primary education.

(Kenya, 1965, p. 2)

The Ominde Report, as it is called, resulted in the adoption of the African Policy for hiring and promotion. In the report issued on December 12, 1965, there was established for certain persons of the United Kingdom the option to assume Kenyan citizenship; employment would henceforth depend upon citizenship in Kenya rather than on race. In the 1969 elections, 17 of the 82 National Assemblymen elected were white Kenyan citizens. At the same time, the employment of non-citizens would be discontinued as soon as qualified local persons became available. A summary of the other recommendations of the Ominde Report follows:

Economic development must claim the highest priority in the immediate future in order, among other things, to enlarge the tax base on which educational services rest.

Primary education contributes to economic progress both by providing a reservoir of candidates for secondary and higher education, and by fulfilling the minimum basic educational requirement for participation in the modern section of economic life.

Although primary education has economic importance, it is not so important in this respect as secondary, commercial, technical and higher education. Consequently, too great an emphasis on primary education must not be allowed to hinder adequate growth in these other sectors.

Self-help in education must be controlled but not in a purely negative spirit. Self-help has a permanent and valuable place in education. . . . Harambee school openings should be sanctioned only if they are within the government's plan and if proper leaders are available.

### Present Educational System

The former Primary and Intermediate levels are being combined into a universal seven-year primary according to the recommendations of the Ominde Report, which the children enter at age six (see Table I). Students progress from lower to upper primary, and from secondary to higher education by passing standard examinations written in London or Cambridge (Sepyer and Meyer, 1966, p. 168). Students who fail the examinations proceed no further in either the government or unaided (i.e., missionary and other private) schools... Jobs are scarce for Kenyans without education certificates, and they return to their families or live in the city and become vagrants.

TABLE I  
UNIVERSAL 7-YEAR PRIMARY SCHOOLS  
TIMETABLE

(In districts where changes have been effected)

	<u>Lower Primary</u> (30-minute period)			<u>Upper Primary</u> (40-minute period)	
	I	II	III	IV-V	VI-VII
Religious Instruction	4	4	4	4	4
Vernaculars* (Reading, Writing, Language Work)	10	9	5		
English	4	4	7	7	7
Geography			2	3	3
Mathematics	6	5	5	5	5
Nature Study and Science	1	1	2	2	2
Health				1	1
Agriculture				2	2
Art and Craft, Needlework and Domestic Science	4	4	4	5	5
Music	1	1	1	1	1
Physical Education (including Health Education in Primary I, II, & III)	5	5	5	3	3
Gardening	—	<u>2</u>	<u>2</u>	—	—
	35	35	39	39	39

\* Swahili, Arabic, Hindi, Punjabi, Gulerati, Urdu.

(Sepyer and Mayer, 1966, p. 168)

However, for those who fail the examinations and can afford tuition, there are in some communities Harambee (translated "self-help") schools which operate under a government permit and with a British-oriented government syllabus leading to the Cambridge School Certificate or General Certificate of Education. Their syllabus does not include the standard examinations of the lower levels. Although these schools were founded at the behest of President Kenyatta on his 1963 inaugural tour, the government does not now support the schools financially or otherwise. The district education officer may check certain procedural matters, such as teacher certification. The schools follow the government syllabus rather closely because it contains the material tested on the examinations. Harambee schools offer the only educational opportunity for the 56 percent of the students who fail the Kenya Junior Secondary Examination (see Table II) and for the large numbers who fail subsequent examinations; they are somewhat more community oriented than conventional schools but nonetheless, like the conventional schools, are dominated by the mystique of the Cambridge School Certificate.

TABLE II

1967 results of Kenya Junior Secondary Examinations, Cambridge School Certification, and Higher School Certificate Examinations:

<u>Exam</u>	<u>No. of Candidates</u>	<u>Percent Pass</u>
KASE	18,868	39.8
Government Schools	3,778	54.5
Unaided Schools (Missionary, etc.)	10,433	41.6
Private Candidates	4,657	24.8
CSC	12,222	75.5
Private Candidates	1,193	43.0
Government Schools	9,446	85.2
Higher School Certificate Government Schools	946	42.0

(Ministry of Economic Development,  
1967, p. 137)

Students who pass the Cambridge School Examinations after Harambee schooling, now have the same opportunities as graduates of the government and other conventional schools.

The Kenya Junior Secondary Examination was introduced for the first time in 1966. This was mainly taken by pupils in unaided secondary schools and by P3 teachers wanting to upgrade themselves to P2 status. The pupils took the examination in at least five out of seven subjects--English, Swahili, Mathematics, General Science, Biology, History, and Geography. The main reason for its introduction was to give those pupils who, for one reason or another left secondary school after the first two years of the course, an award signifying a

recognized standard of achievement which would assist them in seeking training or employment. But actually, they had no skills.

### Enrollment Gains

Pupil enrollment in secondary schools increased from 20,000 to 115,000 since 1960, while the number of students in primary schools increased from 781,000 to almost 1.3 million. Those enrolled in trade schools showed far less gain, rising from 1700 to 2300. The number of teachers in training, however, almost doubled, going from 4000 to 7000. Table III demonstrates the dramatic growth in enrollment.

TABLE III

## PUPILS ENROLLED

By Type of School, 1960-1969

	1960	1961	1962	1963	1964
Primary Schools*	781,295	870,448	935,766	891,553	1,101,889
Secondary Schools**	20,139	22,167	26,586	30,120	35,921
Teacher Training	4,089	3,897	3,927	4,119	4,849
Trade	1,712	2,094	1,443	1,202	1,043
Total	807,235	898,606	967,722	926,994	1,056,532

	1965	1966	1967	1968	1969***
Primary Schools*	1,014,719	1,043,416	1,133,179	1,209,680	1,278,851
Secondary Schools**	47,976	63,193	88,779	101,361	114,567
Teacher Training	5,355	5,474	5,904	6,634	7,145
Trade	1,247	1,349	1,479	2,036	2,344
Total	1,065,467	1,113,432	1,229,341	1,319,711	1,402,907

\*Including Intermediate Grades.

\*\*Secondary Technical Schools are included from 1964.

\*\*\*Provisional.

(Statistical Abstract, 1969, p. 134)

Critical Shortage of Kenyan Teachers

Where Kenya has failed to produce enough qualified Africans to serve the various needs of government, business, agriculture, and industry in the past, the colonial office and other donor countries have gladly filled those posts with overseas personnel. In the most critical area, education, where all staff should be well-qualified citizens, the majority of teachers are foreign and the number of unqualified non-citizen staff rises.

The Republic of Kenya has some 239 maintained and assisted secondary schools with a staff of 2,715 teachers of whom 1,853 are non-citizens.

TABLE IV

	<u>1966</u>	<u>1967</u>	<u>1968</u>
Schools maintained or assisted	199	206	239
Schools unaided	201	336	362
Staff in maintained or assisted schools	2,402	2,320	2,715
Staff in unaided schools	962	1,733	1,929
Non-citizen staff in maintained or assisted schools	1,481	1,632	1,853
Non-citizen staff in unaided schools	485	695	736
Unqualified staff: in maintained or assisted schools	---	---	---
Unaided schools, citizens	246	645	8
Unaided schools, Non-citizens	217	430	735

(Cammaerts, 1969, a draft obtained from Dr. Robert Cox by the writer)

These figures Cammaerts says, show the situation clearly:

The rapid expansion of secondary education, particularly in the unaided section has not yet permitted a real change in the proportion of local and expatriate staff, but at the same time, the program of local teacher production had not reached its full output during this period. The situation is not only unsatisfactory as far as the number of expatriate staff are concerned but also in regard to the increasing number of untrained teachers both from Kenya and from overseas.

#### Definition of Terms

Maintained schools--are those which receive government support, in form of financial grants or the subsidy of teachers, for the difference between their approved expenditure and the revenue, from fees or other sources.

Assisted Schools--are those to which the government contributes a percentage (normally 80 percent for secondary schools) of the salaries of approved teaching staff and certain other expenditures. The remainder of the expenditures are paid from fees or revenues according to the schools.

Unaided Schools--are those not receiving financial subsidies from the government. They include Harambee (or community) schools which constitute the majority as well as a number of schools run by religious and other voluntary bodies and schools in private ownership.

### Political and Social Needs of Kenya

On December 12, 1963, Great Britain granted independence to Kenya which became a Commonwealth member. The new government attempted to unify the various tribes and races in a one-party system to expedite development. But old racial animosities continue, weakening the country. Kenya needs to develop a national consciousness and sense of nationhood transcending consideration of race, tribe, religion, and language. Within such a national consciousness, a government is more likely to remain stable, to contain a system of parties, checks and balances, and to maintain a stable relationship with other countries.

### Economic Needs of Kenya

At the time of independence, industries in Kenya were operated by Europeans for European profit. It is the goal of the Kenyan government to acquire the European-run industries and operate them for Kenyan profit. However, Kenyans have the technical skills for operating only a few of these industries; consequently, the European industries now operate under a Working Permit Ordinance from year to year. In 1967-68, 56 percent of the Kenyan males in industry were employed by Europeans, and more than three-fourths of those were earning less than 240 pounds sterling per annum (\$720), thus providing a weak tax base for a developing country. Furthermore, only

ten percent of adults were employed gainfully full-time. Until Kenyans acquire the technical skills to earn more in private industry and then to operate the government industry, the tax base will be weak, and the profits will not stay in Kenya.

### Agriculture--The Major Way of Life

Kenya is a fertile country, the largest tea producer in Africa, and one of the largest coffee producers. Agricultural products account for the largest export dollar and three out of five Kenyan workers are employed in farm-connected activities.

During the British occupation, settlers drove out the people and the best land became known as the "Kenya White Highlands." The settlers would not permit the Africans to farm any but the poorest land. This led inevitably to the Mau Mau revolt whose strength derived from a mythic attachment to the land--a Kikuyu genesis legend states that the Divider of the Universe came to dwell on Mount Kenya and gave the nearby land to the people.

Following independence one of the major actions of the Republic of Kenya was to institute a large land resettlement program. Land was purchased from the European settlers--it now approaches the two million acre mark--and it was resettled, depending upon the wisest use of the resources. For example, a large tea plantation might be

kept intact at 20,000 acres and operated as a communal farm. Other farms might be broken into small, family holdings of only an acre. Thus today Kenya reaps the benefits of its own bountiful land with Kenyans once again living on and working their own land.

Concurrent with the resettlement on the land, the government established schools for teaching such practical skills as the use of large equipment such as tractors and the basic agrarian skills for specific crop and animal production. Agriculture extension workers are available for individual advice and for lectures and demonstrations. The Ministry of Land Settlement helps with advice and loans.

The importance of a diverse agriculture to Kenya's economy demands that young people receive a sophisticated education so they can become involved in helping to develop their land's great resources.

### Needs of Kenya's Youth

In this section of this chapter, the social imperatives for the future of Kenya have been discussed. These include such nation building elements as industry, labor and agriculture. Kenya's future, of course, resides basically in the capabilities of her youth. And today, these youth are subjected to the enormous strains of a rapidly changing society.

Since Sputnik, one oft-repeated cartoon in the world press shows a skinny African, in night-shirt, holding a shepherd's crook and gazing upward in mute wonder as a moon-bound spaceship orbits overhead. This image, of course, reflects the pejorative Western concept of the African as primitive. Yet the cartoon has elements of the truth for, in many cases, the African youth is making what appears to be a quantum leap into technological society. This has its corollary in the fact that while many parts of Kenya are inaccessible by bus or train, the airplane reaches the most remote areas.

Even in still underdeveloped Kenya, youth faces the stresses and demands of urbanization, congestion, and advanced methods of communication and transportation. Concentration of people in the cities near their jobs requires obedience to law and consideration of the rights and property of others. Effective participation in urban life, as distinct from tribal life which has rigid codes learned in early childhood, demands acceptance of what may be alien and inconvenient laws.

In order to live constructively within a rapidly changing society, the youth of Kenya must: (1) understand social change and changing institutions; (2) be equipped with education/skills training to work in the economy; and (3) develop a strong sense of obligation toward their society, growing from family fealty to national pride.

Youth needs to learn how to be both independent and cooperative. Education should foster the ability to analyze and understand new concepts; and create an appreciation for different modes of living so that diverse individuals and groups might live and work together harmoniously.

The Kenyan youth needs to be assured of his worth as a person. Given the appropriate education so that he may function well he should feel pride in himself, in his heritage and his nation.

Kenya will have to offer its youth the opportunity to make independent choices in life. These choices will depend upon education, skills training, job experience and placement. And, this author believes, the wider the range of choices offered to youth, the richer will be the society when each youth exercises his options.

## CHAPTER II

### BACKGROUND FOR CHANGE

. . . in the majority of classrooms in most developing countries, teaching is dull and routine, and education consists of mastering simple skills and learning by heart a fixed collection of facts and 'laws' the acquisition of which is later tested by examinations; . . . rote memorizing, rather than 'problem solving' and 'understanding of structure' is the dominant characteristic in developing areas. The teacher with only a thin and routine knowledge of the subject he is teaching, who is compelled or cajoled into using a technique he does not understand or does not really believe in, is possessed of a strange inverted alchemy that can turn the brightest idea into lead. The syllabus may change, but he goes on doing the same old thing under another name.

(Beeby, 1966, p. 8)

One way of changing this glum reality is through the use of instructional tools designed to aid a teacher to be efficient and effective. Therefore, this chapter will examine new curriculum programs, new methods of teaching, application of new technology to education and new organizations within schools. First, there will be an examination of the concepts of curriculum and a discussion of terminology. Then there will be a review of major innovations pertinent to this study. Since this dissertation deals with the idea of a comprehensive school, this chapter will conclude with an analysis of basic and vocational education.

## Concepts of Curriculum

Before getting into specific changes, it would be useful to survey the different attitudes toward the concept of curriculum.

One opinion is that the curriculum is the instrumentality through which these two factors are brought together: (1) experiences through which children achieve self-realization and at the same time (2) learn to contribute to the building of better communities and a better nation of tomorrow (Ragan, 1961, p. 4).

In the process dimension, Saylor and Alexander conceive curriculum as including such efforts of educational personnel as the following:

(1) Determining educational goals; (2) translating the goals to the substance of learning; (3) selecting and employing instructional methods designed to make learning effective and economical; and (4) evaluating how well any educational echelon has achieved its predetermined goals. Illustrations are statements of goals; lesson plans, unit plans, and complete course guides, the tangible results of instruction such as homework and class projects, and instruments and profiles of evaluation.

(Saylor and Alexander, 1954, p. 2)

Smith, Stanley, and Shores (1957, p. 3) say that the curriculum is always, in every society, a reflection of what the people think, feel, believe, and do.

Curriculum workers, notably Jerome Bruner, have emphasized that schools must shift their focus from transmitting specific knowledge to providing students with skills, understandings and attitudes that will enable them to go on learning after they have completed their formal education. (See Chart I, page 170, on Pittsburgh Dropout Plan.)

Some of the new curriculum programs are designed with this goal in mind. One assumption underlying these new programs is that learning the structure of a discipline and understanding its basic concepts will provide students with a framework into which they can fit new knowledge as it becomes available.

"The new methods of teaching reflect the concern of curriculum workers, that students learn how to learn. To achieve this purpose students are given many opportunities to learn through independent activities" (Bruner, 1962, p. 5).

Bruner says that the didactic method of lecture-recitation-testing project methods is being replaced with a discovery method of teaching that enables students to discover concepts and relationships for themselves. Emphasis has shifted from handing out predigested information to encouraging children to find out for themselves. Most of the new mathematics and science curriculums are based on the discovery method of teaching.

Terminology confusion may be avoided in the discussion of the curriculum by agreement on the meaning of certain terms. Among the more common terms and definitions are the following:

A program of studies is a complete list of all courses offered in a school arranged by grade levels.

A curriculum is the total controlled environment created under the direction of the school for the purpose of stimulating, influencing, and contributing to the wholesome growth and the development of boys and girls. The term is also used to refer to the arrangement of a sequence of courses to prepare pupils for specific educational or vocational goals such as the college-preparatory, commercial, general, industrial arts, and home economics.

(Gruhn, 1947, p. 89)

Gruhn says that a course of study is the plan of organization for the content, methods, and materials of instruction in a given subject, such as a course of study in algebra, Latin, English, or social studies. It may refer either to one semester or one year, or the program in a given subject for several years (Gruhn, 1947, p. 102).

Ragan indicates a constant is a course which is required of all pupils at a given grade level for all curriculums. For instance, United States history, which is ordinarily required of all pupils is a constant in schools where that is the requirement (Ragan, 1961, p. 9).

A limited elective is a course which must be chosen from a limited group of courses. For example, a ninth-grade pupil should be required to elect a course in mathematics from among several courses, such as algebra, general mathematics, and shop.

A free elective is a course that a pupil is free to choose from several in different subject fields. For instance, in the ninth grade pupils may be expected to choose a course from a group of electives such as Latin, business training, general science, ancient history, industrial arts, and home economics. That choice would be considered a free elective (Saylor and Alexander, 1954, p. 5).

Bossing and Crommer (1965, p. 159) say that the core curriculum is applied to that phase of the experience curriculum which is concerned with the development of the experiences all learners need in order to achieve certain behavior competencies considered essential for effective living in a democratic society.

### A Review of the Literature

The major innovations reviewed for their relevance to this dissertation are:

Team teaching

Flexible scheduling

Programmed materials and instruction

Non-graded high school

Acceleration and enrichment

Guidance and counseling

General and vocational education.

### Team Teaching

The first innovation to be considered is team teaching. Trump and Baynham (1961, p.147) say that team teaching grew in response to needs of the schools for better utilization of limited staff and of limited school facilities. It also met the need for providing varied types of educational experiences. The concept of team teaching is that two or more teachers join together to form a team for teaching purposes. They plan together, share teaching responsibility and evaluate the program together. Team teaching provides: large group instruction, small group instruction, and independent study.

Trump recommends that 40 percent of the student's time be occupied in large-group instruction, 40 percent in independent study, and 20 percent in small-group instruction.

There are considerable variations on the theme, ranging from a basic team of two to a more elaborate team with specialists of various types. A full-blown team could consist of master teachers, general teachers, instructional assistants, clerks, staff specialists, general aides, and community consultants. Each specialist has his own function. Less highly trained personnel are able to perform some of the more routine duties that teachers heretofore have had to perform. Instructional assistants and teachers' aides, frequently chosen from

housewives and former teachers in the community, can render the professional teacher valuable help by correcting tests, reading papers, and keeping records. Each member of a team is assigned that responsibility for which he is most capable. Team teaching in one sense follows the principle of division of labor which is basic to modern industry.

