

THE IMPACT OF THE 'NEW PRIMARY APPROACH'
ON THE QUALITY OF TEACHING IN
THE PRIMARY SCHOOLS OF
KENYA

KENYA

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This thesis is my original work and has not
been prepared for a degree, or any other qualification

Namusong Sifuna

DANIEL NAMUSONGE SIFUNA

While this thesis has been submitted for examination,
I have not been employed by any other institution.

Daniel Namusonge Sifuna

Daniel Namusonge Sifuna

PROF. F. V. OJIE, HEAD DEPARTMENT OF EDUCATIONAL
SCIENTIFIC RESEARCH, UNIVERSITY OF NAIROBI

A thesis submitted to the University of Nairobi
in fulfilment of the requirements for the
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D. Sifuna

DANIEL NAMUSONGE SIFUNA

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

F.F. Indire

PROF. F.F. INDIRE, HEAD DEPARTMENT OF EDUCATIONAL FOUNDATIONS, FACULTY OF EDUCATION.

H.A. Somerset

H.C.A. SOMERSET, SENIOR RESEARCH FELLOW, INSTITUTE FOR DEVELOPMENT STUDIES, UNIVERSITY OF NAIROBI

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A B S T R A C T

The study looks into the problem of quality in teaching in the light of a pupil-centred lesson as opposed to a teacher-dominated lesson. It recognises the fact that quality in teaching has no universally accepted definition nor are many educators agreed on what constitutes it. It traces how the problem of quality in teaching in the schools of Kenya has been a standing problem since the introduction of Western education; a problem about which much has been said, but little done to tackle it. This was largely because of the colonial policy towards education for Africans, which laid heavy stress to the provision of education for 'adaptation'. The adaptation policy restricted the expansion of African literary education and hence focusing African demands to the provision of more literary education and generally paying less attention to the problem of quality in teaching. Some christian missionaries, however, made attempts to improve the quality of primary education, through the expansion of teacher education but largely failed because

of little or half-hearted support given by the government.

A The end of the second World War sparked a general expansion in education particularly the growth of primary education whose corollary was expansion in primary teacher education. Generally expansion in primary education outpaced the production of a sufficient number of teachers and this led to the employment of a high proportion of untrained teachers and poorly qualified teachers. These two factors made it difficult to upgrade the quality of teaching through the education of teachers.

Education commissions set up to study the education system either in Kenya or in East Africa after the war particularly in the fifties, expressed general dissatisfaction about the quality of teaching in the primary schools arising from untrained teachers and a large proportion of poorly qualified teachers most of whom used traditional methods of teaching. They stressed the need for introducing activity methods of teaching. At the same time general

concern was mounting in the country about poor examination performance of the African and Asian pupils on the English paper. It was felt that the subject was generally poorly taught. This led to the introduction of the English Medium in 1957 beginning with the Asian primary schools and extending it later to the African primary schools in 1961. The programme later known as the 'New Primary Approach' was pegged to the teaching of English from standard one of the primary schools, though its architects saw it as a general 'revolution' in the quality of teaching in the schools of Kenya. A lot of efforts were made to make teachers conceive it as a general revolution in the teaching methods of the primary school based on a pupil-centred approach, and as having introduced progressive education into the Kenya education system. Much was said about the programme having introduced a practical approach to teaching, particularly before its expansion was curtailed in 1967, but many of the impressions were based on the teaching of English as an index of improving the quality of teaching.

An examination of the teachers' and pupils' class activities does not seem to support the 'frantic' generalizations and impressions made about the achievements of the New Primary Approach in upgrading the quality of teaching. Teaching in most of the primary schools remains strongly teacher-dominated for those teachers who attended the programme and for those who did not attend it. Though the effects of the programme are to a lesser degree manifested in the lessons of teachers who were introduced to the programme through in-service courses. Primary teachers, primary college students and tutors, generally attribute the failure of the 'New Primary Approach' to have a strong influence on the quality of teaching, to the poor methods through which it was introduced, lack of proper teaching facilities and the Certificate of Primary Education examination factor in the primary schools.

In the study, other factors affecting the quality of teaching; the teachers' academic and professional level, teaching in lower or upper classes of the primary school, teachers' sex

differences, age, teaching experience and whether or not the teacher observed was preparing for an external examination and the pre-service education of primary teachers are examined. It is revealed that teaching in the Lower or in the Upper classes of the primary school has a very powerful effect on the quality of teaching. There is a strong reflection of pupil-centred education in the lower classes declining sharply in the upper classes particularly in class seven of the primary school. This pointed to the Certificate of Primary Education examination as being a very 'critical' constraint to the quality of teaching. Of the other factors examined Pl teachers and women teachers tend to be a positive element in the quality of teaching while preparing for the external examinations tends to prohibit teachers' approach to activity methods of teaching.

The conclusion stresses the need of emphasising activity methods of teaching in Kenya's education system because they are in line with its educational aims. It recommends the reorganization of activity methods in the pre-service and in-service teachers' courses to make the methods more

meaningful; an examination of the place of the Certificate of Primary Education in relation to teaching in the primary schools; increase in the proportion of the highly qualified teachers and women teachers; improvement in the supply of teaching material and a critical examination of the pre-service teachers' courses as means of improving the quality of teaching in the primary schools.

CHAPTER ONE

NATURE OF THE STUDY AND DATA

COLLECTING PROCEDURE

Purpose of the study:

The purpose of this study is to examine the impact of the 'New Primary Approach' on the quality of teaching in the primary schools of Kenya. No educational innovation is today made, without public interest or concern over the influence of such an innovation on the quality or standards of education. The New Primary Approach inaugurated in the primary schools about a decade ago, was received with tremendous popularity not only by administrators and teachers, but also by the parents. Some of them believed that their children were receiving a better education under the plan; as one parent put it; "They are becoming inquisitive little devils"¹. An English Medium Supervisor commenting on the programme summarized his impressions, "The achievement of children in English - Medium classes by Standard IV is much greater than that of their contemporaries in vernacular classes, many are able to make up little stories in English after only one year of school. They have the language; their approach to solving problems is better; they are generally not shy and

are ready to discuss problems with their classroom teacher without fear"². Scepticism about the new programme was also expressed, "I don't like English Medium teaching, it leads to bad discipline; today a child walked up to my table and asked a question."³

The president of Malawi in an address to the Conference on Education in Malawi held on the 17th-19th April 1972, he argued that there had been dissatisfaction with "progressive teaching methods" as being in conflict with the needs of the country and had led to a fall in educational standards at both primary and secondary levels, because of "modern" trends in teaching, learning and organizing of classroom work. He went on to say that in practice, apart from a handful of able, dedicated individuals, the majority of teachers had lost control of the situation. The pupils had begun to gain an upperhand; order and discipline had steadily deteriorated. Knowledge had been unsystematic and linked in rather a desolatory fashion. From October of 1972 the Schools of Malawi were to avoid "modern and progressive methods", and turn to traditional methods. He continued that there is no room for permissiveness in the "traditional approach to teaching". The children are not permitted to do whatever they want.

Learning is a mastery of the subject matter. Knowledge is systematised; syllabuses and text books are logically arranged and organized to cover the subject matter adequately. Nothing is left to chance. Teachers issue clear instructions in connection with all aspects of learning, pupils are highly disciplined and teaching is done thoroughly.⁴ These statements do not seem to point at one and the same thing and considering the Kenya situation they portray a picture whereby the New Primary Approach programme has had a remarkable revolution on the quality of teaching. Such impressions which apparently are not based on serious studies together with the confusion on what the programme has actually achieved, necessitate an investigation of this nature to evaluate critically the success of the New Primary Approach programme.

Definition of Terms and Delimitation.

From the statement of the purpose of the study, some terms arise which need definition. One is an issue of world-wide controversy that it is not claimed that a study of this nature will emerge with a conclusive definition.

Quality of teaching:

The quality or standard of teaching is a term that has been on the lips of many educators all the way from the introduction of Western education in Kenya. And yet it is one of the most difficult terms to explain in precise terms, nor are the educators agreed on what constitutes it, and they certainly have no universally accepted method for measuring it. A missionary educator saw the quality of teaching before 1924 as depending on the training and resourcefulness of individual teachers;⁵ a provincial commissioner measured it in the presence of European teaching staff.⁶ Some have interpreted quality in relation to the educational background and training of the teacher.⁷ The introduction of the English Medium programme is believed to have introduced progressive education and the educational principles of John Dewey to East Africa.⁸ A high employment of untrained teachers after independence was believed to have lowered the quality of primary education.⁹ Many educators have seen it in terms of how many pupils qualify the Certificate of Primary Education examination for government aided Secondary Schools; while others have measured it in relation to pupils behaviour, and tidiness of the school.

For the purpose of this study, quality of teaching will mean the use of activity methods leading to a pupil-centred lesson as opposed to a teacher-dominated lesson. A teacher's class activities such as asking narrow questions, presenting information are part of his class activities but should be less exercised than asking broad questions and accepting pupils ideas, behaviour, feelings and helping individual pupils. Pupils' class activities are expected to feature more prominently to constitute a pupil-centred lesson. Pupils' talk - responses and their simple non-verbal activities like working out exercises from a text-book or silent reading will feature, but most significant will be pupils' initiated discussions and their more involving non-verbal activities like, drawing, modelling, painting, project work, both indoor and out-door.

This implies a "Modern Approach" to teaching in which meaning and understanding are stressed, a variety of content and methods; individual differences catered for; activity methods, problem solving and creativity; relaxed and positive discipline. This suggests a break with the "traditional approach" to teaching which puts

heavier premium on lecturing and rote memorisation of unorganized and relatively meaningless symbols.¹⁰

Although activity methods will be used as the criterion for measuring quality, reference will be made on other indices like the level of teachers' qualifications, achievements in examinations, and the English Medium which have been frequently used to judge the quality of education in primary schools.

The study strongly agrees with a widely accepted view that the main instruments in maintaining the quality of teaching are the 'level of general education of the teachers in the educational system and the amount and kind of training they have received.'¹¹ The Kenya Education Commission Report of 1964 remarking on the standards of teaching in the primary schools summarized the problem "unqualified teachers tend to teach as they were themselves taught; and in view of the rapid strides being made in teaching techniques, that means that they reproduce outdated rote methods of teaching and often a negative approach to discipline. One of the results of the employment of large numbers of unqualified teachers is that they so greatly influence the general tone

and methods of the school in a conservative direction as to make it hard for the newly qualified teachers, trained in up-to-date methods and anxious to try them out, to put their training into practice'.¹² The Commission further remarks that unless steps are taken to upgrade the proportionately high number of P3 teachers and increase the training of P1 teachers, the former would continue to determine the standards of the primary schools.¹³ It is an official government policy to replace the untrained teachers with the trained ones and also increasing the training of high grade teachers as a means of improving the quality of teaching.¹⁴

Accepting teachers' general educational background and training as the chief factors determining the quality of teaching is to throw the study in jeopardy since no serious research has as yet been carried to ascertain the relationship between teachers' qualifications and the quality of teaching. Many of the statements made on the correlation between these two variables are based more on hearsay rather than on empirical research evidence. The study as will be seen later is designed to measure the relationship between teachers' qualifications and the quality of teaching.

Having accepted the assumed close relationship between teachers' education and training; and the quality of teaching, attention will be devoted on the past, tracing the development of teacher education and the quality of education, Emphasis in this analysis will be laid on problems hindering the improvement of quality in primary education through teacher education and necessitating the introduction of the New Primary Approach.

"The New Primary Approach (NPA)"

The Kenya Education authorities having convinced themselves about highly qualified teachers as the basis of improving the quality of teaching in the primary schools, had the task of increasing the proportion of these teachers which for many years had been low. Because of the acute "bottleneck" in the secondary education this could not be very easily done. And yet there was a growing concern over the examination performance which was largely attributed to the poor quality of teaching. The alternative was to accept the low standards of the primary teachers most of whom with only primary education and through training in new methods and techniques raise the quality of teaching. This appeared the best alternative. It was therefore decided to introduce 'modern

techniques of teaching in English'. The details leading to this line of action will be examined in chapter three of the study, but suffice to point out that the reorganization of the teaching of English was believed to be the basis for the improvement of the quality of teaching generally.

The programme for the reorganization of English teaching was fittingly called the English Medium. To the architects of the programme it was not only geared to improving the teaching of English, but it was aimed at promoting the quality of primary education. Much pains were taken, though unsuccessfully, to convince teachers that the purpose of English Medium was not just to improve the teaching of English, but it was an educational revolution in the methodology of teaching in the whole primary school system. For these reasons the term English Medium gave way to 'New Primary Approach'.

The New Primary Approach has been accepted as one of the ways of improving the quality of teaching in primary schools. In 1965 the Ministry of Education observed 'the government has been actively attacking the problem of standards of primary education from the angle of teaching

method and the curriculum. One of the most promising ventures in the history of education in Kenya has been the development of the New Primary Approach in the primary schools. The essence of this is that the old concept of the child passively receiving instruction from the teacher should be replaced by a system in which the pupil develops through active and full participation in the educational process. Thus the teacher becomes less of a dictator and more of a guide. Until now the New Primary Approach has been associated with the use of the English Language as the medium of instruction in the schools from Standard I. But in principle this need not be the case.¹⁵ The 1970/74 Development Plan states that the purpose of the NPA is to develop in primary schools a method of teaching which involves child activity and discovery method. The project is to be continued until the method has been introduced throughout the primary school system.¹⁶

The classification of teachers: Teachers grades which are frequently mentioned in the study are shown in Table I. Omitted is the classification of teachers in 1922 which was not effected.

Table 1. Primary Teachers grades

1925	1932	1949	1962
Elementary B Teachers' Certificate	Elementary Teacher (E.T.)	Teacher (T4)	Primary 4 (P4)
Elementary C Teacher's Certificate	Lower Primary Teacher (L.P.T.)	Teacher 3 (T3)	Primary 3 (P3)
Junior Secondary School Certificate	Primary Teacher (PT) -	Teacher 2 (T2) Kenya Teacher I (K.T.I.)	Primary 2 (P2) Primary I (PI)
The Jeanes Teacher	Jeanes Teacher	-	-
-	Makerere Teacher	Makerere Teacher (T1)	S1 and SA

Review of Related Literature

I have already mentioned that the quality of teaching in Kenya is not a post - Independence problem. Talk about it started with the introduction of 'Western education' in Kenya. Unfortunately very few or no studies have directly been carried out into the problem. A number of studies on quality make it a global or regional study which makes them fall short of an intensive analysis; some base their conclusions on hearsay; while others derive their conclusions on a biased and erroneous index of what constitutes the quality of teaching.

Report on Education in the East African Protectorate. (Fraser Report) 1909.

