PRE-SCHOOL EDUCATION AND ACCESS TO EDUCATIONAL OPPORTUNITIES IN NAIROBI

By

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This Thesis is my original work and has not been presented for a degree in any other University.

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This Thesis has been submitted for examination with our approval as University Supervisors.

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To the children of Mathare Valley
who, through no fault of their own,
live in abject poverty and go to
extremely poor nursery schools.
Most of whom, due to the prohibi-
tive class barriers to their
educational mobility, will never
read this thesis.

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O.N. Gakuru

ABSTRACT

This is an exploratory study of nursery education in Nairobi. The main aim is to classify the types of nursery schools which exist and identify their social significance. Although research in the Sociology of Education has focussed primarily on the relationship of the formal education system to the social and economic context, little attention has been paid to the role of nursery education. To fill this gap this study investigates: (a) the significance of nursery education in relation to the rest of the formal school system particularly its role in regulating access to the primary education, and (b) its contribution to the process of social stratification. The nursery schools in the study area - Nairobi - can be divided into clear categories which formed the basis of the sampling strategy used in the study. The nursery school is the unit of analysis and the nursery school principal the key respondent.

A central assumption of this study is that inequality in the distribution of educational opportunities is a reflection of the general inequalities found among social groups.

Survey data from nursery schools in Nairobi, an urban area in Kenya, are used to determine whether the same relationships which have been found between education and the social group structure in other societies exist in Kenya. Hence, the study investigates the extent to which the differentiated structure and content of education is related to the social class structure as indicated by the major independent variables i.e. cost, geographical location and race of the school principal. Other determinants such as nursery school ownership are also examined in the study.

The major findings emerging from the Nairobi data show that the development of nursery education has taken a pattern that parallels the structure of primary education. For example, there is a very high correlation between the fees charged in nursery schools and the type of primary schools entered. In other words, the children who graduate from the expensive nursery schools go to the high-cost primary schools while the graduates from low-cost nursery schools go to the low-cost primary schools. It was also found that nursery schools differ in the use of language, allocation of time on various aspects of the curriculum and in the

headteachers' perception of the personality traits children are encouraged to develop. The observed differences in the use of language show that children from privileged social backgrounds have disproportionate access to nursery schools emphasizing English language which in turn contributes to their educational mobility. The differences in the allocation of time indicate that the low-cost nursery schools spend more time in teaching literacy and numeracy than the expensive schools. The latter are more responsive to the creative and aesthetic needs of the child.

The empirical findings support the central thesis of this study that nursery education has unequal outcomes both in the type of primary schools entered and in the content of education received. However, these outcomes are to a large extent a reflection of the inequality among the social classes that are served by these nursery schools. In order to give every child an equal opportunity to develop their personal potentialities, it is strongly recommended that the material wealth and services must be more equitably distributed in the society. It is only after the poor are liberated from the struggle to satisfy the basic needs: food, shelter, clothing and good health that their human potentialities can be fully realized.

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CHAPTER ONE

PRE-SCHOOL EDUCATION

INTRODUCTION

The total number of children involved in pre-school education has made it a mass movement affecting thousands of Kenyan families. In the rural areas, in 1973, nearly 400,000 children attended 5,800 day care centres and were taught by 6,326 teachers. In Nairobi, there is an estimated total enrolment of close to 15,000 children in about 214 nursery schools and under the guidance of an estimated 700 teachers. (Gakuru, 1976[1]; K.I.E., 1978[2]).

The number of children enrolled in nursery schools is therefore visibly large, but is is only a small fraction, less than one-fifth of the total population of children between the ages of 3-6 years. In 1969, there were about one and a half million children between the ages of 3-6 years out of a total population of 10 million people. (Kenya Population Census, 1969).[3] Today the number of pre-school age children is expected to be much higher than it was ten years ago. According to the latest population estimates there are about 13.4 million people in Kenya with at least 87 per cent living in the rural areas (I.R.S., 1977).[4] A comparison

of the number of children attending nursery schools with the total number of pre-school children shows that more than a million children are left on their own to play both around the home-steads in rural areas and along the streets in urban centres and also to carry out various economic and social tasks.

To carry out a study of nursery schools is no doubt to study a privileged minority of children. This however, does not render the category of children who do not attend nursery schools less important what-so-ever. The latter category comprises mainly the mentally retarded, disabled, and the children who finally enter primary school without going through the nursery schools. There are also those children who do not attend both the nursery and primary schools. The latter are the target of literacy classes in their adulthood.

Pre-school education is a term which includes a range of infant institutions. The more specific labels used in Nairobi and other urban centres are: day nursery, playgroup, kindergarten and pre-school. Similar institutions in rural districts are commonly known as day care centres. The pre-school concept refers to the fact that all such institutions comprise an

educational structure that preceeds the elementary education. In this thesis, the term nursery school is used to refer to all types of pre-school institutions.

The modal age for children attending pre-school education is between four and five years and the range is two to six years. Government primary schools generally admit children in standard I at the age of six years. However, in some rural districts and the urban centres some children go to primary schools when they are five and not six as is officially required. The minimum age requirement is fixed largely because there are not enough places for all children old enough to enter primary school particularly in Nairobi. Thus, the hidden criterion for the existing minimum age for entry into standard I is determined by the available educational opportunities and not by the educational needs and readiness of the children. The scarcity of standard I places coupled with arbitrary methods of admitting children into primary school raises a problem of selection which can contribute to an interest in pre-school education.

The fees charged in nursery schools range from Shs. 9/- to Shs. 1,800/- a term. The harambee nursery schools, mainly found in the rural

areas and built and run by the communities are the cheapest. Similar institutions in urban areas charge nearly twice as much. But the expensive urban self-help nursery schools are extremely cheap compared to the private schools serving the wealthy families mainly in large towns. In Nairobi, for example, the private nursery schools charge a median fee of about Shs. 2,000/- per year. (Gakuru, 1976).[5] Thus parents at all economic levels spend large sums of money on nursery education. After all, a sum of even Shs. 9/- to 20/- per month is a lot of money for most families in rural areas or poor urban communities bearing in mind that they have a multiplicity of competing needs for their meagre incomes.

Nearly all the nursery schools cater for children in the mornings only. Officially, the self-help nursery schools are supposed to be full day, but lacking lunch for children to eat and space for them to nap on in the early afternoon, these institutions find it impossible to keep children a whole day. In Nairobi alone, about 70 per cent of nursery schools are half-day. In addition a considerable number of children attending full-day nursery schools are half-day pupils. The time children spend in nursery schools differ and is also dependent on the age of a child at the time of entry. However, it seems that most of the children who

attend, spend one or two years before going to primary school.

The overall development of nursery schools is an outcome of many interacting factors. In the rural districts for instance, the nursery schools were introduced as part of community welfare mainly to meet nutritional, clinical and custodial needs of the children. Indeed as late as 1970 the Ministry of Housing and Social Services charged with the administrative responsibility over day-care centres issued an authoritative handbook which articulated the objectives of day-care centres as non-academic, non-teaching functions.[6] But these centres are reported to be engaged in academic work. Indeed, partly due to pressure from parents and limited educational background of the teachers, these centres have become informal extensions of lower primary schools by both style and content. Herzog (1969)[7] in a survey of the parents of nursery centre children in four communities in Kenya found that a majority of parents of nursery school children vigorously favour academic instruction in the nursery schools - it is the basic raison d'etre of the centres for all but a few parents. Follow up studies by (Kabiru, 1972;[8] Gakuru, 1976[9]) also report a heavy concentration on academic activities in nursery schools. Commenting on self-help nursery schools in rural areas Krystall and

Maleche (1976)[10] stress that although nursery schools are among the simplest self-help projects to plan and implement, their simplicity should not blind us to their significance for local parents who view them as an investment in their children's educational futures, a way of ensuring success in future schooling.

The child-care function of pre-schooling cannot be ruled out altogether, but it is necessary to point out that ayah service in Kenya is cheap unlike that in other countries where labour is expensive. A lot of families with children attending nursery schools especially in the urban areas also have ayahs at home. The availability of cheap domestic labour and other forms of child care make the argument that pre-schools are serving educational aspirations in the society all the more convincing. Thus, while the child care function is no doubt one of the explanatory factors, the development of nursery schools is largely a response by parents, communities, the government, welfare organisations, and private enterprise to the high demand for education. This overall interest in pre-school education is illustrated for example by the extent to which the pre-school concept has been assimilated into the dominant developmental philosophy:

> "Nursery school education is the foundation for the development of the person, the community and the nation. Education is the best investment that parents could offer their children. Parents should send their children to schools as it is through education that the child of today would become a better leader of tomorrow".
>
> (The Standard, Tuesday, September 2, 1976).

The above address by a senior government official to a fund raising ceremony in aid of a self-help nursery school illustrates the importance that the government attaches to the development of pre-school education.

The nursery schools in the rural areas are more or less homogeneous. They are all self-help projects except a few private schools which served the white children in the former White Highlands. The self-help nursery schools are partially completed or very poorly constructed buildings, mostly without doors and windows. Inside the classroom, the children either sit on forms or desks arranged in rows facing the front of the room where the teacher stands always. The teachers are poorly trained. In 1973, out of a total of 6,326 teachers in day care centres, 570 had been trained for one year, and another 1,400 had attended short courses lasting one, two, three or six months at the most. Nearly all of these

teachers are primary school leavers. (Gakuru, 1976)[11] We are thus witnessing a virtually undifferentiated stage in the development of nursery school education in the rural communities. This observation does not in any way imply that the rural community is undifferentiated. On the contrary, there are quite distinct social classes whose origin is largely based on the development of capitalism in Kenya, both in the rural districts and the urban centres.

In the urban centres the nursery school is an old feature. One of the earliest recorded nursery schools was in Nairobi in 1942. These nursery school like many others started during the colonial period were primarily available for Europeans and hence located in urban centres. The Anglo-Saxon presence in ownership and management of nursery schools in Nairobi has continued to dominate the nursery education scene. The Asians have also developed their own schools. The Africans too have developed theirs through self-help and with assistance from church and welfare organisations. The nursery school reports are extremely poor. However, from the existing incomplete records out of about 492 recorded nursery schools in Nairobi, slightly more than half, 54.67 per cent, have either been managed or owned by white dames, 23.4 per cent by Asians and the rest, mainly self-help, by Africans. Out of the total number

of the recorded nursery schools, about 214 were in existence in 1976. The others have been closed for various reasons and at different points in time. Most of the nursery schools closed for the following reasons: owners returning to their mother countries, inability to meet the necessary requirements, intra-city migration, lack of children and ill health.

There is no overall body to manage, develop and supervise pre-school education both in the urban centres including Nairobi and in the rural areas. The day-care centres are built by individual communities through the self-help effort sometimes with assistance from the government officers at the grassroot level. As indicated already, the majority of day-care centres are found in the rural areas. The rest serve the slum communities in the urban centres. Each day-nursery is under the care of a parents' committee. The two main responsibilities of the committee is to appoint, pay and supervise the teachers, and to ensure continued development of the school. Only very few day-care-centres get assistance from the local councils.

The government involvement in the development of these centres can be traced to the early 1960s, mainly through the Ministries of Home Affairs

and Health. The Ministry of Education only intervened to prohibit academic instruction thus taking an inhibitive function but did not institute supervisory mechanisms to ensure that the directive was observed. From 1968 the Department of Social Services introduced a training programme for the day-care teachers. However, by 1974, only 1,935 out of those 5,000 teachers were trained. The training emphasized non-academic functions of nursery schools but there is no inspection to ensure that the teachers adhered to the requirements (K.I.E., 1978).[12]

In Nairobi and other urban centres most of the nursery schools belong to the local administration, church, welfare institutions and communities through self-help committees. The rest are private nursery schools run as businesses. In Nairobi for example, there was a total of about 214 nursery schools in 1976. Out of this total, 78 were private, 70 self-help and the rest service nursery schools.

Table 1: Distribution of Pre-School Institutions in Nairobi by Ownership in 1976

Type of Ownership	Total Number of Schools	Estimated Number of Children Enrolled
Private	78	4,118
Service (City Council, Church, Welfare, etc.)	66	5,598
Self-help (Harambee)	70	5,079
Total	214	14,795

Source: Department of Health, Nairobi City Council Nursery School, Inspectorate Files.

The figures in table 1 above are an approximate only because the number of pre-schools in Nairobi does not remain constant. There is a continuous process of starting new schools and closing some of the existing schools. However, it is quite evident from table 1 that large numbers of nursery schools have been established both in the low and high income suburbs in the city. All the pre-schools in Nairobi except the self-help require a licence to operate. To qualify for the licence, a nursery school must meet certain physical, health and educational conditions that are defined by the local authority (see Appendix 1). However,

once a nursery school is licenced there is no supervision throughout the year by the Education Department. The only supervision are the occasional visits by a team of nurses from the Department of Health.

The lack of coordination, control and effective supervision of nursery schools has led to spontaneity, heavy influence of parental educational aspirations, differentiated fees reflecting the unequal incomes among the social groups served by particular nursery schools and different pre-school experience that individual schools present to the children. Hence the development and continued existence of a complex and differentiated pre-school education structure.

Primary education is also differentiated. Some primary schools are private and charge large sums of money per term. Other primary schools belong to the city council. These too are differentiated. Among them, there are the former European schedule C schools, the former Asian schedule B schools and the former African schedule A schools. In addition many new schedule A schools have been built to serve children in the new estates. The structure and content of primary schools may also have contributed to the existing structural pattern and content of pre-school education. Indeed, entry

into some primary schools is based on performance in selection examinations (see Appendix 2). However, access to the expensive primary schools was governed almost by the socio-economic status of the parent after the removal of the racial barriers. The fees charged in these schools is not a hindrance to any one on a middle level income. But competition for vacancies in these primary schools has intensified because the existing facilities have only expanded slowly whereas the middle class has expanded rapidly. Similarly, competition for places in the low cost primary schcols (schedule A) has intensified because of the abolition of fees, inadequate provision of new facilities and a rapid expansion of the low income population. For example, in Mathare Valley and Kariobangi the inadequate provision of primary schools by the government has forced these slum communities to establish self-help primary schools to cater for the children who do not gain admission into the state schools.

Hence the crucial decisions are now those that govern access to the infant classes in primary schools and as a result pre-school education has taken on a significance which it previously lacked. However, in Nairobi the large differences particularly in the fees charged per term suggest strongly that nursery schools are more than just filters for

primary schools entrants. In addition, the differences among nursery schools reflect the existing social class structure of the society. Furthermore, the absence of government supervision and control on the educational activities, allows nursery schools to contribute unimpeded to the reproduction of different social classes.

In brief, the development of pre-school education is influenced by many interacting factors such as custodial and educational needs of the child. But the pattern of its development may be understood fully only within the context of the existing structure of primary education and the underlying socio-economic differentiation in the society. As already suggested above, the lack of government intervention and the acute competition for standard one vacancies in primary schools has led to a fees structure in nursery schools that reflects the income inequality that characterises the different social classes. Therefore, in this study, I intend to do the following:

(a) classify the types of nursery schools and establish the social significance of the identified categories of nursery schools.

(b) identify the relationship between nursery education and primary education with an emphasis on the role played by nursery schools in regulating entry into primary schools.

(c) identify the relationship between education and class formation using pre-school education in Nairobi as a case study.

Footnotes to Chapter One

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12. Kenya Institute of Education, op.cit., p. 11.

CHAPTER TWO

LITERATURE REVIEW AND THEORY

SOCIAL STRATIFICATION

Although research in the field of Sociology of Education in Kenya has primarily focused on the relationship of the formal educational system to social and economic context, little thought has been given to the development of nursery education (Court, D., et.al., 1973)[1]. Thus we do not know its sociological significance in relation to the rest of the formal school system, particularly its structural links with the primary education and thus its probable contribution to the process of socio-economic stratification in the society.

Studies have shown that social class structure which is the most common form of social stratification is based on the economic variables, i.e. the way the society organises its production, distribution and consumption of goods and services.[2] According to Weber (1947)[3] property or lack of property are basic categories of all class situations. Possession and non-possession of property and services according to Weber determines the individual life chances in a competitive market situation. Thus, for example, a positively privileged property class may monopolise the privileges of socially

advantageous kinds of education as far as these involve expenditures.

Although the Marxist analysis differ from the Weberian conception on the social classes, there is consensus on the role that the social classes play in the unequal distribution of the material wealth and the socially desired cultural resources including education. For example, Poulantzas (1976:20)[4] adopting a Marxist view points out clearly that:

> "the class barriers (the distribution of income and wage differentials, etc.) and their extended reproduction have the effect of imposing specific and concentrated social inequalities on certain groups according to their various classes in which they are distributed, particularly the young and the old people".

It is quite clear from the above brief discussion that the social class differences are not limited to the economic level alone but are also reflected in the structure and content of the other social institutions such as the educational system, that regulate the distribution and consumption of the socially desired goods and services.

The educational system however, does not only reflect the social class structure in the society but also reproduces it. The role of the educational system in the social class reproduction is characterised by the differential socialisation and unequal distribution of educational opportunities including access to nursery education. The educational system also contributes in the allocation of the social class agents on the basis of performance into occupational structure. Certainly, there are other functions that the educational system plays in the society such as reducing conflict among the social classes that/do not intend to review in this thesis. / I

Education and Social Classes in Kenya

As already mentioned, the significance of education in stratification studies arises mainly from its reproductive and allocative functions in the society. Poulantzas (1976:32)[5] views the two functions as moments of one and the same process:

> "This encompasses, as two moments of one and the same process, both the training and subjection of the agents to enable them to occupy the places and distribution of agents to places".

Commenting further on the part played by the educational system in distributing individuals in employment, Poulantzas emphasizes that in a capitalist social formation classes are not castes and schools have a role of their own in distributing agents to the available jobs. But this role is limited in so far as the effects of the distribution show themselves in the fact that the vast majority of the bourgeoisie remain bourgeoisie and their children do too, while the vast majority of proletarians and the children after them remain proletarians.

Poulantzas observation is relevant for societies such as Kenya with established social class sub-cultures. The Kenyan society is differentiated to a degree that social classes do exist both in economic and cultural terms, particularly in the urban centres (Kinyanjui, 1977).[6] Leitner (1975)[7] points out that the capitalist mode of production in Kenya which was introduced by the European colonialists has a corresponding class formation consisting of a bourgeoisie and a differentiated working class with a commercial, artisanal, professional and administrative petty-bourgeoisie between the two. She also points out at the existence of marginal groups who have not been fully integrated into the capitalist mode of production at the level of

production but which are exposed to unequal exchange for instance when they trade with animals.

This social class structure is characterised by a gross inequality in the distribution of incomes which range from £ 20 or less to more than £ 2,000 a year (I.L.O., 1972).[8] The urban household income distribution is a good example:

Table 2: Urban Household Income Distribution 1968-1969

Monthly Income in Shs.	Percentage of Household	Percentage Share of Total Urban Income	The Predominant Segments of Social Groups
0-499	47.5	15.8	Unskilled and skilled workers, petty commodity producers.
500-999	23.4	18.8	Skilled and clerical staff, primary school teachers.
1000-1399	9.9	14.3	Technicians, semi-professionals supervisory staff
1400-1999	9.3	17.8	middle level executive officers senior clerical staff, secondary school teachers.
2000 & over	9.9	33.3	Managers, professionals, senior state bureaucrats, owners of medium to large firms.
Total	100.0 (191.800)	100.0	

Source: ILO Report, p. 75.

We can see from this table that about half of the population in urban centres have access to only 15% of the income circulating among the urban households, while 9.9% of households control 33.3% of the total income. The concentration of the population in urban centres makes the difference in incomes among social groups be reflected in education, life-styles, and in other socially desired goods and services. This is so particularly in a context of free enterprise whereby the state intervention has not resulted in a uniform type of service in either education or medicine.

Table 2 shows on the basis of income there are three principal groups in urban centres including Nairobi. The first consists of the poorly paid both skilled and unskilled workers including the petty commodity producers. In Nairobi, this social class is found mainly in the Eastlands, and the slum communities. The second group consists of a wide range of occupational categories from clerical staff to semi-professionals. These categories are sometimes referred to as fractions of the petit-bourgeoisie. David Lamb (1977)[9] identified a fraction of this class with values and expectations similar to the other middle classes elsewhere:

> "Nairobi - Kenya - A new class of African is emerging. He is educated and prosperous, economically aggressive, dedicated to the dream that his children's lives will be better than his. He is buying a house with a bank loan, and he owns a second hand car. He makes sacrifices in order to educate his children...his expectations and values are middle class by Western standards, but in Africa, where the great majority of people participate only marginally in the cash economy, he is decidedly upper class. He is found in countries like Kenya..... countries that since the colonialist pulled out have preserved free enterprise and other western ways".

Finally, there are various fractions of the ruling class such as owners and managers of medium to large firms, senior state bureaucrats, and senior officials of bi-lateral and other large welfare organisations including the church. The coexistence of multinational corporations, the service sector, civil service and the local enterprise has contributed into the development of the ruling class or bourgeoisie. This is a wealthy class with some of its members earning over Shs.10,000/- per month plus free house, medical, school fees and travel facilities. They also have access to credit through the banks and other financial institutions. This is a multi-racial class consisting of all races, Blacks, Whites and Asians.

The dominant culture reflected by the capitalist development in Kenya is largely Anglo-Saxon, particularly the legal and the educational system which continue to be influenced directly by the presence of whites in key positions.

However, the most important reason for what goes on in the cultural sphere is the acceptance and perpetuation of what was initially Anglo-Saxon such as language, life-style and values in post colonial Kenya by the dominant classes. Marx's remarks on the bourgeoisie revolution in France (Marx and Engels, 1973)[10] is quite relevant to the nationalist revolution that took place in Kenya:

> "Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves but under circumstances directly encountered, given and transmitted from the past".
>
> (p. 96)

For instance, the development of the European-American model of the nursery schools in Nairobi (the most expensive schools are run by whites) is a good example of the basic aspiration of the upward mobile members of the society. The Kenyan government supports this development as illustrated in an official report, Kenya Institute of Education, 1978:[11]

> "The nursery school is not an African institution...and we have to accept the fact that the implications of modern (western) nurseries go beyond the social and economic functions of any particular African society within Kenya".
>
> (pg. 1)

The economic and cultural differentiation that characterises the existing social classes in Kenya is reproduced in the educational sector. While it is true that in Kenya educational mobility in the government school system and also entry into training and salaried employment are largely based on performance in examinations, (Somerset, 1973)[12] and (Kinyanjui, 1973),[13] the distribution of educational resources favours children from wealthy families (Kinyanjui, 1978),[14] thus giving these children a competitive advantage over the others. Therefore the emphasis which Dore (1976)[15] puts on the lack of influence on school performance by a hereditary class or social divisions in Kenya is a thing of the past.

> "Lacking anything like a hereditary upper crust, differentiated by language, culture and breeding from the rest of the population Kenya has no alternative criteria of excellence to challenge school achievement as the legitimator of high position".
> (pg. 70)

After all he admits elsewhere, that although a generation ago, everybody in Kenya was a village boy, there are now other social classes in addition to the village boys (I understand the village boy to mean peasant background). He illustrates the existence of social divisions by giving an example of a graduate who is now a member of the ruling

class. The question to be asked here is, how does the life experience and outcome of a child born in a "village boy's" family compare with a child born in a family that is engaged in wage employment or one born in the new ruling class, in a context of free enterprise for goods and services such as education and medicine?

A third function of education, that of neutralising conflict among various social classes in other words, social control, was also mentioned. The social control or conflict approach in analysing the role of education in society is dynamic because it suggests that even the skills acquired by going to school are not neutral. The creation of such skills is determined by the structure of the production process and the society at large. The following discussion will be an attempt to review the contribution of education in social stratification. Philip Foster (1977)[16] who has researched into education extensively points out that education undoubtedly contributes to social stratification, particularly when a society is initially differentiated on the basis of education which is then used as a rationale for unequal access to the economic life of the society.