One teacher, often designated the master teacher, serves as team leader. The team meets daily and plans jointly. A school that establishes team teaching programs must schedule at least one period during which time all of the members of the team may meet for planning. The team must agree on what will be presented, and what the duties of each member of the team will be in the presentation. In general, the lecture method is used in large groups, which usually consist of 150-250 students. The discussion method is followed in the small groups, which schools attempt to keep down to approximately fifteen. Teachers take responsibilities for the kind of work they do best: the versatile lecturer may deliver the talks to the large groups, teachers who are skilled in conducting group discussion supervise the small groups, the others may work more effectively with students who are engaged in independent research.

Team teaching and planning allow a great deal of flexibility. Teachers can accept responsibility for teaching to large groups the material and topics in which they are well versed. Each teacher may teach the topic he knows best and may take time to become a specialist in his topic. In an ordinary classroom set-up the teacher simply does not have the time nor energy to do the kinds of research, study, and preparation necessary to become expert in every aspect of his subject. Team teaching programs lead from strength.

### Strengths and Weaknesses of Team Teaching

The strengths and weaknesses of any educational innovation must be weighed. On the positive side of the scale, team teaching has brought into the high school a stress on excellence from both the teachers' standpoint and the students' standpoint. The teachers involved are attempting to give their best and expect the students to do likewise. In large groups students must accept greater responsibility for their own work. They must learn to listen and to take notes. Since materials and equipment have to be duplicated in each of several sections, better materials and equipment can be purchased and provided for use in the large groups. Many kinds of audio-visual aids are supplied to the teams.

Opportunities are provided students to engage in varied types of learning experiences through the three separate phases of the team teaching program. The needs of individuals are partially met through independent study; of small groups, through the seminars; and of large groups, through the lectures.

(Trump and Baynham, 1961, p. 147)

The success of a team teaching program is dependent upon the team members' abilities to cooperate, to get along with each other, to respect each other's ideas, to accept and fulfill responsibilities, and to share in the give and take of cooperative planning.

Other there are teachers who are emotionally and personally unable to work cooperatively with others. It is usually more difficult to form a team of older established teachers who have worked for years on their own than to create a new team. Teachers who have found their own ways of operating over a period of years are often

reluctant to abandon their individual ways. It is absolutely essential that teachers join in a team teaching program voluntarily, rather than by order from the principal. A team teaching program which does not have the full support of the teachers who make up the team does not have a chance to succeed. Teachers should agree to work in a team only because they believe the educational benefits to be derived by the learner will be superior to what they now receive.

Some administrators and faculties have misunderstood the nature of team teaching. They have initiated team teaching with large-group instruction and have omitted the other two essential features of team teaching: small-group and independent study. Large-group instruction can take care of enrollments but it places too great a stress on the lecture method. The personal relationships between teacher and pupils cannot be obtained in large groups. Students cannot discuss, ask questions, and clarify their views in large groups. If small groups and independent study are not parts of the program, some of the more important educational experiences are lost. Large-group or mass instruction per se is not team teaching.

"Turn teaching" is also not team teaching. In turn teaching, two teachers bring together their two sections of the same subject and alternately teach the large groups. One teaches a unit, then the other. While one teacher is teaching, the other teacher may or may not be in attendance at his colleague's presentation. If learners are

to achieve maximum value from this type of instruction, both teachers should be constantly at hand during the presentation. Provision for follow-up discussion in smaller classes should be made. A group composed of two average-sized classes is too large for discussion purposes. Since follow-up discussion is essential to clarify lectures, there is little value in bringing the classes together in a large group without subsequent small-group discussion. If two teachers of two sections of a subject wish to participate in turn teaching, each teacher may move from his classroom to the other classroom to present his topic.

#### Flexible Scheduling

Scheduling is essentially an administrative responsibility which is adjusted to the curriculum of the school.

Imaginative administrators are creating new patterns of scheduling. They have been aided . . . by the decreasing emphasis placed on the Carnegie unit, which arbitrarily set as the basis for all courses one period per day, five days a week, for one school year. With the stress on scholarship, the shortage of qualified teachers, the newer ways of utilizing staff, and the introduction of technology into the curriculum more satisfactory ways of scheduling had to be found.

(Trump, J. Lloyd, 1963, p. 370)

Administrators discovered that not all courses necessarily need five equal periods of time per week. Some could do with less frequent class meetings. Some could use shorter blocks of time and some longer blocks. A seven or eight period day provides more flexibility than a five or six period day. Scheduling by fixed class size, e.g., 35 pupils, for each period of the day rules out flexible grouping--large and small groups as the occasion may warrant.

In order to provide less rigid schedules, patterns were designed to fit the needs of individual schools. Among the approaches in use are the following:

1. Rotating schedules. The number of minutes each subject meets is extended and the number of class meetings per week is reduced. One school with a six period day, for example, had extended its class meeting time to eighty minutes. Each subject meets four times per week instead of five. The fifth period is placed on a rotating schedule meeting at a different hour each of four days of the week. The sixth period is for activities and other courses.
2. Block scheduling with flexibility within the block of time. For example, a core class is scheduled for two periods per day. Teachers involved may divide the two hours into any kind of scheduling arrangement they desire.
3. Combined double and single periods. A course that formerly met five periods daily per week is rescheduled to meet two days a week in two-hour blocks and one day a week as a single period. Farrington

High School, Honolulu, has scheduled courses that meet, for example, two periods on Monday and Thursday or two periods on Tuesday and Friday. On Wednesday every subject meets for one period.

4. Modular scheduling. With this arrangement periods are scheduled in modules of time, as 10, 20, 30, 45, or more minutes. The basic or shortest module is determined, for example, as 15 minutes. Those subjects that require a great deal of time are scheduled in multiple modules. Science, for example, may be allotted five or six modules. At may be given two modules. This kind of schedule recognizes the need for varying time allotments for various courses.

Trump describes the ultimate goal of a truly flexible schedule and gives an illustration of a school which is striving to reach that goal:

The goal, then, in a larger school is to develop orderly procedures that permit teachers and students as much latitude as possible in developing various aspects of instruction and learning. The following appear to be necessary ingredients: The class schedule is made daily on the basis of teacher requests. Each student, under competent direction, makes decisions regarding his part in the established schedule. Conflicts for students and teachers are reduced to a minimum. Teacher loads and pupil loads are such that they permit, on the one hand, maximum professionalization of teaching, on the other, . . . maximum potential learning opportunities for students. The school knows what its students are doing and follows reasonably equitable personnel policies for teachers. The whole scheme is financially feasible and logistically operational:

(Trump, 1963, p. 370)

Making significant strides in the direction of such a schedule is Brookhurst Junior High School in Anaheim, California. Principal Gardner Swenson described their program to Dr. Trump as follows:

Individual members of teaching teams determine three days in advance what students they want to teach, in what size groups, for what length of time, in what places, and with what technological aids. Teacher job-specification forms containing this information are turned into their team leaders. The team leaders then assemble to make a master schedule for the day, a procedure that takes approximately twenty minutes each day. The master schedule is then duplicated and made available to the students and their counselors. In a daily twenty-minute meeting, with the advice and consent of their counselor (twenty students to a counselor), each student makes his schedule. A student may note, for example, that the schedule calls for a large-group presentation on a given subject. Deciding that he already knows that material, he may elect to spend his time in independent study in the art room or library or some other place. The counselor either approves or rejects this decision. Then the student makes out his own schedule for the day in quadruplicate. One copy is for himself, one for the office, one for the counselor, and one for his parents

#### Programmed Materials and Instruction

The common media now in the teacher's technological communication cupboard include teaching machines, T.V. and video tapes, recorders and projectors particularly for programmed instruction.

Professor Sue Winn, during a course in Programmed Instruction at the University of Pittsburgh, said:

A technological nightmare stalks the teacher in his low moments. He gloomily foresees a fully automated school equipped throughout with devices for self-instruction, pupils busily teaching themselves, while he looks in from the outside shivering in the cold, unemployed. The teaching machine has made its way into the schools and can serve as a help to the teacher. It need pose no threat to the qualified teacher. He can put the teaching machine and programmed materials to effective use as aids to teaching.

Programmed instruction refers to teaching that makes use of programs or programmed materials. A teaching machine is an instrument that makes use of a program. Machines come in a variety of forms from very simple to very complex, very cheap (\$20) to several thousands of dollars, very naive to very sophisticated. The machine is designed to help the learner use a program.

A program presents the content of a subject in small steps. The learner reacts to each step by answering a question-- in open-ended form or multiple choice. If he obtains the correct answer to an item, he moves along to the next step. Ideally, the student can never make a wrong response. If he should do this, a sophisticated teaching machine would refuse to move to the next item, requiring him to remain on the same step until he has mastered it. Complex machines permit a student to branch off and study the item missed before returning to the central program.

Programmed instruction operates on behavioristic principles of learning. Students proceed in tiny steps. They respond to each stimulus presented in the program. Each response is reinforced positively when the student obtains the right answer.

(Winn, 1961, pp. 131-133)

### Programmed Textbooks

Programs may be presented to the learners without the use of machines. Programmed textbooks are becoming increasingly more common in instruction. In using programmed materials without a machine the learner must exercise self-discipline and not go on to the next item until he has measured the previous one.

Programmed instruction offers the following advantages:

1. It can help the teacher to provide for individual differences.

Students can work at their own speed. If they finish a program, they can go on to the next. They can work independently and not be held back by slower learners. Teachers may use programs of differing levels of difficulty for learners of varying abilities within the classes.

Programmed instruction can help a good teacher to do his job more effectively.

2. It can extend the curriculum by offering courses which the school is unable to provide because of limitations on number of staff or lack of qualified instructors. Programmed instruction can aid the small school to expand its curriculum. The use of programmed materials

is undoubtedly superior to instruction by an unprepared, unqualified teacher. Programmed instruction is an aid to students engaged in independent study. Advanced courses not ordinarily taught in the school may be made available by programmed instruction.

3. Programmed textbooks, as well as some inexpensive machines, may be taken home for independent study. Since students must obtain the correct responses to items on a program, the teacher does not have to worry about their learning wrong responses, as they frequently do with ordinary homework.

4. Programmed instruction is especially helpful in remedial work. Students who enter a course at a low level of achievement may be placed on an individual program at a more elementary level and brought up in achievement as rapidly as possible.

#### Non-graded High School

John Goodlad and Robert H. Anderson define nongrading as a vertical pattern of school organization, which serves to move pupils upward from the time they enter school to the time they leave it.

The non-graded school provides for the continuous unbroken, upward progression of all pupils, the slowest and the most able. The teacher makes a decision based on a diagnosis of the individual child, whether to reinforce learning through increased emphasis on similar learnings or whether such reinforcement is superfluous.

The non-graded school provides for the irregular upward progression that is characteristic of almost every child. This means that most children do not advance evenly, they spurt and stop, regress and advance in both their general and their specific development. Classes in the non-graded school are set up to recognize and account for wide ranges of accomplishment so that even very long lags or very gross spurts on the part of pupils still fall within normal expectancies for the group.

The non-graded school provides several alternative vertical classroom placements for every child at any time, no one of which denotes non-promotion or skipping. This accounts for the flexibility so often attributed to non-graded schools.

The curriculum embraces both a learner and something to be learned; whether teachers should teach children or subject matter is not for adult debate. They teach both; the children they teach differ widely at each moment in their understanding of what is to be learned. These differences take on a special meaning when they are considered in terms of the developmental and continuous nature of learning. What is to be learned must be viewed as longitudinal threads--concepts, skills, and values--running throughout the entire length of the school's programs. Children progress along these threads at differing rates of speed. At any time they differ markedly in their understanding of given concepts, their proficiency in certain skills and their appreciation of values and attitudes.

(Goodlad and Anderson,  
1963, pp. 219-222)

Many educators and groups have advocated some types of grouping. James B. Conant and the Rockefeller Report are in general agreement that students should be grouped in sections of a subject determined by their abilities or aptitude in each subject. Typical plans of grouping weigh such factors as intelligence, teachers' grades, teachers' judgments, and students' intensity of purpose. The non-graded high school, of which Melbourne High School, Florida is the prototype, dispenses with all criteria except one: achievement scores on standardized achievement tests.

The Rockefeller Report describes the Melbourne scheme.

Melbourne's plan of non-gradedness consists of grouping students in the various subjects in seven phases. These phases are:

1. Subjects are designed for students who need special assistance, in small classes.
2. Subjects are designed for students who have more emphasis on the basic skills.
3. Courses are designed for students who have an average background of achievement.
4. Subject matter is designed for extremely well prepared students desiring education in depth.
5. Courses are available to students who are willing to assume responsibility for their own learning and pursue college-level courses while still in high school.
6. Students whose creative talents are well developed should give consideration to the Quest phase of the curriculum. In this phase a student may do research in an area in which he is deeply and broadly curious either to develop creative powers or in quest of knowledge.

7. Subjects that do not accommodate student mobility, e.g., typing, physical education, are ungraded but unphased.

(Rockefeller, 1967, p. 12)

Students are assigned to the various phases on the basis of their performance on standardized achievement tests. A student can be moved to a higher phase at any time during the year if it appears he has been assigned to a phase too low for him. Effort is made to prevent placement beyond a student's achievement so that the student has to be reassigned to a lower phase.

On the complex Melbourne schedule subjects appear as:

"English--Ph 3," "American History--Ph 4," "Spanish IV--Ph 5."

The non-graded curriculum is often referred to as "phased instruction" or "continuous progress plan." Non-graded plans permit learners to work comfortably within their levels of competency. In phases 1 and 2, Melbourne omits marks, thereby removing a threat. Students go through a high school program under this plan and obtain a quality of education which best fits their own needs. Melbourne claims that since its non-graded program was started the dropout rate has declined to four percent. With the national dropout rate standing at 30 to 35 percent, a reduction of this nature must be recognized as a creditable achievement on the part of school personnel.

### Acceleration and Enrichment

One tool successfully used in the United States is normally termed "acceleration and enrichment." Separate kinds of curricular arrangements are made for students of varying capacities (Gruhn, 1947, pp. 293-296). High schools have instituted a number of accelerated programs for above-average students which allow them to gain in breadth and depth in their studies at a rate not possible under ordinary circumstances. The object of acceleration is to permit faster students to learn as much as they can at as rapid a rate as they are able. Among the plans in operation in the United States, according to Gruhn, are:

1. Ability grouping. Students are placed in sections of a course according to their abilities and achievement. Phased education or continuous progress plans give the grouping a modern twist.
2. Independent study. There is a growing trend, as was shown in the previous discussion of team teaching, to permit brighter students to do more school work individually and independently. Students are encouraged to do independent research, explore special interests, and utilize total school facilities. Independent study can be incorporated into a regular high school program. Teachers may, if they wish, free able students from class periods which the students could well afford to miss. Instead of remaining to go over old ground, students can be excused to do independent study elsewhere

in the school or even in the back of the classroom.

3. Early school leaving. The Ford Foundation for a number of years supported a program by which academically talented young people are identified and enrolled in college at the end of the junior year in high school. Contrary to the misgivings of some critics of this program, those students who have left high school at the end of the junior year have been successful in their college careers.
4. Voluntary courses outside of school hours. A few high school instructors have attempted to offer non-credit courses on a voluntary basis in the evenings or on Saturdays for those students who wished to take them. In some areas of the country these programs have met with a resounding success. The chance to study something of interest to them without the threat of marks motivated many boys and girls to give up their leisure time to take on extra studies.
5. Cooperation with institutions of higher education in the area. By cooperative agreement advanced high school students are permitted by colleges in the same community, particularly junior colleges, to take courses at the college. Students also utilize the college's library resources and call on professors for assistance.
6. Special summer programs for able students at colleges and universities. Some colleges offer summer programs to academically talented students who have completed their junior year of high school.

7. The Advanced Placement Program. Basically, the program permits academically talented students to take college-level courses while still in high school. These courses are usually limited to seniors. Students and teachers in advanced placement courses can follow course descriptions in the eleven subjects (American history, biology, chemistry, European history, French, German, Latin, mathematics, physics, and Spanish) which are currently tested in this program. At the end of the year an Advanced Placement Examination prepared by the College Entrance Examination Board is administered to students in the program. The results are forwarded to the participating colleges in which the students would like to enroll. On the basis of successful completion of the course and examination the college may grant the student, when he is admitted, either college credit or placement in advanced levels of the subject or both.

#### Guidance and Counseling Activities

While examinations may be kept as one indicator of a student's abilities, a more equitable mechanism for evaluating a youth's possibilities exists in the example provided by the guidance office at Aiyetoro, Nigeria.

This office at Aiyetoro developed to meet the needs of that particular school and its students (Rees, 1969, p. 39). (See Appendix A.) At Aiyetoro the guidance office has two major functions:

1. It aids the administration in decision making involving admissions, streaming, and disposition of individual student problems.
2. It provides information to the students about further education and career subject choices. The guidance officer also performs personal counseling.

Rees indicates that guidance can be defined as that part of the school program which attempts to facilitate educational decision-making for the administration, students and teachers. Guidance theory emerged from a philosophy of education which recognizes individuality and the importance of individual difference. Guidance practice, therefore, is based on the theories and specialized knowledge of modern psychology, educational philosophy, and measurement and statistics. The specialized skills of the guidance counselor include the administration and interpretation of intelligence, aptitude and personality tests, the ability to maintain a counseling relationship with students and the skill to assess, predict and interpret the outcome of courses of action available to the individual student.

Often the guidance counselor may be called upon to play an advocate role, interpreting and promoting such values as the importance of a student's creating his own life style. In this respect, he may have to use all of his persuasive powers with teachers and parents. The writer recalls with frustrated amusement the violent reaction of a parent who, on being told that his son's aptitude was for veterinary medicine and not medicine as such, replied, "If my son is too lazy to study medicine, I am not prepared to finance him for veterinary medicine. Anyone with little or no education can take care of cows, even without elementary education!"

#### Vocational Education Built on General Education

Vocational education, like general education, has been subjected to varied definitions and interpretations. Some educators regard all education as vocational since it develops an individual's ability to be a productive member of society (Novak and Sabatini, 1961, p.504).

Others rephrase this view when they define vocational education as the sum of those experiences which affect people's habits, their thinking, and their decisions, thereby enabling them to function successfully in their society. Vocational education is

that part of the individual's experience which equips him for gainful work, and it is part of the total educational program, Prosser and Quigley state. They make these claims for vocational education:

It is essential for the conservation and development of natural resources, and promotes a more productive and prosperous agriculture through training farmers.