Its main object was to spell the kind of education suitable for each race in the East African Protectorate. By recommending African education with an industrial bias it indirectly focused attention on the demands for expansion in literary education and with only little attention on quality.

Report of the Education Commission of the East African Protectorate. 1919.

Though its major purpose was to examine the education of three races, it pointed out that 'Sound education could only be built on a body of well trained teachers'.¹⁷ Though the commission recommended an immediate establishment of teacher training centres as a means of achieving such a goal, little or no attempt was made by the government to open teacher education institutions because much of its interests were centred, on the provision of industrial education. The Commissions' concern with quality was limited in that it was a general survey of the whole education system.

Education in East Africa (The Phelps - Stokes Report) 1922 and the Advisory Committee on Native Education in British Tropical Africa of 1923.

These two commissions, though mainly concerned with averting the dangers of detribalisation among the Africans, stressed the need for teachers in order to improve the quality of education.

The Phelps - Stokes Report stressed the serious need of teachers in the whole colony and Protectorate for the overwhelming number of natives needing the simplest form of training and instruction.¹⁸ The Advisory Committee points out

that ' a sound education system lay in the training of teachers and this matter be given primary consideration'.¹⁹ As a means of improving quality the Reports recommended the supervision of village teachers through Jeanes trained teachers. The government endorsed the recommendation, but this was a very superficial attack on the problem of quality. The Commissions' emphasis on education for 'adaptation' delayed government attention to the quality of literary education for Africans.

The Christian Missions proposals for the reorganization of Teacher Training, 1935.

This was the first direct attempt to tackle the problem of quality through a reorganization and expansion of teacher education. The proposals were prompted by the suggestion of the Pim Report that the extension of education could only depend on the training of African teachers to take charge of the Elementary Schools²⁰ and the department of Education complaint that 'the general standard of African teachers was lamentably low'.²¹ The Missionary Scheme for the reorganization of teacher education could not take root because of the out break of the Second World War.

The Lockhart Committee Report on the organization and expansion of African Teacher Training 1945.

The Committee was set up to advise the Director of Education on the expansion of teacher education in the light of the general expansion of the education system after the War. The general feeling was that unless the expansion of teacher education kept pace with the overall rapid growth in the education system standards were to be lowered. The Committee recognises the recruitment of students with low education so that they would combine professional training with academic education to keep up with the pace of the growing primary education, and lengthening the training period of Lower Primary Teachers and Primary Teachers. These plans were generally not put into practice.

The Kenya Education Commission Report of 1949 (The Beecher Report).

Like the Lockhart Committee Report, the Commission dealt largely with the problem of rapid expansion in education. It made the first successful recommendations regarding the expansion of teacher education to maintain the quality of education in the primary school system. The Commission records public concern over the problem

of quality in teaching arising from a high proportion of poorly qualified teachers. Serious attempts are made in the report to re-structure the T4 training course and the introduction of a Kenya T1 certificate, the highest grade of teacher as ways of improving quality in education.

The African Education. A study of Educational Policy and Practice in British Tropical Africa (The Binns Report) 1952:

The gigantic task faced by the commissioners of this survey in covering the broad expanse of the continent, to some extent precluded any detailed study of particular educational problems. But the survey had the merits of recommending a revolution in teaching methods; 'Education should be active and not passive. The classroom situation should be pupil-centred and not teacher-dominated.' It stressed the rôle of teacher education centres to effect such a change in the quality of teaching.

The First Teacher Education Conference 1956.

The conference re-echos the recommendations made by the Binns Report on the need for teaching through activity. It is critical about teaching

in colleges which it points out lays emphasis on 'talk and chalk' methods which has a serious negative impact on the quality of teaching in primary schools. The Conference attacks the problem of quality from classroom practice at teacher colleges, but did not examine actual classroom practice in the primary schools.

The Kenya Education Commission Report 1964.
(Ominde Report).

This was a general education survey after Independence and the first since the English Medium programme had been introduced. It recommends the expansion of the English Medium in the primary schools and working towards an attainment of child-centred education. While recording that some progress had been made in the quality of teaching, it complained that drill methods of teaching, an authoritarian tone of voice on the part of the teacher, a neglect of activity methods, pupil participation, a negative approach to discipline, and a formalised approach to the presentation of material, were still prevalent. The Commission does not make rash conclusions about the English Medium, having revolutionised teaching in primary schools all of a sudden, though its conclusions were based on a general survey.

E.B. Castle, Growing Up in East Africa:

The volume discusses a variety of themes on Education in East Africa. It devotes one chapter on Language and Communication in East Africa in which the author draws attention to the English Medium teaching in Kenya. After some practical observation of the English Medium classes, the author agrees with the observations made by members of the Special Centre that indeed the programme had effected a revolution in the primary school teaching in Kenya. He, however, tends to contradict himself when he goes further to accept the view that teaching in the Vernacular made teachers relapse to the old mechanical rote memorisation methods. This seems to point out to the erroneous conclusions made about the influence of the English programme on the teaching of other subjects. Observations are made in the teaching of English, from which general conclusions are drawn to apply to the whole education process in the primary school. ~~This~~ study avoids such approaches for it examines the influence of NPA directly on other subjects.

M. Hutasoit and C.H. Prator: A study of the New Primary Approach in the Schools of Kenya:

This is the most outstanding study on the influence of the New Primary Approach method

programme on the quality of primary education. The study was undertaken in six weeks or shorter in the case of Professor Prator. Within this time the authors visited English Medium and Vernacular Schools in all the six Provinces of Kenya and the Nairobi area. Conversations were held with individuals at all levels of the administrative and instructional hierarchy. Open meetings were also held with teachers and administrators. Reports of the Special Centre and the Kenya "Education Commission Report, Part I" were read. While the efforts made by the authors within their very limited time is appreciated, the time was too brief for an intensive study. This is particularly so when all regions of the country had to be surveyed. Mere visits to schools and open meetings and conversations with the educational administrators and teachers did not constitute an objective analysis of the problem. From their general survey, however, the authors arrive to a conclusion about a lack of uniformity in the quality of NPA classes. They observe that 'NPA classes ran the complete gamut'. The study recommends a slow down in the expansion of the NPA classes and lays down conditions to be fulfilled before fresh NPA classes were to be opened. On the basis of this recommendation the government curtailed the opening

of more NPA classes. It is unfortunate that the government had to act on the advise of findings based on a general survey without a further critical scrutiny. The programme was obviously beginning to have a marked impact on the quality of education. Lack of uniformity in the quality of an educational system is a thing that cannot perhaps be totally avoided even in the 'developed' countries, and it did not have to be a point of major concern in Kenya. The study could perhaps have concentrated on the problem of proper supervision in the face of expanding the programme to all the primary schools. The curtailment of more openings of NPA classes has in effect created a stronger disparity in the quality of the programme than when it was in operation. In some areas with effective supervision the programme still goes strong while in many of the areas there is a marked tendency to relapse into the old mechanical ways of teaching. At any rate the study is probably the best of the earlier studies that touched on the problem of quality in primary education. It studied the NPA programme when it was at its climax, while this study attempts to assess its, impact four years after its 'decline'.

E. Stabler. Education Since Uhuru: The Schools of Kenya.

The volume examines a number of aspects of education in Kenya since Independence and devotes a complete chapter on the New Primary Approach. It traces the development of the NPA and makes very useful conclusions about its impact on the quality of primary education, though they strongly reflect the teaching of English as the basis of improving the quality of primary education.

New Directions in Teacher Education and Teacher Education Conferences 1964-1971.

These discuss the problems of teacher education and make general recommendations on the improvement of teacher education programmes with the aim of improving the quality of teaching in the schools.

A study of the Curriculum Development in Kenya 1972.

The study is devoted to the various aspects of the curriculum of the educational system. It observes that the introduction of the New Primary Approach has changed classroom practice in the lower classes. The use of child activity and discovery methods have broken through the traditional formal class teaching methods;

though its success varies with the qualifications of teachers and the closeness of supervision. It was critical of the fact that though the syllabus of the upper classes of the primary school generally encourages the undertaking of projects to make learning an active process, teaching in the upper classes of the primary school is still passive often based on rote learning. These observations make no generalizations about the 'wonderful' success of the NPA. However, it does not seem to discuss why activity methods do not seem to have influenced teaching in the upper classes.

Literature on activity methods and the quality of teaching outside Kenya.

C.E. Beeby - The Quality of Education in Developing Countries.

A very comprehensive study on what is quality in education and what constitutes it. A hypothesis of the stages of Educational Development analysing the growth of quality in teaching is advanced and it provides a very useful theoretical framework through which quality in education can be evaluated. The hypothesis envisages four stages of the growth

of a primary school system:

- (a) Stage I: The Dame School: In this stage teachers are ill-educated and untrained. Teaching consists of unorganized, relatively meaningless symbols; very narrow subject content - 3R'S; very low standards, memorizing features strongly.
- (b) Stage II: The stage of Formalism: Teachers in the system are ill-educated but trained. Teaching reflects a high organization of symbols with limited meaning, rigid syllabus; emphasis on 3R'S, rigid methods- "one best way of teaching". One text book; external examinations; inspection stressed; discipline tight and external; memorizing heavily stressed; emotional life largely ignored.
- (c) Stage III: Better educated teachers, possibly attended Secondary education and are trained. Roughly the same goals as in stage II, but more efficiently achieved; more emphasis on meaning, but it is still rather 'thin' and formal; syllabus and text books less restrictive, but teachers hesitate to use greater freedom; final leaving examination, little in classroom to cater for emotional and creative life of a child.

(d) Stage IV: Well educated teachers - completed secondary education and are well trained. Meaning and understanding stressed somewhat wider curriculum, variety of content and methods; individual differences catered for; activity methods, problem solving and creativity; internal tests; relaxed and positive discipline; emotional and aesthetic life, as well as intellectual; closer relations with community; better buildings and equipment essential. The study has the limitation of being a global survey based more on administrative experience and less of empirical researches.

N.L. Gage - Handbook of Research on Teaching.

It compiles various aspects on teaching methods that have been carried out in the United States. It raises the problem of methodology as the chief limitation in comparing teachers class activities whether they reflect a modern or traditional approach to teaching. This is because teachers' class activities are never consistent and teachers themselves suffer from the dualism of what they are expected to do and what they actually do. In this respect teachers cannot be used as a basis of describing their own class activity.

Many of the researches into traditional and activity methods have not generally yielded useful conclusions in the United States of America. Only a few appear to have done so.

Among the few, one conducted by Manning arrived at a 'somewhat' useful conclusion. He developed a rating scale for the dimension of permissiveness versus control in the classroom behaviour of teachers. The study was undertaken in two twelve year schools and covered the entire range of grade levels. He observed teachers in a number of different situations and concluded that directive behaviour was far more common than non-directive. In the least directive situations studied, directive behaviour was found four times more frequent than non-directive. Directiveness also increased with grade level, indicating perhaps that the school did little to foster self-direction among the pupils. Manning concluded that educational literature about 'child-centred' school was much more a reflection of talk than reality.²²

Such a finding from a very 'developed' country such as the United States in whose footsteps Kenya perhaps is following in the

development of methodology in teaching is quite disturbing. Teaching methods in the catechist schools instituted with the establishment of Western Education were similar to the Dame Schools of the eighteenth century in Western Europe. There as in Kenya, the syllabus was based on religion with some emphasis on the 3R's. Memorization of 'nonsense' rhymes was the pattern of teaching. In Britain particularly, the Dame Schools evolved into the National School Type, in which the best pupils 'the monitors' were assigned the task of teaching, supervised by the head teacher. Teaching was perceived as an activity requiring no special skills. A study made by David Stow in the late nineteenth century regarding the needs of the children of the Junior School age is said to have been the origin of Activity Methods in Britain.²³

Kenya by introducing Activity methods tried to by-pass a number of stages the developed countries have passed through to achieve the present state of the educational growth. If after a century of Activity methods, it can be still asserted that child-centred teaching is a reflection of 'talk than reality' it

implies that Kenya still has a long way up the ladder to achieve child-centred teaching. This will emerge from this study.

Significance of the study

The introduction of the New Primary Approach into the primary schools was by any standards costly.

To equip a standard I class the estimate of expenses was as shown in Table 2.

Class Furniture (Tables, chairs, benches)	100/-
Class Book Shelves (Shelving, books, etc.)	100/-
Class Equipment (Blackboard, pointer, etc.)	50/-
Classroom (Paint, posters, etc.)	50/-
Total	250/-

Approved by the Kenya Education Commission, Nairobi
 1988 No. 5043

**Table 2: Estimate of expenses for equipping
a class I NPA.**

ITEM	COST
10 tables at the cost of Sh.32 each	320/-
40 stools at the cost of Sh.10 each	400/-
New Peak Texts: Teachers' course work and a set of 10 children's books	115/20
Class Equipment: Pencils, exercise books, chalk etc.	60/-
Apparatus: Paste, Scissors, paint brushes, etc.	Sh. 72/10
TOTAL	967/60

Source: The Kenya Education Commission Report
1964 pp. 51-55.

Equipping all the classes of the primary school with the necessary NPA material would perhaps have meant primary education alone absorbing the whole government education vote. Is this enormous expenditure on NPA methods all that necessary? Has its introduction not been based on hearsay from the developed countries, that these are the most practical ways of teaching and learning? Unfortunately no serious researches have been carried out in Kenya or in East Africa to justify the 'frantic' efforts taken to introduce the NPA. If achievement in examinations, particularly the English Language paper necessitated the introduction of the English Medium, no follow up has as yet been made to show that the Language Paper results have improved because of the English Medium programme.

Researches carried out elsewhere prove beyond doubt that in terms of pupil achievement methods do not matter. Wallen and Travers²⁴ concluded that teaching methods do not seem to have much difference and there is hardly any

direct evidence to favour one method over the other. Siegel also arrives at the same conclusion, when he states that students learn about as much when exposed to one kind of instructional environment as they do when exposed to another.²⁵ These findings are quite remarkable if the unreliability of most of the achievement tests is ignored; and they make nonsense of the efforts made to develop the NPA teaching methods and reduces this study to a mere academic exercise.