> "I assume that few here would disagree with the observation that the schools and universities of Africa are among the most important and perhaps the most important contemporary mechanisms of stratification....they are not simply reflections of extant patterns of social and economic differentiation but rather powerful independent forces in the creation of new and emergent groupings based on power, wealth, and prestige. Moreover, in stressing the word <u>contemporary</u> we should not overlook the fact that formal educational systems are not a recent phenomenon in Africa".
>
> (pg. 1)

With a few exceptions, the evaluative literature on the educational development in Africa tends to give the impression that the geographical factor and ethnicity are the most important determinants. The social class concept is only referred to in passing. This theoretical bias may be explained partly by the type of primary data that is found in the official reports. Unfortunately, this data tends to reinforce the view that social classes have not developed in the third world to the extent of influencing the pattern of distribution of resources such as education. Therefore, there is a tendency to think that to understand the development of education one has to look into the different regions of African societies and into the various ethnic communities. But the ethnicity dimension in

Kenya took a racial tone where the White settlers, the Asians and Africans had separate educational systems. This racially differentiated educational system was a manifestation of the racial division of labour which existed. The allocation of resources and the world view encouraged in each of the three categories of the educational system reflected the expected position its products would occupy in the colonial hierarchy. These differences did not disappear with the death of political colonialism. The same structural form was carried on to the neo-colonial era more or less intact particularly in urban areas such as Nairobi:

> "The legacy of the racial differentiation of school opportunities is at present to be found mainly in the large urban centres, where the former European schools have become integrated to cater for the national bourgeoisie, and the former Asian schools to cater to the children of the petit-bourgeoisie. The colonial African schools have become schools for the working class and urban poor. In the countryside the schools are not all that well differentiated, but each district - particularly the rich ones have three or four boarding schools which cater to the children of the rich peasants, rural merchants and bureaucrats".
>
> (Kinyanjui, 1978:19).[17]

In the urban centres, where incomes are highly differentiated as already illustrated, the existence of a racially integrated stratified

educational system is an indication of the transformation of a class society based on race to one based on income. Kinyanjui (1978)[18] found that the former European school system has continued to be the most expensive in the national educational system charging nearly ten times the fee charged by the former African schools. But there are private primary schools, about 15 of them charging on average 80 times more than the former African schools. The private schools charge a commercial rate but the national educational system is subsidized. The children attending the former European schools get 3.6 times what pupils in the former African schools receive from public funds. The pupils attending the former Asian schools get 1.5 times what pupils in the former African schools get. In the same study, Kinyanjui found that the distribution of teachers of different grades follows a similar unequal pattern. The low-cost primary schools receive mostly teachers of lower grades, while the expensive schools receive teachers with high qualifications. In 1972, 32.3% of teachers in the former European schools were graduates while the proportion in the former African schools was negligible.

Mundia (1975)[19] makes a similar observation.

The structural differences that we have observed so far at the level of production and subsequent distribution of national wealth, and in the educational system in terms of fees, subsidy and quality of teachers are also visible at the level of educational performance in the national selection examination. Let us take the example of Certificate of Primary Education (CPE).

Table 3: Type of Primary School/Standardised / by Scores in Certificate of Primary Education (CPE) 1976

Type of Primary School	Subject		
	English	Maths	General Paper
Schedule D	81.43	65.97	66.72
Schedule C	76.85	66.09	65.90
Schedule B	64.21	56.85	53.55
Schedule A	57.70	49.12	50.74

NB. I wish to acknowledge the use in this table of unpublished data which have been collected by H.C.A. Somerset (1977).

It is quite clear from the above table that the expensive private schools Schedule D together with the expensive state schools Schedule C which are(the former European schools) and to a large extent Schedule B (the former Asian schools) are qualitatively much better than Schedule A

(the former African schools). The latter system is almost wholly subsidized. The average annual school fee per pupil in 1971 was Shs. 60/-; 180/-, 580/- and Shs. 1,000/- for schedules A, B, C and D respectively.

The fee structure has not changed much in the state schools but the private schools now charge fees ranging from Shs. 3,000/- to Shs. 20,000/- per year without any boarding facilities. The available evidence suggests strongly that entry into the high cost system of education guarantees educational mobility in a manner that the cheap educational sub-system does not. Indeed Kabiru Kinyanjui (1978:85)[20] confirms this expectation. In looking at the distribution of secondary school opportunities by type of primary school attended in Nairobi in 1972, he finds that 89% of pupils who attended schedule C schools gained admission into government maintained secondary schools, but only a mere 22% from schedule A schools. Schedules D and B sent 56%, and 43% to government maintained schools respectively. Putting together the proportion of children going to secondary schools which virtually guarantee upward mobility in the educational system with the pattern of performance in CPE among the primary school categories, it becomes quite clear that the high-cost educational sub-system guarantees excellent performance in the

selection examination which in turn ensures entry into secondary schools with established academic excellence. The expanded middle class consisting of departmental managers, secretaries, middle level civil servants and businessmen have correctly identified that the schedule B, C and D schools are middle class schools which together with the family and private tutoring where necessary, provide a child with the necessary opportunities and skills to move up the educational ladder. (Meyer, 1970).[21]

As shown already, entry into well paid jobs in Kenya is largely on the basis of educational attainment. The escalation of minimum job qualification arising mainly from both the greatly expanded educational system and the failure of the economy to generate desired employment opportunities is perceived as a problem by the middle class, the workers and peasants as a strong barrier to their generational class mobility. However, by manipulating the school system the middle class has a competitive advantage over the lower classes. This perception comes at a time when the society is at an intermediate stage when the direct influence of education on social mobility in terms of educational, reputational, and occupational status is increasingly supplemented by one's family occupational status. This trend suggests that the Kenyan social system may be moving

towards a relatively more closed system than it has been previously. In fact, the National Committee on Educational Objectives and Policies Report 1977 has emphasised the problem of unemployment and the subsequent need to train school leavers not to expect well paid jobs. (N.C.E.O.P., 1976).[22] I have interpreted this recommendation elsewhere to mean that:

> "The absurdity of the proposal that school leavers be equipped with attitudes and skills that may help them to survive in poverty is an indication of how desperate it is to continue to offer well paid employment within the prevailing economic structures. Previous educational reforms...have met with limited success".
> (Gakuru, 1979:10).[23]

The report fails to indicate how the children attending high cost primary schools would be affected by the recommended reforms. But from the above discussion on the structural differences among the different types of primary schools, one may conclude that the children from privileged backgrounds will continue to enjoy better educational facilities found in the expensive schools.

Pre-School Education

Pre-school education is a part of the educational system in every society. It is therefore not exceptional in terms of how it is influenced by the basic socio-economic structures in the wider society. An examination of the literature on pre-school education: its growth, and its relationship to the rest of the formal educational system and the society at large indicate that most of the studies that have been done on Kenya and elsewhere are largely psychological and emphasize development of cognitive skills in children. Reference is also made to the integrative and egalitarian functions of education. But educational systems have rarely behaved according to traditional precepts: rarely have they promoted either social equality or full human development. (Bowles and Gintis, 1976).[24]

> "Repression, individual powerlessness, inequality of income and inequality of opportunity do not originate historically in the educational system....the roots of repression and inequality lie in the structure of.... modern economic systems...which deny people participatory control of economic life".
>
> (pg. 49)

Thus, in Kenya, the emphasis on socialization, developmental and egalitarian goals in the development of education, including pre-school education only

gives a limited sociological understanding of the school system as a social process. This is largely because as already suggested, the process of integrating the youth into the various occupational, political, familial and adult roles and the development of cognitive and behavioural traits take place in a context of severe scarcity of educational and economic opportunities for the majority. Only a negligible few in Kenya today have the economic security and the knowledge that is required to experiment with liberal concepts such as 'whole child', 'real-life-experiences' developed in the progressive education movement.

Thus, the development and structure of pre-school education in Nairobi is best understood in the context of the existing social divisions and the stratified primary education. In addition the highly competitive nature of the economic system is also reproduced in the educational system. Parents expect children to master the knowledge and social skills that will enable them to compete hence their readiness to send children to nursery schools. Furthermore, entry into the first grade in primary schools (see Appendix 2) requires familiarity with classroom knowledge. As already pointed out in the introduction, nursery schools are found all over Nairobi but mostly in the former

Asian, former European and new middle class estates. Because places in primary schools are restricted, both in the low-cost and high-cost sub-systems of education, competition for entry to primary schools is intense.

The nursery schools serving the wealthy charge different fees and are generally more expensive than most of the primary schools. The variation in fees charged by the expensive nursery schools is a reflection of the income differentials among the rich, (see table 2). The children attending these nursery schools are exposed to teachers who have an excellent mastery over the English language. Indeed pupils in these schools are taught often by teachers who speak English as their first language. The head-start in English language these children have, gives them a tremendous advantage over the children who come from poor homes and go to self-help nursery schools with barely literate teachers. In his study on language development, Bernstein (1971)[25] found that chlldren from middle class differ in language skills from working class children. The former use "elaborated" codes while the latter use "restricted" codes. The significance of this distinction is based on the fact that elaborated structure of expression is rewarded positively in the school system which is universalistic.

In Nairobi, the selection examination after seven years of primary education rewards the children who come from the wealthy background. Research on this examination shows that children from high-cost schools perform better particularly in English language than children from the low-cost schools. (Somerset, 1977).[26] Thus, the high-cost educational sub-system characterised by cost and quality is a closed social class structure which the ruling class uses as a mechanism to reproduce itself at the economic level by ensuring that their children acquire the necessary skills. The nursery schools serving the poor differ in the fees charged. The range however, is not as large as the one between the high-cost nursery schools. The cheap nursery schools are relatively homogeneous. They are poorly managed, equipped and children learn through sing-song, and rote memory in Swahili.

Somerset's finding is not unique, indeed, there is a wealth of literature and research findings on the complex issue of intelligence and school performance. Most of what is written suggests that socio-economic differences lead to qualitative differences among schools: the wealthy can afford to pay for better education for their children. Commenting on the British educational system which is highly selective,

Jackson, B. and Marsden, D. (1966)[27] observe that the removal of the crudest barriers such as school fees, revealed subtler ones at work:

> "It is now clear to see in many small ways in which money and power in society prepare early for a competitive situation. In particular we can note how the middle classes (supported by the primary schools) respond to and prepare early for the divisions of eleven plus at which their children do so conspicuously well. We can understand why, if we have elite education, it does not matter, whether the formal selection takes place at eleven plus or even seven plus. Middle class families are in so many ways insured against failure by virtue of their class position".
>
> (pg. 231).

This discussion does point to several expectations. Firstly, that expensive nursery schools send their children to high-cost primary schools. Secondly, the location of the nursery school does suggest the type of language used. In a recent study on pre-school children's comprehension of Mathematical skills in Nairobi, Ngini (1976)[28] found that there were no significant differences among the different types of nursery schools in the naming, identifying and ordering geometric shapes. The sample used in this study, however is restricted to the expensive schools with the cheapest charging Shs. 225/- per month. The study left out nearly 50% of the nursery

schools unrepresented by omiting the self-help nursery schools. Nonetheless, it is important to learn that in the vocabulary sub-test, children drawn from the low-cost nursery schools averaged 2.94 as compared with 10.48 average scores obtained by children attending the high-cost nursery schools.

The findings reported by Maas (1973)[29] in her study in Kampala is very strong evidence of the importance of nursery schools in stratification studies in Africa today. She observed tremendous growth in pre-school education in Kampala. She tested the hypothesis that the growth of the pre-schools is due to at least in part to an increased selectivity of primary schools. She found some evidence which tended to confirm the hypothesis, but the most vigorous selection seemed to be a form of self-selection in which parents restricted themselves to applying to schools with statuses roughly commensurate with their own.

The core of this chapter is that the Kenyan society is characterised by great inequality of income among the social classes and between individuals. The educational system is stratified and reflects the class nature of the economic structure. In the colonial era, the ruling class who also had their own expensive schools, were

Whites and Asians. However, Africans had been allowed to accumulate wealth quite early, a process which intensified after independence. The Africans who moved into high income status send their children to expensive primary schools. These schools were integrated to reflect the multi-racial structure of the new ruling class. There are also other primary schools which are cheap and admit children of the low income members of the working class. The nursery education that has developed in Nairobi is highly differentiated and is an informal extension of the unequal and stratified primary education structure. The nursery schools while fulfilling the orthodox educational objectives are no doubt a social structure that contributes to the subtle process of social class reproduction. They are also serving a selective and allocative role for the scarce educational places irrespective of the type of the primary school.

HYPOTHESES

The hypotheses fall under two major categories: the major and sub-hypotheses.

Major Hypotheses

(1) The type of nursery school attended is important in determining entry into different types of primary schools. Thus, the flow of pupils tends to be from high-cost nursery schools to high-cost primary schools and from low-cost nursery schools to low-cost primary schools.

(2) There is a real difference in content including the use of language among the nursery schools located in different parts of the city.

(3) Pre-school attendance contributes to primary school entrance.

Subsidiary Hypotheses

(1) The corelation between the fees charged and primary schools entered will be closest with the private nursery schools.

(2) The welfare nursery schools operate in a non-market situation and variation in fees can hardly be accounted for in terms of the type of primary school that they are linked with structurally.

Footnotes to Chapter Two

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17. Kinyanjui, K., op.cit., p. 19.

18. Ibid., p. 74.

19. Mundia, A.B. Socio-economic Status and Academic Performance. M.A. thesis, University of Nairobi, 1975.

20. Kinyanjui, K., op.cit., p. 85.

21. Meyer, J.W. The Charter: Conditions of Diffuse Socialisation in Schools, in Scott, W.R. (ed.) Social Process and Social Structure: An Introduction to Sociology, New York, Holt, Rinehart and Winston, 1970, p. 564-578.

22. Republic of Kenya, The Report of the National Committee on Educational Objectives and Policies. The Government Printer, Nairobi, December 1976.

23. Gakuru, O.N. Employment Creation in Light of the New Report of the National Committee on Educational Objectives and Policies. Working Paper No. 349, Institute for Development Studies, University of Nairobi, 1979, p. 10.

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CHAPTER THREE

RESEARCH METHODOLOGY

SITE DESCRIPTION

Readily available information on nursery schools was lacking at the time this study was formulated. For instance, there were no records showing the number of nursery schools either in the country as a whole or in Nairobi. I started in late 1976 to look for information that would indicate the size of the nursery education sector: the number of schools, teachers, and pupils. The exercise turned out to be difficult because there is not a national office that keeps records for nursery schools. After enquiries I found out that the Department of Community Development does keep records of self-help nursery schools in the rural districts only.

The case for Nairobi was much more difficult and it seemed right from the start that pre-school education is an administratively disorganised structure lacking in coordination and control. The structure of ownership, management and administration became known only after visiting individual nursery schools and making enquiries about the running and functioning of these schools. However, later I found most of the records of the registered nursery schools in Nairobi, both the closed and the existing ones in a city council office at State

House nursery school.

The following are the nursery school categories that I identified based on the preliminary survey:

Table 4: Ownership of Nursery Schools in Nairobi

Category of Pre-schools	Approximate number in the population
1. Pre-school Units:	
i. Attached to schedule C primary schools	4
ii. Attached to schedule B primary schools	1
iii. Attached to schedule A primary schools	10
Sub-total	15
2. City Council Day Nurseries:	
i. The high-cost (formerly European)	3
ii. The medium-cost (formerly Asian)	3
iii. The low-cost (formerly African)	9
Sub-total	15
3. Proprietary Day Nurseries:	
i. Nursery schools charging fees of up to 100/- p.m.	15
ii. Nursery schools charging a monthly fee from 101/- to 250/-	33
iii. Nursery schools charging monthly fees of 251/- and over	30
Sub-total	78
4. Voluntary Social Service Nursery Schools:	
i. Owned by Christian Church	15
ii. Owned by Asian welfare institutions	10
iii. Owned by other welfare organisations e.g. Kenya Christian Homes	11
Sub-total	36
5. Self-help Nursery Schools	70
Grand Total	214

The results from the preliminary survey presented in table 4 above show that there were a total of 15 pre-school units. These kindergarten classes belong to the Education Department of the City Council and are attached to a few of the City Council primary schools. Children are admitted into pre-school units for one year before going to standard one. Out of the total, 4 are attached to the high-cost City Council primary schools (schedule C). The rest, except one, are all attached to the low-cost schedule A primary schools. The pre-school units attached to Schedule C primary schools charge about shs. 450/- per term and all the others charge tuition fees of Shs. 300/- per term. The Department of Health of the City Council owns 15 nursery schools. These are not attached to primary schools and admit children from the age of 2½ to 6 years. These nursery schools are old institutions established in early sixties or earlier. They differ a lot in the fees charged, physical and educational facilities and also in their geographical location in the city. Out of a total of 15, there are three day nurseries that charge shs. 250/- per month each for full day care. The three are the former European City Council nursery schools. Virtually all the teachers and children are now Africans. There are 3 medium-cost nursery schools charging Shs. 200/- per month each for full day care.

Two out of 3 are found in the former Asian residential areas. The third is found inside the State House grounds and was used as a primary school for Whites before independence. The remaining 9 are the low-cost City Council nursery schools. They charge Shs. 75/- per month and are found in the Eastlands of Nairobi. These low-cost nursery schools are housed in large halls initially meant to be health and nutritional centres for working class children. However, they have been converted into educational centres for the lower middle class whose residences are located in the Eastlands.

Out of a total of 36 voluntary social service nursery schools, 15 belong to the Christian establishment. The latter, except a few are found in the former European suburbs and charge fees which is considerably less than the fees charged by private nursery schools in the same areas. However, the Church nursery schools in the Eastlands charge almost double the fees paid in the self-help and City Council nursery schools in the neighbourhood. By charging a high fee in the Eastlands, the Church schools discriminate against the children of the lowly paid families in favour of the lower middle class families. There are an additional 11 nursery schools that belong to institutions other than Church or public. Although

these nursery schools are meant to serve the children of employees or pre-school children in child welfare homes such as Mama Ngina Children's Home, they also admit children from outside. Finally, there are 10 nursery schools that belong to the Asian welfare organisations. All of these nursery schools are found in the former Asian residential areas and their intake is largely Asian. For instance in 1976, Visa Oshwal nursery school had only 7 African children out of a total of 350 children, the rest Asian.

Out of a total of 78 private nursery schools, 15 charged fees of up to 100/- per month. Thirty three nursery schools charged fees between shs. 101/- to 250/- and the remaining 30 schools charged over Shs. 250/- per month. All the cheap private nursery schools (charging up to 100/- per month) are found in the former Asian suburbs and the new estates. They are small in size, ranging from 9 to 25 children. The medium-cost and high-cost private nursery schools are located in very seclusive and expensive suburbs. Some of these residential areas were exclusively European, others Asian and the rest a mixture of both. But now Africans have moved in, thus at the moment the residents are a mixture of Blacks, Asians and Whites. Nearly all the nursery schools charging monthly fees of Shs. 251/- and over require that the fees be paid termly. In other words, the

parents with children in these schools, pay a lump sum ranging from Shs. 600/- to 2,000/- once in every three months.

There are about 70 self-help nursery schools in Nairobi. Most of them are not licenced and are under the parents' committees. These nursery schools fail in every way to meet the prevailing requirements of running nursery schools. However, they are allowed to operate partly because they are established by poor communities. Besides the city administration has not built better day nurseries to replace the existing ones. The self-help nursery schools are found in the slum communities at the city margin but mainly concentrated in Mathare-Kariobangi complex, Dagoretti, Riruta and Kawangware areas. Others are found in the low income areas such as Bahati and Shauri Moyo in the Eastlands, Old Pumwani and some parts of Kangemi. Most of what has been written about the slum residences in Nairobi (Nelson, 1977)[1] point to the misery and degrading living conditions. Among the myriad problems facing the residents of slums are: over-crowding, rotting rubbish dumps, stinking static water and a variety of poor dwellings with plastic, mud and wooden walls, human waste littered all over, earth and only occasionally concrete floors. The land terrain in some parts of Mathare Valley are rough and rugged as a mountain slope.

In Nairobi, the problem of housing and the development of a stable labour force are historical (Hake, 1977).[2] The government and private enterprise have only been able to provide quality housing to the middle and upper classes. The working class: the typical labourer, security guard, the street hawker and the petty commodity producer live in sub-standard dwellings. The phenomenon of poor housing is not urban specific. There are equally poor houses in the rural areas amidst countryside bungalows. No doubt, the social class, location of the slum dwellers has definite negative implications on their material conditions. For example, housing is extremely poor and they also have marginal access to other desired facilities and services such as education and health. There are many children in Mathare Valley and other slum communities who do not go to school for a variety of reasons: inability of parents to buy school uniforms, lack of documents to prove the child's age, etc.

Besides differences in ownership, cost and geographical location, nursery schools in Nairobi also differ in management. The nursery school managers or headteachers differ in racial background, level of education, and experience in nursery school teaching. Out of the 78 private nursery schools, only 4 are managed by Africans.

In other words, this category of nursery schools is dominated by whites and Asians who are in charge of 36 and 38 nursery schools respectively. The ethnicity of headteachers in voluntary service schools is also differentiated. As many as 17 of those schools are run by Africans out of a total of 36 schools, 12 by Asians and 7 by Europeans. Thus the only difference in the ethnic factor of principals between the private and service nursery schools is that the proportion of African managers is higher in the service than in the private schools. All the other nursery schools including self-help and all but one City Council nursery schools are managed by Africans.

SAMPLING

The assumption in studying samples is that the characteristics of the sample will adequately reflect the characteristics of the statistical population. Other considerations behind sampling include the unmanageability of all the cases in the population, use of scarce research resources and time constraints (Moser, et.al., 1971).[3] In this study, the sampling unit is the nursery school. There are about 214 of them in the specified area of study, and I could not collect information on all of them, hence the need for a sample. In order to represent the nursery school structure described above on the basis of the preliminary survey data,

the stratified random sampling was considered the most adequate sampling procedure. As table 4 shows, the sub-samples based on ownership of nursery school differ in size. Furthermore, there are important differences in nursery schools inside the sub-samples on the basis of cost, geographical location of schools in the city and racial background of the principals. Therefore, random sampling was done inside each stratum using different sampling fractions. The use of disproportional sampling fraction technique ensured maximum efficiency in stratification by allowing a greater representation to a stratum with a large dispersion and a smaller representation to one with a smaller variation. That is, sample size drawn from each stratum was fairly in proportion to the contribution which nursery schools in that stratum make to the total population of nursery schools. The disproportionate samples were taken through systematic random sampling procedure in the various strata.

The following were the sub-samples obtained in each stratum:

Table 5: The Nursery Schools Included in the Sample*

Nursery School Category	Number of Schools in the Sample
a. Pre-school units	5
b. City Council Day Nurseries	6
c. Voluntary Social Service Nursery Schools	13
d. Private Nursery Schools	20
e. Self-help Nursery Schools	13

* (Also see Appendix 3)

This gives a total sample size of 57.

As evident above, a large sample size was taken to represent the private nursery schools. This is consistent with the contribution which the private nursery schools make to the entire nursery education sector in Nairobi. Out of 20, 5 are low-cost, 7 medium-cost and 8 high-cost nursery schools. However, there are only a few (13) self-help nursery schools in the sample. Although self-help nursery schools constitute a very large proportion of the total nursery school population, they are relatively homogeneous which makes the selection of a big sub-sample statistically unnecessary. Out of the 13 voluntary social service nursery schools 5 belong

to the Christian establishment, 3 to Asian welfare organisations and 4 to other public and child welfare organisations such as the Kenya Science Teachers College and Mama Ngina Children's Home. Out of the 5 pre-school units, two are attached to the high-cost City Council primary schools and the rest to the low-cost schedule A primary schools. Finally out of the 6 City Council day nurseries, 2 charge Shs. 250/- per month. There are only 4 in the sub-sample. Another 2 charge Shs. 200/- per month and the rest charge Shs. 75/- per month.