It prevents the waste of human labor by making labor more effective, through supplementing apprenticeship programs, and supplying the labor market with trained men and women.

(Prosser and Quigley, 1949, p. 431)

Novak and Sabatini (p. 505) suggest that vocational education differs from general education in the following ways: vocational education is primarily designed as preparation for a particular occupation or to improve a worker's efficiency; course work is related more directly to the actual work of a specific occupation; the student is given opportunities to use his knowledge and skill productively as he learns.

This author prefers the distinctions made by Alberty. He says. "General education is that part of the program which is required of all students at a certain level because it is regarded essential to the development of common values, understandings and skills which are basic to citizenship. On the other hand, special interest education consists of that part of the total education program designed to meet the special needs and interests of various individuals and groups. This latter program provides both vocational and non-vocational opportunities" (Alberty, 1959, p. 159).

According to Alberty's definition, general education forms an important foundation for the development of vocational competence. Three generalizations illustrate the undergirding role of general education:

1. It helps the student discover and explore his capacities and interests, including those with direct vocational implications.
2. It provides opportunities to develop an understanding of the world of work and appreciate the contributions of the major vocations to human welfare.
3. It provides guidance to the individual learner in the selection of a vocation.

(Alberty, 1959, p. 169)

To this writer, the most important point which Alberty (p. 164) makes is that general education should provide special interest education to a point where more specialized competencies become necessary, either on-the-job or in further training institutions.

Referring specifically to vocational education, Alberty shows that such courses as those offered in industrial education which lead to direct employment in industry, are examples of vocational education opportunities which the modern school should make available to its students.

Finally, it is now appropriate to summarize the fundamental characteristics of an efficient vocational education program suggested by Lee:

1. Vocational education students must be carefully selected.

2. The content for vocational education should correspond to actual future vocations. The subject matter to be taught should correspond to the way it functions in the work for which the students are being prepared.
3. The instructors must have had occupational experience in their teaching fields.
4. Whenever applicable individual instruction should be used.
5. Individual progress should be permitted. Each student should be allowed to progress as rapidly as his or her ability requires. Promotions should be made at any time on the basis of ability.
6. Arrangement of subject matter should go from the simple to the complex or from easy to the difficult.
7. Prevailing occupational standards should guide instruction and standards.
8. Enough repetitive training in various operations should be given so as to provide the employer with someone who is an asset rather than a liability.

(Lee, 1939, pp. 27-28)

The background and literature for the areas of distributive education, such as trade and commercial, are more appropriately considered within the actual Kisumu model.

## CHAPTER III

### KISUMU MODEL SCHOOL

#### Introduction

Brameld states that education, to fulfill its rightful function, must come to grips with the most urgent problems of a culture (1966, p. 104). Helping to solve the problems of Kenya, as has been stated, is one of the major goals of this thesis and the purpose underlying this design of Kisumu Model School. In order to implement this design, the previous chapter reviewed the literature dealing with new methods and programs. This chapter proposes to incorporate and adapt some of those innovations for use in the Kisumu Model.

First, this chapter will deal with the realities of Kisumu School: (1) its community environment, and (2) an overview of the curriculum which will incorporate those components necessary for certification and those structure changes which will enable the school to provide equally for those with academic or vocational potential. A flow chart with supplementary discussion illustrates how students will move through the school.

Next to be considered are both the innovations and the traditions which could most fruitfully be adapted for use within Kisumu School.

Following this is the content of the curriculum which is designed

both for its relevance to Kenya and for its usefulness to a student preparing for modern life within his community.

Basic, of course, to the development of Kisumu School is the teacher. The role of teachers, and resource personnel, and a proposal for teacher training within the school will be discussed. Finally, this chapter which began with the community will come full circle to end with the community as it examines the role of the Community Coordinator.

### The Concept of Community

One of the major aspects of this model concerns the concept of the school's identification with the community. In order for the country to grow, its people must develop widening circles of obligation. As Ominde says,

The substitution of communal for parental responsibility calls for a psychological change in the community that cannot be encompassed overnight, for it involves the supersession of the family or clan by the community as the main object of loyalty.

(Ominde, 1965, p. 8)

As one of the responsibilities of the school will be to help achieve this "psychological change" from personal to communal loyalty, it is felt that one major strategy is to involve the community in a basic and integral fashion with the development of the school.

The concept of community was not considered in the review of the literature because the writer prefers to build upon the actual community of Kisumu and upon the spirit of Harambee.

### The Community of Kisumu

#### Population

Using a table of the western districts of Nyanza Province, giving location index and population density, in the census of 1948, Kisumu had an area of 83 square miles with a total population of 34,860, and a density per square mile of 420. In the census of 1962, the population had increased to 49,595, bringing the population density per square mile to 598. The population in 1962 was markedly concentrated in the urban centers of Lake Victoria basin; Kisumu Township had 73.5 percent of the total urban population for the whole region (Ominde, 1968, p. 198). Kisumu school population at the primary level totaled 5,114 for the municipality and 36,477 for Kisumu County. Nyanza Province elementary enrollment totaled 203,016 (Statistical Abstract, 1969, p. 136).

#### Location

Kisumu is strategically situated in the middle of a productive land extending from the foothills of Mount Elgon to the Tanzanian border. Products from the agricultural activities of north, south, and

south-east of the gulf, and the modest contribution of the surviving mine industry of the area south of the gulf, pass through Kisumu as the main gateway. Within the province lies Fort Tryon, site of rich, prehistorical archaeological findings.

The town is situated at a focal point of the transportation round the eastern end of the lakeshore and from the coast and Highlands to the east. It originated as a railroad and minor administrative center. It has grown considerably with the addition of distributive and collecting functions for the greater part of Western Kenya revenues. Only twenty-five miles from Kisumu is Siriba, a large college and training facility.

#### Functional Aspects

Kisumu is the major port of Lake Victoria and accommodates the headquarters of marine services of the lake. The economics of the town have depended largely on the regular employment offered by the marine workshop and on the associated maintenance and engineering services. Kisumu railway serves: industrial estates situated about a mile from the town center on the north side of the lava ridge on which the town is situated; the oil storage installations close to the shore; and light industries parallel to the railway and on both sides of the Kisumu-Mumias Road.

Kisumu town which is linked to the other parts by regular steamer service and to the most populous parts of Kakamega districts and with Nairobi by a permanent surfaced road, handles the following products: copper and livestock products from south Nyanza Districts, maize from Kisii and north Nyanza, cattle from Kekicho Districts, fish from Lake Victoria.

Kisumu is the capital for the provincial government of Nyanza, and is also the center for the Luo tribes of Kenya.

#### A Harambee School for Kisumu Community

Kisumu School will be designed and operated utilizing many of the elements and ideas of the Harambee-type schools. One of the major reasons for selecting a Harambee-type school was because of the deeply symbolic relationship Kenyans have with these schools. These schools mean freedom. They mean overthrowing the colonials. They mean an African investment in African education.

Harambee schools were first established by the Kikuyu tribe before the Mau Mau period. The concept was to train all the people, especially to indoctrinate them with the idea of independence. These schools thus became the training ground for nationalism.

The schools spread like wildfire, beyond the Kikuyu tribe into other areas. In the morning the youth were educated, and in the evening adults came for "independence discussions." When the

British discovered the Harambee were a cover for the Mau Mau, the British banned the schools but the schools continued to pop up secretly.

The Harambee school concept--local schools, built, staffed, and supported by the community--continues to grow. They are initiated by the community as a prime agent for social change--village people want an African and a modern education for their children.

The spirit of Harambee is given credit for the voluntary building of libraries, schools, laboratories. ". . . we estimate that our Harambee voluntary capital expenditure totals now over 20 million pounds on schools . . . especially the secondary schools" (Njoroge, 1969, p. 109).

The great moral surge behind the setting up of a Harambee school and its distinctively Kenyan nature, promises that it might be uniquely qualified to be the model for a community-centered school to prepare youth for work within the province. Certainly those members of the community who built the school would have a strong vested interest in it. This should create a more accepting climate for innovations and community participation.

## Kisumu Curriculum

The author here prefers to define curriculum as a sequence of meaningful experiences provided to children and youth by the school for the purpose of developing the potentialities of the learner.

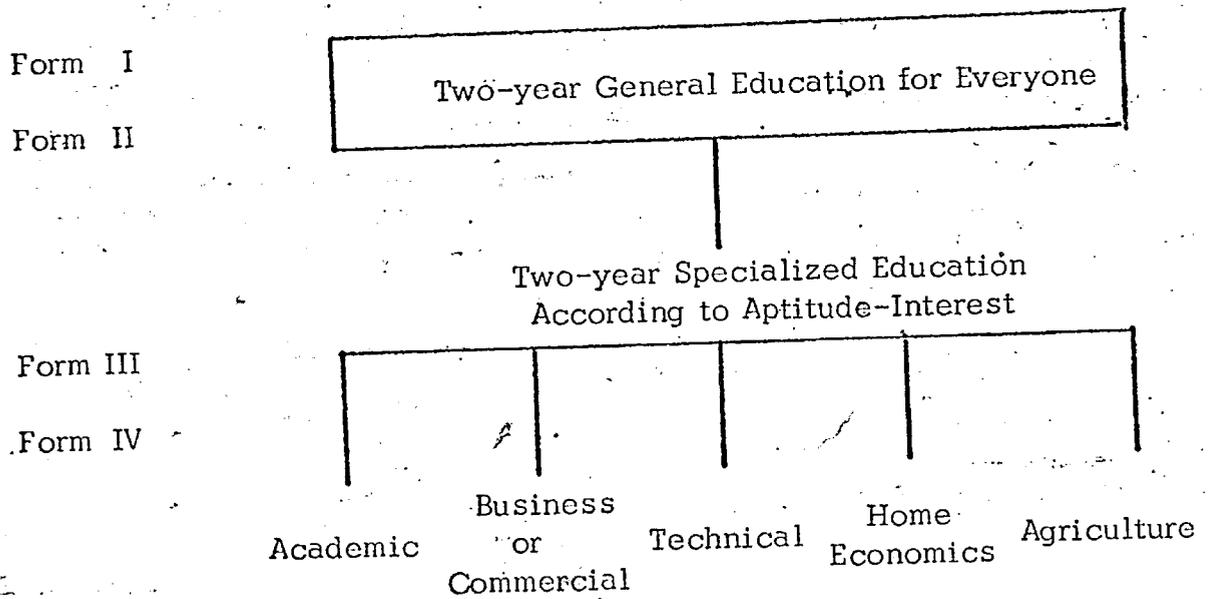
According to this definition, any experiences provided by school, such as work experience, are part of the curriculum.

However, before entering the realm of new methods and the broader aspects of curriculum for a community-based school, one must conform to what exists in Kisumu.

The education department has organized all schools in Kenya on a tri-term basis. Kisumu will follow the same organization. There are approximately three months in each term, with one month vacation between the terms. Kisumu will also meet the academic standards set by the government.

For convenience, the writer has prepared an overview which is followed by a more detailed flow chart which describes alternate routes taken by two students.

Overview of Kisumu Model



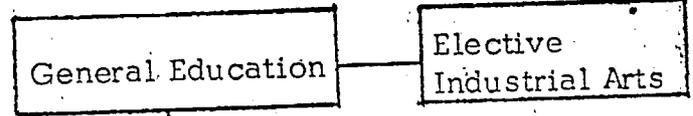
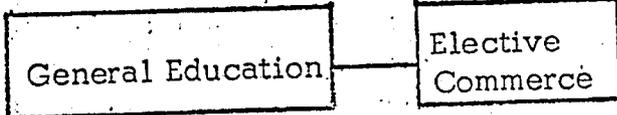
Form I is equivalent in the United States to ninth grade. Each form is one year so Form IV would equal twelfth grade or the final high school year in the United States.

Four-year Flow Chart

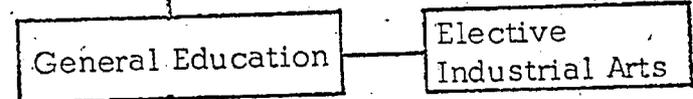
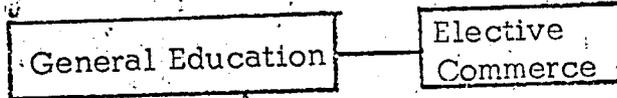
Student A

Student B

FORM I

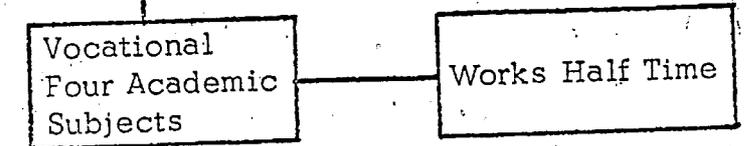
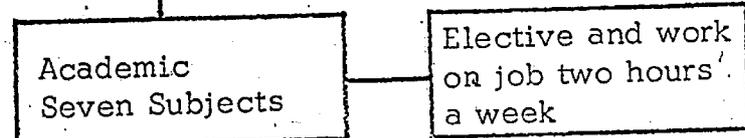


FORM II

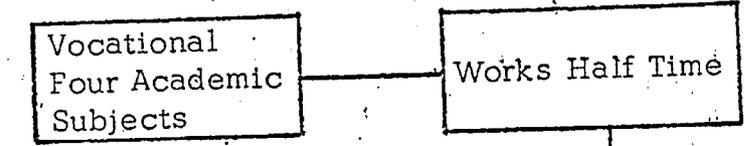
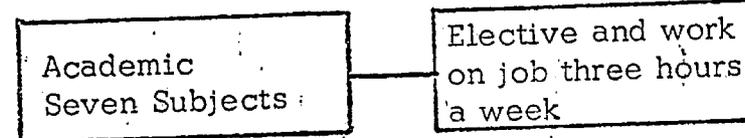


Students meet with principal, counselor, parent, community coordinator, teacher to determine aptitudes, future course.

FORM III



FORM IV



Able to pass C.S.C.  
 Possesses marketable skills and experience.  
 Capable of more sophisticated technical training.  
 Accepted in college.  
 Earns cash to help pay for college tuition.  
 Chooses profession he prefers.

Utilizing the Four-year Flow Chart, following the vertical blocks for students A and B, the progression indicates how each might move through the Kisumu curriculum. To hypothesize further from this diagram, Student A may be seen, beginning with Form III, as working part-time as a clerk in a government office. He later graduates from college as a liberal arts major with a minor in business administration and chooses to enter government service in Kisumu. During the same time, Student B works half-time, beginning with Form III, in a fish freezing plant. His academic work in languages, science, math, and social science qualifies him for acceptance to Nairobi Technical College where he trains as an industrial engineer. He returns to Kisumu to manage the fish freezing plant.

#### Detailed Analysis of Curriculum

As the flow chart shows, during the first two years all students take a general education program. This would include languages, (African and world) literature, general science, mathematics, social studies (including civics, history, and geography), African music and art, physical education, and any one of these electives: agriculture, home economics, commerce and industrial arts.

This kind of general education is one that helps meet the common and universal needs of all the children, both as individuals and as citizens of the country. It should help develop the students' attitudes, abilities, capabilities and values with regard to the demands of their sociocultural environment.

At the end of the second form and beginning with the third form, every student will have participated in planning his final two-year program with the help of school personnel, parents and members of the community. In traditional schools, the final examination alone has been the measuring instrument to determine the student's future. The involvement in Kisumu of a concerned committee brings a new dimension to curriculum development and organization.

In the third and fourth forms, students in the vocational and technical programs would work half-time, for credit and cash, while the teaching would be project oriented.

During the one month vacation periods between terms all students will engage in full-time work. The job program, arranged by the student, school and community to meet the needs of both the employer and the student, has many advantages: it gives the student experience at the actual site of the job, so that if he does not like a situation he has the privilege to change; it provides cash, which the student can apply towards his tuition, so that he need not drop out of school if his parents are poor and cannot afford to

continue to send him to school (this is one of the obvious and common reasons why there are a lot of drop-outs in Form II or III and even IV).

A third advantage is that the work gives a student an opportunity for practical application of the skills he learns in school. For the academic student, there are further advantages: vacation and part-time work experience should provide him with a sense of respect for work and valuable insight into the functionings of an economy at a lower level than that to which he aspires.

The major difference in Forms III and IV between the academically-oriented students and the vocationally-oriented students would be in preparation for C.S.C. It is recommended that the academically-oriented prepare in seven subjects. Those with a vocational bent should take less, say three or four.

The academic program will provide for high level performance in the following subjects: language (literature, a foreign language, French or English, an African language), history and civics, geography, mathematics, physics, chemistry, biology, economics, and sociology. Students in the vocational program will select three or four courses from the academic list. These courses, while academic in nature, would be designed to complement the student's vocational bent, e.g., a student intending to work with fish might focus on marine biology rather than take a course in physics.

Although most of the secondary schools in Kenya offer in some degree all of the subjects listed above under the academic program, the methods of teaching and the content of the lessons leave much to be desired. The syllabi of most of the subjects taught are replicas of the English syllabi, with the drawback of both irrelevance and of promoting English opinions and morals instead of those of Kenya.

The following sections, therefore, will deal with methods of teaching and content which, it is suggested, are more appropriate for a Kenyan education.

#### Utilization of Innovations

In this section innovations will be selected for the most effective use within the Kisumu model. New methods and programs include those examined in Chapter Two: Team teaching, flexible scheduling, programmed materials and instruction, non-graded high schools, acceleration and enrichment, guidance and counseling and general and vocational education.

Applications of most of these new methods and programs to Kisumu will be demonstrated within the framework of the Pittsburgh Individually Prescribed Instruction (I.P.I.) Model. This model has the advantage of using imaginative and utilitarian methods to

establish new programs within a school even though there may be a shortage of teachers (a critical problem for Kenya).

First, this I.P.I. Model will be described in its major elements. Then from this, the Kisumu model will be extrapolated.

The subject of vocational education, with its innovative curriculum for Kisumu, will be discussed separately following the I.P.I.-Kisumu model.

### Individually Prescribed Instruction Model

As described by J. O. Bolvin of the University of Pittsburgh,

I.P.I. consists of seven components:

1. Reorganization of the school environment.
2. Sequentially established curricular objectives in each area stated in behavioral terms.
3. A procedure and process for diagnosis of student's achievement in terms of objectives of the curriculum and the proficiency level desired for each student and each objective.
4. The necessary materials for individualizing learning to provide a variety of paths for attainment of mastery of any given objective.
5. A system for individually prescribing the learning tasks the student is ready to undertake.
6. The organization and management practices of the total school environment to facilitate individualization.
7. Strategies for continuous evaluation and feedback information for teacher decision-making as well as information for continuous evaluation of the curricula for the curriculum developers.