Though there is no obvious evidence supporting one method against another in terms of pupil achievement, there is ample evidence supporting the use of activity methods in relation to the whole learning process, though such evidence has not, however emerged from Kenya or many of the developing countries. In the United States, Bruce Ellena and William refer to the consistent finding of a positive relation between the degree to which the teachers statements make use of ideas and feelings previously expressed by pupils and the average class scores for attitudes (towards the teacher and class) and achievement.²⁶

McKeachie accepts that discussion method offers opportunity for a good deal of pupil activity and feedback could be according to theory and according to research results, be more effective than typical lectures in developing concepts and problem solving skills. McNally discovered that in general, pupils in pupil-centred classes participate more and have greater responsibility for the determination of the purpose content and procedure. Generally no consistent differences occur in knowledge outcomes, but the pupil-centred class yields greater gains in higher cognitive process and effective outcomes.²⁷ Bloom found out that college students thoughts were more often relevant to the subject matter in discussion than in lecture sessions. And the superiority of such student-centred discussions in promoting favourable attitudes towards the subject matter as a whole and influencing attitudes specific issues within the subject matter probably arises from the greater degree to which group cohesiveness, interpersonal perceptions and similar forces can operate in such discussion groups.²⁸ Flanagan concludes that discovery methods engage the learner in work tasks designed for his individual

needs and abilities. The learner proceeds at his own rate independent of others with carefully organized and sequenced segments. His progress is closely monitored through frequent evaluation and his subsequent tasks designed to serve thoroughly explicated objectives are adjusted accordingly. Such systems will radically alter the teachers role, relieving him of didactic burdens and freeing him for the uniquely human functions.²⁹

Relative superiority in motivational aspects of activity methods above the passive methods may not in itself justify the heavy expenditure invested in orienting classroom teaching to NPA. However, Kenya's educational aims necessitate activity methods not only in primary schools but in the whole educational system. The country's educational goals are geared to preparing the youth so that they play an effective role in the life of the nation whilst ensuring that opportunities are provided for full development of individual talents and personalities.³⁰ Furthermore Kenya aspires to remain a democratic country, which implies that the educational

system should not be designed to produce robots who cannot be inquisitive about their environment. It is largely through Activity methods, which can enable the child to observe investigate and ultimately to analyse and solve problems. In the changed relationship between teacher and pupils and between pupils themselves, working in cooperation, a pupil will learn to take initiative and be capable of adapting himself to the 'harsh' environment that awaits him. Thus learning through activity will provide a pupil means of developing qualities of curiosity and initiative, readiness to co-operate, and tolerance for change that are precisely the qualities that young citizens of a developing country like Kenya very badly need.

Pupil-centred teaching has been stressed in much of the philosophical literature. John Comenius of Germany stressed how children learn through all senses; not only through ears alone, so that the teacher should use aids and encourage pupils to write their own records. He stresses that solid learning depends on pupil's enjoyment of the work and his appreciation of its utility and purpose; and it is necessary

for each pupil to arrive at truth for himself either through his senses or by reasoning and advocates methods that foster learning by experience.³¹ Jacques Rousseau of France emphasised the child as the prime factor in education. The child learns well when his curiosity is developed. He should therefore be provided with opportunities to find out the how and why of things he experiences. Problems should be put before him so that he can solve them by himself.³² Other leading philosophers who stressed pupil - centred learning include J.H. Pestatozzi of Switzerland, M. Montessori of Italy and J. Dewey of America.

There is every practical point to teach through activity in the primary school. The vigour and activity shown by children during the primary school age suggest that the work of the class must be planned along lines which give opportunities for movement. Thus methods of teaching must involve action on the part of the children. Children are usually curious to find out; and this implies that these needs have to be catered for to facilitate a healthy physical and mental development.

Having pointed out the need for activity methods in Kenya's educational system, the significance of this study is outlined as follows:

1. Since many of the studies of Activity method programme in the past lacked depth and hence became of limited value for planning, this study will analyse some constraints to its effectiveness with a view to pointing out ways and means of its future expansion.
2. It will explore other factors apart from the NPA programme which should be examined to promote the quality of teaching in the primary schools.

Data Collecting Procedure

Kinds and Sources of Data - Reading was carried out in libraries and the Kenya National Archives to trace the problem of quality in teaching in relation to teacher education before the introduction the NPA. This consisted of reading official records, minutes of meetings, committee reports, official and personal letters, government circular letters and institutional records.

Lesson observation. As has already been discussed, the purpose of this study is to find out the influence the NPA programme, has had on the quality of teaching. It was therefore necessary to design an objective instrument that would assess teachers' class activities. The only available objective instrument would have been the Flanders Interaction Analysis Categories (FIAC) shown in the appendix II. But this is not quite suitable for the purpose of this study since it is mainly concerned with the Verbal Interaction Analysis; while this study is interested in the non-verbal activities as well. This necessitated a modification of the FIAC to suit the objective of this study. The details of the modified instrument used are shown in the appendix II, together with the coding sheet. In a broad outline it included teachers' and pupils' class activities as an index of quality.

This embraced:

Teachers' class Activities

+ Asking narrow questions

+ Asking broad questions

Lecturing or presenting information

Accepting ideas behaviour, feeling and helping individual pupils.

Teacher's non verbal activities

Pupils' class activities

Pupils' talk response

Pupils' initiated talk

Simple non-verbal pupil activities.

More involving pupil non-verbal activities.

Then confusion, irrelevant behaviour, giving commands and taking commands.

While in the Flanders Instrument, class behaviour is recorded after every three seconds it was decided for convenience to record class activities after every 5 seconds. The reliability of the instrument was established on the Scott's Coefficient of Reliability which also appears in appendix II.

On the basis of this instrument 245 lessons were observed in various primary schools based on different geographical regions to give a general cross-section of the differences. Group C primary schools were not visited due to the fact that many operate under conditions well above those of ordinary primary schools. To maintain a fairly high degree of reliability most of the lessons were tape-recorded. It should be admitted that tape-recording in some cases tended to create some artificial situations

in the classroom. Results of the lesson observation are discussed in chapters four and five.

Questionnaires: Questionnaires were carefully designed to find out the attitudes of primary teachers, students in teacher education colleges and their tutors towards the New Primary Approach and teacher education in general. The questionnaires contained major items on the curriculum of teacher education, NPA, teaching practice, teaching in teacher education colleges, teaching in the field and miscellaneous questions. A total of 138 teachers and 70 tutors responded to the questionnaire through an interview and 210 students of Kaimosi, Eregi, Siriba, Mosoriot, Kericho, Kisii and Thogoto colleges responded to the questionnaire by filling in answers after explanations had been given to them. What primary teachers, college students and tutors say about NPA and teacher education on the quality of teaching will be discussed in chapter six.

Simple drawing. This was done in one college only. The objective was to ascertain the effect of teacher training on students understanding of their classroom role. Its results are also examined in chapter seven.

1. M. Hutasoit and C.H. Prator. A study of the New Primary Approach in the Schools of Kenya (unpublished) 1965, p. 22.
2. Ibid,
3. E. Stabler - Education Since Uhuru: The Schools of Kenya. Wesleyan University Press 1969 p. 40.
4. Conference on Education on Malawi held on the 17 - 19th April 1972 (unpublished) pp 4.
5. L.K. Painter - The Hill Vision. East African Yearly Meeting 1966 p. 51.
6. Evidence of the Education Commission of East African Protectorate 1919, Swift Press, Nairobi p. 175.
7. The Kenya Education Commission Report (Ominde Report) 1964, Government Printer, Nairobi pp. 49-50.
8. E. Stabler op. cit. p. 57.
9. Ministry of Education - Triennial Survey 1964-66, Government Printer, Nairobi p. 5.

10. C.E. Beeby The Quality of Education in Developing Countries, Havard University Press 1966 p. 72.
11. Ibid, p. 57
12. Ominde Report op. cit. p. 49
13. Ibid p. 50.
14. The Development Plan 1970-74, Government Printer, Nairobi 1969 p. 464.
15. Ministry of Education - Triennial Survey op. cit. p. 5.
16. Development Plan op. cit. p. 465.
17. Report of the Education Commission of the East African Protectorate 1919, Swift Press, Nairobi p. 175.
18. The Phelps - Stokes Education Report 1922-23, Edinburgh House Press, 1925 p. 48.
19. Education in British Tropical Africa H.M.S.O. CMD 1925 p. 5.
20. Department of Education, Annual Report 1937. Government Printer, Nairobi p.6.
21. Department of Education Annual Report 1936 p. 37.
22. D. Manning "An Analysis of the relative Directiveness of Instruction in Selected Situation as indicated by a refined observation technique" Indian^a University

- School of Education 1950 No. 2. pp. 81-85
In Encyclopedia of Educational Research
- R. Ebel Ed. 1969.
- 23 M.V. Daniel - Activity in the Primary School.
Basil Blackwell; Oxford 1962 pp. 4-7.
24. N.E. Wallen and R.M.W. Travers - Analysis
and Investigation of teaching methods in
N.L. Gage Ed. Handbook of Research in
Teaching Methods Rand McNally and Company
Chicago 1963 pp. 448-506.
25. L.A. Siegel - A multivariate Paradgm for
Education Research Psychol. B68 pp. 306-7.
N.L. Gage Ibid.
26. J. Bruce Ellena and J. William (Eds)
Contemporary Research in Teacher effectiveness
1964 pp. 196-123. N.L. Gage Ibid.
27. W. McKeachie - Research in Teaching; the
gap between Theory and Practice Improving
College Teaching 1967. pp. 211-39. N.L. Gage Ibid.
28. B.S. Bloom, Thought Processes in Lectures
and Discussion. Jn. of General Education
1953 pp. 160-9. N.L. Gage Ibid.
29. J.C. Flanagan. Functional Education for
the Seventies 1967. N.L. Gage Ibid.

30. Ndegwa Commission Enquiry. Government Printer, Nairobi 1971 p. 146.
31. S.J. Curtis and M.E.A. Bultwood, A short History of Educational Ideas University Tutorial Press 1966 pp. 171-207
32. Ibid pp. 262-290.

CHAPTER TWOPRIMARY TEACHER EDUCATION AND THE PROBLEM
OF QUALITY IN TEACHING BEFORE 1945.The Training of Primary Teachers on job. 1845 -
1924, and the Quality of teaching.

During the introduction of Western Education in the last half of the last century and in the early years of this century, perhaps the problem of of quality in teaching did not largely preoccupy the minds of government and missionary educators. Their prime concern was with the nature of education to be given to the African Community.

Government policy in African education and the problem of quality in teaching: The settler - dominated government paid little or no attention at all to the problem of quality in African education. The need for it did not arise, since Africans were not capable of receiving literary education. The general background governing government activities in many of the African affairs was that 'in dealing with the African savage, the whiteman was practically at the genesis of things. An African represented a somewhat lower homo sapiens as compared to an

Anglo-Saxon; and this an African himself reflected it through his primitive habits and customs. Equality between a white and a black was therefore relegated a very remote future'.¹

It was on this background that the nature and content of African education had to evolve.

From the outset the settlers pressed for Africans to have practical education which could teach them skills that would be useful on the farm.

In the light of these attitudes, the settlers tended to be generally critical about Christian missions which emphasised literary education at the expense of manual work. These were seen as trying to teach an African to misread the Bible which subsequently gave him a fallacious policy that as long as he professed the christian faith he automatically became an exact equal to his white masters.² A racial approach to 'civilization' was endorsed by the Report on Education in the East African Protectorate of 1909 and the system of education was structured to reflect this policy.³ Africans were to receive an industrial type of education. A department of education was set up in 1911 and it floated grants-in-aid to various Missionary Schools for experimental purposes. A government Industrial School and

Teacher Training Centre was opened at Machakos, but its results were not very encouraging.

Education with a strong industrial bias became the official government policy in African education, but had the consequences of restricting the provision of literary education. This consequently made it imperative for Africans to focus much more attention on the expansion of literary education and giving only scant attention to the problem of quality in teaching.

The industrial element in African education was emphasised by many government education commissions, occasionally with little reference to literary education. The Report of the Education of the East African Protectorate in 1919 stressed that 'for education to have effect, it implied that the education given must be of the right sort. For natives education should be on technical lines as many witnesses had recommended; for fear that if any literary education was given the child educated would be ruined and would look forward to clerkships and similar occupations rather than entry into the field of labour.'⁴ The Commission however, expressed reservations about the provision of

technical education without some literary education. It pointed out that literary education was an essential preliminary to effective technical instruction and it was of the opinion that up to 11 years of age the education given could be literary, but could include hand and eye training gradually verging to the purely technical type; after that age it could be both technical and literary.⁵

In the light of this reservation that the provision of literary education could be the basis of effective industrial education, the commission was of the view that sound education could only be built on a body of well trained teachers. It was, however, not unanimous on whether or not the government should set up a secular teacher education centre; for it was feared that such an institution would lack a religious and moral foundation. It was therefore recommended that every missionary society be encouraged to found its own training college which would be maintained with government grants and supervised by government inspectors of the department.⁶

The Education Commission Report of 1919 had the merits of drawing government attention on the problem of training teachers as a means of improving the quality of African education. Accordingly the Department of Education issued rules governing the classification of primary teachers. This was the first government attempt of its kind to concern itself with the teacher and the problem of quality in African education. Teachers were classified as follows:

Pupil teacher: In general education, pupil teachers were to be examined in the work prescribed for standard V. Their professional side was to be examined by the inspector examining the schools for grants. A pupil teacher was to give a lesson in his presence.

Certificated teachers: These were placed in three categories; third class teachers; second class teachers; and first class teachers.

Third class teachers were to enter a teacher training centre after they had passed the seventh class syllabus and were to take courses in general principles of instruction, lesson preparation, the explanation of the subject of a lesson, the presentation of a lesson, writing on the blackboard, the teaching of writing, the elements of reading dictation, the teaching of

practical arithmetic and lesson criticism to be given before a European master. Before taking examinations prescribed by the department of education, candidates must have qualified as pupil teachers or have been trained for at least one year in some training institutions for teachers recognized by the department of education.

Second class teachers: Were to undergo a two year training course after holding a third class teacher's certificate. Their course was to include; the keeping of school records, attendance registers, the log book, diary work, syllabus of work, time-tables, accommodation and equipment, what to expect in a good classroom; lighting, arrangements of desks, types of blackboard, types of desks and the posture of pupils. Second class certificate holders could become First class teachers after obtaining five satisfactory annual reports from the Director of Education or his representative, provided not less than three of such reports be consecutive. Special Certificates were to be awarded to those qualified to give instruction in hand and eye training in knowledge necessary for agriculture, industry, history, hygiene, practical teaching, blackboard work and writing.⁷

It is important that in these instructions an attempt was made to classify primary teachers and structure their courses of study for the purpose of improving the quality of primary education, but they had a major weakness of putting much premium on teachers' class activities and completely dwarfing pupil participation in the learning process. It is quite regrettable that the rules could not be implemented. The government was more convinced about providing industrial education than literary education; and the Phelps - Stokes commission of 1923-24 had a stronger appeal to government action than the Education Commission Report of 1919 which tended to emphasise the importance of incorporating industrial education with literary education.

The Phelps Stokes Commission Report with some of its objectives as 'investigating the educational needs of the people in the light of the religious social and hygienic and economic conditions and assisting in the formation of plans designed to meet the educational needs of the native races,' stressed that education must be of a character to draw out the powers of the Native African and fit him to meet the specific

needs and problems of his individual community.⁸ The Report generally stressed a policy of adaptation in African education. The education given was not expected to divorce an African pupil from his tribe and give him contempt of his people and attract him in the towns.