DATA COLLECTION: QUESTIONNAIRE CONSTRUCTION AND FIELD WORK

It was clear from the beginning of the study that this was a pioneer survey in an area not well known. It was therefore important to use open ended questions so as to allow for adequate probing and development of qualitative insights through talking to the teachers and observing the general material conditions in the school and children's activities. Therefore, the interview schedule is the major data-gathering tool in this study using the principal as the key informant, supplemented with the simple observation technique. The questions were open-ended. Although close-ended questions are easier to handle in a data gathering situation, they were not used because of the lack of prior knowledge of the distribution of values in the important

research variables. For example it would have been pointless to pre-code the responses on the questions related to the language use in nursery schools. It was important to get the answers from the teachers, observe them teaching and listen to the children talking in the class and outside during free play to be able to determine the pattern of language use in a school (see Appendix 4). Editing of the questionnaires was carried out as soon as possible and missing data, and especially on the major variables was collected.

The unit of the study as pointed out earlier is the nursery school and the head of the school was the respondent. The author was the only interviewer. The exploratory nature of the study, the use of open-ended questions that required in-depth probing, the need for accurate and detailed observation, and the high degree of rapport that must be established during this kind of an interview ruled out the use of research assistants. Research assistants are only useful when the researcher knows all the research categories and has worked out a pre-coded questionnaire.

Field work was carried out in the period between October 1976 and July 1977. The preliminary survey had been done earlier. The interviews took at least two mornings each, the first morning

was spent in observing nursery school activities and talking to teachers and children in the classes. The second morning was spent with the principals discussing the questions in the interview schedule.

Certain special problems were experienced in the field:

(1) The headteachers particularly of the private nursery schools insisted that they were too busy and it was common to be given appointments months later. In fact, one nursery school was replaced purely on this ground. Furthermore, the principal was reluctant to discuss the school on the basis that it had been sold to new management.

(2) A considerable number of principals behaved purely as profiteers in that they regarded their curriculum and other school practices as business secrets that were not to be passed on to the other nursery schools. Indeed, one stubborn owner insisted that due to the wide coverage of my questions, I was no doubt going to open a nursery school or else I should only have shown interest in the learning process, that is, whether the children come from home gloomy

but go home cheerful at the end of the day.

(3) Interviewing the headteachers of the self-help nursery schools was quite easy due to their relative openness and simplicity. On the contrary, the headteachers of the other nursery schools were spphisticated, seemed quite busy and had a lot of information to offer on child development. The behavioural differences between the two types of teachers in an interview situation indicates that the self-help nursery school teachers have not developed elitist traits to the level of the others.

(4) Initially, the researcher did not know the exact way to behave in presence of some of the principals who were thoroughly polished in speech, dress and personal bearing.

METHODS OF DATA ANALYSIS

The coding scheme was prepared after the fieldwork on the basis of the categories that emerged from the information given. Although a lot of interesting information was collected in the field, only the relevant information to the testing of the hypotheses was post-coded. Later, the data were transferred into the punch cards, checked and analysed in the IBM 370 Computer using the Statistical Package for the Social Sciences.[4] (Also see Appendix 5). I received the computer print out in November 1978. Several statistical procedures were used depending on the characteristics of the variables and their level of measurement. The mostly used procedures were:

(1) Cross-tabulation: This is a joint frequency distribution of cases according to two or more classificatory variables. The technique is to display the distribution of cases by their disposition on variables by use of contingency tables. The chi-square statistic was used to test the relationship while the contingency coefficient summarised the power of the identified relationship.

(2) The correlation analysis: The Pearson Product Moment Correlation (r), scattergram and simple regression statistical models were used to analyse the interval and ratio-level data such as the fees charged by nursery schools and the primary school outcome values (see chapter four). The value of r and r^2 indicated the direction and power of the relationship while the properties of the regression line provided the researcher with the ability to predict on the basis of fees the type of primary schools that admit children from a given nursery school. The combined use of the regression line and the scattergram indicated both the trend and dispersion from the line. Another measure of correlation that was used is eta (Norman, et.al., 1970).[5] Eta is an asymmetric statistic used when the independent variable is nominal e.g. the ownership of nursery schools and the dependent variable is internal or ratio such as the fees charged by nursery schools. It is basically an indication of how dissimilar the means on the dependent variable are within the categories of the independent variable. When eta is squared, it has an intuitive interpretation as the proportion of variance in the dependent variable accounted

for by the independent variable.

(3) Descriptive statistics particularly the mean value were also used in the data analysis.

Footnotes to Chapter Three

1. Nelson, Nicci, (1977). Dependence and Independence: Female Household Heads in Mathare Valley: A Squatter Community in Nairobi, Kenya. Ph.D. Thesis, School of Oriental and African Studies, University of London.

2. Hake Andrew, (1977). African Metropolis: Nairobi Self-Help City. Sussex University Press, Sussex.

3. Moser, C.A., et.al., (1971). Survey Methods in Social Investigation. Heinemann Educational Books, Ltd., London.

4. Mr. Scot Wallace, Visiting Research Fellow, Institute for Development Studies, University of Nairobi, gave me invaluable guidance in post-coding and the preparation of the procedure cards for the use of the SPSS in data analysis.

5. Norman H. Nie, et.al., (1970). Statistical Package for Social Sciences (SPSS), McGraw Hill Book Company, New York.

CHAPTER FOUR

FROM THE NURSERY TO THE PRIMARY SCHOOL: TESTING RELATIONSHIPS BETWEEN NURSERY AND PRIMARY SCHOOLS

THE STRUCTURE OF PRIMARY EDUCATION IN NAIROBI

Originally, the primary schools in Nairobi were run on a racial basis. The schools that were exclusively for the Whites were labelled 'Schedule C' in the post-colonial era, and Asian schools 'Schedule B', and the African 'Schedule A'. These labels however, are no longer used officially. Instead the schools are grouped according to their geographical location in the city. Thus Muthaiga, a former White and later on a schedule C primary school and Baba Dogo, a former African and later on a schedule A school are both classified as among the Northern division schools. The other divisions are the Eastern, Central, Western and Southern. The change of labels is no doubt a reflection of the dominant political ideology of integration. The first move to abandon the racial entry introduced the multi-racial composition in the schools while the second move was at best an ideological manipulation of labels that mystifies the class differences in terms of quality and resources among the different types of primary schools.

In 1976 Nairobi had 112 full primary schools that entered pupils for the Certificate of Primary Examination (C.P.E.). About 60% of these schools were schedule A, 23% schedule B and the rest schedule C. Somerset (1977)[1] observed the very clear differences among the three primary school schedules. The schedule C schools were:

> "originally established for European pupils only, but a short while before Independence in 1963 the racial criterion for admission was abandoned. However, the other two criterion - competency in English and ability to pay the fees - were retained. By 1976, about 90% of the pupils sitting for C.P.E. from these schools were of African origin. Most of the remainder were Asians; only a handful were Europeans. The total cost of attending a schedule C school is about Shs. 800/- per annum. Schedule A schools catered exclusively for pupils of African origin. Virtually all their pupils come from low income African families. Schedule A schools now charge no fees at all in the first four standards; from five to seven the fees is Shs. 60/- per annum. Building fees and other charges, however, usually bring the total cost of attendance upto about Shs. 100/- to 150/- per annum. Schedule B schools are the former Asian schools. They are all located in the urban areas, and are generally intermediate in character, between Schedule A and schedule C schools".

In addition, there are two other types of private primary schools on top of the state schools described above. One type is run by the Catholic

Church, while schools in the other type are a source of capitalist accumulation run on a proprietary basis. Somerset (1977)[2] makes the following remarks on the Catholic run primary schools:

> "There are also a number of private primary schools run by the Catholic Church which enter their standard seven pupils for the C.P.E. examination each year. These schools charge fees ranging between Shs. 1,800/- and 3,000 per annum. For convenience we can refer to them as schedule D schools, although this designation is quite unofficial. Three of the four schedule D schools in Nairobi are attached to secondary schools. This means that very few schedule D pupils ever fail the C.P.E. in the sense that they fail to gain a secondary school place. Until quite recently, the majority of pupils in schedule D schools were Europeans and Asians, but over the last few years the proportion of Africans has increased rapidly, partly as a result of pressure on the schedule C system. In the lower standards, the proportion of Africans in most classes is now about 70%".

In his comments on the proprietary primary schools, Somerset suggests the underlying hierarchical relationship among the different types of primary schools:

> "At the top of the status hierarchy are the high cost private schools, run on a proprietary basis. These schools do not enter pupils for C.P.E. at all, instead they prepare them for entry to private secondary schools, mainly in Britain, but also to an increasing extent in Kenya. Fees in these schools range upto Shs. 20,000/- per annum for a day pupil. As yet, very few Kenyan African pupils have enrolled in these schools".

For convenience the proprietary schools are defined as schedule E schools.

Kinyanjui (1977)[3] indicates the sort of social class backgrounds served by the different primary schedules outlined above:

> "Today schedule A schools are still predominantly African in their intake, but their students are from urban poor and working class backgrounds. The B schools--after independence started enrolling children from middle level income groups (income between Shs. 1,000-1,999/- per month). In colonial period C schools catered for the ruling class, the Europeans. Today these schools still carry out this function, but without the racial characteristics of the colonial past".
>
> (pg. 3)

Because Nairobi primary schools are so clearly structured in a hierarchy of cost, quality, and status, it is possible to rank them along an

ordinal scale. Schedule A schools were assigned the arbitrary value of one, schedule B a value of two, schedule C a value of three, schedule D a value of four and schedule E a value of five. These arbitrary values were then used to derive an 'outcome index' for each nursery school in the sample. This index was a measure of the average rating of the primary schools entered by graduates from each nursery school. For the 19 nursery schools for which data was available for all 1976 graduates, the outcome index was calculated in the following way:

$$\frac{\Sigma(\text{Number of children going to a given primary school X value assigned to the primary school})}{\text{Total number of nursery school graduates}}$$

For example, in 1976 Waridi Nursery sent 14 children to Consolata Primary School (schedule D) 16 to Westlands (schedule C), 5 to St. Mary's (schedule D), 3 to Lavington (schedule C), 4 to Visa Oshwal (schedule B) and 2 to Hospital Hill (schedule C). The outcome index for Waridi is thus:

$$\text{Primary school Outcome Index (PSI)} = \frac{(16 \times 4) + (14 \times 3) + (5 \times 4) + (3 \times 3) + (4 \times 2) + (2 \times 3)}{16 + 14 + 5 + 3 + 4 + 2}$$

$$= 3.34$$

In the remaining 38 nursery schools, the principals were unable to give detailed information about the primary schools entered by the children. They were, however, able to list the schools entered by their graduates and also to identify the schools that admitted the greatest number. In these schools the outcome index was calculated as follows:

$$\text{Primary School Outcome Index} = \frac{2V\,(\text{School that admitted most children}) + \Sigma V\,(\text{Other schools mentioned})}{\text{Number of schools mentioned} + 1}$$

where V is the value assigned to the primary school.

In other words, the value for the school cited as receiving most nursery school graduates was weighted twice as heavily as the other schools mentioned. Let us take the example of St. Stephen's Kindergarten. This school stands on a five acre plot at the centre of a bourgeoisie suburb at Karen. According to the principal, Banda Preparatory School admits most of the graduates. Others go to St. Mary's, Loreto Msongari, Loreto, Valley Road, Kenton and Hillcrest Primary Schools. The outcome index, (elsewhere referred to as the primary school weighted value) for this nursery school was derived in the following way:

(1)	Banda	5 x 2 = 10
(2)	St. Mary's	4 x 1 = 4
(3)	Loreto Msongari	4 x 1 = 4
(4)	Loreto Valley Road	4 x 1 = 4
(5)	Kenton	5 x 1 = 5
(6)	Hillcrest	5 x 1 = 5
	Total	32

$$\text{Outcome Index} = \frac{32}{6 + 1} = \frac{32}{7} = 4.57$$

The two methods of calculation give indices that are directly comparable, except that in the latter case the results are less reliable. The indices range from a maximum of 5 (all children go to schedule E schools) to a minimum of 1 (all children go to schedule A schools). It can be seen that St. Stephen's Kindergarten graduates its pupils into primary schools of considerably higher status than Waridi.

The Structural Links Between Primary and Nursery Schools

We shall now discuss the links between the nursery and primary school levels of the educational system in terms of the flow of pupils between the two systems. In the review of literature and theory, evidence and views on the existence of

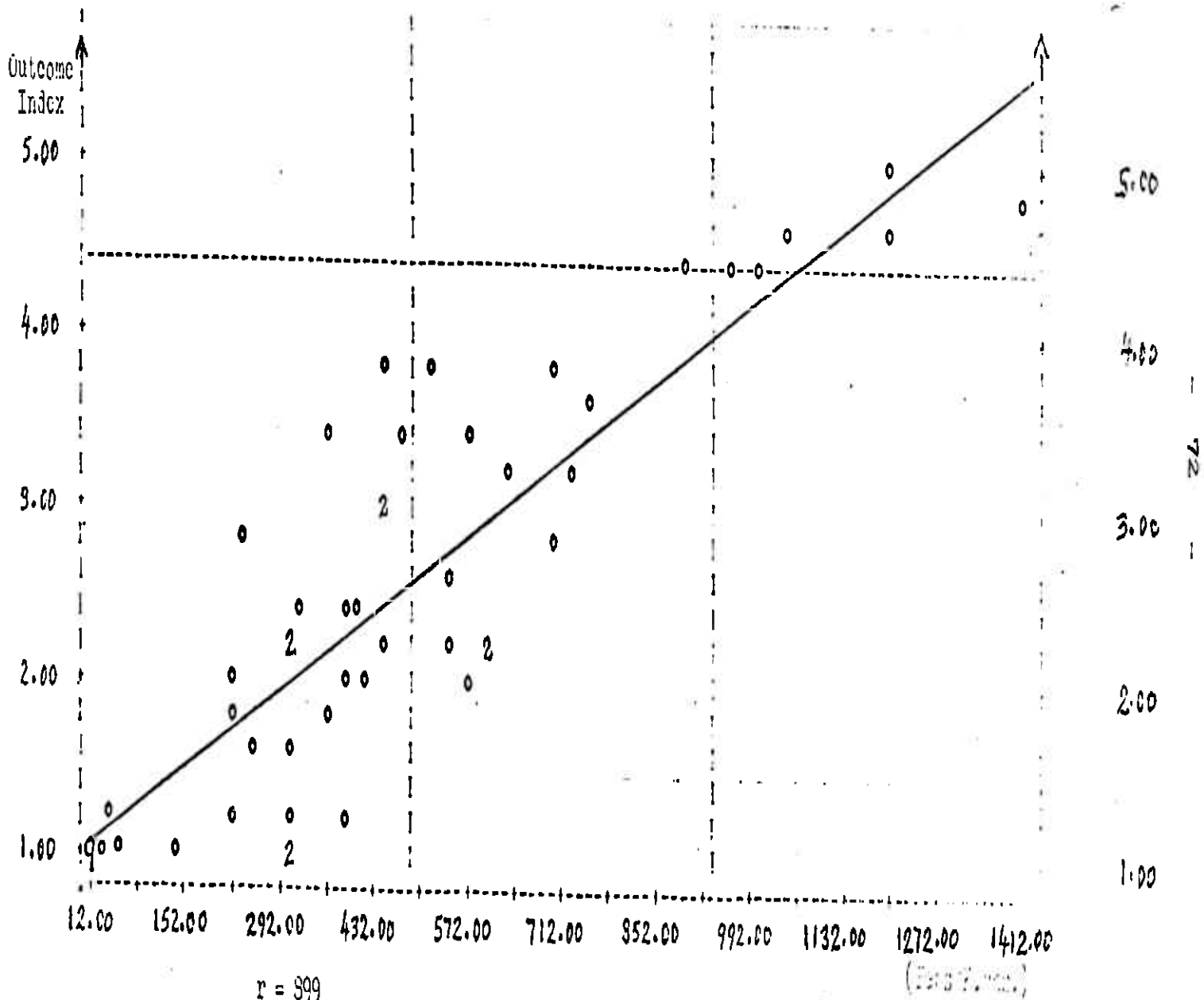
social classes were examined in some detail. The theoretical proposition that runs through chapter two is that the school system, starting from the nursery schools, is a reflection of the larger class society. The latter is characterised among other factors, by huge income differences. The central hypothesis is that the cost of the nursery school attended is important in determining the type of primary school that the child enters. In other words, there will be a close correlation between the fees nursery schools charged per term and the primary school outcome index.

DATA ANALYSIS AND INTERPRETATION

The Overall Trend

The correlation between the fees charged by the entire sample of 57 nursery schools and the primary school outcome index can be seen in Figure 1. It is immediately clear that the two variables are very closely related. The Pearson product moment correlation is 0.899. In other words, as much as 81% of variation in the primary school outcome index can be explained by the fees charged by the pre-school attended. The relationship is of course highly significant. There is less than one out of a thousand chances that the observed relationship is not real.

Fig. 1: The Relationship Between the Fees Charged Per Term and the Primary School Outcome Index for the Entire Sample

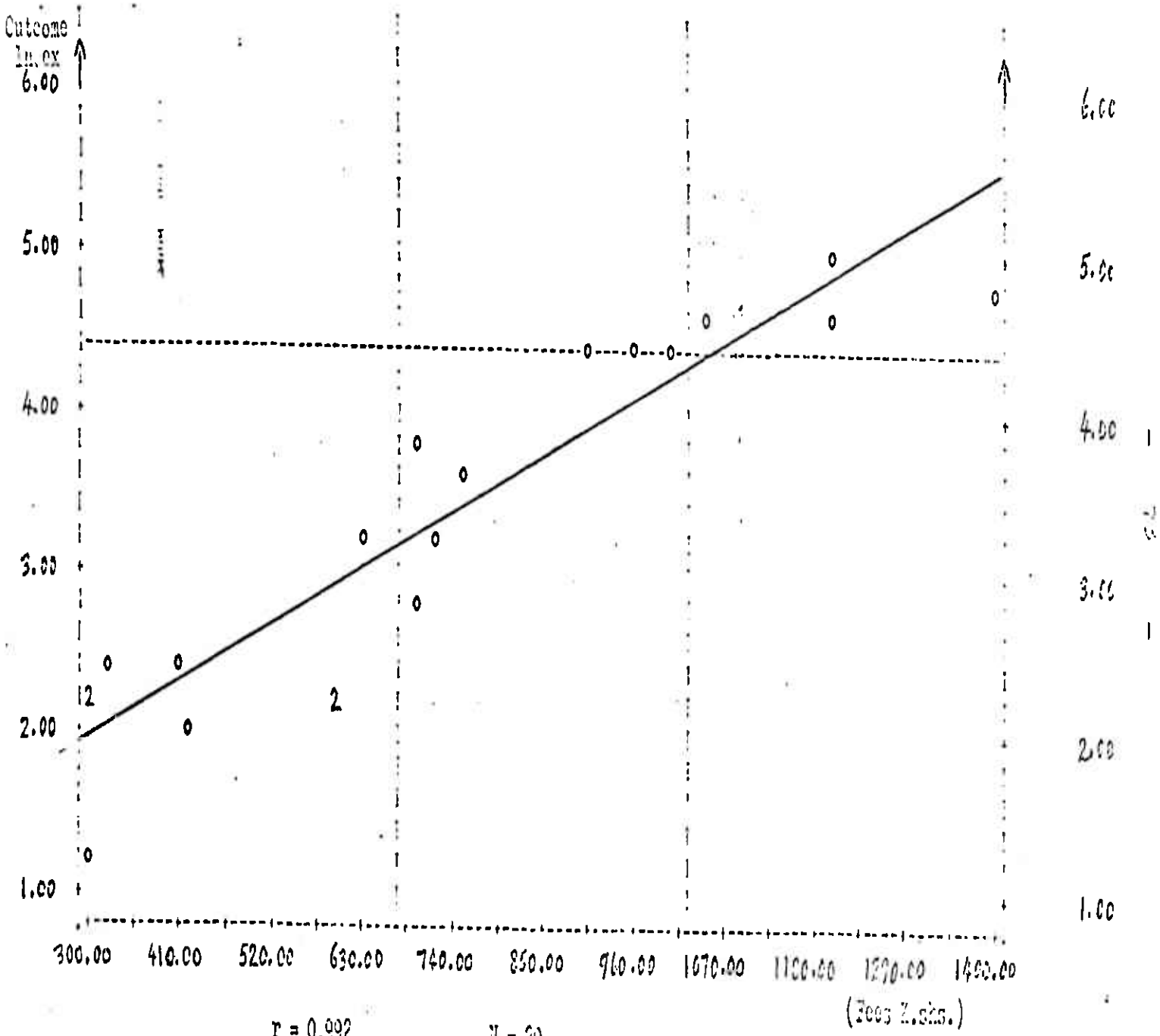


r = 899

r^2 = 808

N = 57

Fig. 2: The Relationship Between the Fees Charged Per Term and the Primary School Outcome Index for the Private Pre-schools

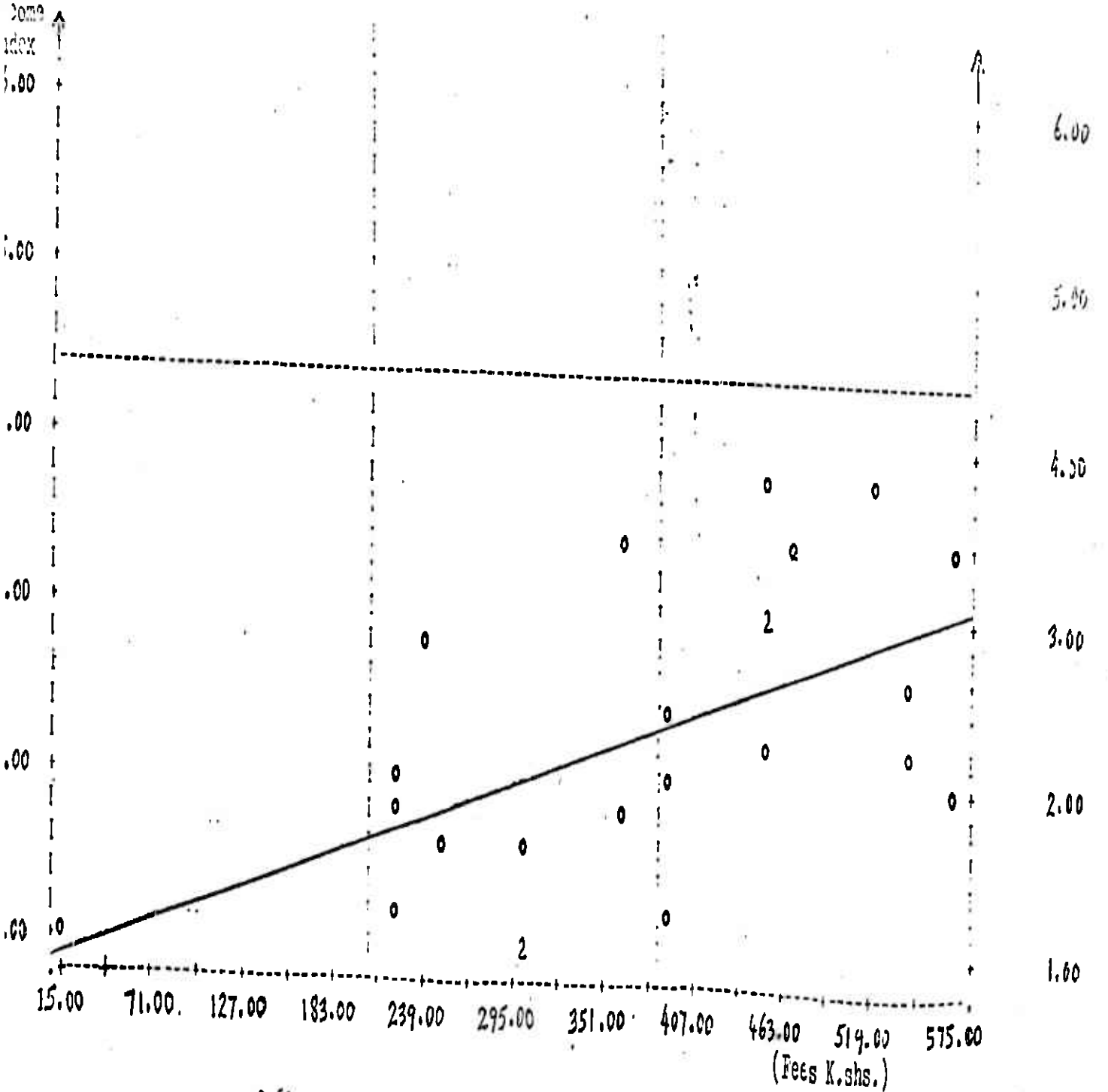


r = 0.992

r^2 = 0.85

N = 20

Fig. 3: The Relationship Between the [illegible] for the Service Industry



r = 0.60

It is of interest to look at the scatter-gram in more detail. Not a single nursery school with an outcome index of 4.0 and over charges less than 900/- per term. All these nursery schools are managed by the White principals and all are located in the multi-racial suburbs. There is a wide gap of Shs. 150/- in the fees charged per term between these schools and the schools with an outcome index between three and four. The most expensive nursery school in the latter category charges Shs. 750/- per term while the cheapest charges Shs. 360/-. Among the nursery schools with outcome indices of two to less than three, the most expensive school charges Shs. 600/- per term and the cheapest Shs. 225/-. The schools with outcome indices of less than two are the cheapest. The most expensive school charges Shs. 300/- per term and the cheapest Shs. 12/-. Thirteen out of twenty-two nursery schools with outcome indices of less than two are self-help. Thus self-help nursery schools rank the lowest in the hierarchy of the nursery schools in terms of fees and ability to place children in favoured primary schools.