(Bolvin, 1969, pp. 14-15)

These seven components may be applied to any subject in school thereby increasing the efficiency of learning atmosphere. Because this model is tailored to each student's learning needs, and his characteristics as a learner, it will greatly facilitate his acquisition of new knowledge.

Since lessons are directed toward specific student competencies, more precise evaluative devices could be developed to determine pupil achievement. (Each of the curricula is divided into levels, units, and objectives or skills.)

Materials for Individually Prescribed Instruction are selected and developed to teach each of the objectives. The materials for the most part, must be developed for self-study, leading the child from what he knows to what he must know or perform next to progress through the curriculum.

(Bolvin, 1969, p. 4)

Once the sequenced objectives in each area have been stated, diagnostic instruments to measure specific tasks to be learned are used, Bolvin says. These instruments are: (1) Placement tests; (2) Pre-unit tests; (3) Curriculum embedded tests; and (4) Post-unit tests.

While it is absolutely necessary to develop I.P.I. materials, there is a great difficulty: it takes experience and imagination to recognize, identify and select materials appropriate to individual needs.

### I.P.I. Used in Kisumu Model

Utilizing the I.P.I. model, with its seven major components, the following plan demonstrates how innovations and programs may be utilized for Kisumu School. These inputs will be underscored as they appear naturally in the context of the model.

The subject for instruction is Civics. The student is in Form III.

1. The environment is organized so that the student works part-time as a messenger in the district Community Development Office. Basic to his support at school is the use of team teaching, guidance and counseling, materials in the vocational education department and flexible scheduling.

2. The student did not understand the importance of sanitation. The student works as a messenger and observes unsanitary conditions. He learns the importance of sanitation for public and personal health and is able to explain the necessity for sanitation.

3. Teachers, counselors, employer and community agents determine that the student is capable of making a survey to document unsanitary conditions and prepare a proposal for solving the problem.

4. Materials available to the student will include office equipment such as a typewriter and adding machine. The intern may help the student to obtain material--film from the UNESCO

library in Nairobi which illustrates public health practice, radio tapes which deliver simplified suggestions for sound hygiene practices. The Community Development Office where the student works may provide him with graphic materials used to teach sanitation procedures to villagers.

5. The most experienced teachers will decide on the basis of the student's abilities, the school's resources and the community's needs which tasks the student is ready to undertake.

Interns and residents may work directly with the student helping him to organize and interpret his material. His boss in the Community Development Office may help the student to make the best approach to people in the area which he wishes to survey. The Public Health Officer may help him learn the indicators of poor sanitation practices. Help may be provided by other students who are able to make schematic drawings and dimensional mock-ups. The student enlists the cooperation of his teachers and boss to permit him flexible scheduling of his study-work time to achieve the greatest effectiveness.

7. A resident working directly with the student may be the most appropriate liaison person to facilitate continuous evaluation of the performance of the student and his progress toward his goal.

When the student has acquired a thorough knowledge of his subject it can readily be evaluated in terms of testing, and in the case of this hypothetical student, in terms of the quality of his

documentation and proposal for solving the problem of poor sanitation within an area of the community.

The student has mastered the area of the cognitive domain:

From knowledge, comprehension (ability to restate knowledge in new words).

Application (understanding it well enough to apply it).

Analysis (understanding it well enough to break it apart into its parts and make the relations among ideas explicit).

Synthesis (the ability to produce wholes from parts, to produce a plan of operation, to derive a set of abstract relations).

Evaluation (the ability to judge the value of material for given purposes).

(Bloom, 1956, pp. 19-33)

Objectives from the affective domain would show how the student, through attaining knowledge, had changed his attitudes. In this domain, behavioral objectives would possess emotional quality in developing an integration of value patterns. This may be determined in the enthusiasm shown by the student for his work project, in the way he engages others in his projects, in a growing dislike for vermin-infested conditions, in his developing sense of obligation toward helping the community solve the problem of sanitation, and perhaps, finally, in the student's appreciation of the possibility of working cooperatively with the school and the community to help better social conditions.

### Vocational Education

Another way for Kisumu and its educational committee to ensure that their children are educated into the community, not out of it, is through vocational education. And the students should be equipped to enter the community feeling they are valuable members.

Erikson notes that the struggle today is for "more inclusive identities,"

Probably the most inclusive and the most absorbing identity potential in the world today is that of technical skill. This is what Lenin meant when he advocated that first of all the mushik be put on a tractor. True, he meant; as a preparation for the identity of a class-conscious proletarian. But it has come to mean more today, namely, the participation in an area of activity and experience which [for better or for worse] verifies modern man as a worker and planner.

(Erikson, 1966, pp. 166-167)

A well-balanced vocational curriculum is therefore proposed, using the technique of job analysis which was first employed in industry as a means of selecting employees to perform certain specific duties. By following the methods developed by job analysis, schools will learn to concentrate more on those vocational education courses that achieve visible relevance. The school will see the possibilities in planning training courses with exactness and proceed to develop additional steps in the technique. (See Pittsburgh Model in Appendix.) Further, it would provide the teachers with a useful tool

for the understanding of job content and relationships and for all future work in occupational research.

The teachers will go into business and determine job qualifications. This will enable them to understand the working community and they will become acquainted with prospective employers. The teachers thus will be able to find out the physical demands, working conditions, and training time. This will enable them to concentrate on training in those skills immediately usable in industry.

While making this analysis the teachers will be learning to interact with managers, employees, and they will introduce the youth to the realities of work. Teachers may work in the community during one vacation. During another they will go to Siriba College for further professional work.

While industrial courses are usually considered vocational in nature, they have great pre-vocational value, especially for those who will enter industry as soon as they leave school. These courses could continue to further the exploratory function of the school and help coordinate and stimulate work taken in other courses, such as mathematics, science, art, and drawing. The reason why industrial courses play an important role in this study, is that the student can take such courses during general education while gaining more experience with advanced skills. They should also create a positive

attitude toward manual work. Most students would seek further knowledge and skill in electricity, wood and metal work, automobile mechanics, and other fields; not particularly for vocational purposes, but mainly to become a well-rounded person.

We must prepare our pupils to live happily and usefully in the world as it is today or may be tomorrow, but not necessarily as it was yesterday. It is vital that what a child learns in school be connected with his everyday life.

(Kiano, 1969, p. 11)

#### Home Economics, or Home-Making Curriculum

In this study, the needs of Kenya's youth were identified. In the case of the future home-makers, courses should be designed to prepare students for home-life including: instruction in financial planning, in management of time, in human and community relationships, and in the mechanics of housekeeping.

In most of these courses, the author advocates teaching by units and evaluation of students by assessing their ability to demonstrate the skills they have learned in school. These skills could easily be demonstrated by doing rather than by memorizing some facts about a unit. The writer proposes that a well-balanced curriculum should have the following objectives and content which periodically should be assessed in performance terms:

1. Selection, preparation, serving, conservation, and storage of food for the family, based on sound nutritional values.
2. Selection, care, renovation, and construction of clothing.
3. Care and guidance of children.
4. Selection, purchase, and care of the home and of its furnishings, including the use and conservation of home equipment.
5. Sound hygiene practices, including home care of the sick and first aid.
6. Management of human and material resources available to the home.
7. Maintenance of satisfactory family relationships.

Although the majority of those pursuing home economics courses actually turn to home-making, which is a vocation in a broad sense of the term, many find gainful employment in occupations requiring knowledge and skills learned in home economics courses. Some of these would be managers of motels and convalescent homes, and workers in establishments where food is purchased, prepared, and served, such as in tourist industries or for airlines.

As has been mentioned before with the social needs of Kenya in mind, particular phases of home-making education to be included in the curriculum should be determined after a survey of the community and its peculiar needs. Such a survey would include the type of homes in which pupils live; the facilities in the homes for cooking and lighting; the prevalence of machines or hand labor for doing such housework as

sewing, washing, or sweeping; and the methods of preserving foods.

Community resources should be utilized in the school and interests and needs recognized. Much of the course will be built about home and community problems. These are problems in which a pupil shows an interest and which he attempts to solve under the guidance and help of the teacher as a regular part of the course. This provides an excellent method of integrating the work of the school and that of the community and also makes the curriculum more meaningful, for pupils will be engaging in real experiences, and real materials will be encountered in everyday living.

#### Business or Commercial Curriculum

Commercial training has not received much attention in public schools. It is recommended that a commercial curriculum be placed in Kisumu. It would be based on commercial subjects that can be used immediately after the high school. The aim should be strictly vocational, and the courses should consist of shorthand, bookkeeping, and typewriting.

The curriculum would go beyond the pragmatic, as Bent says,

. . . business education aims at teaching pupils to become flexible in their vocational capabilities, to become familiar with and be able to think about economic and business problems to gain understanding and appreciation of economic institutions and to develop economic intelligence.

(Bent, 1958, Ch. 7)

The present writer believes that every individual has dealings with or is benefitted by economic institutions. Therefore, every individual is dependent upon trade and commerce. At least every individual engages in trade to secure the necessities of life and he comes in contact with economic institutions and agencies almost daily. The institutions include banks, wholesale and retail stores, insurance companies, the stock market, and the farmers market. The conventions utilized by these institutions are the mediums for exchange such as money, checks, bonds, stocks, mortgages, and products. Knowledge of these institutions, conventions, and the mastery of economic skills provide a background for many vocations and are essential from a personal and civic point of view. For this reason, the writer proposes that these courses are justified in Kisumu Secondary School.

#### Distributive Education Curriculum

This is another dimension in business education. Distributive education would be of vital importance to Kisumu youth, because it is learning by doing. This would be practical to both youth in school and the businessmen in the community, and also would motivate the teachers if they can see how the students apply in practice what they have learned theoretically in school.

Bent characterizes distributive occupations as those in which workers are directly engaged in merchandising activities or are in direct contact with buyer and seller or are engaged in managing or operating a commercial service (Bent, 1958, p. 158).

This type of curriculum in Kisumu as proposed by the writer would assist many boys and girls who could not otherwise achieve high school education due to lack of funds for school fees, which is one of the main drawbacks for many students completing high school. The student would attend school half-day and work half-day, receiving full academic credit. This curriculum would provide students with paid experiences in different community establishments which they would otherwise have lost sight of. Since this model is community-based, the businessmen in this community would appreciate the school more than they had ever done before, because of help they receive through the school by this type of program. Later the businessmen would be able to employ the more experienced help rather than new ones. The most important factor is that the community will be able to retain its own youth.

#### Skills Inventory

Working together, the school and the community could compile a skill inventory with a comparison of skills demanded by employers and skills provided by the schools. This would help enable schools

to develop appropriate training programs. Educators and businessmen could work together to achieve the best balance of jobs and skills.

An on-going inventory would: determine occupations for the future, develop new training systems, open job opportunities, increase apprenticeship programs and plan for continuous advancement of workers within their jobs.

This would serve a two-fold purpose: foster economic growth within the country thereby adding to the tax-base and create more funds for more schools--a beneficial cycle.

(In an effort to find out what schools in Pittsburgh were doing in the areas of vocational education the writer interviewed Dr. Samuel Santoro, Jr., Director of OVT [Occupational-Vocational-Technical] Federal programs for the Pittsburgh Board of Education. Dr. Santoro gave the writer a thorough analysis of programs conducted in the Manpower Development of Training Act course in Pittsburgh up to February, 1970. [MDTA is a Federally-sponsored program to equip unemployed or under-employed youths and adults with usable skills] For the MDTA curriculum development see Chart IV.)

#### Training for Living With the Land

Because of the predominately rural character of Kenya, with agriculture the richest industry, the teaching of agriculture is of vital importance in the secondary schools. Up to now, most

agriculture courses have had small appeal to farm and non-farm youth. The curriculum model indicated that to perform any agriculture activity, e.g. dig, was and continues to be perceived as a kind of punishment.

American attitudes are particularly useful in preparing for changes in Kenyan curriculum. There is a number of distinct trends noticeable in United States high schools serving rural areas that deserve attention here (Butterworth and Dawson, 1968, Ch. 10).

1. The curriculum was changed from one designed to prepare a select few to enter liberal arts colleges to one broad enough in scope to serve the needs of all the students.
2. Training in agriculture and related subjects and in home-making was offered to prospective farmers or future wives of farmers.
3. Courses were offered which prepared about half of the pupils for participation in commercial, industrial, and professional pursuits. This trend appeared because it was being recognized that rural boys and girls were most likely to migrate to urban communities.

In the United States as in Kenya, farming education has become more essential today than in the past. This is due to the complexity of modern farm operation and management because of the increase in the variety of relationships between farming and other occupations.

Today farmers are required to participate more in community affairs and in the solution of local, state, and national problems, all of which require a more educated and informed citizen (Butterworth and Dawson, 1968, Ch. 10).

There is not only a need for explicit objectives for vocational agriculture, taking into account varied farming occupations, there is also the need for preparation for related occupations such as extension work and teaching agriculture in schools.

Butterworth and Dawson found from a survey of farm leaders representing national, state and county officials of the major farm organizations, that 74 to 98 percent believed that schools should better prepare children and youth in the following areas of interest or activity, listed in the order of importance: (1) conservation of natural resources; (2) individual and community health; (3) home and family life; (4) farmers' cooperative; (5) community recreation; (6) political issues.

The farm leaders also marked as "excellent" vocational agriculture, vocational home economics, science, bookkeeping; and as "good" fine arts, typing, social studies, physical education, and industrial arts. Latin and modern foreign languages were ranked as "poor" by these leaders.

Conservation, a naturally important aspect of agriculture, is equally important to all students, whatever their focus. The course of study in conservation would provide teachers and students with the ability to see conservation problems as part of man's physical environment (Marlin, 1960, p. 3).

Some of the problems facing Kenya today are those of conservation of natural resources, and a knowledge of conservation is a need of all youth. Wild life is abundant, but it is quickly being exterminated by poaching and other illegal activities. Not only is it imperative for the Kisumu School to take a positive attitude toward conservation education, but also the citizens of Kisumu need to have a clear understanding of how they can organize themselves for efficient use of their natural resources.

For Kenya, of course, the most important aspect of vocational education is that as it increases wage earning power, it helps develop the economy through consumption and taxes.

Kenyanization of Content in the Kisumu Curriculum

One of the most important goals of the Kisumu school is to develop a predominately Kenyan atmosphere. Therefore the writer proposes a Kenyanization--or reconstruction--of curriculum content so it bears an African orientation. History is one of the major

affective ways of binding a pupil to his land, so the revision of the history syllabus opens this section.

It is proposed, first, that in Form I, community (local) history be taught; in Form II, Kenyan history; in Form III, African history; and in Form IV, world history. Since local and African history would play a large part in the history syllabus, Europe would then take its place among foreign countries such as U.S.A., U.S.S.R., Argentina, and the like when reconstructing the syllabus.

The goals of an African history syllabus would be to familiarize the child with his social, political, cultural and economic environment.

It is this writer's firm conviction that the history of Kenya must in the long run be written by the citizens. As all educators know, it would be unwise to allow outsiders to plan what a country's children should study. This does not mean that books written by qualified outsiders should not be used as collateral reading or for comparative study. For the above stated reasons, it is the conviction of the present writer that Africans will have to write their own history textbooks.

The local history syllabus should include the study of African heroes and heroines, customs, mores and institutions--political, social, economic and educational. There should be emphasis on marriage and family values. Citizenship education would include the study of kingship, chieftaincy, government and judiciary.

African history courses should include the study of African social, political, philosophical, religious, economic and cultural institutions before the European intervention and after, and a study of comparative African history.

Using many course disciplines, individual interests and skills, and available materials, one class could focus on a Kenyan dimension to bring it into full national consciousness. Student teams could go from clan to clan throughout Nyanza Province to record (on tape) oral history, customs, music and song of the tribe. This could be the basis of a series of radio programs. However, the original tape should be preserved intact with a copy made for editing and further copying. The original should go in an archive because future historians might discern something of value on the tape which might be discarded by the contemporary historian.

Along with audio taping another class could draw, paint, photograph and film tribal dances and festivals. This form of anthropological and sociological research could result in a multi-media program, produced so it could travel to other schools and become part of an audio-visual history resource center.

The understanding of pre-history and geology and the flora and fauna of Kenya is on the school's door-step. Students could bring to bear their specific interests, whether in botany, anatomy, history, drawing, or surveying, to join in archaeological explorations at nearby Fort Tryon, or by collecting shells in Lake Victoria

reconstruct the history of the lake.

There are many possibilities for making Kenya's past and present come vividly alive and so become encapsulated in the national consciousness.

### Civics

Civics as a subject should, when not taught as part of history, be featured in the general school curriculum to encourage good citizenship.

The idea of secret ballot is new to Africa, and the role of the individual differs when comparing the two systems--old Kenya and modern European. Now that Kenya has adopted or adapted the Parliamentary system of government, the youth of the country need to be well acquainted with their civic obligations and responsibilities, as well as their rights and privileges. They need to participate actively as well-informed and responsible citizens in solving the problems of their village, community, and nation. They need to transfer their tribal loyalties to their state or nation, and to respect the dignity of the individual, develop a code of behavior and recognize the interdependence of nations.

### Teaching of Geography

Geography falls in the same category as history, in that pupils at the secondary school level know more about the complicated physical geography of the British Isles, the remote continents of Australia, North and South America and Asia than the continent of Africa itself. The writer proposes the following curriculum: community or local geography, geography of Kenya, geography of Africa, world geography (selected areas, preferably Asia, and another continent for purposes of comparison in terms of similarities and differences in economic, political and social conditions).

At Kisumu, in Form I and Form II the writer suggests that at least fifty percent of the curriculum should be devoted to the child's local, Kenyan, and African environments, so that if an examination would be set at least fifty percent of the questions should be devoted to Africa. It is only fair that if these children are to be trained to participate fully in the life of their local communities, Republic and Africa, they should be helped to familiarize themselves with their physical, social, ecological and political environment. To do otherwise is to ill-prepare them for their future role as dedicated and well-informed citizens of Kenya.

### Science and Mathematics Curriculum

General science incorporating physics, chemistry and biology should be compulsory for all secondary school pupils. In the first two forms, and even the last two forms, general science must be taught. More pure science should be taught to the college-bound students in the academic program. With some reservation, general science must be taught in other programs too.