On the training of teachers the commission stressed the serious need of teachers in the whole colony and Protectorate. There was an inadequate supply of teachers for the overwhelming number of natives needing the simplest form of training and instruction. In the view of the commissioners, emphasis upon highly trained teachers and hence a higher quality of instruction, would lead to a postponement of education for a number of years. Such a delay it was noted, was undesirable and even dangerous in view of the acute conditions arising from the rapid entrance of European influences into Africa. It recommended that the (Miss) Anne T. Jeanes experiment which had apparently proved successful among the American Negroes should be adopted as a means of 'manufacturing' teachers within a very short time. The plan recognized a temporary necessity of accepting teachers with lower qualifications but through effective supervision to meet the development of pupils. It emphasised that the condition on which

lower standards for teachers was to be tolerated even as a temporary expedient was supervision and organization which were to provide means and methods for the realization of satisfactory advance.⁹

An institution for the training of visiting teachers for the village schools could be established. The training of such teachers was to emphasise a sympathetic approach into the problems of the village schools or rural areas where the teachers had to initiate the necessary educational changes by actual demonstration in co-operation with the teacher and pupils rather than by talks and memoranda. In getting in contact with the village teacher, they were to deal with the 3Rs and then deal with other activities depending on the duration of the visit. Other activities were to include practice into household activities, gardening and etc. taught in connection with the neighbourhood.¹⁰

In November 1923 an Advisory Committee on Native Education in British Tropical African dependencies was established 'to advise the Secretary of state on matters of Native Education

in the British Colonies and Protectorates in tropical Africa; to which he might from time to time refer and assist him in advancing the progress of education in these colonies and Protectorates,¹¹ issued what might be seen as a government white paper on the Phelps Education Commission. It emphasised that education be adapted to the mentality, aptitudes, occupations and traditions of the various peoples conserving as far as possible all sound and healthy elements in the fabric of their social life adapting them where necessary to changed circumstances and progressive ideas as an agent of natural evolution. Its aim was to render the individual more efficient in his or her conditions of life whatever might be and promote the advance of agriculture, the development of native industries, improvement of health, the training of the people in the management of their own affairs and the inculcation of true ideas of citizenship and service.¹²

On the training of teachers, the committee also recognized that the key to a sound education system lay in the training of teachers.

It noted that the issue of training teachers be given primary consideration. The training of village school teachers was to be carried out under rural conditions so that those trained could be in direct contact with the environment in which work was to be done; and those selected for training were to belong to the tribe or district. As a means of continually improving the village teachers there was a need for training of teachers who could visit the village schools.¹³

In examining general government policy towards African Education in relation to the quality of teaching in primary schools, it might be concluded that the policy was a major critical constraint to the improvement of quality. Despite the government's 'pious' platitudes about placing priority on the training of teachers as a means of improving the quality of African education, in its view the development of African education implied an overall betterment of community life through visiting teachers trained for a multitude of functions related to community work. These were to assist untrained village teachers to handle the fundamentals of the 3Rs

in relation to community aspects of life like agriculture, industry and hygiene. This policy persisted well into the early 1940s and literally diverted government attention on the problem of quality in primary education. Most of the measures taken to improve the quality of education in the primary schools were seen in relation to community development and generally represented half-hearted attempts. Its main contribution as will be seen was the establishment of the Jeanes School whose main function was to train itinerant teachers who were to supervise village schools as well as community projects. Government policy of education for adaptation stood contrary to the aspirations of a majority of the African population and partly contributed to the independent school movement in many parts of the country and which led to the establishment of the Kikuyu Independent Schools in the Central Province, which though seen by the government as offering mediocre instructions,¹⁴ in the eyes of many Africans they were seen as occupying the educational vacuum that the government had created. The policy generally had the effect of making the African community

concentrate their demands on the expansion of literary education no matter the mediocrity of the instructions given in such expanded institutions.

Christian Missionaries and the Quality of African Education: The christian missionaries strongly subscribed to government education policy of 'adaptation to environment'. They believed that if the African Christian was to abandon his place on the old ladders of economic prosperity and social prestige by practising monogamy, he must be compensated by learning a trade or new method of agriculture which would open the way to new ambitions. If his children were to sleep at home, and live a good christian family life, he must provide suitable accommodation. If he was to read the Bible his house must have windows to admit light and therefore its shape must be square and not conical; nor could he afford to rebuild it every five years to meet the needs of shifting cultivation. If his children were to be 'educated', he must learn to do without their services on the farm and yet earn enough money to pay their school fees.

Again to pay government tax and his church tithe, he must have ready money; and if he was to leave his family to work on railway or a plantation he must produce not only for himself but for the market.¹⁵ On the basis of this policy, to almost every mission station an industrial school was attached. Christian Missionary devotion to industrial education led to less attention to the quality of literary instruction in the village schools.

What is important, however, was that while subscribing to the government policy of African education with a strong industrial bias, the missionaries realized that emphasis on reading and writing for literacy was the high road to or at least the concomitant of conversion. In this way schools had to stem from the catechistical centres presided over by the African catechist who built the first contingent of African teachers. The first batch of these teachers was trained in India. In 1860 through the encouragement of Sir Bartle Frere, governor of Bombay, allowances were paid for freed slaves and the Church Missionary Society (C.M.S.)

founded the African Asylum at Sheranpur, a model of Christian Village, which was part of the Nasik Mission. Under the supervision of the Rev. W. Salter Price, Africans were admitted to the Indian Schools there and eventually to the Industrial Training Centre and Teacher's College. It is noted that these catechists assisted John Rebman to maintain the C.M.S. mission on the East Coast of Africa.¹⁶ The intense competition with which different Christian Missionaries settled the inland of the East Africa Protectorate necessitated a hasty training of teachers to man the many catechist village schools that were being left behind.

The preparation of catechist teachers consisted of giving them basic elements of simple counting and reading; though approaches to the problem varied from one missionary group to another. Generally they were not given adequate training. The problem of selection and training is summarized:

'Mission staff and Christian leaders were confronted with many perplexing problems in the field of education. One of the concerns was to select the most apt pupils who showed promise of leadership ability and give them short term training in preparation for teaching in the village schools. After youngmen

were assigned to teaching posts, they were brought in the mission station one half day a week for further instruction. On these occasions it was not unusual to outline the teaching programme for the following week'¹⁷

Complaints were often raised about the trainers not having completed normal teaching courses at home and hence villagers accordingly had little respect for the catechist village teachers trained by such teacher educators.¹⁸

The Friends African Mission point out that the quality of teaching in the village schools very much depended on the training and resourcefulness of the individual teachers. Teaching aids such as maps and source materials were not only in short supply, but were not even available. Teaching largely consisted of reading portions from the Bible; music instruction was devoted to learning hymns in vernacular. Generally there was no division between secular and religious instruction.¹⁹ The quality of teaching in these schools perhaps reflects the Dame Stage of the hypothesis of Educational stages, in which, the bulk of the teachers are ill-educated and are either untrained or have the sketchiest training. Teachers fall back on the very narrow

subject content they remember from their own school days; and generally teaching consists of little but completely mechanical drill on the 3R's and the memorization of relatively meaningless symbols.²⁰ Concern over the quality of education given by the catechist teachers was not only expressed by missionaries but also by some civil administrators. A Provincial Commissioner had this to say; 'Speaking generally it may be stated that the bulk of the instructions carried out by native teachers is of mediocre attainments. The schools are on the whole of little educational value since it must be remembered that many of the missionaries are not trained teachers and do not view education as the greatest value 'qua adue' but merely as a medium of transmission of the Christian belief.'²¹

That the village teacher had received a sketchy training and hence had to give poor teaching, was partly as a result of circumstances and partly due to a false educational theory. The circumstances arose through the desire of christian missions to spread themselves as far and as quickly as possible and hence becoming

concerned with the quantitative value of education at the expense of the qualitative aspect of instruction. The education theory arose from the fact that quality of instruction was not seen as something of immediate concern. Both the government and the missionaries were most concerned with industrial education than literary education. It was generally perceived that for one to teach, one only needed to be only a little way ahead of one's pupils; for what after all was training? Was it not just handing over a certain technical hints as to how the children ought to sit at the desk or at what point of the lesson the use of the blackboard should come in? And what was the village school? Belonging to a mission it was also a church. There was no need for distinction between secular and sacred aspects of education.

Despite his poor training and teaching, the village teacher was the hub of the whole educational system and he was generally respected for this. He was a child of both of his own native village and also of the European School. He was a point of light in an otherwise dark world. To the village he was the only local

element that represented the marvels of the outside world; the world of white people.

The establishment of the first teacher education centres 1924 - 1945 and the problem of quality of teaching.

Government policy and primary teacher education:

Following the recommendations of some of the Education Commissions discussed above, the government issued the first Education Ordinance of 1924. To the African this Ordinance gave real first encouragement for a demand for schools and the desire to run them, a thing the government had been slow to respond to; district boards were set up and they marked a start in the representation of African opinion in educational matters. The boards after their establishment levied rates to assist secular schools; and demanded the expansion in educational facilities.

The government further drew an outline of the school examination for Arab and African children:

<u>Name of Examination</u>	<u>Scope</u>	<u>Language</u>
1. a) Elementary B School Certificate	Std IV	Vernacular
2. b) Elementary B Teacher's Certificate	Teaching up to Std IV	Vernacular
2. a) Elementary C School Certificate	Std VII i.e. intellectual attainment of Local Cambridge Preliminary	English or Swahili.
b) Elementary C Teacher's Certificate	Teaching up to Std VII	English or Swahili
3. a) Junior Secondary School	Form 2 i.e. intellectual attainment of Cambridge Junior Local	English
b) Junior Secondary School Teacher's Certificate.	Teaching up to form 2	English

In response to African demands for increased facilities for higher literary education the government argued that 'few of the Africans had at that time the power of thought which was required for a high standard of literary work. Generally speaking the African mind had reached a stage of sense perception, imagination and emotions which were highly developed, but development of reasoning faculties were still slow; useful training was a continual contact with material processes'.²³ These attitudes reinforced in 1932 by Dr. Vints "findings" about the educability of the East African Native,²⁴ continued to make the government indifferent to the provision of literary education and strongly resisted any demands for the expansion of African education. With few if not none of its own schools, the problem of quality of instructions did not become a major concern for the government. Repeated warnings were sounded to missionaries for attempting to stress a literary curriculum; 'it is incumbent upon all those responsible for educational policy to endeavour to give the African an education suited to his capacity and his environment.'²⁵

For the trickle that were passing through the literary education system an attempt was, however, made through the Education Ordinance of 1932 to effect a high quality of instructions by classifying and structuring the teachers' courses of study. Four teachers' certificates replaced those issued in 1926:

1. A Primary Teachers' Certificate: This qualified the holder to teach up to standard VI or with endorsement to Form II. Candidates for this certificate were to have passed the Junior Secondary School examination and undergone a two year teacher's course in an approved institution. The course of study included Blackboard work, physical training, school management and classroom teaching, English and Swahili speech.

2. A Lower Primary Teachers' Certificate: This qualified the holder to teach up to Standard IV. Candidates were to have passed the departmental examination taken at the conclusion of primary education and undergone a two year teaching course at an approved institution. Subject of study included blackboard writing and drawing,

physical training, school management and classroom teaching, English and Swahili speech.

3. An Elementary Teachers' Certificate: which qualified the holder to teach up to Standard II with endorsement to standard III. Candidates were to have taken the standard IV examination with one years training in an approved institution. In exceptional cases two years approved experience under adequate supervision could be accepted by the Director of Education in lieu of the years approved training. Subjects of examination were to include blackboard writing and drawing, physical training and classroom teaching.

4. The Jeanes Teacher Certificate: These were to have the Lower Primary Teachers' Certificate and had subsequently undergone at least one years training at the Jeanes School, Kabete. In exceptional cases holders of the elementary certificate would be accepted. Subjects of the course included blackboard work, physical training school management and teaching methods of supervising schools and helping teachers and community work.²⁶

It cannot be denied, that this classification if put into practice would have improved the quality of instruction in the primary schools, though the content of the courses place much emphasis on the teachers class activities. The courses give an allowance for the teachers to teach beyond the limits of their knowledge. But in the light of the above outlined policy, government major interest was with education for adaptation consequently as will be seen later in this chapter, the quality of teaching remained generally poor despite this splendid classification and structuring of the teachers' courses.

The Jeanes School, Kabete and the training of itinerant teachers as a means of improving 'quality' of African education: The idea of training itinerant teachers as a means of improving the quality of African education as suggested by the Phelps-stokes report had strong appeal with the settler-dominated government since it stressed education for adaptation and was in no way contradictory to the accepted government policy. The Governor in his address to the Legislative Assembly emphasised the importance of the scheme:

'The training of teachers is the most fundamental part of an education system and must be undertaken by the Department of Education at once; otherwise no great improvement can be expected to result from any school syllabus. First comes the training of village school teachers and the scheme suggested by the honourable colonial secretary for the training of twenty village teachers at Kabete in a two year course is both economical and practical. The teachers in the village are expected to give a combination of mental and manual training to run bush boys; and at Kabete the Reformatory provides facilities for instruction in carpentry drill and practical agriculture. Practising classes for teachers would be provided by a local village school at the Reformatory school'.²⁷

The Jeanes School accordingly opened on the 1st August 1925. The curriculum embraced a variety of subjects: Kiswahili, singing, physical training, games, religious and moral instruction, simple hygiene and sanitation, first aid (fractures, cuts and burns, scalds, dysentery, pneumonia, plague and malaria), simple agriculture including ploughing, simple carpentry, thatching, sundried brickmaking, curing of skins and hides the silk industry, blacksmithing and tin smithing.²⁸

Teacher education included lesson demonstration, blackboard use, how lessons to young children vary from those given to older ones, and dictation.

Teaching practice was given at the practice school at Mwimuto and these consisted of criticism lessons, analysing good and bad points through a questionnaire. Lectures consisted of class management, the meaning of curriculum, time-table, syllabus and daily notes, lesson preparation and application, aids to teaching, examination methods, the teaching of arithmetic, reading dictation, composition and spelling, some elementary geography, principles of Education, instincts, imitation, formation of habits, imagination, memory and discipline, physical training, drill and organization of sports and athletic meetings.