Free Market and Service Nursery Schools

We may gain further insights into this relationship by examining the regressions among different types of pre-schools. The private nursery schools operate in a free market. They charge a fee that reflects what the market will bear. Pre-schools offer many services that command a price such as custodial care, teaching literacy skills, and sponsoring children to primary schools. If the customer for pre-schools is basically buying access to primary education we would expect the correlation between the fees charged and the primary school outcome index to be higher in this group of 'market' nursery schools than for the overall sample. From Figure 2 it can be seen that indeed this is the case. The Pearson Product Moment Correlation is 0.922. In other words, among the private pre-schools, as much as 85% of the variation in the primary school outcome index can be explained by the fees charged by these schools. Furthermore, the relationship between these two factors is significant well beyond the 0.001 level. The free market norm that one can only get as much as one is able to pay for cannot be illustrated in a clearer way. Only a negligible 15% of the variation in the primary school outcome index is explained by other determinants among the market pre-schools.

However, the service nursery schools are less concerned with profitability. Instead, they are mainly interested in serving the community. Among them we would expect the correlation between the fees charged and the primary school outcome index to be lower. The data is set in Figure 3. The Pearson Product Moment Correlation between the fees charged and the primary school outcome index is only 0.60, thus confirming the hypothesis. In other words, only a mere 36% of variation in the primary school outcome index is explained by the fees charged. The relationship between the two factors is significant at 0.001 level.

It is not possible to calculate relationship values for the self-help nursery schools since there is very little variation in both the fees charged and the primary school outcome index. Eleven out of the thirteen self-help schools have an outcome index of 1.0. In other words, they send all their graduates to the schedule A primary schools. They charge fee ranging from Shs. 12/- to Shs. 30/- per term. The remaining two have outcome indices of 1.1 and 1.16. These two schools send most of their graduates to schedule A schools. Only a negligible number enters the other schedules. They charge Shs. 135/- and Shs. 45/- respectively.

Deviations from the General Trend

Figure 2 shows that most of the nursery schools are on or near the regression line, a few are clearly above or below.

It would help a great deal to clarify what it means when a nursery school is said to be either above, on or below the regression line. The schools that are below the line over-price themselves. In other words, the fees charged cannot be accounted for on the basis of the primary school outcome index alone. There are other factors that intervene. Similarly, the nursery schools that are above the line charge less than could be expected on the basis of the primary school outcome index. In other words, in the absence of other determinants their primary school outcome indices would command a higher price in the market than at the moment. The difference between the expected and charged prices indicate the amount of indirect subsidy these schools give to their customers.

However, most nursery schools charge fees that are close to the trend line. These are cases where the observed and the predicted primary school outcome indices are more or less equal. In other words, the schools that are on the regression line or deviate only slightly charge fees that may be justified by the primary school outcome index

within the pre-school market.

The scatterplot of residuals (Appendix C) shows the position of each nursery school in the sample in relation to the regression line. The following are brief case studies of the three types of nursery schools (above, on and below the line). The case studies present facts and in-sights that suggest strongly other determinants that influence the fees a nursery school may charge or the type of primary schools that admit its graduates. A total of 13 schools are examined here. Out of the total, 4 are on the line and are arbitrarily selected. The other 9 have the highest deviations above and below the line.

Nursery Schools with Negligible Deviations from the Regression Line

It has already been pointed out that these are the schools that fall along the trend between the fees charged by nursery schools per term and their primary school outcome index.

Thayu Day Nursery

This is a harambee school. Its primary school outcome index is 1.0, which indicates that all its graduates go to schedule A primary schools. The school charges Shs. 12/- per term, a price which reflects its inability to place children in better primary school. In 1976, the school had 100 graduates who all went to nearby schedule A schools. These primary schools are among those with the poorest C.P.E. results.

The children are exposed to a very poor educational programme. In 1976, there were only two teachers in the school in charge of 138 children. Both had only primary education. All the pupils and teachers are Africans. The children occupy one large hall. The school has no furniture or equipment except the forms that children sit on and a blackboard. This school is one of the many self-help schools (there are about 70 in Nairobi) that serve the slum communities in Nairobi. These schools serve only children from the better-off families among the squatter residents. These are mainly petty commodity producers and manual workers. Most parents in these areas do not send their children to nursery schools.

Ziwani Day Nursery

This is a city council school under the Department of Health. Its outcome index is 1.78 and it charges Shs. 225/- per term. The index of 1.78 suggests that most of Ziwani graduates go to schedule B primary schools. The school is at the boundary between the former Asian and the former African residential areas. The schedule B schools are all found in the former Asian suburbs while the schedule A schools that admit children from this school are in the former African areas. Ziwani estate was occupied before Independence by the African elite, the likes of Tom Mboya.

The school is run in a large hall where each teacher is in charge of about 20 children. In 1976, there were 100 children, 5 teachers and 3 assistants. All the pupils and teachers are Africans. The teachers are primary school leavers. However, they have taught in nursery schools for a long time. Three teachers have primary school teaching certificates, one a kindergarten certificate and the remaining are trained in elementary nursing. The school had 300 applicants in the waiting list. The principal thinks her school is very popular because it is full day and is located near busy highways.

Sclatters Kindergarten

This private nursery school has a primary school outcome index of 3.30 and charges Shs. 720/- per term. Most of its graduates go to schedule C schools and the rest to schedule D and B schools. The enrolment is largely Asian. The Asian pupils are about 80%, Africans 10% and the remaining 10% are Europeans. The headteacher emphasizes that the multi-racial character of the school improves the learning process since children are concerned not with colour but whether a child behaves well or is tidy. In 1976, the school had a total enrolment of 75 children under the care of five teachers, that is 15 children to every teacher. All the teachers are Asians and are higher school level graduates. The school is situated in an affluent section of Parklands consisting of houses surrounded with thorny hedges or bamboo fences.

The present management takes pride in transforming the nursery school from purely Asian to multi-racial. The problem facing Sclatters is to attract other races. In contrast, nursery schools with white principals enforce strict quotas for Asians so as to maintain a racial balance in their schools.

Kestrel Manor

This is one of the most expensive nursery school in Nairobi. Nevertheless its fees of Shs. 1,200/- per term is what would be expected from its outcome index of 4.92. Most of its nursery graduates proceed to the attached primary school section in an adjacent compound. Children stay in this section up to the ages nine to eleven, then they go to schools abroad or to schedule E elementary schools in and around Nairobi. Only a negligible proportion go to schedule C and D schools. Besides sending its graduates to schools that are on top of the primary school hierarchy, this nursery school, according to the principal, offers children a learning environment freed from oppressive discipline and teaching methods. The school has a highly qualified teaching force. Eight out of the nine teachers have a diploma or higher in child education. Only one teacher is an African, all the others are White. The management of the school is keen to maintain some racial balance. However, at the time of the interview, the school was heavily White with only a few African and Asian children. Out of a total enrolment of 155 children, 15 were blacks, 32 Asians and 108 whites.

The four schools discussed above have only one common feature: they each charge a fee that corresponds with the primary school outcome index. In other words, judged from the overall trend in the sample these nursery schools are neither overcharging nor under-charging. However they differ tremendously in the amount of fees charged per term, the cheapest charges Shs. 12/- and the most expensive Shs. 1,200/-. As suggested already, the cheapest school serves children from the better off families among petty commodity producers such as carpenters, hawkers and the exploited manual workers living in the slums. On the other hand, the most expensive school serves children from the ruling class families, mainly foreigners with only a few representatives of the national bourgeoisie. Ziwani and Sclatters are examples of the nursery schools that serve different fractions of the middle class.

Nursery Schools in a Near Monopoly Market Situation

We now consider nursery schools which lie below the regression line. The fees charged by these schools is more than can be accounted for on the basis of their primary school outcome indices. The following brief review of outliers (cases that deviate quite far from the regression line) should contribute to the understanding of determinants other than fees that influence the flow of children

from the pre-schools to the primary schools.

Baptist Day Nursery - Kariobangi

This is a self-help day nursery run in the church compound. Its primary school outcome index is 1.1 which means that the primary schools that admit its graduates are predominantly schedule A. In fact out of 25 graduates in 1976, only 2 went to schedule B schools. The rest went to nearby schedule A primary schools. The school is expensive for the ordinary Kariobangi resident. It charges Shs. 135/- per term. According to the trend line between the fees charged by nursery schools and the primary school outcome index, Baptist is expected to charge Shs. 40/- and not Shs. 135/-. Thus, judging from the regression line the parents with children in this school are overcharged by about Shs. 85/- per term. This school has no waiting list and has extra vacancies which suggest that the school may be rated lower by the parents than the fees charged. Furthermore, the majority of Kariobangi residents cannot afford to pay as much as Shs. 135/- per term. There is a nearby self-help nursery school which charges Shs. 60/- per term and is always full. In 1976 this nursery school had 150 children compared to only 49 children at Baptist. No doubt Baptist nursery school is serving the few elite families that either live or work at Kariobangi. About 3

children were transferred from Baptist nursery school to Kariobangi pre-school unit.

The latter is even more expensive. It charges Shs. 300/- per term. Two of the children that were transferred to the pre-school unit had mothers who were teachers at Kariobagi primary school. The mother of the third child was an inspector with the City Council.

Baptist nursery school was built by the church community in 1974. Before then, there were self-help nursery schools only in Kariobangi and the surrounding estates. The self-help nursery schools are poorly managed. They also lack equipment both indoor and outdoor, hence the need for a better nursery school in the area. The church community built two classrooms attached to the church building. They also bought standard nursery school furniture. In 1976, there were 49 children under the care of 2 teachers. One teacher has primary level education and the other has gone up to form two. The construction of standard classrooms, provision of standard nursery school furniture and the support by the church community made it easy for the school to make an immediate impression on the community that it was a better school than the other harambee nursery schools. Thus justifying the large sum of money it charges

per term.

Rahima Day Nursery

This is a private school with a primary school outcome index of 1.14 which charges Shs.300/- per term. This school is overcharging by as much as Shs. 230/- per term since a fee of Shs. 300/- accounts for a primary school outcome index of 2.0 according to the trend line. The total enrolment is 18 children under the care of one teacher. Both the pupils and the teacher are Africans. But there are factors that make it possible for this school to charge a high fee without pricing itself out of the market. First, the geographical location: the school is found in a city council estate in Eastlands. There are no other nursery schools nearby. Furthermore, the social class position of the residents does not allow them to own cars which they can use to take children to distant nursery schools. The parents may also not be aware of the low chances for upwards mobility of children who enter the local schedule A schools.

When the school started in 1975 the fee was Shs. 450/- per term. After one year, the fee was lowered to Shs. 300/- due to lack of pupils; and all the extra vacancies were filled immediately. As already stated, Rahima sends virtually all its graduates to the nearby schedule A schools. These

are the New Pumwani, which is the nearest and admits most of the children, Heshima Bahati, St. Michael and Muslim, Race Course. Some of these primary schools are across Nairobi river in Bahati and Shauri Moyo estate. These estates are some of the oldest dormitory residences built for the African migrant. The primary schools that Rahima graduates go to perform very poorly in C.P.E. The explanation of the deviation seems mainly to be the lack of competition from other nursery schools. If more nursery schools were to open in the area Rahima would have to drop its fees further to survive.

Happy Hours Day Nursery

Happy hours is a private school with a primary school outcome index of 2.17 which charges Shs. 600/- per term, paid on a monthly basis. This school is over-charging by at least 200/- per term given its primary school outcome index of 2.17. The typical primary school outcome index of a school that charges Shs. 600/- per term is about 2.9 (see Fig. 1) above. Happy Hours sends most of its graduates to schedule B as indicated by its primary school outcome index and not into schedule C schools as would be expected.

There are several factors that may explain why this school overcharges and yet retains its patrons. First, the school is located in a former Asian suburb across the industrial area. This estate is far away from high-cost primary schools. The only schools in the Southern and Western suburbs are schedule Bs. These schedule B schools perform quite well in the C.P.E. In fact, one of them was 26th out of 112 primary schools that sat for C.P.E. in 1976. It seems therefore quite rational for a parent to send a child to Happy Hours and later to the nearby schedule B school particularly if the parent works in the industrial area.

The school is also able to overcharge because the fee is most likely based on the understanding that the residents are middle class. Here the Asian and the African live side by side in flats or detached houses. The school reflects this racial integration. Twenty nine per cent of the enrolment is African, the rest Asian. The Asian teacher is also the principal. Unlike other multi-racial suburbs, Nairobi South and West have not attracted white residents. The typical resident in these estates is for example the Asian proprietor or an African departmental manager of a multi-national company. The school makes it quite clear that it is also selling knowledge as shown in a

wall poster introducing the school to the community:

> "We have pleasure in informing you that there is a day nursery within easy reach of your house known as Happy Hours formerly known as 'Super Infants' School...the fee is moderate and the knowledge invaluable. Do not hesitate to send your children tc nursery. Send them today and make their foundation strong".
>
> Source: A wall poster advertising Happy Hours Nursery School.

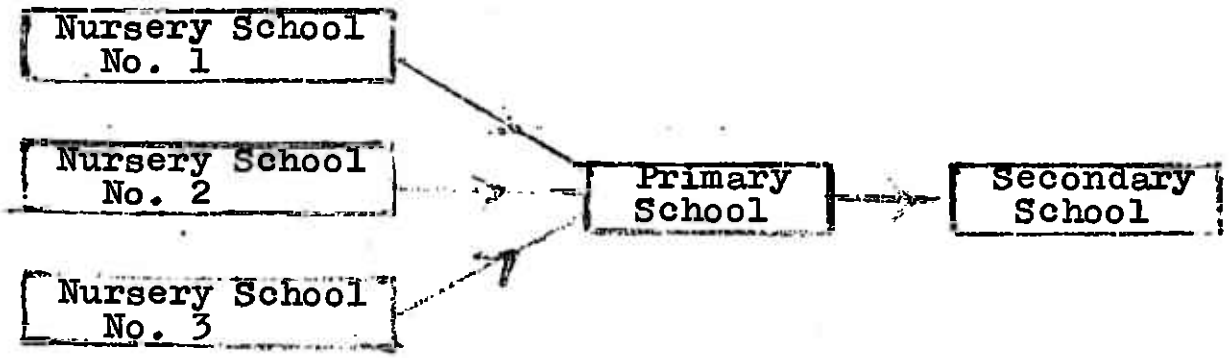
Westlands Kindergarten

This is the most expensive nursery school in the sample. It is also private. The owners of the property and business are the Alliance Development Ltd.' The fee charged per term is Shs. 1,400/-. The school's primary school outcome index is 4.88. Obviously, this very high index means that Westlands graduates mainly go to schedules D and E primary schools. In 1976, out of 25 children who were ready to go to primary schools 20 continued into the top class at Westlands. In practice this is a standard one class that is used mainly to prepare children for entry into private elementary schools. The fee was a prohibitive sum of Shs.2,850/- per term in 1976. At least 50% of the top class graduates enter Hillcrest. Hillcrest is a private school whose minimum age for entry into the first grade is seven or eight years. The other nursery school and

the top class graduates went to Loreto, Msongari and Valley Road, St. Mary's and English public schools.

No doubt, Westlands Kindergarten places its graduates into schools that are at the top of the primary school hierarchy. Thus, the element of overcharging cannot be explained by primary school factors. The school overcharges with about Shs. 200/- per term. What determinants justify the large sum of money parents pay per term in this school? First, this school is a part of a large business consisting of three nursery schools, one primary school and one secondary school (see figure 4 below).

Fig. 4: Vertically Integrated Business in Childhood Education



The vertical integration guarantees a child educational mobility right from the nursery school upto the secondary school level. Thus justifying the extra 200/- per term charged at Westlands according to the primary school outcome index. The principals of other high-cost nursery schools lamented strongly the fact that children from the three nursery schools are given priority at Hillcrest. This privileged relationship poses unfair competition for children from these nursery schools. Already, there are children who have been transferred from these schools to either Westlands, Andy Pandy or Marborough. The latter are the Hillcrest extensions.

The principal of Westlands Kindergarten is British, and has two diplomas - one in Art and the other in Infant Education. All the other teachers except one are also British with either medical or infant teaching diplomas. Out of the total enrolment in 1976,16 children were Black, 23 Asian and 59 White. According to the principal, the school is committed to reproduce the multi-racial relations of the Kenyan bourgeoisie. Who else can afford a lump sum of Shs. 1,400/- or more per term per child for only four hours a day except the very rich? Although the costly nursery schools

such as Westlands are only accessible to the ruling class, each school restricts the number of Asian, Black or White children that may be enrolled. At the moment, the attempt is to increase the proportion of the Black children by imposing strict quotas for the Asians. Some principals point out that Asian parents are willing to pay any price to secure places for their children in these schools. According to these principals the wealthy Asian parent prefers a teacher whose mother tongue is English so as to prepare the child for a life possibly in Britain or Canada.

Kariobangi Pre-School Unit

This is a kindergarten class attached to Kariobangi primary school. It charges Shs. 300/- per term, paid monthly, and has a primary school outcome index of 1.1. In other words, most of its graduates go to schedule A primary schools. In actual fact, nearly all of them go to standard one at Kariobangi - the attached primary school. Based on the criterion variable - primary school outcome index this kindergarten is overcharging by about 280/- per term.

However, there are several factors that explain very clearly the apparent irrationality

on the part of the parent as a customer. The pre-school unit is taught by qualified teachers who trained first in primary teaching and later as kindergarten teachers. Secondly, the pre-school is English medium. Thirdly, the pre-school unit children comprise a stream of their own in the primary school. As a whole, a child who goes to the pre-school unit not only gets good quality education but also is assured of adequate attention in primary school (Rosenthal, et.al., 1968).[4]

In 1976, the unit had about 72 vacancies but had only one class with 34 children. Out of the total enrolment, only 15 were Kariobangi residents, the rest came from middle class estates such as Buruburu (informally called Muthaiga East). The actual Muthaiga is one of the most secluded bourgeoisie residences in Nairobi. Other children come from New Mathare, a newly built city council low-cost estate but occupied mainly by the lower middle class due to housing problems in Nairobi.

There were a total of 15 pre-school units at the time of the interview. Four were attached to schedule C primary schools, one to a schedule B school and the rest to schedule A schools. The establishment of pre-school units was a part of an experimental pre-school project by Kenya Institute

of Education with financial assistance from a foreign donor. The two main objectives of the project were to develop teacher training materials and also develop an educational curriculum that is both compensatory and developmental. For a number of reasons, the remedial objective was dropped. However, a model pre-school unit was established at Kariobangi. But as pointed out already, this unit only serves a few middle class children whose parents live or work in Kariobangi.

The establishment of the pre-school units presents a quasi-experimental situation that illustrates very clearly how the social class differences are reproduced in the educational scene. The child development experts working on this project as we have already seen concerned themselves mainly with the mental development of the child. They thought that the kind of content and the quality of their teachers would command a uniform price fixed at Shs. 100/- per month for all the pre-school units. However, charging the same fees was later identified as an error and the fee for the units attached to schedule C schools was raised by 50%. No doubt, the large difference in fees is indicative of functional differences between schedule A and schedule C educational sub-system.

Briefly, the following are the important determinants that enable the nursery schools to overcharge without losing children. First, the geographical location of the nursery school: either a school may be far away from other nursery schools, or near only one type of primary school. Secondly, the social class background of a school also influences the amount of fees charged. For example, Rahima was forced to reduce fees from Shs. 150/- to Shs. 100/- per month because parents were either unwilling or unable to pay the initial amount charged. Thirdly, a nursery school creates a near monopoly situation if it is structurally attached to a desired primary school.

Nursery Schools that Give an Indirect Subsidy

These are the nursery schools that undercharge their market price according to the primary school outcome index. In other words, these are the schools that are above the regression line. There are 24 nursery schools above the line but only 8 are outliers. The rest only deviate slightly above the line. The following are a few examples of the schools that deviate considerably above the regression line. However, it is important to point out that only service nursery schools are real outliers. The private schools are mostly below or very near the regression line. Most of them therefore overcharge or charge a justifiable

fee in terms of primary school outcome index. Only an odd case that underprices itself. This is not surprising, since private schools are profit making businesses.

Waridi Day Nursery

This is a service school. It belongs to the Christian Church and is managed by an African headteacher. Its primary school outcome value is 3.34 and charges Shs. 360/- per term. The primary school outcome value of 3.34 suggests that Waridi sends most of its graduates to schedule C and D primary schools. In fact out of 44 children who went to primary schools in 1976, 21 went to schedule C schools with about 16 graduates going to Westlands Primary School. Nineteen children went to schedule D schools but mainly to Consolata which admitted 14. The remaining 4 out of the total output went to Visa Oshwal, an assisted schedule B school. All the primary schools that admitted children from Waridi were among the first ten schools in the order of merit based on C.P.E. performance in 1976. Therefore, Waridi sponsors children into primary schools that virtually guarantee educational mobility. However, it only charges Shs. 360/- per term. Given its primary school outcome index of 3.34, the market price for Waridi should be about Shs. 750/- per term.

The difference between what the school charges and what ought to be charged is roughly Shs. 390/-. Thus parents with children in this school are subsidised indirectly with as much as Shs. 390/- per term, that is more than the fees charged. Waridi undercharges itself with as much as Shs. 390/- per term as a response to the church's moral objective of community service. Waridi is not a unique case, in fact all the Christian church schools offer equally large sums of money in form of indirect subsidies.

Waridi is located at Westlands. The management was Africanised in 1972. The headteacher is trained both in nursery and primary school teaching. All the other teachers except one have primary school education and only two had not been trained in nursery teaching. According to one of the first African parents, the majority of children were White in 1972, but rapidly the enrolment changed to Black. By 1975, the school had only a handful of Asian and hardly no Whites.

Visa Oshwal Day Nursery

This school has a primary school outcome index of 2.9 and charges Shs. 240/- per term. Therefore on the average most of its graduates go to schedule B and C schools. In fact most of its

graduates go to Visa Oshwal primary, a school that competes with schedules C and D schools in C.P.E. grades. The remaining graduates go to Parklands (schedule B), Westlands (schedule C), Hospital Hill (schedule C), Consolata (schedule D) and the odd case to Cavina (schedule E). The element of informal subsidy granted parents is Shs. 332/- per term judged according to the primary school outcome index. The commercial fee ought to be about Shs. 572/- per term.