In the world today, science and technology have become a dominant cultural factor. Problems related to education, health and sanitation, town planning, economics, politics, commerce, and industry to name a few, are related to science and allied fields, and improvements in all of these are being sought through the aid of science. Even though Kenya is not going to engage in a space race or nuclear development, Kenyans need to know enough about science to enter the modern world. That is why it is of vital importance to make compulsory science education mandatory for the first two forms in secondary school. In America the writer observed considerable progress in the teaching of mathematics and science at both elementary and secondary levels. Substantive attempts are already being made to introduce these new methods to Africa and other parts of the world.

The Tananarive conference recommended that the content of syllabi in the natural sciences be adapted to the study of the fauna, flora, and geology of Africa. In Botany, care should be taken to avoid perpetuating the study of European plant types without any other alteration than that of replacing the examples used by African plants of the same type. The use of other approaches besides the outdated and limited taxonomic ones must be incorporated. Since types of vegetation vary considerably from one region of the world to another, the reform of botany syllabi would mean replacing the study of European plant types with those most commonly found in Africa. Also, little space is devoted to the study of reptiles in European textbooks, whereas they should be important in African textbooks (UNESCO, 1962, p. 4).

The UNESCO meeting also recommended that physics and chemistry should be adapted to suit local requirements. In both physical and natural sciences a time could be devoted to practical work in order to nail down the theoretical concepts learned.

Cheap but durable scientific materials should be given to Kenyan students to enable them to perform their experiments and observe the results.

Mathematics teaching should have two major aims: (1) to develop the understanding of concepts for problem solving, and (2) to show the relationship and use of mathematics in solving the problems of real life--the problems of industry and commerce, of science and politics, of the home and the market. In reviewing math projects in Africa; for example, Potts says that the basic content in all new schemes includes:

. . . use of the language of sets. The concept of a set is an important unifying idea. Computation skills are subordinate to an understanding of methods. Structure is emphasized. The pupil is less likely to be asked, "Did you get the right answer?" and more likely to be asked, "Can you see some sort of pattern in this?" or ". . . "Would the results be the same if we reversed the order of things?" Modern courses often include reference to recent applications of mathematics, aspects of computing and the use of calculators, statistics, electrical circuits and so on.

(Potts, 1967, p. 15)

The author suggests that Kisumu study the Entebbe model, derived from an English plan, and that the teachers change and revise the manuals as they work with the students. One reason American texts are not considered is that they cost too much to import. A second reason is that they are American and not Kenyan in context, examples and emphasis.

### Language and Literature

This curriculum proposes that the syllabus of Kisumu stress the literature of Kenya, in the first two forms, and then the rest of the syllabus should include as much as possible of the literature of other lands--Asia, Europe, the Americas, and other parts of Africa. Literature helps a student to enlarge his experience. To achieve this, the Kenyan pupil needs more than Shakespeare and Milton. He needs to know how his own people expressed themselves through folk tales, poems, stories, and drama. He needs to appreciate literature from other parts of Africa as well as from Asia, Europe or America (see Appendix B on Drama for Kenyan Villages).

A literature curriculum would include: community literature, local literature, Kenyan literature, African literature in general, and world literature (selected representative works).

Language and literature are inseparable, and should be taught as one.

### Music-Art Curriculum

One of the students' social needs that must be fulfilled by the schools is the need to belong. Kisumu youth belong to their community and to Kenya and they should be proud of their Kenyan (African) heritage. Two subjects that help foster loyal sentiments are music and art.

The teaching of music and art in Kenyan schools is still considered secondary by many educators--and yet there is hardly any other subject through which the artistic and creative genius of the people can be more easily expressed and perpetuated, and these arts are usually readily incorporated at a deep level of feeling and belief.

Students should have an understanding of and creative participation in the cultural and aesthetic experiences native to their environment; but, in practice, insufficient attention is given to African art and music. Usually, the amount and sort of music and art taught are conditioned by the demands of the examination syllabus. The writer remembers what his headmaster used to tell the class. The headmaster was Mr. Chapman--he always said, ". . . boys, what cannot be examined should not be taught, . . . therefore, spend your time on what is to be examined."

If Kenya's education is to develop the whole child and not estrange him from his own culture, the present "examination system" of education must be Africanized and pupil-centered. Art and music touch the spirit and the soul of the child. African art and music, folk tales, poetry, masked and costumed dancers form the focus of African culture. Naturally the African child should not be taught his own peoples' music and art to the exclusion of those of other cultures, but the emphasis should be on the rich artistic and musical aspects

of his own culture. Needless to say, African schools have already produced too many people who today shun their own art and music because they think it is "pagan." Part of African history and civilization is recorded in wood, music, and poetry. To neglect these vital aspects of a deeply meaningful education process, is to kill the very soul of African education. Therefore, a well-balanced curriculum should include: living with and participating in the creation of local music and art, Kenya's music and art, and other African art and music.

#### Swahili as National Language

Next year (1971) Swahili becomes the standard language of the Kenyan schools. Undoubtedly, it will take time for all textbooks to be translated into Swahili. So one of the methods of Individually Prescribed Instruction could provide immediate texts for the students.

In the Pittsburgh area, a producer supplies four hundred schools with the Individually Prescribed Instruction lessons. Essentially, these are work sheets which a pupil takes from his own mail slot. When the student has completed a certain number of work sheets, which he has kept in his own file for reference, he takes the completed sheets to the teacher's aide who grades it. From this grading the teacher evaluates whether the lesson has been understood.

Students complete the work in time spans ranging from one day to a week. The embedded test shows the student's grasp of concept and ability to work sequentially.

This type of Individually Prescribed Instruction lesson could be produced within the Kisumu School. It would be useful for teaching mathematics, Swahili, language, physics, biology, and most vocational subjects.

One drawback is the high cost of paper in Kenya, but the author suggests that Kisumu could produce the lessons as a pilot project for potential national distribution.

#### Teacher Training in Kisumu

Throughout this section, whether considering innovations or programs, one pervasive factor has been the teacher, yet so far the multiple roles of the teacher and other educational people have not been clarified. So this section proposes to define the roles and responsibility of the teacher, the trainees, the instructional consultant, the counselor, and the community coordinator.

Before developing this educational syndicate, it might be useful to look again at the quality and numbers of teachers in Kenya. As was documented in the first chapter, the majority of secondary school teachers are foreigners, Kenyan teachers often have no

qualifications beyond a high school certificate. Primary school enrollment doubles every few years while secondary school growth lags behind, due, in a great measure, to the paucity of teachers. Teachers in Kenya, by necessity, must teach many subjects, often crossing departments, i.e. moving from music to geography. They have small opportunity for professional growth.

Yet, while the Kenyan teacher is overburdened and often professionally unqualified he is "more than any other professional the centre of change" (Fafunwa, 1968, p. 91). This is one reason the author proposes to base the Kisumu Model for teacher training upon the Teacher Corps in the United States which was designed to foster change and better the learning process within ghetto schools.

#### The Teacher Corps Model

From the author's own experience working in the Teacher Corps training program in Pittsburgh, he believes this model would serve two vital needs in Kenya:

1. It would relieve Kenya's shortage of teachers by basing the major part of the teacher's training in schools using a structured internship model similar to that used by the Pittsburgh Teacher Corps.

2. Teachers trained in schools are better acclimated to the teaching environment than are those who receive academic training for two years and are then posted to different schools as new teachers.

For Kisumu, the Pittsburgh model could be implemented in this way:

The first year trainees will be called interns, and the intern will be defined in this program as a person who has a C.S.C. (Cambridge School Certification) and who is in the first year of this program's two-year sequence.

The second year student will be called a resident. He has completed the first year of his internship.

An instructional consultant will be a resident supervisor whose duties closely approximate those of a clinical professor of teaching. He will come from the ranks of experienced educators with a minimum of five years of teaching or a Diploma in Education (three years of college). The ideal instructional consultant's role is described in David W. Champagne's unpublished dissertation, "Rationale and Design of University phase of an Internship for Instructional Consultants," School of Education, University of Pittsburgh:

. . . to support and encourage teachers to improve their classroom performancy by identification of personal and professional roles, by trying new curricular patterns with pupils, by making effective use of various

means of receiving feedback on their interactions with pupils, and by working with fellow teachers and administrators in an examination of how recent innovation within and outside the district can be transformed into relevant classroom practices for specific pupils.

(Champagne, 1968, p. 47)

The counselor or guidance officer, based on the Aiyetoro model, will aid in decision-making regarding admissions, student development, and communications and he will also work with students and parents in a counselling role.

He should have experience and training in evaluation, testing, and psychology and be skilled in the art of human relations.

The community coordinator will play a new role proposed by the author as a mechanism for a dynamic liaison between school and community. He should be skilled in public relations or social group work.

Heading the school will be the traditional hierarchy of headmaster and department heads.

The trainees, both intern and resident, will divide their time, half of it working in Kisumu School, half of it in academic classes at Siriba College. The resident will play a more responsible role than the intern.

2

### Team Teaching as the Base

Basic to the proposed teacher training model, for both the beginners and the older teachers is the idea of team teaching. Specifically, it will pair or group experience and youth so both may learn new methods and share responsibility. The experienced teacher will help the intern to gain confidence in becoming a respected teacher. Conversely, the intern, being young and more impressionable, may also help the older teacher to accept new content and methods.

The advantages of team teaching for Kisumu include the immediate introduction of the intern to the classroom so that fewer teachers can combine their efforts in a variety of ways to teach larger or smaller, more diversified classes. And, as was stated, team teaching means more individualized instruction for the student. For example, the experienced teacher may decide what material the student should learn and write a prescription. The intern then executes the prescription and works with the student individually. (This method was explained in the previous section dealing with I.P.I.)

Students may perform the roles of tutor-tutee, with a Form IV boy coaching a Form III boy and on down the line. This is an old Kenyan custom in which each student had to work with an older and

a younger buddy. However, if the tutor-tutee system follows the Pittsburgh I.P.I. model, there will be a more genuine learning experience in which the older student may learn something new through helping the younger. The traditional system of boys preparing boys for exams was dreary rote memorization. With more stimulating instruction and young interns, students may be inspired to become teachers.

In working with such instructional tools as programmed learning and audio-visual equipment, e.g., an overhead projector, the interns may contribute more insight into what would appeal to students as they are themselves only a year away from secondary school.

When the program is underway, implemented with differentiated staffing, and with the development of innovations under the direction of the instructional consultant, it may be appropriate for the instructional team to be the actors in a film on team teaching which would dramatize how teachers behave. This would be useful as a training device for both teachers and students.

The instructional consultant may use the principles and techniques of sensitivity training so that the teachers and trainees may gain more insight into their relationships with each other, with the students, and with the community.

The instructional consultant may also bolster the teacher's morale by reminding him of the important role he is committed to play:

Education may be defined as a process of shaping behavior. . . . The function of the educator is to effect behavioral changes in specified groups of people, and to do so in a planned and goal-directed manner.

The teacher . . . occupies a shunting point between generations: he may reinforce the continuation of traditions; or he may be a factor in unsettling or in reshaping them. And he may perform either of these functions with a greater or lesser consciousness of his role. Directly or circuitously he may be a powerful force molding society. A single teacher may accelerate the fruition of talent in hundreds of individuals, neglect or warp it; he may further or stifle potentials for creativity or waywardness. A teacher's trade is concerned with the human condition, with human promise and destiny.  
(Wittlin, 1963, p. 745)

### Teachers and Curriculum

The proposed curriculum model has advocated ways of learning and teaching broadly harmonious with a functional emphasis and subordinated other emphases. This means gradual elimination of rote learning and of authoritarianism in home and school alike. It also means experimentation with curricula, stimulation of esthetic and emotional experience as well as primarily cognitive experiences, active and continuous sharing in both school and community planning,

utilization of classroom films, programmed materials, and other audio-visual instruments as everyday aids to learning and encouragement of critical thinking and democratic action.

The key role of the teacher in determining the methods to be used deserves emphasis; his is one of the most important inputs in the system. The use of newer methods requires teachers who understand the subject matter. For example, a teacher helping students to discover basic concepts in mathematics must himself have a good grasp of these concepts. The "tram-line" teacher-training programs, which focus on methods exclusive of content, do not provide sufficient insight into the subject matter.

It is one thing to design a new curriculum; it is another, and often more difficult task, to bring about the change in teachers necessary to make the new curriculum effective. The important role of regular establishment of an institute for in-service education should be provided. In spite of the best efforts at in-service education, however, it is probable the new students who complete their work in teacher-training colleges within the next few years will represent the greatest opportunity for change. It is important to recognize here the vital role of the instructional consultant as a change agent:

Development of the role of the instructional consultant as a facilitator of change will lead to more rapid, significant change toward the improvement of instruction in the schools. These changes will occur in the way pupils are treated, in what they are expected to learn, in how they are expected to learn, and in the organizational patterns of schools.

(Champagne, 1968, p. 29)

Who shall make curriculum decisions? A variety of decisions need to be made and a number of different individuals and groups should be involved in making them. Many of the decisions regarding the curriculum are made by simply following tradition.

Decisions regarding the inputs of teachers, instructional materials, syllabuses and physical facilities are closely related. These decisions will more nearly accord with the needs and available resources of Kisumu if they are made in consultation with political leaders, and community and parent representatives.

Other groups and individuals should participate. Teachers and headmasters or principals of schools have a role to play, as does the counselor and instructional consultant. The Inspectorate in the Ministry of Education would make many decisions, e.g., dismissals.

The importance of involving the teacher-training colleges in decision-making is apparent because of the interrelation of the various aspects of the curriculum. University teachers of various disciplines should assist in developing new curriculum programs and at the same time the Kisumu model could stimulate more

effective instruction by those who train teachers. A way needs to be found to unite these various groups to improve the decisions and to coordinate the work required for the implementation of the decisions.

### The Community Coordinator

In the Kisumu model, the resource for working with all elements of the community and the colleges might well be the community coordinator.

This person should be elected by the community so they will feel that he is their advocate. Any community perceives the school as an institution stronger than either an individual or most community groups. The community coordinator would initiate and oversee programs involving the community such as on-the-job training; bringing in community experts as speakers; contacting local government; sponsoring such all-community events as drama, music, art festivals. In other words, he should promote the active physical involvement of all segments of the extended community in school programs.

The community coordinator must also work closely with the counselor in helping to bring the community into closer creative relationship with the schools. As the Permanent Secretary of the Kenya Ministry of Education recommended,

. . . mobilizing the parents so that they reinforce our efforts rather than frustrate them . . . government should mount programmes of educating the parents and public so that they possess some of the type of values, attitudes and skills which we try to inculcate in our school population in order to facilitate bringing together the whole process of learning of both the parent and the child.

(Njoroge, 1968, p. 111)

If the community coordinator seems over-burdened it is suggested that the role of liaison with the colleges and universities should be played by an over-all Director of Curriculum for Kisumu, hired by the teacher-training college for this specific job.

## CHAPTER IV.

### FINAL ANALYSIS OF THE PROBLEM, PROPOSED SOLUTION AND CONCLUSIONS

This chapter will re-examine the problem and its proposed solution. It will consider the likelihood of potential hostile reaction to the large order of change involved in the solution.

This is done with the acknowledgement that there will be resistance to change and with the awareness that in structuring the model for change the author has attempted to anticipate a negative reaction and in so doing build in a counterweight.

Any proposal which ventures to change a social structure, even if on critical and logical grounds, takes a large risk. So does this proposal which by implication would change the educational system of a country. However, for changes to occur, risks must be taken and the author is emboldened to take a positive approach because the needs are so crucial and because there is the example of a new Republic struggling to develop after decades of colonial masters.

The aim of this dissertation is to design the basic structure of the curriculum, organization and the inservice of teacher training necessary to create a model, community-based secondary school,

in the city of Kisumu, Province of Nyanza in Kenya. This school would use the resources of the community, industry, government, and the school to give students a broadly based practical and experiential education, in addition to a strong academic one.

#### Imperatives for Change

1. This school must meet the needs of the society as well as those of the individual students.
2. This school will meet the needs of the industries in this community by manpower supply, through on-the-job training programs.
3. This school will supply the local government with skilled manpower, in most major areas of development.
4. This school will create a positive attitude of the community population towards the school.
5. This school will enable students to use their community as a laboratory for their work experiences.
6. This school will be an in-service training ground for local teachers.

### Charges Against the Present System

In Kenya, education is associated with government. Many schools, from primary to the university, are simply called "government" schools. To them attaches some, though not all, the attitude connected with government. There is no feeling that the schools belong to the people. The values they teach are always foreign to the villagers. Teachers are assigned from a distant government office, and inspected by semi-annual visitations from government inspectors. Government seems remote. The schools seem remote. To counter this charge, a Harambee-type school, with its strong Kenyan roots, is proposed.

The major charge against the present system is that it does not work. Lack of local teachers means that the curriculum continues non-African in orientation and irrelevant to the needs of Kenya. Practical subjects are not taught at the secondary level, so that a student is not equipped for wage earning. The system neither produces technical workers to support the developing economy nor does it produce youth with enough background to make choices in career or further education.

This thesis has attempted to deal with these charges and establish strategies for change through the mechanism of a community-based, comprehensive school, located in the city of Kisumu, Province of Nyanza. The writer agrees that:

... education that takes account of cultural goals and social facts will result in changes in curriculum, administration, pedagogical method, and in a self-critical process of experimentation that will provide safeguards against stagnation.

(Brameld, 1966, p. 104)

### Structures for Change.

The school would have multiple functions:

1. To provide a broad-based general education with the alternatives of building on this for academic and professional skills, and on-the-job training programs.
2. To train new teachers in the use of innovative techniques such as team-teaching and to give them classroom-centered experiences; and to retrain experienced teachers. In teacher training, the interns would begin teaching immediately under the supervision of an instructional consultant. This is in contrast to the present system. (See Appendix C about Kagumo.)
3. To involve the entire community in a mutual helping and learning relationship. This would include utilizing government, industry and business as on-site "classrooms" for the on-the-job apprentice training programs. At the same time it would assure the community of a potentially well-trained work force. It would include use of the school for community projects, adult education--cultural

and political. Parents would go beyond their present role of fee-paying and would become more integrally concerned with the learning process themselves, e.g. becoming more sophisticated about their civic responsibilities.

### Curriculum for Kisumu Secondary School

The curriculum will be complete in itself, providing both a background for further study and practical training to make a student available for employment or college entrance at the completion of secondary school, thus making a contribution toward meeting both the needs of the nation and the needs of the locality. Students, teachers, and administrators will see academic subjects and practical subjects as equally important.