The teacher education aspect was quite elaborate, though the curriculum was so crowded that considering the Jeanes teacher's academic background which was barely below standard VI of the primary school, he could not obviously master it very thoroughly. Given the many village schools, he spent most of the time travelling hence did not have much time to teach village teachers effectively; and most of the Jeanes teachers

preferred the social and sanitary aspect of their work to improving the village teacher.²⁹

But the opening of the Jeanes School, noble as it might have appeared in the eyes of government authorities, it brought to the surface African reaction against the quantitative and qualitative aspects of government policy in African education. The first batch of students expected to continue their education in its usual arithmetic progression of standards and resented the cumbersome training as unnecessary and a poor substitute for advanced work.³⁰ In some areas open hostility was shown against the Jeanes teachers because it was felt that education consisted of learning to read and write and to do sums and any manual work that the child may be required to do should be done for the parents and not for the teacher.³¹

The Jeanes school was taken over for military purposes in 1939 when its entrants had almost become a mere trickle. There are a number of factors which constrained its effectiveness. The aim of the school was to enable the teacher to discern the relevance

of African lore and customs that he could pass on to the teachers in the outschools and also try to prevent the heedless wholesale adoption of western ways. He had to learn how all school subjects could be adopted and directed towards the improvement of various villages. Arithmetic was no longer to concern itself with hypothetical problems but be used in the computation of village statistics; drama was to become a vehicle of propaganda for health and agricultural improvement, and even reading and writing could be given local relevance by the collection and repetition of tribal songs and stories. And yet in his missionary background, he had been taught that his own songs, dances and customs were unchristian, uncivilized and therefore unacceptable. He had been taught that he had no history of his own to speak of. Needless to say that the Jeanes teacher was commissioned to undertake a very difficult task; to remove the western element from the bush teachers which in their view constituted the quality of education and substitute through his initiative a very new African syllabus and methodology.

The Jeanes teacher was in a great dilemma; he often must have wondered about the well esteemed education that white administrators were attaching so much importance to when they themselves were not receiving it and furthermore his missionaries appeared quite reluctant to let their best teachers go to this school; only allowing mediocres who in most cases never applied through the normal ways, but were only sought out by the staff.

Stretching his eyes a little away, the Jeanes teacher saw the Alliance High School Kikuyu, and St. Johns School, Kabaa, providing a path for further education and the possibility of entrance to Makerere in Uganda, while the Jeanes School, Kabete demanded an attitude in its students that despised further paper qualifications. Alliance and Kabaa could lead to some of the best paid jobs in the civil service, while the Jeanes school pointed the way back to the reserves and a life of quite extraordinary difficulty, where patience was more important than ambition.³²

African reaction to government 'misplaced values' in education.

African reaction to government restriction of literary education in favour of education for adaptation was first registered through the district boards' efforts to demand the establishment of secondary schools, and the levying of taxes to assist secular primary schools; their second reaction was lack of enthusiasm to enter the Jeanes school and the apparent lack of co-operation with the Jeanes teacher. The emergence of the Kikuyu Independent Schools was as much a reflection of the dissatisfaction over missionary stand over female circumcision as much as it was a frustration over the education practices of the government. Opening in 1929, by 1937 these schools had over 7,223 pupils on roll.

Though existing in a virtual vacuum, the government was very critical about the quality of education given by these schools. It was pointed out that in most of the schools the bulk of the teaching was done by pupil teachers who had themselves received education to a standard very little in advance of those whom they were trying to teach. The standard of class-work in every subject was distressingly low mainly because of inadequate staff, bad teaching,

skimping the teaching of the fundamental process in the sub-standards, pushing the pupils ahead from one class to another without proper tests, lack of reading books,,and unsuitable writing materials.³³ Very often some of the criticisms

were general and biased. A Provincial Inspector summarized the defects of these schools:

'Failure to make any real attempt to teach reading, and number properly to the sub-standards; Arithmetic throughout the classes is bad; English, or what the teacher thinks is English, is taught from standard II and in some cases Standard I'.³⁴

In 1939 Githunguri Teachers College opened to train teachers for the Independent Schools as well as for all African Schools. The ultimate aim was to convert it to a University. Students were drawn from Nyeri, Kiambu, Nakuru, Embu and North Kavirondo.³⁵ The College was closed down in 1952 when a state of emergency was declared in Kenya.

African demand for expanded facilities of literary education and teacher education continued to build as the war was coming to an end.

Expansion in primary teacher education became one of the most important themes of many district education boards. Their major concern was to maintain the quality of instruction in the many primary schools that were being established through the demands of the ex-war veterans. Machakos District Education Board tabled the following motion:

"This Board wished to call the attention of the government to these facts:

- a) The Akamba are showing in various ways that they are most conscious of the great war effort which their tribe has made to assist the government. They are expressing the opinion that their efforts in the last war went virtually unrecognized and they fear that when this war is over their legitimate aspirations will again receive scant consideration.
- b) The war effort of the Akamba compares favourably with that of any African tribe and it seems right therefore that government should afford them, some material recognition as soon as possible and before the present feeling of cynical frustration starts to seek expression through political agitation. More than any other social service the Akamba wish a wide development of elementary education.
- c) There are no facilities for training Protestant teachers in a tribe of nearly $\frac{1}{2}$ million and the development of elementary education is at stand still because of a shortage of teachers. Therefore this Board strongly urges the government to establish immediately a teacher training centre in Machakos District as unsolicited gesture to the Akamba people in the recognition of their war effort rather than forces it to do so."36

Financial assistance from the government.

The Digo District Board presented a plan earmarking Bura, Mbale, Wusi and Shimo la Tewa as expanded future teacher centres.³⁷ Chief M'Angaine in his welcome speech to the Governor referred to the desire of the District that the government provides a teacher training school in Meru.³⁸ Similar demands were made in other parts of the Colony and Protectorate.

Impact of African reaction on government education policy.

Following these demands the government put forward 'proposals for the reorganization of the training and employment of African Teachers'. The proposals noted that there was a great need for increase and in efficiency of Elementary teachers than others. In order to foster the community spirit and incidentally to overcome difficulties of language differences, it was proposed that training institutions were to be organized on tribal basis. For every large tribe there was to be a centre adequately staffed and provided with buildings and equipment appropriate to tribal conditions. In areas where missionary education work was firmly established, training centres were to be conducted by them with adequate financial assistance from the government.

In other areas and where a number of tribes may have to be served by one training centre, it was necessary to establish government institutions. The proposal emphasised that it was considered imperative that all the institutions were to be separate entities and not conducted in conjunction with other types of schools, though obviously they were to be near to or would have to include an Elementary school for use as a practising school.

The Elementary Teacher Training centres were to be as follows:

Coast Province: For the Swahili and other coastal tribes one government training centre.

Central Province: For the Kikuyu 1 - Catholic and one non-catholic. For Akamba 1 government. For the Meru it was considered necessary to establish one government centre; Embu were to be trained with Kikuyu and Meru.

Rift Valley: Somalis and up country Swahilis, one government centre.

Nyanza: For the Luo 1 catholic and one non-catholic centre; Bantu Kavirondo (Baluhya) one government training centre. For the Kipsigis

be taught by a European. English was to be undertaken
 Suk, Nandi and the Elgeyo, one joint government
 training centre. For the Kisii one government
 centre.

Extra Province: For the Masai one government centre.

The members of staff at each centre were to vary with the number of students, but tentatively one full qualified European and one African teacher for every twenty five students in residence.

At larger centres the African staff was to include training instructions in handwork and agriculture; where possible African staff was to be of the same tribe which the centre served. In the most advanced areas no student was to be admitted who had not completed standard IV. Among backward tribes students below this class could be admitted. The course was to take two years with students spending two months teaching in the elementary school. Greater attention was to be paid on method including class management to handwork and physical education.

The training of Primary teachers was to be centralized in two or three institutions; one for the Protestants and one for the Catholics. These were to be separate institutions not linked with any

other school except for practising school. With a possible exception of handwork, all subjects were to

The Advisory Council on African Education appointed a

be taught by a European. English was to be undertaken by those whose mother tongue it was.

Before admission students were to have completed secondary course to Form II. The duration of the course was to be 3 years with students spending three months in practice teaching in a primary school under European supervision. It was proposed that no more students were to be admitted to the lower Primary Training and the grade was to be abolished at the end of 1941.³⁹

The proposals still reflect the government emphasis on education for adaptation, but they represent some shift towards the improvement of literary education through well trained teachers. It is not quite clear why the Lower Primary Teachers Certificate should be abolished and yet a lot of stress is placed on the training of Elementary Teachers. This is perhaps indicative of a main concern with the provision of largely low education. Elementary teachers were a much stronger factor in the policy of adaptation since they were more in touch with their tribal areas. Their instructions were given in vernacular. Possibly due to the war effort, the proposals never went further than their publication.

But the government could not continue its indifference in the face of increased clamour for education. The Advisory Council on African Education appointed a

committee to survey the possibilities of opening a training centre for Primary teachers. The committee observed that in view of the fact that Makerere was not supplying a sizeable number of highly qualified Kenya teachers, it was necessary for the government to open its own training centre for these teachers.⁴⁰

In the Conference of Mission Societies in Great Britain and Ireland of 1923, a general policy statement concerning native education in Africa was formulated. It was stated that mission plans were being made to upgrade it to University status. Kagumo Primary Teacher Training centre was accordingly opened in 1944 as a non-denominational college taking pupils who had passed the Junior School Examination. The opening of Kagumo was quite significant in the improvement of quality of African education since this provided facilities for the training of more highly qualified grade of primary teachers.

The expansion of teacher education by the Christian Missionaries and the problem of quality of instruction

Christian missionaries were naturally disturbed by the fact that the Jeanes school was to be a secular teacher training centre and

In 1916, an Alliance of Protestant Missionaries

were generally unhappy with the way in which the newly established native Education Committees were trying to finance secular schools and their increased demands for African Secondary education.

In the Conference of Mission Societies in Great Britain and Ireland of 1923, a general policy statement concerning native education in Africa was formulated. It was stated that mission education should aim at improving the general material and moral life of the community. Too it should give special attention to the training of leaders, 'through an education that was not to separate them from the people but would fit them to be real leaders of the community and inspire them with the desire to work for the advancement of their people'. And finally it should satisfy the needs of the urban community by training clerks, mechanics, and technical workers as well as doctors, lawyers and clergymen.⁴¹

These factors combined to make christian missionaries relign their educational policies. In 1926, an Alliance of Protestant Missionaries

voted to set up a secondary school on the Church of Scotland site at Kikuyu. Though their objective was to gear the schools' Curriculum towards Secondary School work, thus embracing largely literary subjects like English, Arithmetic and General Science, the emphasis after the third year was distinctly vocational. Agricultural training, clerical work and teacher training were introduced.⁴² The school had a very broad curriculum. It included subjects like Mathematics, Science, Agriculture, Biology, English, History and Geography, Blackboard work, Gymnastics and Physical Instruction. The department of education was able to state that 'Alliance High School has commenced the training of African teachers of the highest class yet seen in Kenya. These teachers are given courses in both biology and agriculture'.⁴³ Subjects necessary for adaptation are an index for the quality of the teachers trained at Alliance. It is however true that the school was training the highest grade of teachers; the Elementary C teachers. Emphasis in training was placed on the proper use of the blackboard, as it was argued that a great fault in a large number of African teachers

was their inability to make adequate use of the blackboard. It was felt that print script was most suited for blackboard use and each pupil spent half an hour each day on blackboard writing. This was followed by a graded series of exercises in free drawing and map drawing together with exercises in geometry and the setting of arithmetical examples. Teachers' guides suitable for African teachers were too few but during the course of the year each pupil made for himself a set of notes dealing with the method of teaching various subjects of the curriculum.⁴⁴ Though the Alliance teachers were the most highly qualified teachers, they trained in very small numbers since teacher education was a mere appendage to secondary school work.

The Catholics started St. John's School, Kabaa with a very strong teacher training bias ultimately to convert it to a Secondary School. The School opened on January 19, 1925 with a solemn retreat calculated to put the pupils in the right frame of mind after which they signed a promise; 'For the Glory of God and for the redemption of our brethren we promise before God and before our priest to follow this three year

course (without a salary, receiving only clothes and food) and after that serve in the schools as our priests shall direct for five years'.⁴⁵ Kabaa continued with its strong teacher education bias even after starting Secondary School work in 1929 and became the most outstanding teacher training centre in the whole country training more teachers than any other school.⁴⁶ Until after 1932 teacher training as such was not treated a separate subject. The practice was that all pupils in higher classes of the primary school and all students of secondary section studied the theory and methods of teaching as a subject of the ordinary school curriculum and received some practical teaching in outschools whenever time could be found or during the holidays. Though Kabaa's significant achievements in the training of teachers, may not be disputed, it was however unfair to groom everybody to become a teacher.

The training of lower grade teachers, Elementary A and B was carried out as an appendage of the primary schools. These included the

S.D.A., Kamagambo, the Friends Africa Mission, Kaimosi, the C.M.S. Butere, Maseno, Kaloleni, the Church of Scotland Tumutumu and the Mill Hill Fathers teacher training Centre Eregi - Yala. The volume of teachers trained at these centres was very small and generally students had to pursue their academic work in an arithmetic progression combined with professional work, a thing that seriously impaired their quality.

Missionary plans for the reorganisation of primary teacher education:

The 'Great World Depression' followed by the Second World War had far reaching effects on missionary efforts to expand African education. They had to surrender some of their institutions for military purposes, apart from throwing their weight on battle fronts. On the eve of the War, however, missionaries had serious plans to reorganise and expand teacher education. Their plans were possibly influenced by the Pim Report which referred to the high costs of the primary schools owing to the high rates of salary of the European staffs. It suggested that the extension of education would depend on the training of African teachers to take charge of elementary schools.⁴⁷ A second factor

influencing the reorganization of teacher education was the teachers' examination results of 1935. The department of Education pointed out 'The examination results were disappointing, and the general standard of African teachers is lamentably low. The system of training teachers at the primary schools is not satisfactory; the teaching examinations are taken during the primary course; and in very few cases have adequate arrangements for efficient practice teaching been made. If there is to be any advance in the general level of African education, it is essential to raise the standard of teaching. Unless this is done there is a grave danger of a considerable percentage of the grants to African schools being wasted. A complete reorganization is necessary, and the training of teachers should only be undertaken in institutions provided and staffed solely for this purpose'.⁴⁸

In this respect christian missionaries presented plans for the consolidation of their teacher training.

The Kenya Missionary Council Proposals for Protestant Teacher Training Missions:

Coast Region: Wusi which had developed as an elementary teacher training was earmarked to provide teachers for the C.M.S. and the Methodist Mission schools in Tana.

The Highlands: Three schools were proposed, the first being a joint Normal school, for the training of Primary and Lower Primary Teachers and the other two for Elementary Teachers.

1. Kahuhia Normal School: It was to train Primary and Lower Primary Teachers and was to be placed under a board of governors similar to that of the Alliance school. Ten Primary and fifty lower primary Teachers were to be trained at one time and were to be drawn from the various missions associated with the Kenya Missionary Council in their work at the coast and the highland areas.