All the 17 teachers have secondary education but only two are trained in nursery teaching. In 1976 out of 350 children, only 7 were African, the rest were Asian. Although the school belongs to Visa Oshwal Community, the idea of multi-racial integration has not been implemented as much as it should. The headteacher however points that the school aims to serve all children indiscriminately, hence the very low fee charged. Nonetheless, majority of the children come from middle class Asian families. The wealthy Asian families prefer the high-cost European managed schools. The latter observation is very useful in clarifying the social class behaviour that permeates the entire social fabric in Nairobi. It illustrates that the social class background is more important in determining the type of school a child is likely to attend than the ethnic factor.

Muthaiga Pre-School Unit

This pre-school is attached to a schedule C primary school. Its primary school outcome index is 3.0 and charges Shs. 450/- per term. All the 36 children who completed the pre-school course in 1976 were promoted to standard one at Muthaiga Primary School. There was not a single child who went to any other primary school. Judged according to the primary school outcome index, this kindergarten should charge Shs. 630/- per term. Therefore, the parents with children in this unit are being indirectly subsidised by the state with as much as Shs. 200/-.

Most of the children in this pre-school unit are middle class. However, a few come from some of the richest families in Kenya. Furthermore, all the children except 3 come from Black Kenyan families. The school is located along the highway to Thika from Nairobi, at Muthiga. It is common knowledge that Muthaiga is a bourgeoisie suburb. But there is hardly any child from Muthaiga itself in this pre-school unit. Without reading too much from these observations, it is quite clear that Muthaiga pre-school unit and probably the primary school itself are more or less exclusive educational centres for the Black Kenyan middle class. The role of the state in post-colonial Kenya

to foster the development of an indigeneous middle class in the economic sector is also reflected in the school system through subsidies.

St. Judes Day Nursery

This is a private school run by an Asian principal. Its primary school outcome index is 2.43 and charges Shs. 320/- per term. Ideally, this school ought to charge Shs. 440/- per term, thus the parent is indirectly subsidised by as much as Shs. 120/- per term. It is not immediately clear why this school including a few other private ones charge a fee that in dry market terms seem irrational. After all, these schools are profit-making businesses.

The only plausible reason that may explain the amount of fees charged by St. Judes is that this school only occupies a portion of a large building that is also used as a residence. The total enrolment was 70 children in 1976. Most likely if the fee was raised to Shs. 500/- the school could lose children to the nearby nursery schools. Thus the school is able to generate substantial revenue when it enrols many children by charging a low fee.

The school is situated in Highridge suburb which was formerly Asian, but Africans have moved in. Most of the St. Judes graduates go to the nearby Highridge Primary School, also a former Asian school. Only a few children go to either schedule C or D schools. The fact that most of the children go to the nearby primary school suggests that St. Judes has organised a 'near home school'. that charges a fee that is clearly cheaper than the competing nursery schools. Alternatively, the low fee may be just an indication of a time lag in raising the fee since the school started as early as 1962.

The discussion on the nursery schools that undercharge, in other words subsidise the families, reveal that subsidy is mainly given by the Christian church, Asian welfare societies and the Government. Historically, the church and the state have played a joint role of developing the middle class in Kenya under the label of nation building. This is a progressive role, after all, every modern nation has a middle class which acts as the middle man between the bourgeoisie and the workers. What is questionable, however is the financial support the middle class continue to get so as to reproduce itself through indirect subsidies from the government. I fail to see why a top civil servant or a business executive, can't pay Shs. 700/- for

his nursery school child at Muthaiga instead of the 450/- charged at present.

A very strong case has been made for the role of fees charged by the nursery schools as a determinant for primary school outcome index. But parents are not just buying for their children desired primary schools only. The case studies have indicated that children in the expensive schools have better educated and trained teachers than the children in the low-cost nursery schools. These schools also differ in other ways. An attempt will be made in the next chapter to show that nursery schools expose children to a varied educational environment.

OTHER DETERMINANTS THAT INFLUENCE THE LINKS BETWEEN NURSERY AND PRIMARY SCHOOLS

It has been suggested very strongly in the case studies above that there are other determinants that explain the link between nursery and primary schools in Nairobi. The most important are: the geographical location of the nursery schools, the racial origin of the principals and ownership. Table 6 shows very clearly that geographical location of nursery schools is strongly related to the primary school outcome index.

Table 6: Geographical Location by Primary School Outcome Index

Type of Geographical Location	Mean Primary School Outcome Index	Standard Deviation	N
Former African	1.14	0.32	18
Former Asian	2.12	0.46	10
New Estates	1.71	0.49	7
Former European	3.64	0.80	22
With groups Total	2.34	0.59	57

Eta = 0.88 Eta squared 0.78 df = 3.

F = 63.21 Sig. level 0.0001

The eta value is 0.88. Eta is an asymmetric measure of association used when the independent variable is norminal and the criterion variable is interval or ratio. Eta is basically an indication of how dissimilar the means on the dependent variable are within the categories of the determinant. Eta squared is the proportion of variance in the dependent variable explained by the independent variable. In table 6 above, the eta squared of 0.78 means that 78% of variation in the primary school outcome index is explained by the geographical location of nursery schools. Thus, geographical location explains nearly as much variation in criterion variable as the fee charged per term (see page 71). This finding confirms the general hypothesis running

through the case studies that the distribution of nursery schools, primary schools and residential areas in Nairobi follow a social class pattern.

The residential pattern in Nairobi is based on social classes but was initially organised on a racial basis. Hake (1977:4) in a study of the historical development of Nairobi summarises the residential pattern thus:

> "The large area of high ground and ridges...between the streams to the west and north had been chosen for the building of estates reserved by covenant or otherwise for European occupation (now occupied by the multi-racial ruling class). Plots were normally one acre, but in some areas half an acre...To the north, east, south and south west, the estates which the Asians lived were laid out with from two to twelve houses to the acre (now occupied by the middle income families) (and) to the south east the Africans (now occupied by the low income group, with the exception of the Buru-buru complex).
>
> (p. 57)

But in post colonial Kenya, the racial criterion was removed. So now the place of residence is determined by the economic power of an individual. This change of policy allowed the wealthy Africans including senior officials in the public sector to move mainly into the former European areas. The other Africans who are in the middle and lower management occupations including clerks moved into

the former Asian suburbs and in the medium cost estates that have been built since independence. The former African areas including the slums that are found at the city margin are occupied by the manual workers both in the industry, tertiary services, and state bureaucracy and petty commodity producers. Thus, the residential zone is more or less a perfect proxy of the social class of residents.

Table 6 shows that the nursery schools in the former African areas have the lowest primary school outcome mean of 1.14 $\pm$ 0.32, thus, they send most of their graduates to schedule A primary schools. The schools in the former European areas have the highest primary school outcome mean of 3.64 $\pm$ 0.8 which means that these schools send their graduates to schedule B, C, D and E schools. The schools in the former Asian areas and the new estates fall in the middle with 2.12 and 1.71 primary school outcome index means respectively.

The nursery schools with the lowest primary school outcome index mean ($\bar{x}$) are also the schools with the lowest mean fees charged per term. Table 7 shows that the nursery schools in the former African areas have a mean fees of Shs. 90.72 $\pm$ 126.7. The schools in the former Asian areas and the new

estates have Shs. 410 ± 138 and Shs. 310 ± 52 respectively. The schools in the former European areas have a mean fee of Shs. 725 ± 297. It is quite clear that the means of the fees charged per term by nursery schools in the various geographical categories differ tremendously. For example, the schools in the former European areas charge on average a fee eight times higher than the average fees charged by schools in the former African areas. Typically the schools in the former Asian and the new estates fall between the two.

Table 7: Geographical Location by the Fees Charged per Term

Type of Geographical Location	Mean Fees Charged per Term	Standard Deviation	N
Former African	90.72	126.73	18
Former Asian	410.00	138.38	10
New Estates	310.00	51.96	7
Former European	725.00	297.35	22
Within Groups Total	418.48	209.15	57

F = 31.12 Sig. level 0.0001 Df = 3

Eta = 0.80 Eta squared = 0.64

Furthermore, the relationship between geographical location of nursery schools and the fees that these schools charge is strong and significant. Put together tables 6 and 7 suggest that the cheap nursery schools are located in the former African areas and their graduates go to the low cost schedule A schools. Secondly, the medium-cost nursery schools are located in the former Asian and the new estates and their graduates go mainly to schedule B schools. Lastly, the high-cost schools are located in the former European areas and send their graduates to the expensive primary school types; schedules C, D and E. These three distinct institutional categories point strongly to the existence of three basic social groups in Nairobi, the poor, the middle class and the class that controls the national wealth.

The racial background of the nursery school principals is also strongly related with the primary school outcome index. The eta value is 0.77. In other words, the racial background of the principals explain about 59% of variation in the primary school outcome index. The relationship is of course highly significant. However, the ethnicity factor does not explain as much variation in the criterion variable as fee or geographical location of the nursery schools. Table 8 shows the mean primary school outcome indices for the nursery

schools under different racial management.

Table 8: The Racial Origin of Nursery School Principals by Primary School Outcome Index

Ethnicity of the Headteacher	Mean Primary School Outcome	Standard Deviation	N
African	1.67	0.85	34
Asian	2.63	0.56	12
Eruopean	4.10	0.85	11

Eta = 0.77 Eta squared = 0.59 df = 2
F = 39.01 Sig. level = 0.0001

The African managed schools have the least mean primary school outcome index. The value of 1.67 ± 0.85.suggests most of these schools send their graduates to a wide range of primary school schedules mainly from schedule A to C schools. The mean index of 2.63 ± 0.56 for the Asian managed schools mean that children from these schools on average go to schedule B and C schools with only a few going to schedule D schools. The average primary school index for European managed schools is 4.10 ± 0.85 which means children from these schools go to schedule C, D and E primary schools. Controlled for the low-cost nursery schools, the mean primary school outcome value for the African managed schools increases to 2.11. There are several African

principals who have been co-opted into the Church nursery schools which were formerly managed by Whites. Thus the low power of the racial factor in explaining the variation in primary school outcome index compared to fees or geographical location of nursery schools suggests that the colonial racial model is no longer as powerful as the neo-colonial economic model in understanding the distribution of the educational resources.

Similarly the mean fees charged per term among the African, Asian and European managed schools differ greatly. Table 9 shows that the mean fee for the European managed nursery schools is Shs. 910/-, Shs. 488/- and Shs. 234/- for the Asian and African nursery schools respectively. The race of the principal explains about 60% of the variation in the fees charged. The mean difference between groups is significant. On the basis of mean fees, the European managed nursery schools charge four times as much as the African managed nursery schools. It is quite clear from tables 8 and 9 that the White managed nursery schools are on top of the nursery education structure both in terms of the average primary school outcome index and the average fees charged per term. This observation does not contradict an earlier point that the racial background of principals is a less powerful determinant in explaining the variation

in the primary school outcome index. The point made here is simply that besides the overall trend where race declines over time, it is in the meantime an important determinant in understanding the structure and content of the high cost educational sub-system in Nairobi.

Table 9: The Racial Origin of the Headteacher By the Fees Charged Per Term

Type of Manager	Mean Fees Charged per Term	Standard Deviation	N
African	234.50	191.10	34
Asian	488.33	189.42	12
European	910.91	304.22	11
Within Groups Total	418.47	216.25	57

Eta = 0.78 Eta squared = 0.606 df = 2

F = 41.45 Sig. level = 0.0001

The type of ownership of nursery schools account for the least variation in the primary school outcome index. The eta squared is 0.58. In other words, 58% of the variation in the primary school outcome index is explained by the type of nursery school ownership. In the folk-lore, nursery schools are categorised on the basis of ownership. They either belong to the city council, church, welfare institutions, entrepreneurs or self-help communities.

This categorisation mystifies the naked social class structure of the pre-school education in Nairobi.

However, as table 10 shows, there are large differences both in the mean primary school outcome indices and the mean fees charged per term by the nursery school ownership categories. Table 10 shows that the private nursery schools are the most expensive with a mean fee of Shs. 723/-. The cheapest are the self-help nursery schools charging a mean fee of Shs. 32.15 per term. The service nursery school constitute a middle category. They charge mean fees ranging from Shs. 232.5 to Shs. 484.29/- per term. On the other hand, the distribution of the average primary school outcome indices do not follow a similar pattern. Instead the Christian church schools have a mean outcome index nearly as high as the mean index for the private schools meaning that their graduates go to the same primary schools. The self-help schools have the least outcome index mean followed by the service - welfare, service - Asian and City Council pre-schools.

Table 10: The Type of Ownership by the Fees Charged Per Term and Primary School Outcome Index

Types of Ownership	Mean Fees	Standard Deviation	Mean Primary School Index	Standard Deviation	N
Pre-school Unit	337.5	91.86	1.93	0.88	5
City Council	417.0	130.94	1.92	0.71	6
Service Welfare	253.75	170.17	1.57	0.42	4
Service Christian	484.29	75.25	3.14	0.75	7
Service Asian	232.5	10.61	2.45	0.64	2
Private	722.75	333.83	3.29	1.15	20
Self-help	32.15	33.88	1.02	0.05	13
Within Groups Totals	418.47	217.39	2.34	0.84	57

Eta coeff. = 0.79

Sig. lev. = 0.0001

Eta coeff. = 0.76

Sig. lev. = 0.0001

It has been proved by use of linear correlation, regression and eta how primary school outcome index correlate with fees, geographical location, racial background of the principal and ownership of nursery schools. In other words, each of these factors determine the flow of pupils from nursery to primary schools. Several references have been made indicating that these determinants are in turn correlated. The multi-colinearity implied among these determinants suggest that these factors are good proxies in accounting for the primary school outcome index. Therefore, to understand the differences in the distribution of nursery and primary educational resources, one must bear in mind the amount of fees a nursery school charges, its geographical location in the city whether the principal is Asian, African or European and the type of ownership.

THE SUMMARY

(1) The fees charged by nursery schools is strongly related with the primary school outcome index. The relationship is also significant (Pearson r = 0.899; sig. level = 0.001).

(2) The relationship between the fees charged by nursery schools and the primary schoo. outcome index is even higher among the private nursery schools. (Pearson r = 0.922, sig. level = 0.001). These schools are profit making businesses as illustrated by the fact that the number of private nursery schools that undercharge themselves in the nursery school market is negligible.

(3) On the contrary, the service nursery schools, excluding the self-help pre-schools, are less concerned with profitability. Instead, they are mainly interested in serving the community. Among them, the correlation between the fees and the outcome index is lower (Pearson r = 0.60, sig. level = 0.001).

(4) The self-help nursery schools provide very little variation in the fees charged and the primary school outcome index. It was found that they charge about the same fee with very few exceptions. Furthermore, majority of their graduates go to the nearby schedule A primary schools.

(5) Three categories of nursery schools were identified on the basis of the regression line. These categories are, the schools that are above, on and below the line.

Each of these positional categories include some self-help, private and service nursery schools. For example, Thayu and Kestral Manor are both on the line. However, charging a fee that may be accounted for by the primary school outcome index is all that these two schools have in common. Thayu charges Shs. 12/- per term and serves slum residents of Mathare Valley. While Kestral Manor charges Shs. 1,200/- per term and serves the ruling class, mainly foreigners and a few representatives of the national bourgeoisie. Similarly, the nursery schools that are above or below the line reflect the underlying social class structure.

(6) Geographical location, the race of the principal and nursery school ownership are good proxies of the fees charged by nursery schools in accounting for the variation in the primary school outcome index. Therefore, to understand the structure between the nursery and primary schools in Nairobi, one must bear in mind not only the fee charged but also the location of the nursery school, its owner, and the race of the principal.

(6) The racial background of the nursery school principal is less powerful in accounting for the variation in the primary school outcome index than fees and geographical location. This is mainly because African principals have been co-opted into the good quality church nursery schools that were managed by Europeans previously. Thus we are witnessing a shift from a racially determined educational structure to one run on social class basis. However, the white domination of the high-cost nursery school and primary schools still remains.

Footnotes to Chapter Four

1. Somerset, H.C.A.,(1977). Aptitude Tests, Socio-economic Background and Secondary School Selection: The Possibilities and Limits of Change. Discussion Paper No. 24, Institute for Development Studies, University of Nairobi, p. 3-4.

2. Ibid., p. 5.

3. Kinyanjui, P.K. (1977). Regional and Class Inequalities in Provision of Primary Education in Kenya 1968-1973: A Historical and Socio-Economic Background. Qualifying Paper submitted to Harvard Graduate School of Education, p. 72.

4. Rosenthal, R. et.al., (1968). Pygmalion in the Classroom. Holt, Rinehart and Winston. New York.

5. Hake Andrew (1977), see chapter 3, p. 57.

CHAPTER FIVE

ESTABLISHING PATTERNS OF DIFFERENTIATION IN NURSERY SCHOOL CONTENT

The structure of nursery education discussed in the last chapter is no doubt a mechanism which tends to ensure the reproduction of the relations of social classes in Nairobi. My aim in this chapter is to investigate whether or not there are differences among nursery schools in their educational and socialization practices. In other words, do nursery schools differ in the way they educate and socialise children? If they do, are the differences congruent with the structural categories of nursery education analysed in the last chapter? It must be emphasized that the subject of enquiry in this chapter is the socio-educational content of nursery schools (see chapter four for an evaluation of the outcome of nursery education on the basis of flow of children from nursery schools to primary schools).

The process of socialisation is well summarised by Bernstein (1971:74)[1] in discussing the relationship between social class, language and socialisation:

> "I take the term to refer to the process whereby a child acquires specific cultural identity, and to his responses to such an identity...the process whereby the biological is transformed into a specific cultural being. It follows from this that socialisation is a complex process of control whereby a particular moral, cognitive and affective awareness is evoked in the child and given a specific form....The process acts selectively on the possibilities of man by creating through time a sense of the inevitability of a given social arrangement, and through limiting the areas of permitted change. The basic agencies of socialisation in contemporary societies are the family, the peer group, the school and work. It is through these agencies, and in particular through their relationship to each other that the various orderings of society are made manifest".

The most formative influence upon the procedures of socialisation from a sociological viewpoint is social class. The school, particularly the nursery and primary schcol plays an important role in reinforcing the values, attitudes and other personality traits characteristic of the different social classes. Indeed, according to Marxist analysis (Bernstein, 1973),[2]

> "It is not only capital...which is subject to appropriation, manipulation, and exploitation but also cultural capital in the form of the symbolic systems through which man can extend and change the boundaries of his experience".
>
> (p. 172)

In a nursery school there are all sorts of play and learning activities, social relationships and educational materials that influence the socio-educational development of a child. For practical reasons, however, I decided to confine the investigation to three topics: use and development of language, academic training, and the development of other personality traits.

(a) LANGUAGE POLICY IN NURSERY SCHOOLS

The use of language is important not only in personal development, but also in regulating access to educational and employment opportunities particularly in highly competitive socio-economic systems such as Kenya. No doubt, a child has an innate capacity to absorb language (Montessori, 1973)[3] but the type of language acquired is determined by the culture acting through social relationships. In his study on language and social class Bernstein (1971)[4] found that:

> "....the typical, dominant speech mode of the middle class is one where speech becomes an object of special perceptual activity and a theoretical attitude is developed towards the structural possibilities of sentence organisation (elaborated code). But... ..members of the working class are limited to a form of language use which...provides a speech form which discourages the speaker from elaborating subjective intent and progressively orients the user to descriptive, rather than abstract, concepts (restricted code)". (p. 61)

As already shown in chapter two, the difference in performance in the Certificate of Primary Education between children in the high-cost and the low-cost primary schools in the English paper is nearly twice the difference in Mathematics and General Paper (see table 3). In other words, by the end of the seventh year in school, children from the wealthy backgrounds have a better understanding of the English language than the children from poor families. Nairobi is multi-lingual but historically English, the language of the coloniser has continued to dominate other languages, both as the official language and also as the medium of instruction in schools. The dominance of English language over the other languages was emphasised by the Kenya Education Commission, 1964:[5]

> "We apprehend therefore that the vernaculars will continue to serve their historic role of providing a means of domestic verbal communication. We see no case for assigning to them a role for which they are ill adapted, namely the role of educational medium in the critical early years of schooling".
> (para. 171)

The Kenya Education Commission 1964 quoted above was mainly concerned with the development of educated and skilled manpower, hence the view that English was suited to the role of educational

medium in critical years of schooling. This was a time of optimism for everybody including the emergent political leadership. As a result, the need to create an African nation state manned by properly educated and trained nationals dominated the incipient social class consciousness among the Africans. But the initial optimism faded by mid-1970's due to the unemployment problem of highly educated school leavers. The appearance of the educated unemployed in the labour market posed a threat to social stability.

Thus in 1976, the concern of the government was to restructure the educational system so as to ensure continued social stability by integrating the school activities including language with that of the local community in which the schools are situated (NCEOP, 1976:54). This change of educational policy from manpower development to social control occured in a context of rapid crystallisation of social classes. Unlike in 1964, there are now Black Kenyan children who are born into families which use English as mother tongue. In addition there are other children who are born into lower middle class families that depend on nursery schools to teach children the use of the English language. But the majority of children in the rural areas and in poor urban families can only speak their vernacular languages at the time of

starting primary education.

Therefore, there are now three unofficial language policies for the three main principal social groups. First, there is the vernacular or Swahili language use. This type of linguistic expression is found mainly among the urban poor or the non-English users. The nursery schools that serve children from this social group start teaching in Swahili or vernaculars and continue in Swahili. As already shown, virtually all the children from these nursery schools go to the low-cost, poor quality primary schools.

Secondly, there is the linguistic form of expression whereby children are mainly exposed to vernaculars or Swahili and only slightly to the use of English language at home. This type of language use is mainly found among the lower middle class families with parents who are not comfortable with systematic use of English outside the place of work. The nursery schools that serve children from this social background start teaching with a mixture of vernaculars Swahili and English but move as quickly as possible to English. Later, most of the children go to the English medium government primary schools that continue to charge amenity fees even after the abolition of tuition and building charges.

The third aspect of language use is a linguistic environment whereby the multi-racial ruling class use English as mother tongue. The nursery schools that serve this socio-linguistic category start teaching in English and continue with it. Therefore, the children who attend these nursery schools are expected to understand if not to express themselves in English before they enter nursery school. Later, the children go to either schedules C, D, E primary schools or abroad. For convenience, the three approaches to the use of language will be referred to as the Swahili, Swahili to English and English to English categories respectively.

The three language categories discussed above were determined partly on the basis of:

(a) Data collected by observing and listening to the children during their indoor and outdoor activities.

(b) Content analyses of the responses to the following open-ended language questions addressed to the nursery school principals:

(i) Do children know English before admission?

(ii) What is the language of instruction? Are any other languages taught in the school? If the language of instruction is English, what is your policy regarding children who do not speak English when first admitted?

DATA ANALYSIS AND INTERPRETATION

The former residential pattern in Nairobi once based on race is now based on ability to pay (see chapter 4, p. 105). As a result, the socio-linguistic categories discussed above are found in different parts of the city. Therefore, it is hypothesised that there is/real difference / a in language use among the nursery schools located in different residential areas in Nairobi.

Table 11 summarises the relationship between language use in nursery schools and their geographical location in the city.

Table 11: The Relationship Between the Use of Language in Nursery Schools and their Geographical Location in Nairobi

Language Use	Geographical Location				Total
	Former African	Former Asian	New Estates	Former European	
Swahili-Swahili	12	0	0	0	12
Swahili-English	6	8	7	4	25
English-English	0	2	0	18	20
Total	18	10	7	22	57

X^2 = 60.88 df = 6 Sig.lv. = 0.0001 Contingency coefficient = 0.72

A X^2 value of 18.55 with 6 df is significant at 0.005 level of confidence. Hence the obtained value of 60.88 is significant well beyond this level. There are fewer than one in ten thousand chances that the idenitified relationship between language use in nursery schools and their geographical location is due to chance. The relationship is not only statistically significant but also very powerful. The contingency coefficient, one of the measures of the strength and direction of a relationship is as high as 0.72. This suggests that the choice of language policy in nursery schools, either Swahili, vernaculars, English or all of them is related strongly with the geographical location of these schools in Nairobi. Therefore, the hypothesis that the use of language in nursery schools is related with their geographical location may be accepted.