There is currently widespread prejudice, both in the educational system and among parents, against technical and practical education. An African legislator exemplified this prejudice when he said to this author, "Vocational education is urgently needed for our development and should be encouraged in the Republic of Kenya, but it is not for my son." The practical training will include job experience to overcome in the students' minds prejudice against certain jobs and to give the student a better background for making his choices.

Great emphasis must be placed on African and Kenyan culture. Kenya now is weakened by a fever of tribal hatred; there must be peace, understanding, and unity.

It is hoped that the school following the proposed curriculum will be a model exhibiting creativity, unity, working together, problem solving, and individuality.

### Positive Attributes for the Model

In an attempt to counteract potential resistance to the new ideas embodied in the model school, and to take advantage of African strengths, the school was located in Kisumu, the center for the Luo tribes of Kenya who are highly competitive with the currently dominant Kikuyu tribes. So, it is likely that the school would engage the sense of loyalty and pride in accomplishment held by the Luo.

Attractions for Luo teachers would include: (1) team teaching with the connotation that teachers would help each other, thus bringing a new aspect of teaching to Kenya; (2) the creation of pride in the older teacher helping to direct the younger one until the new teachers gained strength and confidence in their teaching. This is unlike the resistance shown to new concepts by many older teachers in the United States; (3) tribal participation, for one common goal; e.g. to educate the Luo's better than other tribes in Kenya and to establish a high standard for others to emulate; and (4) a sense of

participation in a unique venture in which students, parents, teachers and the community would interact with a flexible curriculum.

The Kisumu school would provide the following elements that other schools do not provide:

For teachers: A sense of cooperation and encouragement for academic growth for the whole team and for individuals; provision of flexibility in the teacher's working days, which would provide time for creativity and innovation; an opportunity to tackle problems with a base of different perspectives and inputs, because of team work; an opportunity for contributions to the organizational structure of the school, without the traditional fear of being fired for failure to reinforce the administrative pyramid.

For students: Individual participation in conferences with principal, homeroom teachers, counselors, and his parents to decide his future career, rather than relying only on results of examinations; opportunities to explore his own community in and out of the school, to discover their untouched resources; and participate in their development; he would become acquainted with government operations (perhaps attending the chiefs "Baraza" weekly council)--a community source of learning experience; opportunities to work through organized labor as planned by the school coordinator. The student would gain experience at work, e.g., applying learned theory to practical topics

immediately--thus acting as a reinforcement for that theory. At the same time, the student would be able to earn some money to defray the cost of his schooling. Students whose parents are poor would be able to finish at least a high school education. These advantages would in turn influence curriculum.

For Community: For parents, businessmen, and governmental administrators the opportunity to schedule their civic activities on school quarters; opportunity to have inputs in the organizational structure of the school, to counsel with school about the progress of students, to seek intellectuals all over the country for their community; opportunity to participate in the training of potential employees of their organizations. By working with students and teachers on community study programs, opportunity to offer unifying programs that involve everyone in the geographical area with a common winning goal, the sports spirit syndrome. And the opportunity to keep in Kisumu a high percentage of the high school graduates who have some productive skills, thus improving the economy of the community.

### Influences of Curriculum

It is hoped that the aforementioned positive approaches would result in the acceptance and support of the school by the community and this acceptance would lead to an environment favorable to change.

Within the smaller structure of the model school itself, it is hoped that the curriculum would have the following effects:

Kenya's School Roles

Kisumu Model School Roles

Administrative Organization

The Headmaster

Headmaster

Department Chairman

Department Head

Instructional Organization

Department Head

Department Head

Supervisor or

Resident I. C.

Inspector of Schools

occasional visits

dictates change

Tries new methods to influence curriculum change. Changes made through innovation and cooperation of teachers.

\*\*\*\*\*

Wide gap between community and school. No representation

Community Coordinator informs community about school, informs school of community resources and needs.

\*\*\*\*\*

Teachers--under regimen,  
official procedural behavior  
Teach within structure and  
framework of C.S.C.

Teachers--work in teams, save  
energies. Free to innovate, have  
input in hierarchical power.  
Listen to students, parents,  
community, interns and residents.

\*\*\*\*\*

Prefects--authority figure

Team leaders--elected weekly.  
Major factor: cooperation

\*\*\*\*\*

Students--encouraged to aim  
high, whether with or without  
ability. No electives offered.  
Rote memory encouraged.  
Academically oriented.  
Doesn't participate in  
community.

Students--discovery methods,  
concentration on one field of  
study with electives. General  
education offered to all. Skill  
centered courses. Tutor-tutees.  
Participates in community.  
Counseling helps develop  
appropriate aspirations and  
program planning.

### Engaging Community Support

In initiating the curriculum the first task would be to go to the community and enlist their support; for example a business and trade committee could begin work on a jobs and skills inventory. It should be made clear to both the community and to the school that there is a mutual need. The staff should interrelate and understand how the community works, what resources it has, what the community would want the school to provide and vice versa.

Since Harambee parents strongly motivate their children toward education, it would be expected that the community and the school would endorse Erikson's concept, "Status-of-the-moratorium":

Social institutions support the strength and the distinctiveness of work identity by offering those who are still learning and experimenting a certain status-of-the-moratorium, an apprenticeship or discipleship characterized by defined duties, sanctioned competitions, and special freedoms, and yet potentially integrated with the hierarchies of expectable jobs and careers, castes and classes, guilds and unions.  
(Erikson, 1956, p. 72)

Some work with the community might be on a more practicable basis such as the Jeanes School approach (see appendix D).

Working with the community, of course, would require skills normally associated with social work, i.e., the seeking out first of the powerful representative; the creation of neighborhood groups

like block clubs headed by a neighborhood communicator. Also to be consulted would be agencies such as churches and Maendeleo Ya Wanawake, Community Development for Women.

One reason for consulting the community first is the writer's feeling that it is the community which basically is the determining factor in the success of an innovative program, just as it is the community which might initially show the greatest resistance.

Using the Basic Objectives Model (see Appendix E) one could postulate this one potential reaction to change:

A. Attitudinal Change:

<u>The Parents</u>	toward	<u>Kisumu School</u>
positive but detached		feels should contribute
feel can't contribute		be directly responsible

B. Behavioral Change:

just building school,		Participates on board
paying fees		Counsels child with staff

C. Life Style Change:

Home separate from school		Bring into close relationship, reinforce each other
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GOAL: Transcending family, clan, tribe, extending  
loyalty to school, nation.

## CONCLUSIONS

The majority of tomorrow's builders of Kenya will come from the ranks of the secondary school population or an educational level equivalent to it for the following reasons: primary education as the first educational ladder can do no more than give every child fundamental education, and an introduction to pre-technical and pre-vocational pursuit. It is at the post-primary level that greater competence will be developed to enable the child to participate more fully as a member of his society.

The story is heard almost everywhere in Africa that, apart from the overall problem of scarcity of high-level manpower, the few highly-skilled personnel lack supporting subordinates. The engineer, the architect, or the agricultural specialist spends over half his time performing the duties of a skilled technician in addition to his normal duties, for lack of an intermediate grade helper; for next to the engineer or architect is the semi-trained, unskilled or very poorly trained assistant. This story can be multiplied many times as it is symbolic of most fields where higher and intermediate manpower exists. Yet there is no other level most suitable for developing this intermediate grade than the post-primary level.

For the most part, less than four percent of the high school age group has an opportunity to enter this second stage of education, and of this four percent, less than one percent is in vocational or

technical courses. For Kenya to develop as rapidly as its leaders and people wish, the ratio will need to be almost reversed as speedily as possible.

The curriculum, which is the key to any new change or direction, needs to be reconstructed to reflect the needs of the African society instead of the European as most countries of Africa do now. One positive approach is the establishment of a comprehensive curriculum that will consist of a spectrum of skills and competencies and a solid general education foundation for all the children of the community.

The curriculum itself, even when reconstructed, must be flexible enough to meet the challenges of new changes and skills within the society. A living society is a dynamic society, and Kenya is undergoing tremendous social and economic changes. These call for new ways of doing things, new skills, new tools and new knowledge. These in turn create new problems and challenges. It is essential that the new generation of Kenyans be adequately and realistically educated to cope with these changes. The writer believes his curriculum model will foster the dynamic growth needed in education in Kenya.

APPENDICES

## APPENDIX A

### The Guidance Program at Comprehensive High School Aiyetoro\*

The purpose of this paper is to describe and clarify the role of guidance as it has developed over the past seven years at C.H.S., Aiyetoro. This is not a theoretical presentation, but an attempt to describe practices and procedures as they actually occur. It is not to be construed as a definitive description of what has evolved at Aiyetoro under conditions conducive to such experimentation. Many of the guidance activities described here may not be applicable in other Nigerian schools, and indeed, there certainly are important aspects of guidance which have not been practiced here. Guidance is a new concept in the Nigerian educational system and it is hoped that the experience gained in Aiyetoro will be helpful in developing a system that will enhance Nigerian schools and the benefits which they may impart to their students.

Because of the novelty of guidance concepts in Nigeria, a complete and ideal description of the role and duties of the guidance counsellor cannot be outlined as carefully as those of the American Personnel and Guidance Association for American schools. However, as a working premise, guidance can be defined as that part of the

\*Appendix H from Final Report by Contractor, Harvard University to Agency for International Development, September, 1969.

school program which attempts to facilitate educational decision-making for the administration, students and teachers. Guidance theory has emerged from a philosophy of education which recognizes individuality and the importance of individual differences. Guidance practices are based on the theories and specialized knowledge of modern psychology, educational philosophy, and measurement and statistics. Specialized skills of the guidance counsellor include the administration and interpretation of intelligence, aptitude and personality tests, the ability to maintain a counseling relationship with a student, and the skill to assess, predict and interpret the outcome of courses of action available to the individual student.

A definition of guidance is necessarily incomplete unless the functions can be described in detail. Guidance does not exist as a definition, or as a theory or by itself. It has been developed because of definite needs and will continue to grow and develop to meet new needs. An effective guidance system is not one that fits some abstract set of rules and guidelines, but is one that has developed to meet the needs of the particular school and students for which it exists.

The development and history of the guidance program at C.H.S.A. is tied closely with that of the school itself. When the school opened in March of 1963, a guidance counsellor, Ernest Kimmel, was a part of the original Harvard/USAID staff. Since the school began by taking students only into the First and Sixth Forms, many guidance

activities as they exist now were not necessary. The task of the first counsellor was to select students for admission, begin the education of the staff of the school on the purpose of the guidance program, and to gather information about the area and social context from which the students came. The information Mr. Kimmel gathered was influential in later formulation of policy and decisions involving the program of the school. In order to obtain reference data on students he did some aptitude testing and administered many standardized tests, such as the Preliminary Scholastic Aptitude Test used in American schools.

The second Harvard/USAID sponsored counsellor, Dr. Peter O. Rees, worked during the most crucial period of the school's development, and it was during his period of tenure that most of the present policies and practices of the guidance office and administration were developed. Dr. Rees also presented one of the first papers based on experience with guidance in Nigeria, "The Role of the Guidance Counsellor in a Comprehensive School" to the yearly Conference of Secondary School Principals in 1966. From this paper the present understanding of guidance among many Nigerian school administrators evolved.

During the most recent phase of development, a Nigerian counsellor trainee was assigned to the school and after a year of in-service training, was sent to the United States for a formal degree

course in Guidance and Education. This man, together with the writer, the third and final Harvard/USAID advisor, have attempted to consolidate the position of the guidance office and to further define its position in the school. It will remain for the Nigerian counsellor, in light of his training and experience, to develop new directions for guidance.

Thus the school and the guidance program have evolved together, neither being superimposed upon the other. A rather unique program has developed, which while meeting the present needs of the school, has retained the flexibility needed for further change and development.

The present functions of the guidance office may best be circumscribed by division into two main areas: aids to the administration, and aids to students. Though a guidance program can do much to aid teaching, little has been done in this area. Aids to the administration are concerned with decision-making involving admissions, streaming, and disposition of individual student problems. In the student area, the guidance office provides information about further education, careers, subject choices, as well as personal counselling.

### Admissions

The first administrative task of the guidance office each year is the admissions procedure for Form I. The aim of the guidance office over the past four years has been to develop a decision-making

procedure based on daily experience as well as more formal and statistical research data. The goal has been to admit students with the most likelihood of profiting from their experience at C.H.S.A. As a criterion, we have used later success in school subjects, as a function of the child's predicted ability.

At present, admission to the school is open to all students enrolled in Primary Six who are not yet 14 and who are resident in the Western State origin. Notice was given in the press and application accompanied by a 10/- fee accepted. The first series of three academic aptitude tests developed and administered by TDRO of WAEC, was held in key cities in the Western State for approximately 1200 students. These tests were machine scored at the WAEC, and a list of merit printed out. Approximately 400 students in order of merit were selected for the second series of tests to be held at Aiyetoro in conjunction with an interview. During this phase of the selection, some attention was paid to geographical distribution, because of boarding places available. In some cases, where close decisions were necessary, reference was made to primary school records, using rank in class as reported by the Headmaster for a predictor.

The second stage involved nine tests covering aptitude in academic, technical and commercial skills. The interview was structured to test oral and aural English as well as to verify application information. Members of staff, in teams, conducted the

interview, while the tests were again administered by TDRO of WAEC with the help of the C.H.S. guidance office.

Formal selection of the people to be admitted was based on merit. However, an important distinction was made. Out of a total of 150 places to fill, 60 were in order of merit in the academic battery, 60 from the technical battery and 30 on the commercial battery. There is considerable overlap among the abilities in the three areas, and students will not be placed in special courses initially because of their test scores. However, it is believed that if a student has an aptitude for the technical or commercial area, it is more likely he will be more successful in these courses and will more likely choose these areas when a choice point comes. At any rate, choosing students with multiple aptitudes, and exposing them to a broad curriculum, will increase the probability of producing a more flexible, versatile student.

It is also important to note that consideration must be given to the number of boarding places available when offering admissions to chosen candidates. Some students have been unable to accept admissions because of lack of suitable boarding facilities. In conjunction with this problem, it has also been necessary to select a waiting list in order of merit for use when admitted students have been unable to accept admission. This waiting list may be made public, but this decision has been largely a matter of individual judgment.

One of the increasing problems of admission has been social and political. When the admissions pool was restricted to certain feeder schools, a person could be denied admission to C.H.S.A. as a matter of policy if he did not attend one of these schools. Thus it became a problem for parents who lived outside the admission area to convince the Headmaster of the feeder schools to enroll their child for one or two years. In spite of many efforts to prevent students who did not live in the admissions area from qualifying in this way, they were largely unsuccessful. For example, one school master is known to have as many as 30 boys from outside the school area living with him in order to qualify for entrance. Needless to say, these subterfuges defeated the original purpose of feeder school restriction, which failure was one of the factors that led to open admission.

The social and political problems have shifted from those detailed above to that of privileged persons seeking entrance for their children, and those of friends and relatives. Needless to say, we could easily fill the school with these special cases. However, the principal, vice principal and guidance counsellor have insisted that not more than a limited number of students with political affiliations will be admitted, and only if they meet reasonable standards on previous tests. It has been necessary to take an extremely firm stand on this issue because of the multitude of people

who believe they require special consideration. The issue has been morally and academically a weakening factor in the school, but is a problem that will be continuous at a government school of this nature. It has been the role of the guidance counsellor to provide information, statistics, and reasoning to reinforce the principal and vice principal in their policy decisions on this matter.

To summarize, the main goal of the admissions procedures has been systemization, based on both clinical and statistical predictive data. It has been demonstrated at C.H.S. that standardized aptitude tests in combination with other factors such as primary school achievement is the best method of selection. Because of details of the change in the admissions pool, the process will take further refinement. The general procedures and rationale itself seems firmly established.

#### Cumulative Records.

One of the most important daily administrative functions of the guidance counsellor involves the maintenance of cumulative record folders which are the bases for many decisions that have to be made concerning students. Each student's folder contains the admission application, headmaster's report and aptitude test data. A registration form revised each year includes information about family background, residence, and person responsible for fees. The most

numerous item is the triannual report sheets which include teacher's remarks, grades, housemaster's reports, form master's report and the principal or vice principal's summary. Other reports such as absence, prep attendance and notes concerning special problems are also included in the folder. For Sixth Form students their WASC results are included as well as data from any former school.

The use presently made of these records is extensive. The folder is a ready reference for the principal, vice principal or guidance counsellor whenever he needs to make a decision concerning a single student. The decision may concern disciplinary action, class placement, financial assistance, course selection or help with personal problems. A quick glance through the folder gives the reader a factual picture of the student to aid the making of a good decision in almost any situation.

At the end of each year, the records of Forms II and III are examined closely by the guidance counsellor in order to evaluate each student for streaming and placement. In addition, the reports of all of the students in Forms I and IV are examined in order to determine his promotion or retention at the end of each year.

The information in the folder has been a useful device in explaining to the student or his parents the reason for his disposition. In counselling an individual student, the folder has been an excellent source of information. His record can be reviewed easily,

highlighting his strengths and weaknesses. After a review, a student finds it easier to make decisions concerning course choices, or discovery of weaknesses that need correction.

The usefulness of the cumulative records folder for research purposes has been fully demonstrated. Projects have been completed and are underway using data already accumulated. Correlations have been made between success at C.H.S.A. and other variables such as admission test scores, success in primary school, and socio-economic background. An admission test evaluation project has been completed with the TDRO unit of WAEC. The results already obtained from these projects have helped form many of the policies now governing C.H.S.A. and will be of continued importance when further policy decisions have to be made. It is important to note that many of the policy decisions made by the Advisory Board of the school would not have been possible without the analysis of information stored in and obtained from the cumulative record folder.

The usefulness does not expire when the student leaves the school as his folder is kept. A very recent use of the cumulative records has been in the preparation of testimonials and letters of recommendation for school leavers. It would be impossible to recall accurately each student who passed through the school, but a quick review of the folder has enabled the guidance counsellor or the principal to write an accurate and factual account of the student's

performance in this school. Up until this year the number of references has been small, but with the graduation of the first WASC class, and the graduation of the early Form VI students from the university, the numbers have increased greatly. It is a small but important function of a school to be able to testify for its graduates, and with such a large student enrollment, only cumulative records can enable the principal to give fair and accurate evaluations.

#### Financial Aid

Financial aid has been another responsibility of the guidance office. The counsellor has made recommendations to the principal and they have jointly administered various outside scholarship funds. When necessary, the counsellor may also be called upon to recommend students for government scholarships.