2. The C.M.S. Elementary School, Embu: This was to recruit students from Embu, Meru and Chogoria. Twenty-five to fifty students were to be in residence in one year.

3. The Church of Scotland Mission Elementary School Tumutumu: This was to be a school for the Church of Scotland Mission. It was to receive teachers from the C.M.S. Waithaga, African Inland Mission Githumu, the C.M.S.

Kambui and others.

Kavirondo (Nyanza) Region: In this area also a complete scheme necessitated three Training Schools, one for Primary and Lower Primary Teachers and two for Elementary Teachers.

1. C.M.S. Maseno was to undertake the training of Lower Primary Teachers and Primary Teachers for the various missions.

2. Elementary Training School, Butere, Though not discussed under the immediate proposals, it was recommended that the government should assist it to continue the training of Elementary Teachers.

3. Kaimosi Mission School: This too was to be given encouragement to train Elementary Teachers. Since as it observed, the Friends Mission had about 250 sub-grade schools and a number of Elementary Schools.⁴⁹

The Roman Catholic Proposals

These were less elaborate, since each congregation had a potentially large area for centralized teacher education institutions. For Lower Primary and Primary Teachers, Yala, Mathari and Kabaa were earmarked; and for the Elementary

Teachers, Asumbi and Kakamega (Mukumu). In addition the Holy Ghost and the Consolata Missions selected certain Fathers to undergo the teacher training course at the Institute of Education, London University. These were to return at the end of 1937.⁵⁰

Government reaction to the Missionary proposals:

Following these proposals the Director of Education made a cut in the vote for African Education in order to provide funds for the implementation of a comprehensive scheme for the reorganization of teacher training with a general warning to the missionaries against putting forward a scheme which would involve large capital expenditure 'I felt it incumbent on me to warn the missions that any scheme based on a large outlay would unlikely be accepted'.⁵¹ He further pointed out that pupils from government African Schools were to be accepted at all mission teacher institutions, because the government was not proposing to open its own teacher institution. It was further considered economical to finance the missions. Government activities in teacher education were to be

confined to the Jeanes School. He stressed that teacher education as a specialized activity could not be conducted as an incidental activity of a primary school. Noting the importance of the proposals, he stressed that all educational work was being hampered by the ineffective and badly trained teachers and by the employment of a large number of untrained teachers. An appeal was made to the government to increase the missions' education vote to implement the proposals since as he observed, having been hit by the Great Depression, they had no money to implement them on their own. If the government did not do this, an alternative would be for it to undertake teacher training; a thing that would be unacceptable to the missions and contrary to the accepted policy laid down by the colonial office. The venture would involve the government a large capital outlay and considerably higher recurrent costs.⁵² Very persuasive arguments indeed, but they were not advanced in government activities at the Jeanes School.

As a result of the war, missionary proposals just scored partial successes. Teacher education continued largely to be appended to secondary and primary schools, producing only a handful of teachers yearly. Kahuhia Normal School was one of the most successful teacher education centres. Other centres included, Maseno Secondary School, Embu Normal School, Butere, Kaimosi, Nyeri, Yala, Kijabe, Kamagambo and a number of many primary schools.

Despite government attempts to classify and structure primary teachers courses; and missionary attempts to improve the education of teachers, the quality of instruction remained generally poor. As already discussed in this chapter, the standards of teacher education were low. The supervision of practice teaching was unsatisfactory due to the fact that small staff employed made close individual supervision difficult. Generally most of the students had only had mediocre academic attainments; and this factor combined with a greater percentage of untrained teachers in

the primary schools to make the quality of instructions very low.⁵³ The Inspector of Schools had the following to say about a lesson taught by a trained teacher:

"Little attempt is made to introduce some methods in teaching number and reading. Little mental work is done. Written and writing work are generally poor. Slates and exercise books are indiscriminately used. The drill of some five or six classes was seen. Based on inadequate knowledge of the old syllabus. The class was kept in an awkward position in order to give lengthy verbal explanations. Very laborious methods were used in calculation of L.C.M. rather than fractions. One would find certain meaningless definitions such as the following taken from standard V book: 'When we used this word fraction in Arithmetic we used it because when you give me $\frac{1}{2}$ of a thing or $\frac{1}{4}$ and $\frac{3}{8}$ $\frac{1}{4}$ we used with, a fraction.' Note books carelessly corrected many mistakes left uncorrected. The following extract from a notebook will serve as an example: 'A farmer bought a horse for £ 50 guineas and sold it at a profit of £ 319 6 £.S.D. I bought a horse £ 52 10 and sold it for

3	19	6	Ans."	54
56	0	6		

Another Inspector Report had this to say:

"Each class in the Elementary practising School was seen. In each case were apparent the usual mistakes in teaching which one is accustomed to associate with untrained teachers in the bush schools, bad writing, mistakes uncorrected work badly set out, lack of mental arithmetic, too much unguided written work unsuitable Swahili etc."55

Other reports can be cited to illustrate the point that methods of instruction were inadequate, particularly poor performance in the departmental examinations which was largely attributed to the poor quality of instructions used. The need for improvements in the quality of teaching was apparent, but much attention was still focussed on the expansion of educational facilities which had been very slow.

1. African Standard: 11th June, 1906.
2. African Standard: 28th July, 1906.
3. Report on Education in the East African Protectorate 1909 Quoted from K.J. King. Pan Africanism and Education. Clarendon Press 1971.
4. Report of the Education Commission of the East African Protectorate. 1919 op. cit. p.7.
5. Ibid.
6. Ibid p. 175.
7. Departmental Instructions governing Native Education in assisted schools. Swift Press Nairobi 1922.
8. The Phelps-Stokes - Education Report 1922-1923. op. cit. p. XII.

9. Ibid. p. 48.
10. Ibid p. 55.
11. Education in British Tropical Africa,
Op. Cit. p. 1
12. Ibid.
13. Ibid p. 5
14. Department of Education, Annual Report 1937
Government Printer, Nairobi 1938. p. 62
15. R. Oliver - The Missionary Factor in East
Africa. Longman 1965 pp. 213-215.
16. J. Anderson - The Struggle for the School. Longman
1970 p. 12.
17. L.K. Painter, The Hill of Vision, Op. cit. p. 51.
18. Evidence of the Education Commission of
the East African Protectorate. 1919 Op. cit.
pp. 177-8.
19. L.K. Painter - Ibid. p. 51.
20. C.E. Beeby - The Quality of Education in
Developing Countries. Op. cit. p. 59.
21. Evidence of the Education Commission of
1919 op. cit. p. 175.
22. Department of Education, Annual Report 1926.
p. 49.
23. Department of Education, Annual Report
1926. p. 15.
24. Department of Education, Annual Report
1923. p. 2.

25. Kenya National Archives; C.M.S. 1/137.
Director of Education Circular letter of
25th March 1937.
26. Department of Education, Annual Report
1937. pp. 94-100.
27. E.R.J. Hussey, - Memorandum on Certain Aspects
of Arab and African Education, Government
Printer Nairobi 1924. p. 3.
28. Department of Education Annual Report 1924.
pp. 29-30.
29. Interview with Mr. Jeremiah Segero an ex
Jeanes Teacher.
30. The East African Standard, 10 February 1928.
p. 52.
31. Department of Education, Annual Report 1929.
p. 47.
32. K.J. King - Pan Africanism and Education.
op. cit. pp. 150-176.
33. Department of Education 1937 op. cit. p. 62.
34. Ibid. p. 65.
35. The Origins and Growth of Mau-Mau
(The Corfield Report) Sessional Paper no. 5
1959/60 CMD 1030, Government Printer,
Nairobi p. 183.

K.N.A. deposits the Kenya National Archives.

36. K.N.A. Extract from Minutes of the Machakos District Education Board Meeting of 6th October 1943.
37. K.N.A. Extract from Minutes of the Digo Education Board of the 31st December 1945.
38. K.N.A. Welcome Speech - H/E Visit to Embu and Meru 1944 22-26 July.
39. K.N.A. B. 182/111/67 Circular Letter of April 18, 1940.
40. K.N.A. B. 2191/1 Government Kikuyu School Kagumo.
41. Conference of Missionary Societies in Great Britain and Ireland. (London: International Missionary Council Papers and Reports, 1923) Quoted from V.M. Battle and C.H. Lyons ed. Essays in the History of African Education. Teachers College Columbia Press 1970. p. 107.
42. J. Sheffield - Policies and Progress in African Education in Kenya 1949-1963 M.Ed. Thesis. Teachers College Columbia 1964. p. 93.

* K.N.A. represents the Kenya National Archives.

43. B.E. Kipkorir The Alliance High School and the origins of the Elite in Kenya. 1936-62.
Ph.D. Thesis Cambridge University 1969.p. 147.
44. Department of Education, Annual Report 1929.
p. 52.
45. J.N.B. Osogo. The History of Kabaa, Manqu and the Contribution of the Holy Ghost Fathers to Education in Kenya.
M.A. Thesis, University of East Africa
1969. p. 51.
46. Ibid. p. 57.
47. Department of Education, Annual Report 1937.
p. 6.
48. Department of Education, Annual Report 1936. p. 37.
49. K.N.A. T2 Kenya Missionary Council Proposal for Protestant Teacher Training Conference of the 13th May 1936.
50. Department of Education, Annual Report 1936.op. cit. p. 37.
51. K.N.A. Estimates 1937.
52. Ibid.
53. In 1930, The number of trained teachers was 576 and untrained teachers 1,256.

In 1936 trained teachers 981, untrained
 1,553. Source - Annual Reports 1930,
1931 and 1936.

54. K.N.A. 174/11/142 Kaluhia Primary School
1940.

55. K.N.A. 13/160 Inspectors Report 20th July,
1936, Kaimosi School.

Education, 1946-1950.

The end of world war II in 1945 proved
 another force behind the expansion in primary
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CHAPTER THREEPRIMARY TEACHER EDUCATION AND THE PROBLEM
OF QUALITY IN TEACHING 1945 - 1972.Attempts to improve quality through a rapid
expansion and reorganization of primary teacher
education. 1945-1950.

The end of world War II in 1945 became another force behind the expansion in African education. In Britain, Liberal forces which had also fought on the mainland of Europe to liberate European countries from Nazi tyranny saw themselves in a dilemma of having to continue colonial administration abroad; they therefore demanded that colonies be prepared towards eventual self-government; and education was one of the fields in which this preparation had to be made. Here in the colony and Protectorate, the end of the War brought back ex-war veterans. They, having travelled abroad and seen the importance of 'Western education' urged that educational facilities be expanded. This particularly led to the expansion of primary education.¹ A corollary

of the expansion in primary education was an expansion in primary teacher education. The supply of teachers fell so short of their demand in the primary schools that a high proportion of untrained teachers had to be recruited;² hence concern was voiced on the quality of education in primary schools; 'The lack of trained staff throughout the school and the poor quality of what trained staff there is, have combined to impose in the schools a mediocre level of performance. The great mass of those who complete standard

V, tested in an Examination, achieve results so closely alike that proper selection for admission to the Secondary Schools is almost impossible.'³ Serious efforts were however, made to increase the training of teachers.

The Lockhart Committee: A Committee chaired by Rev. R.A. Lockhart the principal of Kagumo Teacher Training Centre, was to consider the needs and future organization of African teacher training in relation to the general programme of development, having regard to: the necessity

to lower Primary teachers, the Committee was

of continuing the training of teachers comparable to the three grades of teacher; the desirability to concentrate so far as geographic and linguistic considerations permitted the training of teachers to professional school reorganization; the desirability, or otherwise of carrying out the training of men and women at the same centres, the training of teachers of work in township schools and the training of teachers for work in schools in settled areas.⁴

The Committee felt that there would be an interim period ending 1951 for the reorganization of the whole education system. To increase the supply of Elementary teachers, pupils below standard IV were to be recruited with some extended training. These pupils were to combine academic and teacher education while in training. At the end of the first year better pupils were to be offered a further three year training, one purely academic and others partly academic and partly professional. The course was to take four years. Turning to Lower Primary teachers, the Committee was

of a view that they were not sufficiently qualified to teach up to Standard IV, particularly lacking in a knowledge of English. Their course could be extended to three years with a special objective of improving their English; a misdirected index of good teaching. English as a medium of instruction should be well spoken and taught but it cannot be alone used as a criterion for judging effective teaching. Primary teachers too were to have their course extended to three years. With the end of the interim period there was to be a total of 2,755 Elementary Teachers, 972 Lower Primary Teachers and 134 Primary Teachers.⁵

After the interim reorganization period, plans would be made to open large teacher education centres. These were to have a capacity of 300 students each and they were to be cited as follows: Nyanza Province 4 centres; Central Province 4, Coast Province 2 centres and Rift Valley 2 centres. English was to be a medium of instruction for all the grades of teachers and courses of preparation would

include class management, principles of teaching and the academic subjects. A special centre for training ex-servicemen interested in teaching was to be opened.

One teacher education college was to open for Primary Teachers, 18 for Lower Primary Teachers and 36 centres for Elementary Teachers.⁶

The Colonial office fearing the possibilities of haphazard planning in the teacher education system. The colleges in the U.K. were appointed an Advisory Committee on Education on the training of teachers in the colonial territories.⁷ The Committee expressed that in some territories there had been a tendency to establish a large number of small centres for the training of teachers. It regretted that it would be very unlikely that such centres would be adequately staffed. It was generally noted that though not all the recommendations would be found workable in all the territories, they were, however, to serve as guidelines.

The Committee recognized the need for supplying qualified teachers to man the expanding educational system, but emphasised the importance of basing the expansion on sound principles

underlying the development of teacher training. It expressed concern over a danger in such a period of rapid expansion of following a pattern based on expediency rather than principles. If such a thing was to happen, it was regretted, the colonial territories would find themselves in a position the United Kingdom was finding itself; with no coordination in the teacher education system. The colleges in the U.K. were so insufficient in size to be either economical or educationally efficient. Such a structure had evolved as a result of a haphazard development. The Committee therefore made the following suggestions:

1. Colleges should be sufficiently large to ensure the economical use of staff and equipment and provide for the diversification of curricula.
2. Presence of the staff of sufficient number of well equipped specialists in the fields that are likely to be of importance e.g. the teaching of English, elementary Science, handling young children etc.

3. Facilities in staff and equipment for experimental and demonstration work in the revision of syllabus and text-books and in educational technique outside as well as inside the classroom, so that each system contains at least one research centre that is regarded as an educational laboratory.

4. Close interrelation of the training institutions with (i) the schools (ii) departments of government whose activities need to be a concern of the teacher (e.g. health, agriculture and welfare etc.) institutions of higher education.