Table 11 above shows that all the English-English nursery schools except two are found in the former European residential suturbs. These are the schools that use English as the mother tongue. They start teaching in English and continue in it without any use of auxilliary languages. These schools are also very exclusive both in location and the fees charged. To expect a family to raise about Shs. 1,400/- lump sum per term per child is in effect to exclude the

majority of children. These English-English schools train and socialise children of the members of the multi-racial and multi-national class that controls the political economy in Kenya. Seen in a wider class structure in this country this is the ruling class operating in a neo-colonial and imperialist context. The nursery schools that serve this class differ for instance in methods of teaching. Some use traditional methods and others use progressive teaching methodologies. However, all of them are child development centres manned by highly qualified teachers and heavily stocked with sophisticated educational materials and a wealth of play facilities. These schools are serving a confident class. In addition, most of the children come to school with an understanding of English language because it is part of their cultural environment. One of the headteachers who knows the type of children she is training says:

> "The children who come here are born in privileged positions. Their parents are professionals: doctors, engineers, lawyers, managers, industrialists, businessmen and politicians. These parents pay large sums of money so that their children are properly trained and socialised for leadership positions in future".

The nursery schools that use a mixture of languages including English (Swahili-English) schools, at the beginning and move as quickly as possible to English are heavily concentrated in the former Asian suburbs and the new middle class estates. Put together, the nursery schools in the former Asian and new estates comprise about 60% of all the Swahili-English schools. Out of a total of 25 Swahili-English nursery schools, 6 (24.0%) are in the former African areas, 8(32.0%) in the former Asian suburbs, 7(28.0%) in the new estates and only 4(16.0%) are in the former European residential areas. Indeed, all of the nursery schools in the former Asian areas and the new estates except two are Swahili-English schools.

All the nursery schools in the former African areas are either Swahili-Swahili or Swahili-English schools. In other words, there are no English-English nursery schools in these residential areas. More important, all the Swahili-Swahili nursery schools are found in the former African areas. Therefore, there is not a single nursery school whose medium of instruction is Swahili or vernacular in the former Asian and European suburbs or in the new estates. The Swahili-Swahili schools serve children whose parents are squatters, hawkers, messengers, drivers, and other manual cadres. No

doubt, this social group is interested in the educational advancement of their children. The large number of nursery schools that serve them demonstrate this point. Historically, the members of this social category attribute its plight to lack of education which they perceive as instrumental in the composition of the middle and ruling classes. The urge to send their children to school is so strong that there are children who only attend nursery school then drop out due to lack of school funds before they were abolished through a presidential decree in 1978 and also the lump-sum required to purchase the school uniform. In brief, this social category operates outside the English language system at both the cultural and educational levels.

Overall, table 11 shows that the majority of nursery schools in the former African areas are Swahili-Swahili (12 out of 18). Secondly, all except two (8 out of 10) nursery schools in the former Asian areas, and all the 7 schools in the new estates are Swahili-English nursery schools. Finally, all except four (18 out of 22) nursery schools in the former European areas are English-English schools.

The use of language is also related significantly with other aspects of nursery schools.

Table 12 shows the relationship between language use and racial background of the principals. It is immediately clear from this table that all the White managed nursery schools, except one are in the English-English category. The exceptional school is also English medium but the principal emphasises the importance of communicating with a child from the first day of school. Of course, there is not a single school with a White principal that is in the Swahili-Swahili category. About 58% of the Asian managed nursery schools are in the Swahili-English category and the remaining proportion in the Swahili-English category. There is none in the Swahili-Swahili category. The African managed nursery schools are more widely distributed among the language categories. However, 50% of the African managed schools are in the Swahili-English category. Thirty-five per cent are in the Swahili-Swahili category and the remaining 25% in the English-English category.

Table 12: Language Use and the Racial Background of the Manager

Language Use	Type of Manager			
	African	Asian	European	Total
Swahili-Swahili	12	0	0	12 (21.1)
Swahili-English	17	7	1	25 (43.9)
English-English	5	5	10	20 (35.1)
Total	34(59.6)	12(21.1)	11(19.3)	57 (100.0)

X^2 = 25.96 df = 4 Sig.lv. = .0001

Contingency coefficient = 0.56

The fee charged by nursery school does also suggest the linguistic form of expression that children are encouraged to acquire by the nursery schools. The relationship between the two variables is statistically significant and also very strong.

Table 13: Language Use by the Cost Category of Nursery Schools

Language Use	Type of Nursery School			Total
	Low-cost	Medium cost	High cost	
Swahili-Swahili	12	0	0	12
Swahili-English	2	20	3	25
English-English	0	9	11	20
Total	14	29	14	57

$X^2 = 58.02$ df = 4 Sig.lv. = .0001
Contingency coefficient = 0.71

All the low-cost nursery schools, except 2 use Swahili as the medium of instruction all the time. One of the two exceptional cases serves the elite of Kariobangi community. This school was purposely built to provide a better educational environment than the surrounding self-help nursery schools. The other exceptional school serves mainly the children of manual workers in a former European boys' high school. Other children in the latter nursery school come from a nearby market. There are no medium-cost and high-cost schools that use Swahili as a medium of instruction. Instead, 69% of the medium-cost schools prepare children for a rapid transition from use of vernacular

and Swahili as a mode of expression to English. The remaining 39% expose children to an educational environment that uses English language all the time. Most of the high-cost nursery schools are English-English schools. However, only 21% are Swahili-English schools. Of course there are none high-cost schools in the Swahili-English language use category. At this point, it is important to emphasise that all the English-English nursery schools are only the medium-cost, and the high-cost schools. Furthermore, all the Swahili-English nursery schools except two are also medium-cost and high cost. However, all of the Swahili-Swahili nursery schools are low-cost. No doubt, the amount of money a parent is able to pay suggests the type of linguistic mode of expression the child is encouraged to learn in the nursery school.

The use of language is also significantly related to the nursery school ownership variable. It can be seen from table 14 that 12 out of 13 harambee (self-help) nursery schools are within the Swahili-language social and educational context. But there is not a single market or non-market nursery school that encourages children to learn the use of Swahili language. Instead, both the market and non-market nursery schools are all English medium centres. However, the non-market and market schools differ in that 60% of the former are serving

a social category whose children come to school with an understanding of vernaculars or Swahili but need to be trained in the use of English language as soon as possible. On the other hand, only 40% of the market nursery schools find it necessary to allow the use of other languages initially while at the same time engaged in a vigorous English language educational programme. The rest make no such allowances and are strictly English medium centres from the beginning.

Table 14: The Relationship Between Language Use and Type of Nursery School Ownership

Language Use	Type of Nursery School Ownership			
	Non-market	Market	Harambee	Total
Swahili-Swahili	0	0	12	12 (12.1)
Swahili-English	16	8	1	25 (43.9)
English-English	8	12	0	20 (35.1)
Total	24	20	13	57(100.0)

X^2 = 55.53 df = 4 Sig.lv. = 0.0001

Contingency coefficient = 0.70

Seen together, table 13 and 14 suggest that what really matters in terms of the language a child learns in the nursery school is both the cost and geographical location of the school but not the race of the principal. This observation confirms the finding in chapter four that in Nairobi, the cost and geographical location of nursery schools are better indicators of the social class background served by these schools than the racial background of the principals.

In chapter one reference was made to the fact that lack of government involvement in the establishment and supervision on nursery schools has led to very strong social group and parental influence on the activities of nursery schools. The three language categories analysed above is no doubt further evidence of the existing stratified social backgrounds of nursery school children. The Swahili-Swahili nursery schools serve children from a social background whereby English is not a part of the culture. In this non-English social environment, vernaculars and Swahili are the dominant languages. Furthermore, the social background that is served by Swahili-Swahili nursery schools is also the poorest materially in Nairobi. It constitutes mainly the hawkers, messengers, and other manual categories and only a negligible proportion of white collar workers.

The fact that the families in this social class only send children to nursery schools that use Swahili and vernaculars and later to poor quality primary schools indicates that their class position prevents them from understanding the subtle mechanisms inside the educational system that foster upward mobility.

The Swahili-English nursery schools serve a social background whereby vernaculars and Swahili are treated as mother tongue but English as a language that is rewarded both in the school system and occupational structure. In other words, the vernaculars are used as a means of domestic verbal communication and socialisation while English is used in the work situation and in other official dealings. Therefore, English is seen as one of the social skills that need to be learnt to guarantee educational mobility and subsequent entry into well paid jobs and not as a mode of expressing daily experience.

The members of the social background that is served by the Swahili-English nursery schools comprise a social category that is highly competitive and upwardly mobile. This competition may be explained by their awkward class position of being trapped between the poor at the bottom and the very rich at the top. However, the educational

system is virtually the only means available to ensure that their children would in future secure similar positions in the occupational structure and hopefully join the ruling class. They have therefore objectively identified good quality schools starting with nursery schools that socialise their children into proficient use of English language as an instrument that can be used to push their children into rewarding adult tasks. The extreme manifestation of the anxiety in some of these families in ensuring that their children are competitive is seen in the crowded city buses with young children on their way to the middle class, English-medium schools located in the former Asian residential areas. But the children from the better-off families in the Eastlands of Nairobi and peri-urban residences are fortunate to be driven to these distant but good quality nursery and primary schools.

The English-English nursery schools serve a social background whereby English is an integral part of the social life and for all practical purposes should be viewed as the mother tongue. Of course, the members of the social category that is served by English-English schools are racially and nationally mixed and English is only one of the languages learnt at home. As already pointed out, this is a confident social class and is served by

nursery schools which are heavily stocked with sophisticated educational materials and qualified teachers.

In summary, it has been adequately shown in the above analysis that nursery schools differ significantly in the use of language. Specifically, statistically significant relationships were obtained between the use of language and the geographical location of nursery schools in the city, the racial background of principals, the cost of nursery schools and ownership. These relationships are also very powerful. Out of the total sample of 57 nursery schools, 12 (about 21%) start teaching in vernaculars and Swahili and continue teaching in Swahili, in other words, these are technically Swahili medium nursery schools.

The largest percentage (43.9%) of nursery schools start teaching with a mixture of Swahili, English and even vernacular but move as quickly as possible to English. Indeed, this Swahili-English category may be contributing the most to the process of qualitative social change by socialising children who can only understand and express themselves in vernaculars and Swahili to understand and express themselves in the English language. The remaining 35.1% of the nursery schools in the sample start teaching in English and continue with

it. These are the schools that serve children who are born in a social background where English is commonly used. These findings lead to the conclusion that there is unequal access to the English language among the nursery schools in favour of the children born in the privileged social groups. Yet, English is the language that is solely rewarded in the educational system and to a very large extent in the occupational structure in Kenya.

Therefore, on the basis of the evidence presented, the implementation of the proposed language policy (Development Plan 1979-83:154)[7] will mean continued English medium for the ruling class and use of vernaculars by the other social groups at least upto standard 4. Yet, all children will be expected to have learnt adequate English by the end of seven years to be able to do the Certificate of Primary Education in English. It is obvious that the children who go to primary school with an understanding of English have a headstart over the others. Therefore, it is safe to say that the outcome of the new language policy will be a more controlled access to the English language in favour of the middle and ruling classes.

(b) ACADEMIC TRAINING AND PERSONALITY DEVELOPMENT OF NURSERY SCHOOL CHILDREN

In stressing the importance of social and technical requirements of adult roles, Bowles and Gintis (1976)[8] define labour power as the:

> "....ability of the individual to contribute to the production process in its current technical and organisational form and includes the worker's physical, and mental skills and behavioural characteristics". (p. 75)

A review of the curricula shows that nursery schools promote physical, mental, emotional aesthetic and other potentials in children (see Appendix 7) as an example. For analytical purposes the nursery school activities that are listed in the time-table, were divided into three main categories: academic, non-academic or creative and play. The academic category consists of activities that are related to the transmission of literacy and numeracy skills. The non-academic category includes other learning activities that are taught formally in nursery schools such as drawing, painting, singing and rhymes. The play category is less involved and includes only free or supervised both outdoor and indoor play activities. In addition to the formal

curriculum, there is what may be defined as the hidden curriculum. The hidden curriculum constitutes mainly the behavioural traits that children are encouraged to develop such as initiative, confidence, conformity and so on.

It is immediately clear from table 15 that nursery schools spend on average more time on academic work than on creative activities and play irrespective of the cost category. The low-cost nursery schools spend about twice the time spent in creative work to teach the academic skills. The medium-cost nursery schools spend only a third more of the time while the difference in the average time spent on academic and creative work in high-cost schools is negligible.

Table 15: Time Spent in Teaching Various Aspects of Curriculum by the Cost Category of Nursery Schools

Type of Nursery School	Academic	Creative	Free Play	Number of Cases
Low-cost	124.29	61.07	54.64	14
Medium-cost	104.67	71.79	62.41	29
High-cost	100.36	96.79	46.07	14
All Nursery schools	108.42	75.09	56.49	57
Eta coefficients	.36	.49	.35	
Level of significance	.02	.001	.025	

It is also clear from table 15 that the low-cost nursery schools spend on average more time teaching academic skills (124.29) minutes per day than the medium-cost (104.67), and the high-cost (100.36) nursery schools. On the contrary, the high-cost nursery schools spend more time in creative work (96.79) than the medium-cost (71.79) and the low-cost nursery schools (61.07) respectively. These findings on the allocation of time suggest very strongly that nursery schools differ in the importance attached to the different aspects of the curriculum. The low-cost nursery schools are more oriented towards formal academic learning: reading, writing and number work than the medium-cost and

the high-cost nursery schools. Although the children in the medium-cost and the high-cost nursery schools are introduced to the academic concepts and the related technical manipulations, they are exposed more to the creative work than the children in low-cost schools.

The difference among nursery schools in the interpretation of the developmental requirements of the child is further seen in the differential allocation of play time. The high-cost nursery schools spend the least amount of time on free play followed by the low-cost and the medium-cost nursery schools respectively. One would expect the medium-cost nursery schools to spend less time in free play than the low-cost schools. However, this is not the case. The explanatory factors for this inconsistency are not immediately clear. But one main reason might be that the teachers in medium-cost nursery schools hold a simplistic interpretation of the child development literature which emphasises physical development. Furthermore, these nursery schools have expensive, well equipped outdoor play facilities.

Appendix 8 presents further evidence that supports the main finding that nursery schools differ in the amount of time allocated to the different aspects of curriculum. For instance, the European managed nursery schools spend less time in teaching academic work than the schools with

African and Asian principals. In fact, the African and Asian managed nursery schools spend on average virtually the same amount of time in teaching activities that are related to literacy skills. However, not all African managed nursery schools spend a lot of time teaching academic work. Appendix 8 shows that the Welfare Christian and Voluntary and City Council-Health nursery schools (all except two have African principals) spend less time in academic work than the self-help (harambee) and City Council education pre-schools.

(c) PERSONALITY DEVELOPMENT

As pointed out earlier, the hidden curriculum constitutes mainly the personality traits that nursery schools encourage children to develop. The following analysis on the developmental philosophy of the child is based on data that was obtained from the nursery school principals in response to the following question: "What kind of learning do you want the children to acquire?" There was no probing to avoid putting answers into their mouths. The responses that were volunteered were grouped into seven categories: intellectual, social, spiritual, physical, citizenship, conformity, and self-presentation. For example, a nursery school that cultivates personality traits such as confidence or initiative was seen as promoting the social aspect of the child. A school

where discipline and obedience is stressed, was seen as a centre whereby children are taught to conform to authority blindly. A school that encourages children to share and to help others was seen as a centre that trains children to be good citizens. The other three categories: physical, spiritual and self-presentation, are self-explanatory variables.

For the sake of brevity, I will limit the examination of the type of personal traits that nursery schools encourage in children to the social, intellectual, citizenship and conformity aspects. The hypothesis to be tested is that nursery schools differ on the basis of cost, in the personality aspects that children are encouraged to acquire. Table 16 shows that only 21.4% of the low-cost nursery schools encourage children to acquire social skills. On the contrary, an extremely large proportion of the medium-cost (69%) and high-cost (91.9%) nursery schools cultivate social skills in a child. In other words, the children who go to the low-cost nursery schools are not encouraged to be confident or to take initiative. Instead, about 50% of these schools encourage children to conform blindly to authority as table 17 shows. But none of the principals in the high-cost schools and only a negligible proportion in the medium-cost schools see it necessary to condition children into this oppressive attribute.

Table 16: Social Training by the Cost Category of Nursery Schools

Human Development in Social Skills	Type of Nursery School			Total
	Low-cost	Medium-cost	High-cost	
	Number of cases (%)	Number of cases (%)	Number of cases (%)	
Yes	3 (21.4)	20 (69.0)	13 (92.9)	36
No	11 (78.6)	9 (31.0)	1 (7.1)	21
Total	14(100.0)	29(100.0)	14(100.0)	57

X^2 = 16.20 df = 2 Sig.lv. = .0003
Contingency coefficient = 0.47

Table 17: Training Children to Conform to Authority by the Cost-Category of Nursery Schools

Encourages Children to Conform to Authority	Type of Nursery School			Total
	Low-cost	Medium-cost	High-cost	
	Number of cases (%)	Number of cases (%)	Number of cases (%)	
Yes	6 (42.9)	6 (20.7)	0 (0.0)	12
No	8 (57.1)	23 (79.3)	14 (100.0)	45
	14(100.0)	29(100.0)	14(100.0)	57

X^2 = 9.82 Sig.lv. = 0.044
Contingency coefficient = 0.38

There is not a single principal in the low-cost nursery school category who mentioned that children are encouraged to develop their intellectual potential. But some of the medium-cost (20.7%) and about a half (42.9%) of the high-cost schools were reported as centres that cultivate intellectual development in the child.

Lastly, I would like to examine the relationship between citizenship training and the cost of nursery schools. Table 18 indicates very clearly that a higher proportion (62.1%) of the medium-cost nursery schools encourage children to learn to share and to 'help others' than in the low-cost and high-cost schools.

Table 18: Citizenship Training by the Cost Category of Nursery Schools

Encourages Children to Acquire Citizenship Skills	Type of Nursery School			Total
	Low-cost	Medium-cost	High-cost	
	Number of cases (%)	Number of cases (%)	Number of cases (%)	
Yes	5 (35.7)	18 (62.1)	5 (35.7)	28
No	9 (64.3)	11 (37.9)	9 (64.3)	29
Total	14 (100.0)	29 (100.0)	14 (100.0)	57

X^2 = 27.7 Sig.lv. = 0.0061

Contingency coefficient = 0.57

Generally the low-cost nursery schools lack both play and educational materials. Therefore, it is only logical that children are not encouraged 'to share'. Of course, there are forms to sit on although in some schools children sit on the floor. On the contrary, the high-cost schools are heavily supplied with play and educational materials. In fact, during the fieldwork I used to view them as supermarkets for children's educational materials. Here, a child does not need to be encouraged to share because there are enough toys, pictures, books, puzzles and all that adds to an expensive nursery school for children to play or work with. Thus, the similarity between the low-cost and the high-cost nursery schools in the approach to citizenship training derives from totally different material bases. On the one hand, the low-cost nursery schools reflect the extreme material deprivation among the poor. On the other hand, the high-cost nursery schools reflect the material wealth of the rich. Unlike these two nursery school categories, the medium-cost schools have only limited play and educational materials; hence, the need to educate children/the ability 'to share'. / on

So far I have shown in this chapter that nursery schools differ in the socio-educational content exposed to children on the basis of cost and other determining variables. But it has not

been easy to explain why for instance the low-cost nursery schools spend more time teaching literacy and other related skills than the medium-cost and the high-cost schools. No doubt, one of the main intervening factors is the educational attainment and training of the teachers. Table 19 shows that nearly all of the teachers in the low-cost nursery schools are primary school graduates. There are only a few with secondary education and none at all with post-secondary education. In fact, there is only one teacher with primary education in the high-cost nursery school category. Furthermore, the medium-cost and high-cost nursery school categories have substantial proportions of teachers with post-secondary education.

Table 19: The Level of Formal Education of Teachers by the Cost Category of Nursery Schools

Type of Nursery School	Education of Teachers			Total
	Primary	Secondary	Post-secondary	
Low-cost	16 (76.19)	5 (23.81)	0 (0.0)	21(100.0)
Medium-cost	52 (36.11)	88 (61.11)	4 (2.78)	144(100.0)
High-cost	1 (1.1)	60 (66.67)	29 (32.22)	90(100.0)
Total	69 (27.06)	153 (60.00)	33 (12.94)	255(100.0)

Nursery schools also markedly differ in the levels of training attained by the teachers Table 20 shows that there is not a single teacher with teaching or medical diploma and teaching certificate in the low-cost nursery schools. Only a half have had brief training sessions in nursing, childcare and nursery teaching. The other half are untrained. On the contrary, about a third of teachers in the medium-cost nursery schools are properly certified. Teachers in the high-cost nursery schools are even more qualified in nursery teaching. Indeed, more than 50% of teachers in the latter category have teaching certificates and both teaching and medical diplomas. Only, a negligible proportion has been exposed to brief training sessions while about 40% are untrained.

Table 20: Teacher Training by the Cost Category of Nursery Schools

Type of Nursery School	Qualification of Teachers					
	Teaching Diploma or Higher	Medical Diploma	Primary Teaching Certificate P1 - P4	Some Nursery and Childcare Training	Untrained	Total
Low-cost	0 (0.0)	0 (0.00)	0 (0.0)	11 (52.38)	10 (47.62)	21 (100.0)
Medium-cost	28 (17.28)	2 (1.23)	31(19.14)	55 (33.95)	46 (28.39)	162 (99.99)
High-cost	39 (41.94)	6 (6.45)	4 (4.3)	4 (4.3)	40 (43.01)	93 (100.0)
Total	67 (24.28)	8 (2.89)	35(12.68)	70 (25.36)	96 (34.78)	276 (99.99)

Tables 19 and 20 reveal a consistent difference among the cost categories: low-cost, medium-cost and high-cost in the level of education and training of teachers. On the one hand, the low-cost nursery schools have the least educated and trained teachers. On the other hand, the high-cost schools and to a less extent the medium-cost nursery schools have highly qualified teachers both in terms of formal schooling and training. After all, the owners of the medium-cost and high-cost nursery schools can afford the services of these highly educated and qualified teachers. Thus, without state intervention, nursery schools reproduce the inequality among the social groups at the socio-educational sphere. In other words, schools that serve children from poor backgrounds can only afford the services of lowly educated teachers since the parents cannot pay high fees. But nursery schools that serve the wealthy in Nairobi, employ qualified teachers from the high fees charged.

SUMMARY

(1) It has been shown in this chapter that nursery schools differ on the basis of cost in language use, allocation of time to the different aspects of curriculum and the personality traits that children are

encouraged to develop. The low-cost nursery schools are Swahili medium centres. In addition, they spend more time in academic work than the other cost categories. This concern with the teaching of literacy and numeracy is further emphasised by the minimum amount of time spent on creative work and the blind conformity to authority that children are expected to demonstrate. These are also the schools with the least educated and trained teachers.

(2) It was also found that the medium-cost nursery schools are language melting pots whereby children are quickly transformed into proficient users of English. The acquisition of the English language is extremely important for these children since they later on go to the English medium primary schools in Nairobi. The medium-cost nursery schools spend less time on academic work and more on creative activities than the low-cost schools. They are also the schools whereby the children are expected to 'learn to share' more than in the low-cost and the high-cost schools.

(3) The children in high-cost nursery schools are exposed to the English language all the time. These schools are English-medium per excellence. Nearly all of them are managed by white principals and taught by white teachers. The teachers in these schools are more educated and trained than the teachers in the other cost categories. The presence of this calibre of teachers may explain the finding that the high-cost nursery schools spend less time in teaching academic work and more time in creative activities than the other types of nursery schools. Of equal importance is also the fact that the high-cost nursery schools serve children from a social class background that is more concerned with the intellectual development of a child than mere acquisition of literacy skills.