#### Registration

Another administrative function of the guidance counsellor has been to assist in registration each year. This involves orientation for new Form I students, re-registration of all old students, formation of Form groups, compilation of the school list, and assistance with the school schedule. Once classes begin, individual schedule

clashes have to be reconciled and often individual students re-scheduled. Because of his special knowledge of the new class, and of streaming, placement and promotion decisions, the counsellor has been in an excellent position to assist in all of these activities. It also has enabled him to keep track of the individual student so as to understand his strengths and deficiencies more clearly. He has also been able in many cases to prevent students from being neglected by the administrative procedures necessary in a large school.

#### Streaming, Setting and Course Selection

One task that is both an administrative aid and an aid to the student is the yearly streaming, setting and course selection. At present we refer to streaming as assigning students to different courses of study. Setting, or as it is sometimes called, "homogenous grouping," is dividing students into faster and slower instructional groups according to their achievement. Presently there is little or no setting, as agreement has not been reached on its efficacy. Undoubtedly this policy will shift from time to time as different philosophies prevail and the time table permits.

Streaming begins at the end of Form II. This basically is assigning students to the vocational programs in business, technical or commercial areas which terminate at Form III, or to the various

areas leading to the WASC. In the past, no student has freely chosen one of the vocational areas terminating in the Third Form. However, those who have shown little academic talent but some talent for one of the vocational areas have been advised to choose that course. Those who have shown no talent for either academic or vocational work have been sent away. In too many cases, a student recommended for a vocational course has withdrawn from the school rather than choose a vocational area. The bases for streaming decisions have been grades, examination results, teachers' recommendations, and staff consultations. The cumulative records described above are of great use in this process.

The first two years' trial in all areas offered by the school is one of the strengths of a comprehensive school. Each student has a chance of discovering an area for which he has an aptitude. After the two years, we can predict to a high degree of accuracy what kind of aptitude a student has. The difficulty has arisen when a child has shown good vocational ability alone but has chosen to leave school and perhaps transfer to another rather than take advantage of the vocational training offered.

At the end of Form III, the vocational courses terminate. Boys who have been recommended by the technical department pass on to the various trade centres. Other boys, with the help of the guidance counsellors and teachers have attempted to find jobs in industry as

apprentices and trainees. The number of boys in this category has been very few in recent years, and only a few have found jobs.

Girls from the home economics class have in a few cases been admitted to the Women's Training Centre in Abeokuta, while others seek further apprentice training in catering, dressmaking or hairdressing.

Students in the commercial courses have been encouraged and aided by the commercial teacher and counsellor to seek further training at the many purely commercial schools in the area. Since none of the students are yet sufficiently capable for employment, this training is necessary and is available for most students who have the fees.

The difficulties with placement, training and recruitment have caused re-examination of the Third Form vocational program. It seems likely that it will be eliminated or modified because of the lack of a labor market for students with this level of training, the difficulty of recruitment of suitable candidates, and the lack of further training facilities in the technical and home economics areas.

#### WASC Course Selection

Course selection for the students pursuing the WASC takes place near the end of Form III. Since this selection is so important, each student is counselled individually, and with a review of the cumulative record, strengths and weaknesses are discussed in relation

to suitable course choices. At this point, a student will choose up to eight subjects to study for the WASC. He must take English language, mathematics, and in most cases, Yoruba or French, and a science. He may also choose a commercial bias, in which he takes typing/shorthand, principles of accounts, and commerce; a technical bias in which he chooses woodwork or metalwork in combination with technical drawing; or a course with science or arts bias. For selected students there is also available a special course in radio repair that leads to the WASC. For 1970, a similar course is being planned for auto mechanics. During the selection of courses, a student's plans for a future career are carefully considered. For example, a boy planning to be an engineer should be taking the proper math and science courses as well as having been successful in these areas previously. An attempt is made through counselling procedures to make a student's plans for a career more consistent with his abilities. For example, a student who has been consistently weak in science and math should not be thinking of the medical profession. It is important to emphasize that subject selection be done with considerable care, for though a student may drop a subject during Form IV, it is unlikely that he can begin study of a new one and cover the syllabus halfway through the year. In sum, the aim of WASC course selection is to have the student choose courses in which he will be successful and which will be appropriate for the

career he is considering. Because of parental pressure on student course selection, as well as scheduling difficulties, the ideal is never reached, but it has been found worthwhile to make the attempt.

The remaining administrative task done by the guidance counsellor can best be surveyed by reference to the chronological chart of guidance activities (appended). These duties mostly involve ready access to and familiarity with the student records, which have already been discussed.

In summary, the goal of the guidance officer is to make available information which will enhance decision-making on the part of the administration. Since the counsellor is trained in understanding students, predicting school performances, and preparation of statistical data, he is in a good position to advise the principal on student affairs; and on decisions affecting the student.

#### Student Aid Section

Aside from the administrative tasks assumed by the guidance counsellor, it should be emphasized that aid to individual students is and should be his primary task. In a school system where the administrative staff is sufficient, the counsellor would almost exclusively work with students and parents, individually and in groups. However, at C.H.S. it has been necessary to assume

certain administrative tasks such as cumulative record keeping because such procedures have not previously been a part of the Nigerian school. This situation does not alter the fact that the individual student can be considered the subject of the guidance counsellor, much as if a teacher's subject were biology. The counsellor has been trained in the psychology of learning and growth. He has learned to test not a student's progress in biology, but his intelligence, aptitudes, interests, his development as a student and as a human being. He is fully informed about career and educational opportunities and has the skill to transmit this information to students effectively. He is interested professionally in the personal problems of students and is able to help them solve these more satisfactorily. If necessary, he can act as an intermediary between students and teachers, and administrators or parents, as well as to contribute understanding among all parties. All of these skills, however, are adjunct to and necessary for the accomplishment of the counsellor's main task.

### Information

One of the main concerns of the guidance program has been an attempt to make the aspirations of students and parents more realistic. Besides the evaluative data given on each term report, many other forms of information have been made available to students. Over the

years speakers from various schools and industries have come to talk about their organizations and the opportunities they offer. Many films have been shown about industry and agriculture. Books about careers and education have been made available in the school library for student use. The guidance office also keeps its own small library for educational opportunities and requirements, as well as for some standard reference books. In addition, the guidance counsellors have become walking encyclopedias for educational and career opportunities and requirements. Though a total effective system of information and dissemination has not been developed, an awareness has been created in many students of the need for planning careers and education. Recently a Guidance Newsletter has been published in a series to assist in attaining this goal. When students have questions, they come directly to the guidance office where aid or information is given.

When groups of students have indicated an interest in the same areas, group lectures have been organized. Special recruiting lectures for the various specialized courses have also been given to eligible students by the counsellors and the teachers involved. This information is perhaps the most direct form of education provided by the guidance office. Besides providing orientation into the world of work for the student, the program broadens his knowledge and insight into the life and economy of Nigeria and the world. As further career and film services develop in Nigeria, this aspect of the program can profitably grow considerably.

### Personal Counselling

Personal counselling of both parents and students has also been a part of the services provided by the guidance office as well as by the principal and vice principal. Problems include issues from financial need to minor illnesses that prevent study. While little of this counselling can be called psychological, the approach has been one of providing understanding and advice which may help resolve the problem presented. A policy of this sort is a major device in personalizing and humanizing a school the size of C.H.S. Because of the numbers of people involved, cooperation among the counsellors and the principal have increased the efficiency of the general counselling and advisory service.

### Study

As there has been no curriculum area taking responsibility for the formation of good study habits, it has become a minor, yet important duty of the guidance office. Thus far action has entailed organization and supervision of preparatory periods for day students. A Study Guide has been compiled and a special paper for the examination classes written by a member of the teaching staff distributed to all students. Special pleas to teachers to provide class study instruction for their subjects as well as yearly distribution of study guides will be sufficient emphasis in this area.

### Vocational Assistance

A major feature of many guidance programs in the United States is a system of assistance for its graduates in finding jobs or further educational opportunities. At C.H.S.A., this function has been limited to a few activities. As stated above, information about careers and educational opportunities are made available in many different ways. There have been some more specific activities for special groups of students. Third Form students in the special technical program are steered toward the various trade centres in a special orientation trip provided by the technical department. Third Form students in the special commercial program are given specific information regarding educational opportunities in the commercial area.

Up until this writing, there have been few Fifth Form leavers to assist in job hunting. Those interested have been given specific information concerning opportunities in the areas in which they expressed interest. Most Sixth Form leavers have been interested only in university education, thus have not sought much help.

There are now major problems which have precluded extensive work in this area. One has been the general scarcity of job opportunities for school leavers without specific skills or good WASCs. Another has been that when a student receives his WASC results, upon which most job opportunities depend, he has

been away from the school for four or five months. If more students would take the opportunities offered by the commercial and technical departments in the WASC course, this situation could be generally improved.

### Summary

In summary, this area is just becoming important at C.H.S. and organized procedures are yet to be developed. It is not probable that the school will ever assume the duties of an employment agency, but it has the duty of aiding students whenever possible.

The counsellor's goal at C.H.S. Aiyetoro has been to encourage a realistic course of action in education for students and parents. This process actually begins with admissions, when only those students are admitted who will benefit from one of the school's programs. The school curriculum during the first two years contributes by providing students with the opportunity to test their interests and abilities in a number of areas. It is then the purpose of each term's report sheet to give an evaluation of the student's progress both in social and academic areas. When a student or a parent comes to the guidance office or to the principal for advice, these records are examined and discussed. Attempts are made to explain the relationship of past performance to future possibilities in school and in future employment.

Information is provided for further education and careers, and some personal counselling is provided.

### The Future

When this writer, the third and final Harvard/USAID Guidance Advisor ends his tour, he will be replaced by his Nigerian counterpart. This man spent 17 months in the guidance office, 12 months with the writer before leaving to take his Master's in Guidance at Harvard Graduate School of Education. Past experience with this man indicates he has the ability to take over and perform this duty adequately.

It is difficult to predict in what directions he might want to develop the activities of the office, as this will depend upon interests he has developed while at school. Also, he will have to deal with a new school administration which will come into office later this year. However, the present system has a solid base and even if this alone is maintained, our efforts can be deemed successful.

Melville P. Cote

WASC: West African School Certificate

WAEC: West African Examination Council

## APPENDIX B

### Drama for Kenyan Villages\*

In the past two years one of the most successful of all the activities has been the drama group. John Inglis, a teacher on sabbatical leave from Rugby, has had fifteen boys writing and producing their own plays and presenting others, such as those by Chekhov and the African dramatist Wole Soyinka.

The most successful of these productions was Oveye Na Matui Ahulili, in which the passion of Christ was given a Maragoli setting.

Three Third Formers, under the encouragement of Jill Claridge, the biology teacher, wrote the play in Luragoli, the tribal vernacular. With help from Miss Claridge and advice from David Cook of Makerere University College, the boys produced the play in the school hall with a simple set and elementary lighting, but with great enthusiasm. They then took it on tour to ten or more villages in the locations where it was an instant hit.

The older people particularly were delighted to hear the more archaic version of their language and on occasion they were so caught up in the Easter theme, they spontaneously stood and took part in the

\*Ernest Stabler, Education Since Uhuru (Wesleyan University, 1969).

action. The play then went on to Nairobi with a cast of twenty-four and technical assistance from John Inglis to sweep all three major prizes in the secondary section of the 1968 National Schools Drama Festival.

The play is an effective blending of the crucifixion theme and Maragoli custom. Muhonyi, a man of low birth, born in a local village, is beginning to upset the community with his teaching. Local elders become increasingly concerned over the challenge of this man to their authority, an authority they use, as do all men, to their own advantage. The local witch doctor is losing trade and is particularly incensed. The leaders plot the fall of Muhonyi, and the young man who betrays him is given an elder's beautiful daughter as his fourth wife.

After his trial by a leading judge of the area, Muhonyi is condemned to be hacked to pieces and his body scattered to the hyenas. In the final scene he is dragged off to his execution, but soon returns in triumph. Although the adjudicators and the audience could not understand a word of Luragoli they recognized the play as authentic, indigenous drama that had been developed into a piece of moving theatre. It was also a sign that Chavakali boys have Maragoli roots which they want to keep watered.

## APPENDIX C

### Teaching Practice\*

Not all of a Kagumo student's time is spent, of course, in college classrooms. In four of the six terms the students go out to nearby schools for three weeks of teaching practice. Women students continue to live at the college but men move into teachers' houses on primary school compounds and take all provisions and equipment with them. Through a minor miracle of organization, each group of students assigned to a particular school are provided with dishes, cutlery, cooking utensils, buckets, an ironing board, and a lantern--all listed and boxed--at the beginning of each teaching period. Students are given money to buy their food and they are then deposited by school bus, fully stocked and equipped at schools that may be up to twenty five miles from the college.

As the students take over their classes, the regular teachers tend to disappear or go on vacation and, surprisingly, are not asked to supervise or assist the students. The only supervision is given by the Kagumo staff who follow the students into the schools and observe them as much as time permits.

\*Ernest Stabler, "Safari in the Short Rains," Wesleyan University Alumnus, LI (November, 1966), pp. 11-15. Reprinted by permission.

Once a year the Institute of Education sends a team or panel composed of inspectors, tutors from other colleges, and Ministry official to inspect Kagumo students while on teaching practice.

## APPENDIX D

### Community Education--The Jeanes Approach\*

Two schools in Kenya are engaged in community education for Africans--Jeanes School at Lower Kabete, on the low hills outside Nairobi, and Jeanes School at Maseno, on the equator, in western Kenya. Both are financed by the Kenya government and form part of the Department of Community Development. . . .

Most of the Africans of Kenya, as throughout the African continent, are still unschooled. All improvements have to be sustained by people of some education. How then can education be brought to the millions of Africans who have had little or no schooling and are unfamiliar with the many elementary things basic to an improvement in their standard of living? How can education be carried to the scattered huts in remote villages where most of the millions live? This is precisely the task the Jeanes Schools endeavour to accomplish.

The purpose of these adult schools is to help African men and women to shoulder their responsibilities, whether as chief, district council clerk, shopkeeper, farmer, or wife and mother.

\*The Times Educational Supplement, November 6, 1959, p. 541.

Such community (or, mass) education, is not new. The pioneer missionaries and government officials did--precisely, that. It was the adults they taught first--children's schools came later. What is new, as T.R. Batten points out in Communities and Their Development, is that the principle is becoming more widely recognized. . . .

The Jeanes School near Nairobi was started experimentally in 1925. The Kenya government's appreciation of the kind of education it offered led to the opening three years ago of the Jeanes School at Maseno.

#### Bringing the Family

Under various directors the first Jeanes School evolved its present method. Men and women students from 20 to 40 years of age are drawn from villages and to a lesser extent from towns for courses of various kinds. The main course lasts about five weeks, a period decided upon by experience. It is about the shortest possible time to impart the desired amount of knowledge and about the longest time most of these adult students can spare away from their work at home. Women can bring their younger children to live at the school with them.

There are special courses for chiefs, local government officials, shopkeepers, and so on. At these, however, as in the main courses, the lessons usually include certain general adult subjects. Thus for

almost everyone attending the school there are lessons on citizenship, including the history and governmental structure of the country. Much of the teaching is devoted to helping the students in their workaday and domestic lives, and a good deal of time and school space is therefore given to practical subjects.

These practical subjects comprise carpentry and metalwork for the men; sewing, cooking, and child welfare for the women; and vegetable gardening (students are given their own plots) and farming for both. For some there is also bookkeeping and arithmetic and even a little reading. In addition, there is sport, religious instruction, and lectures by outside visitors.

About 1,500 Africans a year attend the Jeanes School at Lower Kabete. The children brought by the mothers number about 300 each year, and besides their mothers they have nursery teachers to care for them.

As each course ends about 100 Africans will know a little or perhaps a lot more about a dozen everyday things, from handling a sewing machine more quickly, to giving first aid to a weak child. With such new knowledge they wave goodbye to the school where they have perhaps had good times and certainly a new experience.

But that is only a beginning. The students who leave the school are missionaries. They have not learned merely for themselves how to make a wooden chair or a door that shuts true, to keep

flies out of the eyes of their children, or to rotate crops on their own plot. They have learned these things for the benefit of their village or their neighborhood. That is the spirit in which they studied. They go back to their own homes to teach and help every fellow villager so he can improve his new way of life.

### On The Spot

Elsewhere, of course, mass education can take other forms. Teachers go out to villages and show how to make compost heaps, how to wash babies, how to fertilize the soil.

The Jeanes Schools authorities, however, think more good is done if a person belonging to the village becomes a teacher, not for a few hours or a couple of days, but as part of his daily life. Such a teacher cannot lecture about wells, fertilizers or fitting doors, but he is there when a neighbour is building his store or his shop, when the fertilizer is being sprinkled on the field, when a child is sick, when the local council discusses a new road or well. He is, in fact, there at any time, walking across a field or down a path, calling a bit of advice when it is wanted.

Students who thus become teachers not only teach but set an example in their own home and in the way they look after their children. They do these things all the time, even if the other villagers laugh and mock a little at the new-fangled ways. . . .

After they have returned home the students are not abandoned. Development officers and sometimes teachers from the schools visit the villages to give help, and to see for themselves how their method is working out.

The Jeanes Schools also run specialized courses, intended primarily to train individual students, such as community development and other government officers, and cooperative employees. Their grounds and buildings are used by other educational bodies from time to time. But community education of the kind described is their main function.

## APPENDIX E

### Basic Objectives Model for Change\*

#### Introduction

The basic objectives of any community education development should focus on change; otherwise the program has little cause for existence. Usually the goals or objectives of educational programs are written in the jargon so typical to educators and are difficult to translate into service behaviors. In an attempt to overcome the problems inherent in verbalizing educational objectives for common understanding a model was devised to aid in identifying your basic objectives as you begin work in community education. That model is presented below.

#### Discussion

Seemingly people or organizations change in three basic ways. They change their attitudes, behaviors or life style (e.g., income or employment). But people are not the only things that change; institutions, agencies, communities and groups of people (e.g., racial,

\*Model obtained by the writer from Curtis Van Voorhees, Director, Center for Community Education Development, Office of Extended Services, Ball State University, Muncie, Indiana.

economic) also change. And each organization, group or individual is capable of changing itself or bringing about change in other individuals or groups. Potential for change is outlined in the model below; an example follows the model. As you work with the model try to keep in mind the areas where you hope to effect change in your first year of operation.

(The Basic Objectives Model, followed by an example, is outlined on the following page.)