The Committee noted some of the problems that would face the implementation of such a scheme. It recognized the diversity of missionary bodies, some with large scope, some with less, differing sharply in aim and outlook and in capacity of free co-operation; presence of strongly differing racial groups, multiplicity of language employed as teaching media in different regions of the same territory; lack of homogeneity in the education

and standards of students to be trained; sparsity of population rendering a high degree of concentration extremely difficult.

It however, recommended that 2 or 3 institutions would be founded at which training staff imported could be economically and efficiently used in the training of students and for the supervision for small centres. The small centres could be organically related to major institutions whose primary responsibility would be to train African staff for the small centres. This meant, the small centres would be located within reach of the big centres. Any alternative policy would result in an economical utilization of the small number of the qualified staff and hence throwing the territory in monetary expenditure well above what it can afford. All the partners involved were to co-ordinate their efforts.

The honourable chief Secretary in answer to the above suggestions⁸ also expressed a deep concern about a shortage of well qualified teachers. He reiterated the committee's recommendations about establishing large

institutions, facilities for large centres in thinly populated areas, the difficulty of a wide range of vernaculars which hindered the work of large centres except among the

homogeneous groups. He stressed the difficulty of widely varied denominational interests which made co-operation between them impossible.

As a means of establishing large centres Kenya had started composite Colleges run by various government departments. The aim was to prevent water-tight compartmentalization in professions.

For example a new centre at Maseno was to train teachers and instructors for the agricultural and veterinary departments. The Jeanes School or Centre 'C' was also training many types of workers for social betterment.

With a virtual rejection of the Colonial Office Advisory Committee's recommendations, expansion of teacher education reflected pegging teachers' colleges to the definite vernacular areas for which they catered. Scatter was thus encouraged and centralization to embrace more than one vernacular area was considered virtually impossible. The result was that in many small centres, four members

of staff had to try and cover fourteen curricular subjects between them. This naturally had a very adverse impact on the quality of the teacher produced by these centres.

The Ten year Plan envisaging a full primary course under qualified teachers for approximately 50% of the children of school age, recommended an establishment of 24 Elementary Teacher Training Centres, 16 Lower Primary Teaching Training Centres.⁹ This recommendation was adopted by the Beecher Report of 1949.

The re-classification and reorganization of teaching courses

In 1948 there was a general reorganization in the teaching courses and the classification of teachers' certificates. A new subject was also introduced in the teachers' courses aimed at bringing a new aspect into teaching; the pupil. The Principles of Education Courses was to be taken by T2 and T3 teachers, implied the study of the child and the understanding of his behaviour in relation to class-work.

It implied that the teacher would no longer be at the centre of the learning and teaching processes as had been the case in the courses already outlined.

The Rules to be cited as Issue of Teachers Certificates in schools for Arabs and Africans¹⁰ structured teachers grades and certificates as follows:

- a) A teacher's Certificate (T4) this replaced the Elementary Teachers' Certificate, qualified the holder to teach up to standard IV. Candidates were to have reached the sixth standard and subsequently undergone a year course of training. Subjects of examination included all the subjects of the primary course plus practical teaching and blackboard work.
- b) A teachers' Certificate (T3) replaced the Lower Primary Teachers' certificate which qualified the holder to teach up to standard VI. Candidates were to have reached the second form and

taken a two years' course. Subjects of examination covered the primary school syllabus together with practical learning; application of Piaget, Montessori teaching, blackboard work, methods of the Dalton plan, activity and project methods to teaching and principles of education.

c) A teachers' Certificate (T2) which replaced the Primary Teacher's Certificate, qualified the holder to teach up to form 2. Candidates were to have reached form 4 and taken a two years' course. Subjects of the examination were similar to those of the (T3) teachers' certificate.

d) A teacher's Certificate (T1) (Makerere teacher) qualified the holder to teach up to form 4.

A study of the Principles of Education which was introduced in an attempt to break through the teacher's dominating role in class activity embraced the following fields of study; theories of thought and reasoning process; the teacher as an agent to help children to learn; learning as the solving of problems, basic needs and the teacher, the

teacher's effect on the groups he teaches, Intelligence, non-social influence on learning; application of Froebel, Montessori the Dalton plan, Decroly and project methods to teaching.¹¹ This was an important step towards the improvement of quality of instructions in primary schools, but the nature of teacher education which evolved to meet the needs of the expanded primary education was not adequately staffed to teach this subject effectively. In the few colleges that attempts were made to teach it, much of it remained in theoretical expositions.¹²

The African Education Commission Report of 1949.

(Beecher Report.)

This like the Education Report of 1919 before formulating its recommendations listened to a wide variety of public evidence on the nature of education. Members of the public were concerned about the quality of the various grades of teachers. They generally complained about a high proportion of untrained teachers in the unaided schools who, they believed, had doubtful value. The T4 teachers were said

not to equal the demand made on them, because their schooling and subsequent training were inadequate. It was suggested that they should receive eight years' schooling followed by a two year teaching course. It was further revealed that their training was so crowded that their capacity to develop the character of their pupils was extremely limited. Most of them at the time of recruitment were either too old and stolid or too young and unstable. There was considerable difficulty in recruiting the right type of candidates. There was therefore a need to raise the level of entry. The shortness of the course and the difficulty in recruitment resulted in an inability on the part of the training establishment to impart in the teachers any real appreciation of professional conduct and standards or any awareness of the social responsibility of their profession towards the pupils, the school, and much more towards the community of which the school is part.¹³

Many witnesses are said to have affirmed that the African teaching profession could be

reinforced by European aid, thus be encouraged and enabled to attain and to maintain the highest professional standards. The training and subsequent supervision of teachers was urged as a very high priority. Witnesses are also said to have demanded the following qualities in a good teacher,

'Most important in any educational programme is the teacher, wherever we have good teachers there are good schools regardless of the kind of building or the kind of equipment. Poor teachers mean poor schools. Good teachers will sooner or later improve buildings and equipment. It is the business of the trustees to select teachers on the basis of their qualifications and fitness to teach children. Schools do not exist for teachers. They exist for the children'.¹⁴

On the basis of public evidence, the Commission recommended that T4 teachers should take a two year course after the eighth class and recommended the training of a Kenya (T1) in order to train a high number of highly qualified teachers, 'in view of the fact that it is beyond the sole control of educational

authorities in Kenya to bring about a sudden expansion of the department of education at the level of general education of the teachers

in the system and the amount and kind of training they have received. The position is essential to train a new type of teacher. The (T1) certificate is normally restricted to students possessing the Makerere Diploma.

We recommend that a Kenya T1 (KT1) certificate be awarded to students who have satisfactorily completed a two years' training after form 6,¹⁵

A government notice issued rules governing the certificate of KT1 teachers. A teachers' certificate (KT1) qualified the holder to teach up to form 4. Candidates were to hold a Cambridge School Certificate and have subsequently undergone a course of training of not less than two years duration. Subjects of study included practical teaching and blackboard work, methods of teaching, principles of education, school management and subjects of the primary school curriculum.¹⁶

A short reflection into trained teachers and the problem of quality in teaching.

Taking Beeby's thesis that there are two strictly professional factors that determine the quality of education in primary schools thus, the level of general education of the teachers

in the system and the amount and kind of training they have received,¹⁷ the position of teachers in the field by 1952 was as shown in Table 3.

Year	Untrained Teachers	Elementary Teachers	Lower Pr. Teachers	Primary Teachers
1933	1728	420	197	7
1937	1853	686	250	17
1945	2708	1478	454	94
1952	3655	1764	711	181

Note: From 1948, the grades changed to T 3, T 2, T 1 and etc.

Source: Department of Education, Annual Reports.

Table 3: Number and Qualifications of teachers in the Primary Schools from 1933 - 1952.

Year	Untrained Teachers	Elementary Teachers	Lower Pr. Teachers	Primary Teachers
1933	1728	610	197 ?	?
1937	1603	686	250	37
1945	2708	1478	454	96
1952	3655	3780	721 ?	181

Note: From 1948, the grades changed to T 3, T 2, KTI and etc.

Source: Department of Education, Annual Reports.

From Table 3 it can be seen that the bulk of primary teachers were untrained or had just had primary education. Active, pupil-oriented teaching through such teachers is doubtful since they are likely to lack inner security. Lack of a wide enough knowledge of subject matter and of its adjacent fields to follow without fear; will shun activity methods because the interests of their pupils will take them beyond the beaten track. Operating at the level of the limits of their knowledge they cling desperately to the official syllabus, and the tighter it is the safer they feel. Such teachers would be afraid of any other questions in the classroom but those they ask themselves, for they are the only ones to which they can be sure of knowing the answers. Activity methods and childish researches are shunned because they lead too easily to the brink of the unknown. The relationship between teachers and pupils, is stiff and formal in the classroom. ¹⁸

An inspector's report had this to say about the quality of teaching in one of the schools, 'the practice of reading round the class in standard three is to be deprecated and the teaching level of the teaching profession. This would not

generally needs to be reviewed in the light of a more active approach to teaching all subjects.

In Standard one and two the use of reading charts, simple counting material and purposeful

handwork (the making of plaited ropes) is a step in the right direction'.¹⁹ On pupil -

teacher relationship another report points out,

'teacher - pupil relationship was forgotten by

some of the students who were pre-occupied with the technique of lesson and disregarded their

pupils as individuals. The necessity of keeping

the pupils active and interested must constantly

be borne in mind. Teachers talk too much and

do not encourage their pupils' talk'.²⁰

The poor quality of instruction in the primary schools was a result of the high proportion

of untrained and poorly educated teachers. To tackle the problem one alternative was to accept

the low quality of teaching and put high

priority on producing new teachers with a higher level of general education. Only candidates

with Secondary School Certificate were to be accepted into the teachers' training colleges on

the assumption that the way to improve the quality of primary education is to raise the education

level of the teaching profession. This would not

Institutions in which teachers are trained have in the past usually been restricted in the light of the restricted nature of secondary education. The alternative was to bring changes and improve the quality of instruction through new methods and techniques and train teachers, who were themselves poorly educated to use these techniques effectively.²¹ This line of development was adopted by the education authorities to improve the quality of instructions.

The era of activity methods 1952-1962.

The African Education Commission Report

(The Binns Report) 1952: The Commission stressed

the need of reorganizing teacher education as a means of improving the quality of primary education. It expressed concern about a lack of dignity in the teaching profession caused by the structure of teacher institutions. It suggested that for as long as teachers' education would continue to be carried out at a very large number of small scattered training centres; sometimes little more than annexes to schools, the profession cannot achieve the dignity it requires.

'Institutions in which teachers are trained have in the past usually been called training centres or Jeanes Schools. If the training of teachers is to acquire new status and dignity, the title training college, should be used, those who teach in training colleges should be termed lecturers and those studying in them termed students; rooms should be termed lecture rooms not classrooms and the atmosphere should be that of a university rather than a school.'²²

There was a need to consolidate teacher education institutions with an adequate teaching force to man the different disciplines effectively, have large libraries, special facilities for child development and research in education and teaching methods. On student recruitment, the commission was of a view that for as long as it was necessary to recruit teachers before they had had an adequate general education it was necessary to combine general and professional education in the two year course. The effect of this had been an overcrowded, time-table. In such a regime the student had little time for private study and for reflection. The main emphasis in teacher education should be on professional training and the development of personality. As far as possible new knowledge and skills could

be acquired as a result of the study of teaching methods. It stressed the need for balancing general education study and professional training. It observed that students arrived at college from an education training in which continued education and so success in life seemed to depend wholly on passing examinations. These students would certainly go back to schools to be mere examination officers unless this hateful cycle was broken somewhere. The college was the only place to break it by reform both of the curriculum and of the examination of students.²³

With the experience of the McNair Report the Commission recommended that each territory should co-ordinate its teacher training along the lines of the English institutes of Education, to coordinate the training of teachers; the examination and recommendation for qualification of all students in training; in service training of all teachers; and the development of research plans and the allocation of research projects to training colleges and schools.²⁴

The Commission emphasised the role of teacher education in effecting changes in teaching

observations. A change from passive to active methods with a view of improving the quality of primary education:

'Changes in primary schools should have their expressions in colleges where teachers are trained. Education should be active and not passive. The classroom situation should be pupil-centred and not teacher-dominated. The release of pupils' eager desire for knowledge and skill must be sufficient to carry them through the drudgery of repetition. Imitativeness should be balanced by creative work. The quiet hum of group conversation should be more usual than the silence or the chanting of the whole class in unison. Discussion should replace question and answer and pupil work by pairs or groups or individuals should be more usual by class'²⁵

Colleges were to be centres of experimental research where new syllabuses were to be devised before being put into general use; be given trial period for at least one year in the practising schools. Thus the ideas and experience of the practising teachers, the trainers of teachers and their students, and supervisors of schools would be brought to bear on major events in education. In Colleges, students be asked to study one individual pupil during the teaching practice - run nursery centres for careful recording of individual

observation. A change from passive to active education could take place slowly and only as competent teachers are produced by training colleges with demonstration schools in which such methods could be successfully practised. It stressed the beginning of active methods at the training college level because their use demanded not only a knowledge of special teaching techniques but also insight into child nature. Activity methods used by half-trained or semi-convinced teachers would quickly lead to disillusionment.²⁶ The commission finally recommended that careful steps should be taken to introduce gradually into the schools modern activity methods of learning to replace passive class teaching methods. If necessary a small team of teachers experienced in such methods be brought out of selected training colleges to give a short demonstration of such methods and such a demonstration should be followed by the slow and controlled extension of such methods from a single demonstration school to others.²⁷

The first teacher education Conference 1956:

This discussed a number of themes raised by the Binns Report in connection with teacher education. The conference was preceded by Mrs. E.M. Williams, the principal of Whitelands Training College, study of primary teacher education in Kenya. In her address to the conference she emphasised the need for co-ordination in teacher training activity,

In 1961 the government together with the Royal College set up a joint committee to design their own schemes and would minimise explore ways in which the colleges could be more the external control over academic work. Because of geographical conditions she recommended the formation of Delgacies which were later changed to Teacher Training organizations to undertake the work. Following the endorsement of this recommendation by the conference, the Eastern Teacher Training organization based on Kagumo and Western Teacher Training organization based on Siriba were formed. Their functions included the organization of the annual teachers' examinations, the presentation to the Director of Education a pass-list of students recommended for teachers' certificates, the overhaul through subject panels of teacher training syllabuses, the publication, and distribution to training

colleges in the form of circular letters of academic material related to the training of students, the organization of refresher courses for teachers, book exhibition and occasional lectures, and the maintenance of a teacher training library of books and duplicated material used by training staff.