Footnotes to Chapter Five

1. Bernstein, Basil, Class, Codes and Control. Vol. I. Routledge and Kegan Paul, London, 1971, p. 174.

2. Ibid., p. 172.

3. Montessori, Maria (1973) The Absorbent Mind (translated by Claude, A. Claremont). Kalakshetra Publications, Madras, India.

4. Bernstein, Basil, op.cit., p. 61.

5. Kenya Education Commission Report, Part I, 1965, para. 171.

6. The Report of the National Committee on Educational Objectives and Policies, Government Printer, Nairobi, December 1976, p. 54.

7. Republic of Kenya. Development Plan 1979-1983, Part I, Government Printer, Nairobi, 1978.

8. Bowles, S., et.al. Schooling in Capitalist America: Educational Reform and the Contradictions of the Economic Life. Basic Books Inc. Publishers, New York, 1976, p. 75.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The aims of this chapter are as follows: First, to recapitulate the major findings and conclusions. Second, to make some policy recommendations. Third, to suggest areas of further research.

The development of nursery education by the City Council, church, self-help committees, welfare institutions and entrepreneurs has taken a pattern which parallels the structure of primary education. The two educational sectors have three basic categories interlinked by the flow of children from the nursery schools to the primary schools. The three categories are: the low-cost, medium-cost and the high-cost nursery and primary schools. Indeed, it was found that the fees parents pay in nursery schools are strongly related to the primary school outcome index (Pearson r = 0,899; sig.lv.=0.001. In other words, as much as 81% of the variation in the primary school outcome index is explained by the fees charged by the pre-school attended. Briefly, what this very strong relationship between the fees parents pay for nursery education and the type of primary schools entered by their children mean is that the children of the poor who only afford to send children to the cheap nursery schools are only admitted into the

low-cost, poor quality, schedule A primary schools. But the children of the wealthy go to the expensive good quality government maintained and private schools obviously because the parents afford to pay the prohibitive fees charged by the expensive nursery schools.

It was also found that the geographical location of nursery schools, the race of the principal and the type of ownership are good proxies of the fees charged by nursery schools in accounting for the variation in the primary school outcome index. The eta squared for the geographical location = 0.78, race of the principal = 0.59 and for the type of ownership = 0.64. The relationship between these three variables with the primary school outcome index (entered primary schools) is highly significant (s.lv.= 0.0001). The fees charged by nursery schools and where they are located in the city testifies that there is a continued residential segregation in Nairobi once based on race but now on the economic power of the various social classes. The race of the nursery school principal is no longer as important as the other two variables because after independence the expensive city council and some of the church nursery schools co-opted Africans into management positions.

There is sufficient evidence to conclude that the development and structure of both the nursery and primary education reflects the existence of inequality among the different social classes. A child who is born in Mathare Valley, is destined to go to a self-help, low-cost and poor quality nursery school in the community and finally to a low-cost, and poor quality nearby primary school. But a child born in a wealthy family in the exclusive suburbs in the city finally goes to the costly nursery and primary schools. Where do the two worlds meet?

The majority of children who attend the low-cost nursery and primary schools drop-out at the end of primary education. What else can they do as adults but join the ranks of manual workers in industry, tertiary services, petty commodity production and trading and the unemployed? Of course the few who are able to climb the educational ladder and perform well in subsequent examinations have an opportunity to secure well paid jobs in the labour market.

In contrast, the children from the families that can afford to spend large sums of money in nursery schools have the privilege of a guaranteed educational mobility up to the tertiary level, thus legitimising the future leadership positions.

that they will occupy in the occupational structure. In addition, some of these children are born in a family background that they can draw upon through personal contacts to secure well paid jobs later. Obviously this social class is not homogeneous. There is a fraction mainly the clerks, supervisors and middle managers, who according to my judgement are benefitting tremendously from the present structurally inter-linked nursery and primary education. Their children are born in a social background that is mainly concerned with the physical development but generally unresponsive to the mental growth of the child. Furthermore, the early socialisation of the child is mainly done through the mother tongue other than English. They therefore buy the support of the English medium nursery schools at the earliest possible time so as to prepare the child for the good quality English medium primary schools. However, some of the English-medium nursery schools are very costly and are managed mainly by European principals. These nursery schools admit children of the very rich both local and foreign. They are also profit making ventures. But the nursery schools/belong to the Christian Church, Asian / that and other welfare organisations and the government charge fees that a family in the middle income level can pay. No doubt, this is an indirect

subsidy that the church and the state is giving to the middle class for its intergenerational reproduction at the educational and by implication the economic levels. This is not the first time the church and the state have taken a similar position in the development of social groups. Historically the two, have jointly developed the middle class in Kenya under the label of nation building. The correlations between the fees and the primary school outcome index for the service and private nursery schools are 0.60 and 0.92 respectively. The lower correlation for the service nursery schools suggest that the sponsors are more concerned with the reproduction of the middle class whose services are vital for the survival of the existing society than in extracting the economic rent for the educational opportunity offered.

If the customer for pre-schools is basically buying access to primary education, then some pre-schools are overcharging. These are the schools that deviate far above the regression line between the fees charged and the primary school outcome index. These schools operate in a near monopoly market situation for several reasons. First, a school may be located far away from other nursery schools and mainly serves families whose class position does not allow them

to send children to better quality schools. Second, the nursery school may guarantee a child educational mobility because of being vertically integrated with a primary and a secondary school.

Nursery schools also differ in the way they educate and socialise children. The observed differences in the use of language, shows that the low-cost nursery schools operate outside the English socio-linguistic system. But the medium-cost nursery schools admit children who can only express themselves in vernaculars, Swahili or both but quickly transform them into fluent English users. The high-cost nursery schools are English-medium schools that serve children from a social-linguistic background that uses English as the mother tongue. Similarly, the use of language is both strongly and significantly related with the geographical location and racial origin of the principal (s.lv=0.0001). Furthermore, all the Swahili-Swahili nursery schools are self-help schools and only one nursery school in the Swahili-English category is self-help school. All the other Swahili-English and English-English nursery schools are either market or non-market schools (contingency coefficient = 0.70; s.lv=.0001).

The findings based on the use of language indicate very clearly that there is unequal access

to the English language among the nursery schools in favour of the children born in the privileged social backgrounds. While the children who are into the poor families are virtually excluded from any use of English at all both at home and in the nursery schools, the children of the ruling class both local and foreign are born into an English speaking social-linguistic environment and later on go to exclusive English-medium schools taught by teachers who use English as mother tongue. Unlike these two nursery school categories, the medium-cost are language melting pots whereby the children of the upwardly mobile families are socialised from the use of vernaculars into the English language. The early masterly over the English language is an invaluable resource since this is the language that is solely rewarded in the educational system and to a large extent in the occupational structure in Kenya.

Nursery schools also differ in the value attached to other aspects of child development. The low-cost nursery schools are more oriented towards formal academic training: reading, writing and number work than the medium-cost and the high-cost schools. Although the latter two categories, also introduce children to academic concepts and other related technical manipulations, they are also responsive to the

creative and aesthetic needs of the child. For instance, the low-cost nursery schools spend more time on average in teaching children literacy skills (124.29 minutes per day) than the medium-cost (104.67) and the high-cost (100.36) schools. Similarly, the low-cost nursery schools spend on average less time (61.07 minutes per day) than the medium-cost (71.79) and the high-cost schools (96.79) in teaching creative skills.

There are clear differences in the ideology of personality development nursery schools expose to children. According to the nursery school principals, the low-cost nursery schools encourage children to be submissive to authority. Indeed the very organisational set up in these schools; oppressive discipline due to lack of educational materials and poorly educated and trained teachers, conditions children to fear and obey blindly the existing authority structure. This conditioning has far-reaching implications in that these are the children who will occupy subordinate adult roles in the occupational structure. These are also the same children who are not expected to learn to share since there is nothing for them to share with the other children in the nursery school.

The findings based on the low-cost nursery schools manifest the fundamental characteristic of the poor: the overriding concern to subsist since their material position does not allow them to pursue self-actualising goals.

On the contrary, the medium-cost and high-cost nursery schools, encourage children to learn to be confident and creative. They are also taught to value and enjoy work and to obey reason. The children who attend these schools come from affluent families whereby basic necessities of life are guaranteed, hence the response to self-actualising objectives (Maslow, 1973:56). However, there is one main distinction between the medium-cost and the high-cost nursery schools. The former encourage children to learn to share while schools in the latter category do not. This distinction is a reflection of the difference in the material wealth that the two social backgrounds served by the medium-cost and high-cost nursery schools command. The high-cost nursery schools are heavily equipped with educational materials, while the medium-cost schools have only a few to be shared among the children.

Precisely, nursery education in Nairobi has unequal outcomes both in the type of primary

schools entered and in socio-educational development of the children. But these outcomes are only a reflection of the inequality among the social groups that these nursery schools serve.

The structure of nursery schools in the rural Kenya tends to be homogeneous with a few exceptions in the small towns found in the former European occupied areas. But there are indications that even the rural day care centres will be stratified over time. Already in some rural districts there are county council assisted nursery schools which are more expensive than the ordinary self-help day care centres. Thus, the case of Nairobi may be a good example of the structure of nursery education in future.

POLICY SUGGESTIONS

(1) The government should coordinate and supervise all the nursery schools. It should also provide guidelines into the amount of fees parents may pay per term or month, standardise the content of the socio-educational activities including the use of language and the training of teachers.

(2) So far, the state entrusts mainly the parents and nursery schools with the educational and socialisation duties of the children. But the only example of nursery school management available locally is the western model: its literature such as the Lady Bird books that depict the 18th century England and the rhymes and songs loaded with the mannerisms of the affluent. This orientation which emphasises the Anglo-Saxon culture of the affluent alienates the children from the Kenyan material culture. Therefore there is an urgent need to produce relevant educational materials that encourage children to identify themselves as Kenyan nationals.

(3) But it is not possible to give every child an equal opportunity to develop the personal potential: intellectual, creative and aesthetic unless the state restructured equitably the control of production and the distribution of the material wealth and services. It is only after the poor are liberated from the struggle to satisfy the basic needs: food, shelter, clothing, and good health that their human potentialities can be realised.

(4) The government high-cost primary schools should charge full tuition, i.e. eliminate subsidy. After all, the members of the middle class who fail to place children in these schools send them to the private schools.

(5) The language policy should be reviewed. The existing language policy whereby English is the medium of instruction penalises the children from the poor families.

FURTHER RESEARCH

(1) In this thesis nursery education has been evaluated on the basis of flow of children into primary schools and the socio-educational activities that are presented to children. It is also necessary to evaluate the acquisition of academic and social skills among the children through tests at the end of nursery school work. In addition, a follow-up study should be done to determine whether children with pre-school experience perform better in primary school work than children who lack this experience.

(2) Research should be done to identify as clearly as possible the social class background and aspirations of the parents with children in the different cost-categories of nursery schools.

(3) There is also a need to identify the trend and factors that influence the development of nursery schools in the rural areas. Any study in this area should not rule out the possibility that the development of rural nursery schools will follow a pattern similar to what has been found in Nairobi.

Footnote to Chapter Six

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Appendix 1

REPORT TO WORKS AND TOWN PLANNING COMMITTEE AND PUBLIC DAY NURSERIES, NURSERY SCHOOLS, KINDERGARTEN ETC.

INTRODUCTION

Considerable concern has been expressed by the Departments of the Council concerned with the approval and inspection of private Pre-School Education facilities by the misuse of the premises after approval and incorrect information supplied in the first instance due to varying requirements dependent upon the description of the premises. To simplify both the approval and subsequent inspection for licensing purposes the following policy is recommended to the Committee for approval.

(1) DEFINITION

For the purposes of this policy all pre-school facilities (hereafter called 'the nursery') containing or registered for 10 or more children shall conform to the requirements hereinafter specified irrespective of the definition of use applied to the application.

(2) GENERAL REQUIREMENTS

2.1 HEALTH: The standards are to be as laid down by the Medical Officer of Health, Nairobi City Council.

2.2 EDUCATION: The City Education Officer will satisfy himself of the need for the type of education required and SHALL require the premises to be registered as an educational institution.

2.3 TOWN PLANNING: In all cases a change of use to EDUCATIONAL will be required.

(3) DEPARTMENTAL REQUIREMENTS

3.1 TOWN PLANNING SECTION

3.1.1 Land Uses on Plot

(a) The primary use of the plot shall be Educational and an application for a change of use from the existing use (unless that is educational) shall be made in the first instance.

(b) Residential accommodation will be permitted on the plot upto a maximum of 1 (one) dwelling unit plus servant quarters but must be physically separated from the nursery buildings and no connection to the nursery buildings will be permitted and the land use to be restricted to 40% of the plot.

3.1.2 Geographical Distribution

(a) Within low density areas (minimum plot size ½ acre) no new nursery will be permitted within a ½ mile (1 kilometre) radius of an existing nursery.

(b) Within medium and high density, areas (¼ acre plots or less) the numbers of nurseries will be determined by the population requirements and sites will be earmarked for development by either public or private agencies.

3.1.3 Development of the Site

(a) Open air play spaces shall be provided as required by the Medical Officer of Health and such spaces shall be safely sited and/or fenced to ensure that there is no danger to the children. The spaces may only be used either for play or open-air teaching.

(b) Sufficient space shall be provided within the plot for vehicles depositing, collecting or awaiting for the children, to be accommodated without interfering with traffic flows on the adjacent road.

3.2 MEDICAL OFFICER OF HEALTH

3.2.1 General Lay-out

(a) The premises including class-rooms, office, reception, playing area, kitchen facilities and sanitary accommodation must be self-contained and must be separated from servants quarters by a fence or other suitable means.

(b) Premises must have waterborne sanitation throughout.

(c) All Nurseries must have an adequate out-door playing area exclusive to the Nursery.

(d) Only ground flocr premises will be licensed.

(e) Nursery schools will not be permitted in flat development except as a specially designed separate building within the plot.

3.2.2 Structures

(a) The premises must be of sound construction and comply with the Building By-Laws in all respects, particularly as regards sanitation, lighting and ventilation.

NOTE

Attention must be given to the adequacy of the septic tank, conservancy tank and waste water disposal to deal with the additional load.

(b) The number of pupils permitted will be based on an allocation of 12 sq.ft. ($1m^2$) of floor space per pupil in classroom (the minimum size of classroom permitted will be 240 sq.ft. ($22m^2$) and 27 sq.ft. ($25m^2$) and 27 sq.ft. ($25m^2$) per pupil for open air play space.

3.2.3 Sanitary Accommodation

(a) Water closets shall be provided at the rate of one W.C. for every 10 pupils. Where new W.C.'s are to be provided, consideration should be given to the installation of fittings suitable to the age of the pupils to be accommodated.

(b) Wash hand basins shall be provided at the rate of one basin for every 10 pupils.

(c) Staff: Sanitary accommodation for staff shall be provided at the rate of 1 W.C. for 1 to 12 staff plus wash hand basins at the same ratio.

3.2.4 Kitchen Facilities

Kitchen facilities must be adequate both as regards cooking and washing-up i.e. a kitchen of not less than 100 sq.ft. with at least 2 stainless steel sizes ($9.3m^2$).

3.2.5 Safety

All necessary precautions must be taken by means of the provision of fences (chain link or other approved) and gates to prevent the pupils gaining access to roads, rivers, waste water pipes or other places liable to be dangerous.

3.2.6 Staff

The number of supervisory staff required should be in accordance with the following table:

Group 1: Ages 0 - 2 years.

1 Supervisor for every 6 infants

OR

1 Supervisor + 1 Assistant for every 8 infants.

2 Supervisors + 1 Assistant for every 14 infants.

Supervisors looking after this group of children must have had recognised training in the care of infants. One supervisor must be a K.R.N. or K.R.M.

Group 2: Ages 2 years to 3 years

1 Supervisor for 6 toddlers
2 Supervisors for 14 toddlers
3 Supervisors for 24 toddlers
4 Supervisors for 36 toddlers
5 Supervisors for 50 toddlers

Additionally

1 Assistant for 4 toddlers
2 Assistants for 8 toddlers
3 Assistants for 14 toddlers
4 Assistants for 20 toddlers
5 Assistants for 30 toddlers

NOTE: If assistants are employed then one supervisor is required for every 2 assistants as follows:

1 Supervisor
1 Assistant) for 10 teachers

1 Supervisor
2 Assistants) for 14 toddlers

2 Supervisors
2 Assistants) for 22 toddlers

Group 3: Ages 2 years to 4 years

1 Supervisor for every 12 children
1 Assistant for every 8 children

1 Supervisor
1 Assistant) for 20 children

1 Supervisor
1 Assistant) for 28 children

No supervisor should have more than two assistants. If therefore a nursery has 3 assistants, a second supervisor must be employed.

Group 4: Over 4 years old

1 Supervisor for 20 children
1 Assistant for 15 children

Thus 1 Supervisor
1 Assistant } for 35 children

1 Supervisor
2 Assistants } for 50 children

NOTE: Where assistants are employed, one supervisor is required for every 2 assistants.

DEFINITIONS

'Supervisor' an adult with at least one of the following qualifications:

(1) Having had recognised child care training e.g. enrolled Child Care (E.C.C.) Nurse or Montesori training.

(2) A qualified teacher of at least P3 level.

(3) A qualified nurse

NOTE: The Officer authorised by the Town Clerk to the City of Nairobi can demand evidence of the qualifications required prior to approving the nursery or in the course of his (or her) inspections.

'Assistant' means an adult with at least seven years of formal education.

If Nurseries where food is served, cooks and domestic staff will be required. The number of cleaners employed will depend upon the number of pupils in the nursery and the staff employed to take care of the pupils may not be for cleaning and cooking duties, etc.

Appendix 2

SAMPLE STANDARD ONE ADMISSION TEST

Name ----------

Sex ----------

1. Good morning!
2. How are you?
3. What is your name?
4. WRITE NUMBERS 1 TO 10 (in any order)

---

5. COUNT AND WRITE:

=

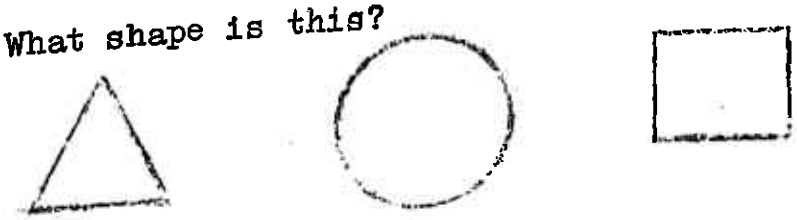
=

=

=

=

6. What shape is this?



7. Name the colours shown on a separate piece of paper.

8. What is this letter? (Examiner points out different letters)

B D F E G J I H K M

L C A

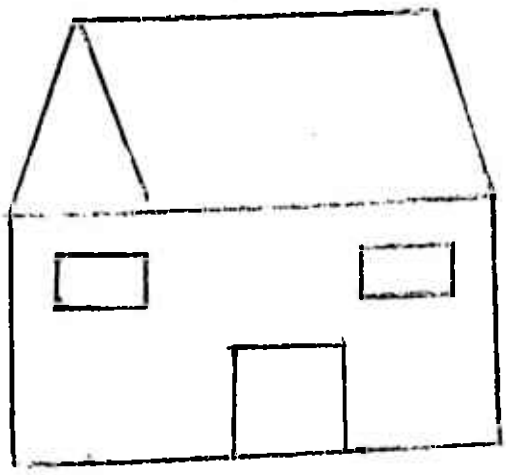
9. Write down the remaining letters of the alphabet.

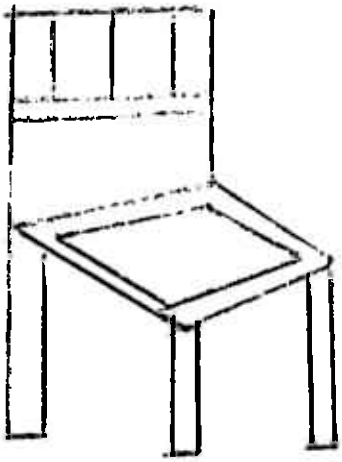
---

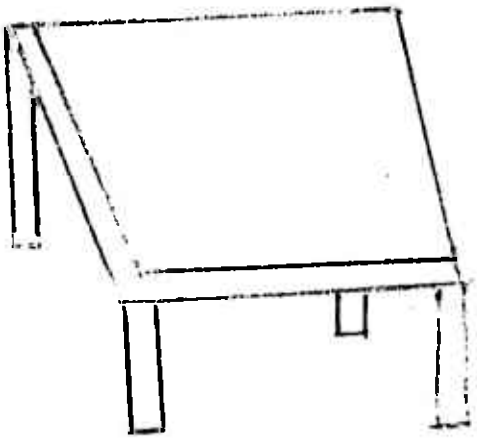
10. Name all the pictures shown on a different sheet of paper.

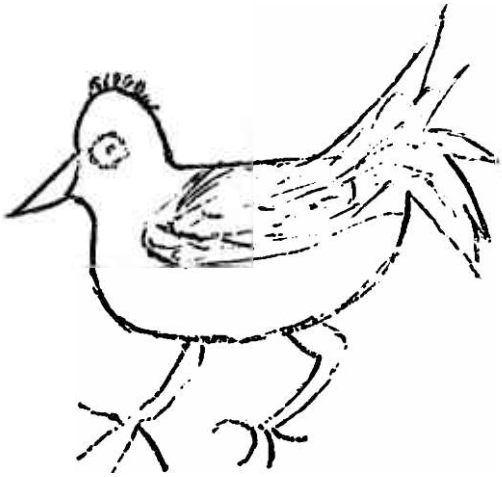
Total Marks: _____ Out of 60

** I am indebted to J. Nkinyangi for his permission to use this Standard One admission test.









ENTRY REQUIREMENTS IN HIGH-COST PRIMARY SCHOOLS WITHOUT SELECTION EXAMINATION

Notes on Admission Into Standard I

1. All application forms must be back before _____

2. The school committee will consider applications of children born in _____ only.

3. All applications MUST be accompanied by a photostat copy of the child's birth certificate. Later, originals will have to be produced for verification before the child is offered a place.

4. All applications MUST be accompanied by a Nursery School report or letter.

5. All applications MUST be accompanied by a recent Water/Light Bill photostat copy as proof of residence.

All application forms will be acknowledged by _____ and NOT earlier.

An example of a Nursery School Leaving Certificate

Name _____ Date _____

Subject	Marks Gained	Remarks
Religion	A	V. good. Always eager to answer
Reading	A	Has a good accent and a good flow of words
Writing	B	Has a neat and clean hand
Recitation	A	V. good. Recites very well
Arithmetic	A	Excellent. A careful worker
Drawing	B	Has a good hand for art
Handwork	A	Has very good idea and imagination
Hygiene	A	Always neat and tidy
P.E.	B	Very keen

Conduct: Good. A very obliging child.

General Report: _____ is a very steady and keen pupil. She is making very good progress. She must keep it up.