BASIC OBJECTIVES MODEL

(A) Attitudinal change:

We hope to change the attitude of

Individuals  
Groups  
Schools  
Agencies  
Community

toward

Individuals  
Groups  
Schools  
Agencies  
Community

(B) Behavioral change:

We hope to change the behavior of

Individuals  
Groups  
Schools  
Agencies  
Community

in interaction with

Individuals  
Groups  
Schools  
Agencies  
Community

(C) Life Style change:

We hope to change the life style of

Individuals  
Groups  
Schools  
Agencies  
Community

through the efforts of

Individuals  
Groups  
Schools  
Agencies  
Community

- Individuals - Individuals in the community
- Groups - Groups in the community (e.g. Businessmen, poor, white, middleclass)
- Schools - The school(s) in the community (or the school staff)
- Agencies - Agencies or institutions in the community (or agency personnel)
- Community - The people in the community as a whole

EXAMPLE

Re: (C) Life Style Change

If a concern is the current employment situation of minority groups and you feel that the schools should become actively involved in bringing about changes you would identify the following as a basic objective:

We hope to change the life style of groups (the minority referred to) through the efforts of the schools:

symbolically [ (C): G - S ]

CHARTS

CHART I

PITTSBURGH POTENTIAL DROPOUT - DROPS OUT

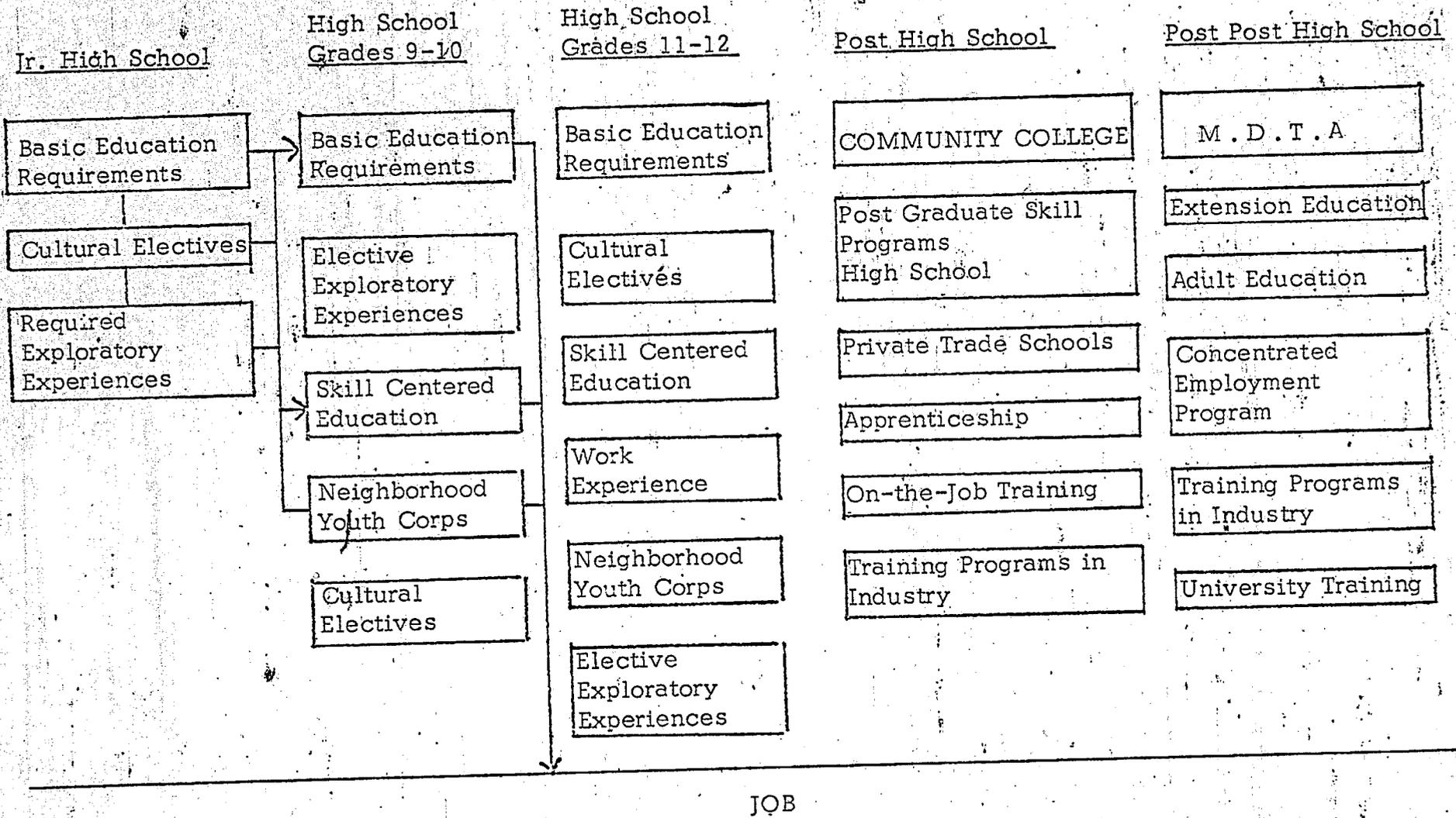


CHART II

VOCATIONALLY ORIENTED - NON-UNIVERSITY BOUND STUDENT

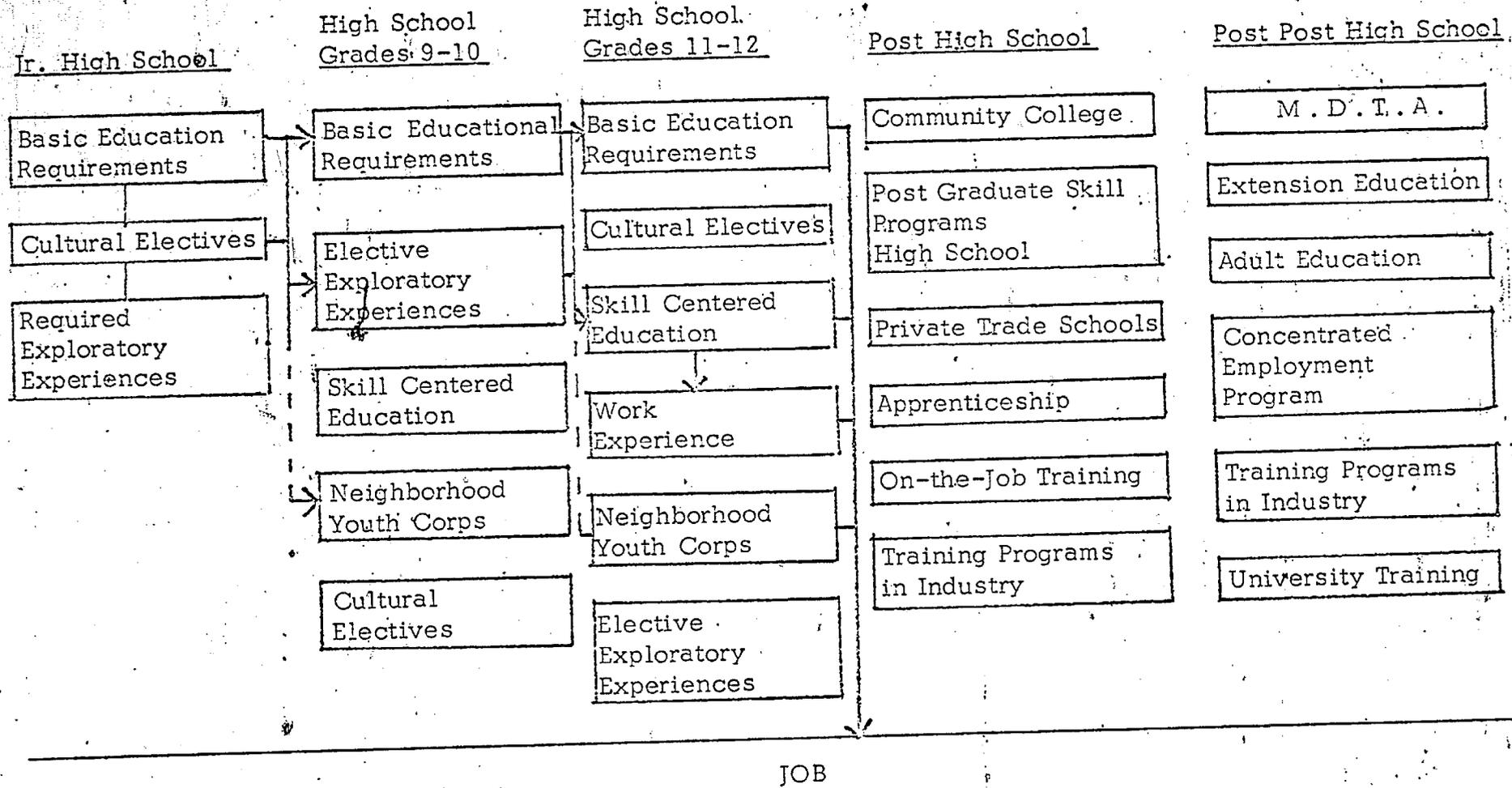
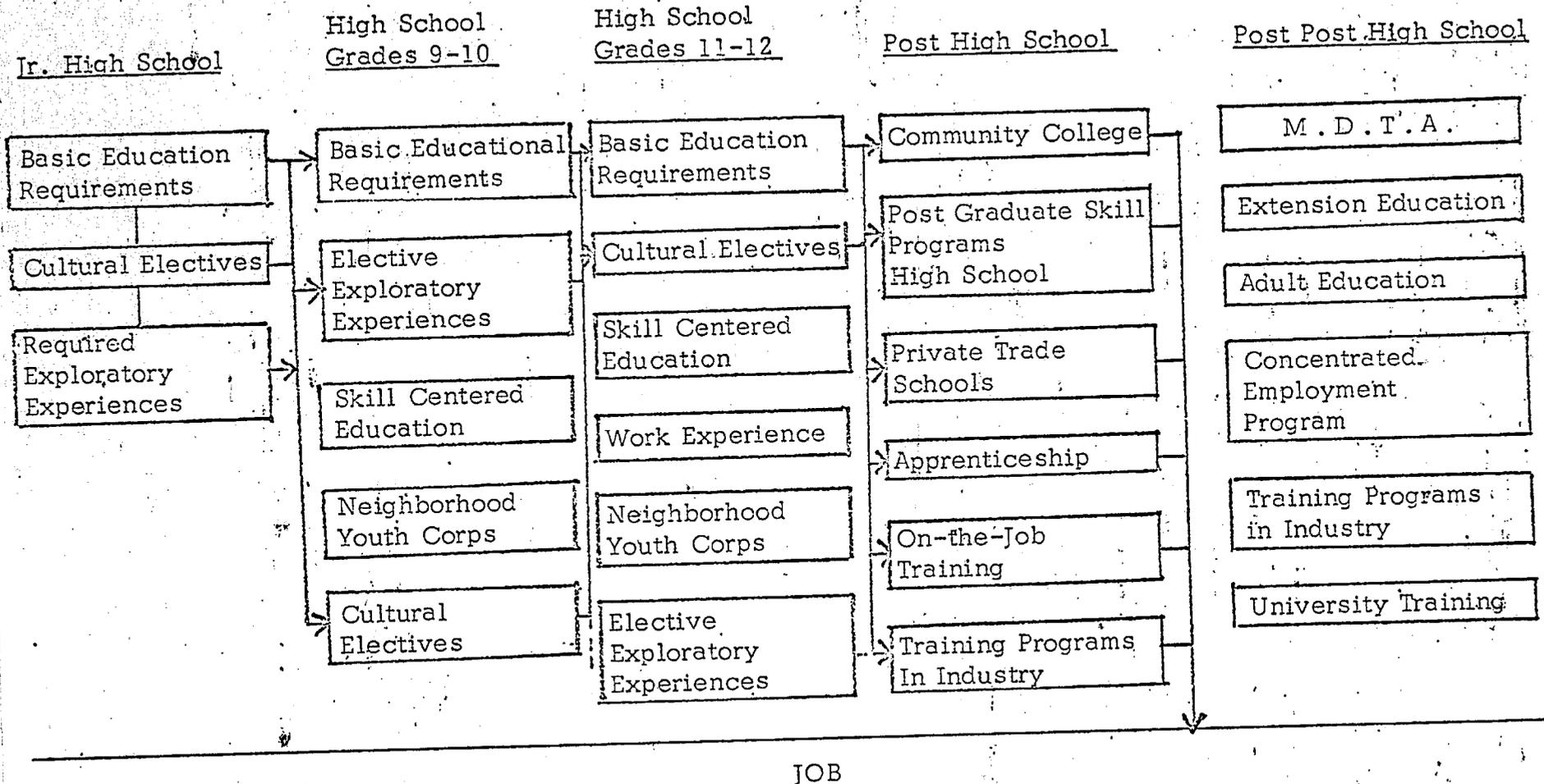


CHART III

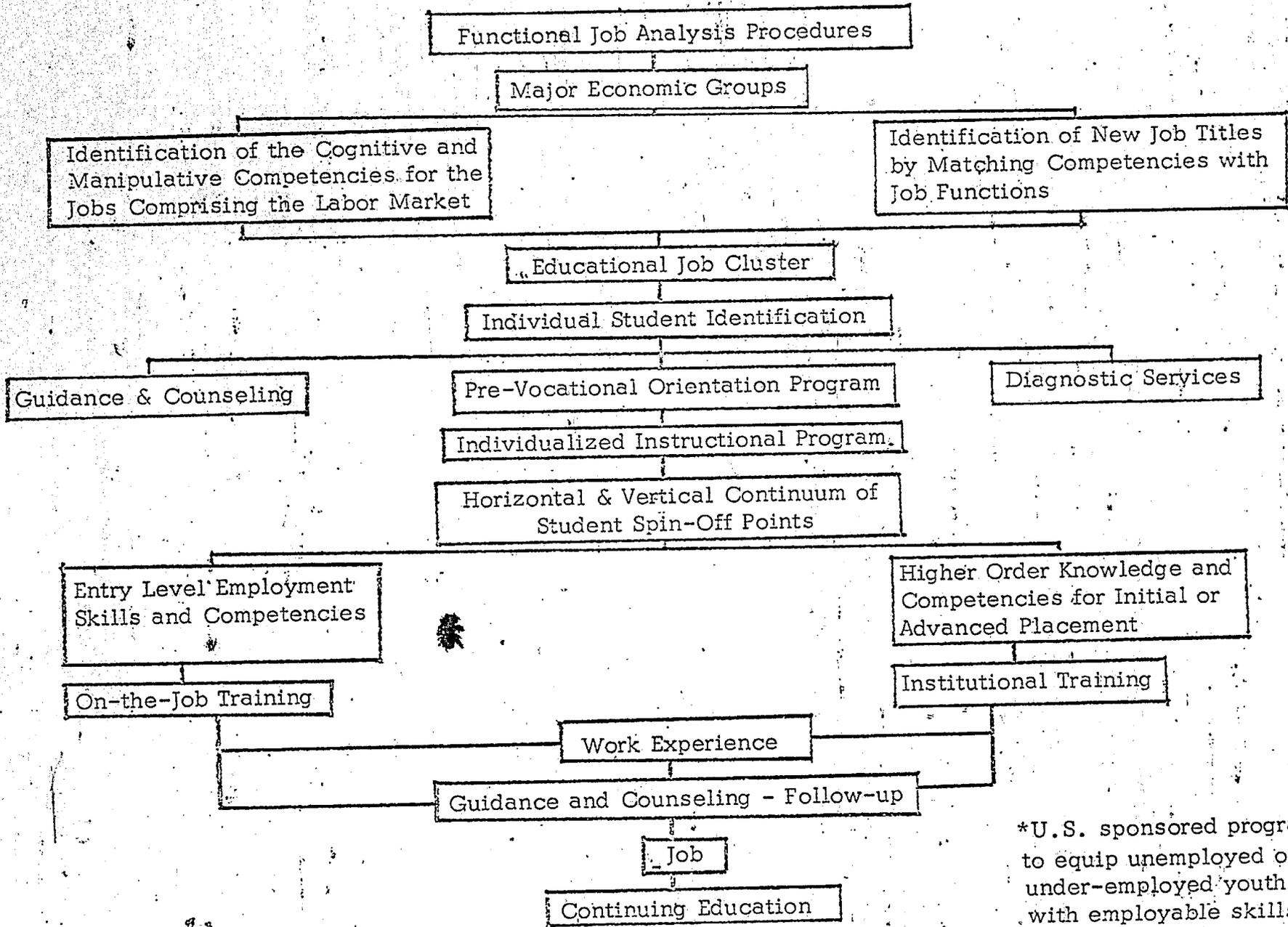
ACADEMICALLY ORIENTED - NON-UNIVERSITY BOUND STUDENT



Charts I, II, and III are from the Occupational, Vocational and Technical (OVT) division of the Pittsburgh Public Schools, Pittsburgh, Pennsylvania, September, 1969. They demonstrate the alternatives open to a youth within the school system, whether he becomes a dropout or goes on to college.

CHART IV

PITTSBURGH CURRICULUM DEVELOPMENT FOR MDTA\*



\*U.S. sponsored program to equip unemployed or under-employed youths with employable skills.

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## VITA

Amram Onyundo was born in Marama location, at Butore, Kenya, December 26, 1936. He attended Musanda Luo primary and intermediate school and graduated from Kakamega Government Secondary School in 1954. He joined the Ministry of Education and taught at Kitale Secondary School, 1954-1960. To further his education in 1960 he came to the United States. In 1964, he graduated with a B.S. in biology from the University of Louisville, Kentucky. From 1964-65, he worked as a Senior Laboratory Technician at the University of Pittsburgh, in the Environmental Occupational Health Department.

From 1966-67 Mr. Onyundo attended Graduate School of Education at Duquesne University earning an M.Ed. in Curriculum and Supervision. During this time he was a graduate assistant in the Biology Department, where he taught Comparative Anatomy and General Biology.

In 1967-68 he entered the Graduate School of Education at the University of Pittsburgh, with major concentration on individualized instruction. He was one of the team of teachers from the University who organized and wrote a curriculum for the Oakleaf Project, in the Baldwin-Whitehall School District in Pennsylvania.

From 1968-70 the writer participated in the Teacher Corps Urban Internship Program, in Pittsburgh. He held a joint appointment as an Instructional Consultant\* in the Pittsburgh Board of Education and as a lecturer in the internship program, School of Education, University of Pittsburgh.

\*An Instructional Consultant is a resident supervisor.

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