Next term begins: ----------

Code: A - Excellent B - Good C - Fair

Signed: ----------
PRINCIPAL

Appendix 3

THE MAJOR CHARACTERISTICS OF NURSERY SCHOOLS

No.	Name of School	Type of School	Fees per term Shs. 1976	Geographical Location	Race of Principal	Language Use	Primary School Outcome Index	1976 Enrolment	1976 Output	No. of Teachers
01	Muthaiga	1	450	3	1	3	3.0	36	36	2
02	Karen	1	450	3	1	3	3.0	38	36	2
03	Uhuru	1	300	4	1	2	1.04	42	42	2
04	Madaraka	1	300	4	1	2	1.7	40	40	2
05	Kariobangi	1	300	1	1	2	1.1	34	30	2
06	Joseph Kangethe	2	540	3	1	2	2.18	120	50	7
07	Lady Northey	2	540	3	1	2	2.67	75	14	6
08	Nairobi West	2	390	2	1	2	1.18	56	25	5
09	State House	2	390	3	2	2	2.43	102	40	4
10	Ziwani	2	225	1	1	2	1.78	100	70	6
11	Bahati	2	225	1	1	2	1.16	85	48	6

No.	Name of School	Type of School	Fees per term Shs. 1976	Geographical Location	Race of Principal	Language Use	Primary School Outcome Index	1976 Enrolment	1976 Output	No. of Teachers
12	Dr. Barnados	3	360	2	1	2	1.72	33	20	3
13	All Saints	4	450	3	1	3	3.8	200	17	9
14	Nairobi School	3	15	3	1	2	1.0	48	30	1
15	Mana Ngina	3	390	2	1	2	2.0	45	20	2
16	K.S.T.C.	3	250	4	1	2	1.57	118	30	4
17	Vive Kanand	5	225	2	2	3	2.00	115	40	5
18	Consolata	4	520	3	3	3	3.88	125	50	5
19	Waridi	4	360	3	1	3	3.34	115	44	5
20	St. Andrews	4	570	3	1	3	3.40	130	25	8
21	Mariakani C.C.	4	390	2	3	2	2.0	120	50	10
22	Nairobi Baptist	4	470	3	3	3	3.38	130	35	10
23	St. Joseph Jericho	4	450	1	1	2	2.2	160	30	8
24	Visa Oshwal	5	240	2	2	2	2.9	350	125	16

No.	Name of School	Type of School	Fees per term Shs. 1976	Geographical Location	Race of Principal	Language Use	Primary School Outcome Index	1976 Enrolment	1976 Output	No. of Teachers
25	Cockar	6	300	4	2	2	2.25	9	4	1
26	Rahima	6	300	4	1	2	1.14	18	13	2
27	St. Judes	6	320	2	2	3	2.43	70	28	6
28	Okwara	6	300	4	1	2	2.25	18	8	1
29	Lenana	6	700	3	2	3	2.78	18	9	1
30	St. Ann's	6	630	3	2	2	3.16	320	140	30
31	Happy Hours	6	600	2	2	3	2.17	18	17	2
32	Sclatters	6	720	3	2	3	2.2	75	20	5
33	St. Teresas	6	405	2	2	2	2.43	115	60	7
34	Jack & Jill	6	600	2	2	2	2.25	100	17	5
35	Wonderland	6	420	4	2	2	2.0	12	9	2
36	Greengates	6	900	3	3	3	4.36	180	30	7
37	Riverside	6	100	3	3	3	4.46	56	20	5
38	Kestrel Manor	6	1200	3	3	3	4.92	155	52	9
39	Riara	6	960	3	3	3	4.45	80	18	4
40	Westlands	6	1400	3	3	3	4.80	98	22	6
41	Jambo	6	700	3	2	3	3.83	40	12	3
42	St. Stephen's	6	1050	3	3	3	4.57	62	22	5
43	Pelican	6	750	3	3	3	3.67	34	12	4

No.	Name of School	Type of School	Fees per term Shs. 1976	Geographical Location	Race of Principal	Language Use	Primary School Outcome Index	1976 Enrolment	1976 Output	No. of Teachers
44	Brookhouse	6	1200	3	3	3	4.63	120	48	6
45	Village One	7	16	1	1	1	1.0	52	42	2
46	Village Two	7	18	1	1	1	1.0	70	66	2
47	Village Three	7	15	1	1	1	1.0	55	23	2
48	Village IVA	7	16	1	1	1	1.0	50	40	1
49	Village IVB	7	18	1	1	1	1.0	17	8	1
50	Ngei I	7	18	1	1	1	1.0	25	18	1
51	Ngei II	7	18	1	1	1	1.0	26	8	-
52	Thayu	7	12	1	1	1	1.0	138	100	2
53	Kanu	7	17	1	1	1	1.0	68	50	1
54	Kariobangi	7	60	1	1	1	1.0	150	115	3
55	Gitathiru	7	45	1	1	1	1.16	64	43	1
56	Baptist	7	135	1	1	2	1.1	49	26	2
57	Mango	7	30	1	1	1	1.0	40	36	2

(see next page for key to appendix 3)

Key to Appendix 3

* Type of School

1 - Pre-school unit
2 - City Council Day Nursery
3 - Welfare - Voluntary
4 - Welfare - Christian
5 - Welfare - Asian
6 - Private
7 - Self-help (Harambee)

1

** Geographical Location

1 - Former African residential areas
2 - Former Asian residential areas
3 - Former European residential areas
4 - New middle class estates

200

1

*** Race of Nursery School Principal

1 - African
2 - Asian
3 - European

**** Language Use

1 - Swahili medium
2 - Initially Swahili but quickly moved to English medium
3 - English medium

Appendix 4

PRE-PRIMARY EDUCATION IN NAIROBI

Interview Schedule

Dear Principal,

Below are/series of questions designed to ∠ a get some information on Pre-primary Education in Nairobi. This information will be used to study its development. I also hope that these findings will be of value and interest to you in your work when they become available.

Thank you for your cooperation.

Name of School: _____

Location of Premises: _____

Name of Principal: _____

Address and Telephone Number: _____

1. In what year did the school begin?

2. When did you start being principal of this school?

3. How long is your list of applicants for 1977?

   Is this list closed?

4.a. Has the school any admission requirements?

   b. Do you give preference to applicants with brothers or sisters at the school?

   c. Do children need to know English before admission?

5.a. What fees does/school charge at present? / the How long has the school fees remained at this rate? What were they previously?

b. Are fees paid monthly or by the term?

6. Does the school receive any financial assistance in the form of private donations of funds, equipment etc. If yes, about how much private assistance can you count on each year?

7. How large is the teaching staff? Please indicate for every teacher, age, educational attainment, training, experience, ethnic origin and salary.

8. On what basis are children grouped? (age, ability, other)?

9. How large is each group?

10. Is there a religious majority at the school? What religious minorities are there?

11. Is any religious knowledge taught? If yes, give details.

12. What is the total and ethnic ratio of the enrolment? What was it when the school started, 1970, and 1974?

13. What is the language of instruction? Are any other languages taught in the school? If the language of instruction is English, what is your policy regarding children who do not speak English when first admitted?

14. Do parents make specific requests as to what they would like their children to be taught? If yes, what?

15. What language do the parents want their children to use at school? Why?

16. Which parent talks to you about the development of the child? Father or Mother?

17.a. What kind of learning do you want the children to acquire?

b. About how many hours do you give each week to teaching?

Topic	Age of Children			
	3-4	4-5	5-6	3-6
Reading				
Writing				
Arithmetic				
Music				
Drawing				
Handicrafts				
Free Play				
Others (specify)				

18. How many children went to primary schools last year? Please give names of the primary schools and the number of children admitted into each school.

19. How many children have applied for standard I next year? How old are they? Please give names of the primary schools that parents may have told you they have submitted names of their children for standard I selection.

20. Do you give children help to be admitted into primary school? What kind of help? (Probe).

21. Are applicants for standard I required to attend interviews?

1. Yes 2. No 3. Do not know

If yes, when did interviewing become part of the admission requirements and why?
If you answered 'NO' please explain on what basis are primary one entrants selected.

22. What is your age?

1. 20 years or under
2. 21-25 years
3. 26-30 years
4. 31-35 years
5. 36-40 years
6. 41-45 years
7. 46-50 years
8. 51-55 years
9. 56 years or over

23. Ethnic group:

1. African
2. Asian
3. Goan
4. European
5. Arab
6. If other, specify.

24. Do you have any professional qualifications? If yes, please give the name of the country, training college, type of training, and year.

25.a. How many years' experience of nursery teaching have you had?

b. For how many years have you taught in nursery schools in Kenya?

26. Did you do any other work before you became a nursery school teacher? If yes, give details.

27. If you have any comments you would like to make about nursery schools, primary schools or this questionnaire, please write them here. They will be much appreciated. Once again, thank you.

Appendix 5

SPSS DATA LAYOUT: PRE-SCHOOL EDUCATION PROJECT

Cols.	Field Name (8)	Size Total	Variable Labels (40)	Values and Value Labels (20)
1-2	ID	2	School Number	1 - 57
3	CD	1	Card Number	Always 1
4	Type	1	Type of Nursery School	1 - Pre-school unit 2 - City Council 3 - Welfare, Voluntary 4 - Welfare, Christian 5 - Welfare, Asian 6 - Private 7 - Harambee
5-8	Fees	4	Fees per term (in shillings)	12 - 1400
9	Cost	1	Cost category	1 - Low-cost 2 - Medium-cost 3 - High-cost
10	Geoloc	1	Geographical location	1 - Former African 2 - Former Asian 3 - Former European 4 - New Estates
11	Manager	1	Ethnic Background of Manager	1 - African 2 - Asian 3 - European

Cols.	Field Name (8)	Size Total	Variable Labels (40)	Values and Value Labels (20)
12	Lanuse	1	Language Use	1 - Swahili-Swahili 2 - Swahili-English 3 - English-English
13-14	Pritype	2	Primary School Entered	3 - 15
15-17	Weivalue	3.2	Primary School-Weighted Value	1.0 - 4.92
18-20	Output	3	Number entered Primary School	8 - 140
21-23	Enrolment	3	Number attending school	12 - 320
24-26	Waitlist	3	Number waiting	0 - 423
27	Adission	1	Status of Waiting List	1-open 2-closed 3-none
28	TEP	1	Teacher Education - Primary	0 - 6
29-30	TEP	2	Teacher Education - Secondary	0 - 2
31	TEPS	1	Teacher Education-Post Secondary	0 - 8
32	TTDIP	1	TTC Diploma	0 - 6
33	TTCE	1	TTC Certificate	0 - 5
34	TTMEDIP	1	Medical Training	0 - 2
35	TTNU	1	Nursing Training	0 - 4
36	TTSN	1	Some nursery training	0 - 3

Cols.	Field Name (8)	Size Total	Variable Labels (40)	Values and Value Labels (20)
37-38	UT	2	Untrained Teachers	0 - 28
39-40	TEXSYR	2	Teaching Experience	0 - 21
41	TEXIOYR	1	Teaching Experience	0 - 5
42	TEXTENP	1	Teachers with more than 10 years experience	0 - 5
43-45	TAC	3	Academic Teaching Time per day	60 - 165
46-48	TNAC	3	Non-academic Time per day	30 - 140
49-50	TP	2	Play Time per day	30 - 90
51-52	Teachers	1	Number Teaching	
53	HDS	1	Human Development - Social	1 = Yes 2 = No
54	HDI	1	Human Development - Intellectual	
55	HDSP	1	Human Development - Spiritual	
56	HDP	1	Human Development - Physical	1 = Yes 2 = No
57	HDZ	1	Human Development - Citizenship	
58	HDC	1	Human Development - Conformity	

Cols.	Field Name (8)	Size Total	Variable Labels (40)	Values and Value Labels (20)
59	HDPR	1	Human Development - Self Presentation	1 = Yes
60	GRP	1	Recommendation Reports?	2 = No
61	IRPS	1	Informal Contact with Primary School?	
62	ADENT	1	Advise Parents on Entry Procedures?	1 = Yes
63	VIP	1	Visit Primary Schools?	22= No
64	RECPRIM	1	Recommend Primary Schools?	1 = Yes
65	Engage	1	Guarantee Standard I Vacancy?	2 = No
66	PATATE	1	Which Parent Talks to Teacher?	1 = Mother 2 = Father 3 = Both

096378/2004

01/12/78

Appe

* M U L T I P L E R E G R E S S I O N * * * * * * * * * * * * *

DEPENDENT VARIABLE: ACTVALUE FROM VARIABLE LIST 1
REGRESSION LIST 1

SEQNUM	OBSERVED ACTVALUE	PREDICTED ACTVALUE	RESIDUAL
1	3.000000	2.445533	0.5544663
2	3.000000	2.445533	0.5544663
3	1.040000	1.954262	-0.9142618
4	1.100000	1.954262	-0.8542619
5	1.100000	1.954262	-0.8542619
6	2.500000	2.740297	-0.2402974
7	2.000000	2.740297	-0.7402974
8	1.100000	2.249024	-1.149025
9	2.500000	2.249024	0.1809744
10	1.750000	1.708638	0.4137623E-01
11	1.100000	1.708638	-0.6086359
12	1.749999	2.150770	-0.4007712
13	3.750000	2.445533	1.3544675
14	1.000000	2.020345	-0.2345337E-01
15	2.000000	2.249024	-0.2490243
16	1.500000	1.796504	-0.2965037
17	2.000000	1.796626	0.2033742
18	3.500000	2.284783	1.2152205
19	3.350000	2.150770	1.1992228
20	3.400000	2.839551	0.5604484
21	2.000000	2.839551	-0.8395512
22	3.379999	2.511034	0.8689625
23	2.200000	2.445533	-0.2455338
24	2.900000	1.757792	1.1422246
25	2.250000	1.954262	0.2957382
26	1.133497	1.954262	-0.8207623
27	2.329999	2.019764	0.4132347
28	2.250000	1.954262	0.2957382
29	2.700000	3.264319	-0.5643205
30	3.400000	3.036000	0.1249379
31	2.100000	2.936095	-0.7660844
32	3.250000	3.329923	-0.7982359E-01
33	2.629999	2.298152	0.1319473
34	2.250000	2.916805	-0.6668055
35	2.000000	2.347279	-0.3472793
36	4.340000	3.919349	0.4206507
37	4.450000	4.244643	0.2131351
38	4.919999	4.911892	0.1810581E-01
39	4.350000	4.115457	0.3345416
40	4.750000	5.556622	-0.7566233
41	3.230000	3.264319	-0.3643205
42	4.570000	4.410621	0.1593783
43	3.660000	3.426077	0.2339215
44	4.629999	4.911892	-0.2719941
45	1.000000	1.024120	-0.2412321E-01
46	1.000000	1.030670	-0.3067051E-01
47	1.000000	1.020645	-0.2064507E-01
48	1.000000	1.024120	-0.2412321E-01
49	1.000000	1.030670	-0.3067051E-01
50	1.000000	1.030670	-0.3067051E-01
51	1.000000	1.011820	-0.1101963E-01
52	1.000000	1.027396	-0.2739536E-01
53	1.000000	1.168226	-0.1692266
54	1.000000	1.119699	0.4030039E-01
55	1.160000	1.413862	-0.3138632
56	1.399999	1.069973	0.6997222E-01
57	1.000000		

PLOT OF STANDARDIZED RESIDUAL

-2.0 -1.0 0.0 1.0 2.0

DURBIN-WATSON TEST OF RESIDUAL DIFFERENCES COMPARED BY CASE ORDER (SEQNUM).

VARIABLE LIST 1, REGRESSION LIST 1. DURBIN-WATSON TEST 1.96642

Appendix 7

HEAD HIGH-COST PRIVATE NAIROBI NURSERY

The school aims to provide for the developmental needs of the child. There are several aspects of a developing child that are emphasized. First there is creativity. It is important that a child learns how to be creative. The school offers every child an opportunity to develop this faculty. Creativity is encouraged mainly through art activities; for instance, a child learns to express his ideas and feelings through painting. Further, he learns to concentrate and to control both himself and the materials in an environment that is full of distractions.

There is a cluster of activities which are seen as helping the child to develop manipulative skills and coordination. Some of these are specific activities such as threading, cutting and puzzles. An activity such as painting also gives the child a chance to manipulate the brush. Learning to handle the brush makes it easier for a child to use a pen later.

The third aspect of learning that is encouraged is what is seen as laying foundations for academic work in general, particularly for science and mathematics. 'Laying the foundation' is a broad process. The child's desire to learn and to explore is used to give him a range of suitable apparatus to play with. Some of the apparatus a child is introduced to and encouraged to play with is designed in such a way that in the process of play a child is made aware of existing notions such as volume, length and width as he plays with

cubes, graded rods and broad stair respectively. Children also play with cylinders and geometric patterns such as triangles, circles and squares.

Exposing children to cubes, geometric shapes, graded rods and cylinders of varying lengths and widths does not lay a sound academic background automatically. The manner in which this educational equipment is introduced to a child is important too. The teacher should be able to explain clearly to the child how to play with these objects. She should also encourage the child to talk to her and to the other children. In this way a child learns both from the teacher and other children. Children do not have to be taught to speak their mother tongue; they learn to speak by hearing speech going on around them. Neither do they have to be taught the other skills if suitable apparatus is presented in the right way, and the child is allowed enough freedom to make him feel secure, confident and independent of the teacher so that he can think things out for himself in his own time.

The material basis is provided in terms of educational equipment and other cultural objects and activities. In addition, a child is made aware of these materials by talking about them and being shown how to work with them. In this way a child absorbs new findings as he explores the environment. New findings become a part of his total self. What remains is learning to express the material and cultural attributes that he has absorbed from his physical and social environment. The child in this nursery meets new objects such as cubes and graded rods in a context which encourages verbal expression. Since the words or labels of the acquired concepts form part of what the child knows, he finds it easy to articulate not only his needs but also his ideas. For instance, a child will learn to express in words

that he would like some food and also that five objects are more than three. With his conceptual framework properly developed, it is quite easy for a child to write the symbols such as the letters of the alphabet and numerals.

In this nursery school, giving a child an inner feeling for academic work is extremely important. As we have already seen, a child is exposed to a lot of activities and specialized educational materials. Laying a sound foundation is a delicate and complex process, and a child is encouraged to develop his potential gradually at his own pace. About one year of exposure to the right kind of materials before a child learns how to form letters and numbers is necessary. Most of the other nursery schools, however, seem not to trust the materials meant to help a child to develop a firm conceptual basis. Rather, they start teaching a child writing skills at the same time without first letting the child work with the materials for any length of time.

The one year period is not devoted to play with suitable educational toys only. Exposure to these materials is just a part of a well organised programme since the process of laying an academic foundation is one aspect of personality development. In addition, there are other crucial personality traits such as self-confidence, ability to concentrate, initiative and creativity. Thus, this nursery school undertakes to encourage and stimulate the intellectual development of a child. Because of the very complex nature of this kind of development, there is only a general framework into which various activities are fitted. To have a routine would destroy everything the nursery is trying to develop in the children. The structure of the educational programme is based

on the concept of the family. There is no use separating the children on the basis of age because a child will naturally pick on something to do in the school.' If he does not, the teacher should be around to help him identify something to do. Further, younger children learn from older ones, particularly in this school which encourages verbal expression of individual experiences and thought.

There is a time-table for the entire school which is used to enable the teacher to insure that every child gains broad experience in using a wide variety of apparatus regularly. For instance, a group of children may be scheduled to work with thread and beads on Monday, puzzles on Tue day, cutting on Wednesday, book corner on Thursday and geometric patterns on Friday. The children are divided into two or three groups according to their stage in development, not their age. Each group is assigned three activities each day. The teacher encourages the children to complete these activities during the morning. If a child prefers to use some other equipment which is not shown in the time-table, he is allowed to do so because all the equipment is designed to develop a child's skills.' In addition, a child will learn more from using apparatus he has chosen himself.' But an experienced teacher will be able to direct the children to use the right apparatus as though they had chosen it themselves.

The list of activities in the time-table is only a small part of what the children do in the morning. But the list helps a teacher to keep a check on the progress of a child and provides a general framework to the proceedings in the school. The time-table is not adhered to rigidly, and the teachers learn not to be impatient if the children do not complete the given activities for the day.

It is, however, quite easy to direct children to the right activity once the apparatus is kept well and presented attractively.

In between the activities listed in the time-table, the children are encouraged to take part in creative activities such as painting with a brush and their fingers and playing with dough and water. A child who decides to spend all the time on these activities is allowed to do so. These creative activities need a skilled and experienced supervisor who knows when to leave a child alone and when to help.

A fairly formal break follows after about two hours. The children are encouraged to sit down in a civilized way and take their mid-morning snack consisting of milk, biscuits and fruits. The register is called at this time, and any birthdays are celebrated.

After the break, the children play in the garden with the outdoor equipment. Sometimes this is followed by activities such as a dancing class, percussion band and singing games. All these activities are voluntary, and the children are free to carry on their game in the garden.

Finally, some of the young children settle down to a card or board game, listen to a story, look at a book or listen to a record. The rest continue with their game in the garden until it is time to go home. And the children who are preparing for entry into primary school go to a separate room for academic instruction.

HEAD LOW-COST, SELF-HELP NAIROBI NURSERY

Children in this nursery school learn both manners and academic skills such as reading and writing. Although the aim of a parent is to have a child learn school work, it is more important that a child learns to live with others. There is a time-table which is not followed rigidly because the children are sometimes not interested in a particular activity. For instance, the teacher may turn to story telling if she finds that the children are losing interest in learning the numbers or the letters of the alphabet.

The first activity in the morning is the assembly. The children line up in front of the classroom and are inspected for cleanliness. This is followed by either singing or story telling. Some of the main themes that are covered in the songs and stories are the existence of God who should be worshipped and obeyed, respect and obedience to parents and rulers, and the importance of being active. The next activity is either reading, writing, drawing or acting various adult roles such as the shopkeeper, teacher, doctor, mother and constable. Singing and listening to stories makes children attentive and ready for activities such as reading and writing which require a lot of concentration.

Reading and writing include learning to recognize numbers 1 to 10 and the letters of the alphabet and how to write them. After learning the alphabet, a child is taught the art of word construction. Similarly, a child who knows numbers 1 to 10 is introduced to computational skills such as adding and subtracting. The exercise of drawing shapes and pictures of objects is seen as an

opportunity to teach the children the English language. For instance, the teacher draws a picture of a cup on the blackboard and tells children that the name of the object drawn on the blackboard is cup. Children are taught English language as preparation for primary school where it is the medium of instruction because they do not know it when they come to school. Most of them, however, already know Swahili when they come to school.

A child is exposed to all of the activities that are discussed above so that he may be able to do them when he enters primary school and later on as an adult. This may be compared with a person who practices to run in preparation for a sports competition.

The academic and other related activities are followed by a break. The main activity during break consists of physical and singing games that are conducted in the playground. This may go on from eleven, when the break starts, until twelve noon, when the school day ends. Sometimes the children go back to the class before twelve to revise the numbers and the letters that they may have learned already.

Appendix 8

THE AVERAGE TIME IN MINUTES PER DAY SPENT IN VARIOUS ASPECTS OF NURSERY SCHOOL CURRICULUM

A. The Average Amount of Time by the Ethnicity of Nursery School Principals

Type of Manager	Academic Activities Mean Time	Non-academic Activities Mean Time	Play Mean Time	No. of Cases
African	110.44	68.68	59.12	34
Asian	111.25	68.75	63.75	12
European	99.09	101.82	40.45	11
Entire sample	108.42	75.09	56.49	57
Eta coeff.	0.179	0.486	0.425	
Sig. levels	0.4120	0.1790	0.0045	

B. The Average Amount of Time by the Geographical Location of Nursery Schools in Nairobi

Type of Manager	Academic Activities Mean Time	Non-academic Activities Mean Time	Play Mean Time	No. of Cases
Former African	123.33	60.00	58.83	18
Former Asian	102.00	66.00	67.50	10
New Estates	107.14	83.57	55.71	7
Former European	99.55	88.86	52.27	22
Entire Sample	108.42	75.09	56.49	57
Eta coeff.	0.408	0.48	0.28	
Sig.levels	0.2080	0.0027	0.2201	

C. The Average Amount of Time by the Type of Ownership

Type of Ownership	Academic Activities Mean Time	Non-academic Activities Mean Time	Play Mean Time	No. of Cases
City Council Education	120.00	62.50	60.00	6
City Council Health	88.00	56.00	84.00	6
Welfare Voluntary	90.00	82.50	48.75	4
Welfare Christian	107.14	84.29	48.57	7
Welfare Asian	135.00	62.50	52.5	2
Private	102.50	89.25	53.25	20
Harambee	122.31	61.15	56.54	20
Entire Sample	108.42	75.09	56.49	57
	Eta.coeff= 0.49	Eta.coeff= 0.503	Eta.coeff= 0.48	
	Sig.lv. = 0.2680	Sig.lv. = 0.0191	Sig.lv.= 0.0312	