In 1961 the government together with the Royal College set up a joint committee to explore ways in which the college could be more closely associated with training of teachers in Kenya and might become the guarantee of academic standards in teacher education.²⁸ Both parties agreed to establish the Institute of Education, a decision reinforced by the Mombasa conference on the Institutes of Education 1964. The Institute was to be in the first instance a 'shadow' institute, run by the government but eventually and by progressive stages, the Royal college would accept full responsibility. Accordingly the government merged the Eastern and Western Teacher Training organizations to form the Institute of Education in 1964.

children, working in groups or individually, following its amalgamation with the Curriculum Development and Research Centre, the Institute carries out the functions which were originally carried by the Teacher Training organizations together with researching and making recommendations on teaching materials.

The Conference also stressed the need for changes in teaching methods.

'Instead of basing work on the lesson - unit, the matter to be taught and the orthodox way of presenting it to a whole class, could we not more profitably focus attention on the individual children - constituting the class, each of which must, after all, learn for himself in his own way and at his own rate? In an educational system which has examination hurdles every four years, with all the children hoping to get successfully over the hurdle into a new field of education, inevitably the attempt is made to teach the whole class the same material at the same time. This must be unsuccessful, since children do not learn at the same rate. The effect is to produce a large number of children who have not in fact learnt what had been put before them or have memorised material which they have not understood. If students can be trained to teach in accordance with the children's capacity instead of in relation to a fixed examination objective a great step forward will have been taken.'

In such an approach to teaching Mrs. Williams emphasised, methods like storytelling and choice of activities for the

children, working in groups or individually, class discussion and observation. Students could observe pupils while on teaching practice and record some behaviour and discuss them with their tutors. A noticeable feature of teacher education noted while she was visiting the colleges was that a great deal of time was spent in teaching students to make full use of the blackboard, occasionally with a real imaginative flair. This she emphasised usurped too large a share of the timetable, tuning teaching towards talk and chalk methods. Such an approach to teaching had the effect of making teachers talk too much, which naturally mesmerised children and too much of chalk made an unreal sort of the world, with many signs and symbols. The teacher's best aids to his job are the things that children could handle and work and make use of. Students could make a collection of simple things found locally which can illustrate for the children some of the lessons to be taught or start a line of interest for them or suggest something which they would like to make. She quotes a Belgian educationist, Dr. Decroly, who thought

that the 'ideal start for the schooling of young children was an empty room with no equipment. An enterprising teacher would make of that room and its surroundings a place as gay and inviting to children as the best provided school.' Desks and seats are less important than the things children would see and handle, and talk and write about. Since the students would be very short of conventional equipment when they got out of their school, the college ought to give careful thought to ways in which they could be helped both by allowing more freedom and imagination in the choice of aids they make and take away as their stock in trade, and by suggesting ways of providing more materials, pictures and new ideas for teachers in service.³⁰

↓ "English Medium" the index of quality in teaching.

A call by the Binns Education Report and the Teacher Education conference about the need for revolution in teaching methods appeared quite timely. A sense of 'dissatisfaction' was beginning to grow in the country over the examination performance of Asian and African something wrong with the teaching of English.³²

children. Asian primary pupils were taught in one of the vernaculars, Gujerati, Punjabi, Hindi, Urdu, English was taught as a subject for two or three years then becoming a medium of instruction. In African schools the children were taught in one of the many tribal languages, English taught as was the case with the Asian schools. To the colonial education authorities there was everything wrong with this system of instruction and was largely responsible for 'poor quality' in teaching and the poor examination results exhibited. The question was 'why was it that seventy-five per-cent of candidates for the School Certificate failed in the English language paper?'³¹ Though no similar questions were asked about the rest of the subjects! It was similarly argued that Asian and African pupils revealed marked weakness in the use of English. On School Certificate, it was observed that few students had either the confidence or the ability to attempt the oral English Examination and those who did, more than half failed. This the argument went, indicated that there was something wrong with the teaching of English.³²

While this argument stands no challenge; weakness in English did not necessarily reflect the whole educational system. What is quite questionable is that no attempt was made to compare performance in English with the rest of the subjects. On the assumption that the quality of teaching would be improved through reorganization of methods of instructions in English, the Ministry of Education in 1957 created a Special Centre as the offshoot of the Inspectorate to investigate and experiment.

The centre staff focused their attentions first on Asian primary schools and 'discovered' that pupils had little oral training in English and instead were memorising items of information in a written language they did not understand. A very considerable problem involved in requiring a child to change from language of instruction to another halfway through the primary school had been overlooked.

'The process of changing from one medium of learning to another has usually resulted in the loss of about one year, measured purely in terms of time. But in terms of psychological, linguistic

and educational disturbance, this transfer in amateur hands has been at best a disturbed blessing and at worst a disaster. Perhaps the main damage from one teaching medium to another has lain in the loss of meaning. Meaning is understood or learnt by a process of association in which the new language symbol is met in the context of the experience which it symbolises. Thus teaching of the second language which becomes the vehicle of all educational thought and expression should involve the presentation of both form and meaning and their subsequent fusion into language habits. When only form is taught, oral and written expressions become an abstract exercise dealing tentatively with artificial classroom values rather than a real life situations indeed intelligent and intelligible expression in the new language are virtually impossible'.³³

Many arguments, some based possibly on reseaches done in other countries and others based on personal feelings were advanced to justify a reorganization in the teaching of English as a means of improving quality in African education. One argument runs 'the difference between what is and what might have been, lies wholly in the approach to language learning. The proper function of a language in school is that it should be used for learning. Students should read to learn and write to learn in a language they can handle on a sub-conscious expression.

level, as a habit.³⁴ Pupils were believed to have either learned by rote or translated imperfectly from their mother tongue. Two difficulties were encountered by African and Asian children in expressing themselves in English; the relevance of the spoken language was not really appreciated in the teaching of English and meaning tended to become a casualty of the transfer from one language teaching medium to another.³⁵

It was argued that it was an accepted linguistic maxim that speech represents the living dynamic aspect of languages. It is also accepted that there is a considerable gap between the written and spoken forms of English. The order of priorities is therefore for the child to learn first to express orally what he has to say in correct English sentence patterns, using a fair approximation of the standard sound-system of the English language. Thereafter he can begin to express himself on paper in the written language, since fortunately the gap is not unbridgeable, and there is a considerable transfer between oral and written expression.

These priorities are rarely observed at present. The early sentence - patterns which he learns in English frequently do not correspond with the realities of his age and environment, and so do not permit him to say what he needs to say. The sound - system of the language is often neglected and many teachers are not trained to attempt the task of teaching systematically phonemes which occur in English but not in the vernacular. Even when they do make the attempt they are not clear about the interference imposed by the linguistic habits of the mother-tongue and unaware that time is against them, in that difficulty of establishing aural sensitivity to such phonemes increases rapidly after the children reach nine or ten years of age.

The children are in effect expected to bring off a tour de force - to express themselves clearly in written English without ever having had the necessary practice in expressing themselves orally, a training without which they can scarcely be expected to learn to think in the language. Indeed, education is so

his mother tongue and adopt another language largely equated in our schools with success in written examinations that the important fact that teaching is fundamentally a process of communication becomes obscured. Teaching should be organized round a child's ability not only to hear and understand but also to speak English confidently and accurately. At present the need to encourage Verbal Communication on the part of the child is inadequately met.³⁶

This 'diagnosis' was sufficient to convince the colonial educational administrators that the centre should experiment with English teaching from standard one. This decision was obviously contrary to the linguistic policy laid down by the UNESCO linguistic authorities, that a child's education should begin in his native language. A pupil's adjustment to school is difficult under any circumstances and it will be only more difficult if he is given the formidable task of learning a new language. Furthermore whatever justification there could be in introducing him to learning through a foreign tongue, if asked on his first day in school to put away

his mother tongue and adopt another language for learning he may be driven to feel that there is something inferior about his language and perhaps himself.

Ignoring some of these fundamental points, the Special Centre went ahead with the experiment. The Ford Foundation provided printing equipment tape-recorders and additional staff. The Centre undertook the task of 'breaking down and reassembling English structures within the limits of carefully selected word lists so that a child could be taught to talk in simple terms about the familiar aspects of his immediate environment and to exchange experience through communication with others.

The first step was to select for training twenty five teachers from eight Asian schools in Nairobi. These lower primary teachers taught their classes in the mornings frequently under supervision and came to the Centre every afternoon to confer with one another and the staff. Their instruction included speech drills, lessons in English grammar and syntax, the making of teaching aids, and guidance in the

teaching of English. During the afternoon sessions they planned their work for the following day. Over a two year period they were able to test the course books and readers in preparation at the centre before these were adopted in schools and introduced into the syllabus of the Asian Teacher Training College for women in Nairobi. In 1961 four years after the centre was opened, the Oxford University Press launched the PEAK SERIES a group of English books designed to meet the needs of Asian children in East Africa who begin their primary education in English, without prior knowledge of the language. One year later 80% of Asian primary classes in Kenya were following 'PEAK' and the Asian training colleges had incorporated it their syllabuses.

In extending the programme to African schools the Centre is said to have been faced with a major problem of 'different qualifications' among teachers. Most Asian primary teachers had completed four years secondary school and two years of training whereas African teachers in the main had only primary education and a two years course of training. With another

grant from the Ford Foundation the work began in 1961 with one African class 1 turning to English Medium teaching. PEAK was oriented by the Oxford University Press to an African background. Instructions were re-written with

The English teaching programme introduced African P3 teachers, formerly T3 teachers in as a result of 'misclassification' in the examination mind. The centre organized 'conversion' courses for standard I teachers and supervisors and sent its staff into all sections of the country to demonstrate the English programme teaching

educational idea of teaching through 'Activity and to teach both the content and the procedures of NEW PEAK material. By 1963, with only

the programme having concerned itself with one or two exceptions, all the colleges had started to revise their syllabuses and include through activity in classes One and Two of the NEW PEAK and its implications as part of the primary school in which the subjects are not training of lower primary teachers. Teacher

college tutors went out to schools to supervise English programme teachers and their reports

and education authorities have interpreted the revealed that P3 teachers stood comparison with Asian P1 formerly KT1 teachers. They were using equipment and apparatus well, though

and this factor alone has already bedevilled they were finding it difficult to pay attention to individual pupils. As the programme grew

colleges began to train serving teachers, of the

Special Centre to obscure the naked fact that

the programme was intended for effective

teaching of English.

headmasters and supervisors in addition to carrying out their normal work with students in training. These courses normally lasted for a week.³⁷

The English teaching programme introduced as a result of 'dissatisfaction' in the examination performance was rightly termed the 'English Medium programme or Method.' The programme was believed to represent the 'modern educational' idea of teaching through 'Activity Methods.' A very misplaced view indeed, because the programme having concerned itself with the teaching of English could reflect teaching through activity in classes One and Two of the primary school in which the subjects are not sharply divided. Even with change of the name to 'New Primary Approach in 1965, teachers and education authorities have interpreted the method to mean the teaching of English in the lower classes of the primary school', and this factor alone has already bedevilled the success of the New Primary Approach programme.³⁸

Every attempt was made by the staff of the Special Centre to obscure the naked fact that the programme was intended for effective teaching of English.

'Our aim in the Special Centre is not primarily to teach English but to educate through the medium of English. Fluency in English is a by-product of our system, not its chief. If children can use a language for all they want to do and say, in an atmosphere where inquiry and activity are encouraged they will learn the language fast enough.

This is what we have tried to do, to link language to all the needs of young children. This is why we think our work is revolutionary. The children work in small groups as individuals and feel free to express themselves through positive constructive activities. The same English structures recur repeatedly through the day no matter what the child's time-table is framed to teacher.³⁹

The experiment was described as 'a practical partnership between education and language with the latter being adjusted to the demands of the former.'⁴⁰ Later observations on the programme largely based on assumptions rather than actual study 'painfully' try to associate the English programme with a general revolution in the Kenya primary education. The PEAK English text-book was described as 'having introduced a new kind of education in East Africa. The principles, and methods and the paraphernalia of progressive education were incorporated. The child becomes an active and equal partner in his own learning; much

of his education comes through the senses, varied occupations and activities. A warm and informal atmosphere which encouraged children to express themselves and ask questions. The school was a place where a child could learn and enjoy himself with a new set of brothers and sisters.⁴¹ It is difficult to visualize how this English text could permeate the rest of the subjects and foster such a spirit in education. Another conclusion runs 'many Asian and African teachers have realized for the first time in their lives that teaching can be absorbing and satisfying; and their pupils have rediscovered school as a rewarding place to be in.'⁴² And yet the same observer notes 'Another interesting effect of change has been observed: When a teacher for some reason has to return to teaching vernacular he relapses into the old mechanical ways of rote teaching; on the other hand when English is the medium of instruction there is a definite transfer of modern activity method to the teaching of other subjects. In other words English medium teaching becomes firmly associated in the teacher's mind with the approved practices

of modern education'.⁴³ That the English medium programme was accompanied with activity methods of teaching and therefore was a major break through the rote and mechanical memorisation cannot be denied, but its revolutionary effect on the whole primary education system tended to be somewhat exaggerated and over emphasised. The programme was strongly pegged to English teaching and its influence on other subjects was 'incidental'.

The expansion and decline of the 'New Primary Approach' programme 1963-1967.

Popularity of the English language largely and partly the activity methods in the English-Medium instruction led to formidable pressures for the rapid expansion of the programme. In 1961 there was only one African standard. One class using the new materials. In 1962 there was the one standard II and 82 new standard ones. In 1963 the figures were one standard III, 82 standard II and 226 standard I. New standards I numbered 650 in 1964 at which point more than 10% of Kenya's primary

system had gone over to English medium instructions.⁴⁴ By 1965 the term 'English Medium' had given way to the New Primary Approach a supposedly accurate name for what was now a national movement in the reform of primary education. The Ministry of Education reported the following number of NPA classes; standard I 1,920, standard II 650, standard III 220, standard IV 80 and standard V 1.⁴⁵ The programme was endorsed by the Education Commission Report of 1964 when the enthusiasm for its expansion was already very high.⁴⁶ It had tremendous popularity with teachers, administrators and parents. There were cases when parents complained if their children were not receiving the new English teaching.⁴⁷ In the face of this rapid expansion it became quite difficult to maintain the standards of training and supervision. This led to the study undertaken by M. Hutasoit, the Deputy Minister for planning in Indonesia and C.H. Prator, Professor of English at the University of California, a professional linguist. These

were to make a detailed analysis of the programme that had begun as a 'small experiment and had become an educational revolution.' Among many of the aspects the study had to explore were; the NPA curriculum and the teaching methods, the content and quality of the materials employed in the programme, the pre-service and in-service training of the teachers for the whole programme, organisation, expansion and supervision of the programme with particular reference to the urgent popular demand for the programme and the financial aspect of satisfying that demand, and the impact of the programme on the whole primary school system.⁴⁸

On the evaluation of the programme, the study observed that though there was an amount of impressive enthusiasm about NPA, its rapid expansion had outstripped the stock of human and material resources available for implementing it properly. An increasing number of untrained teachers had been assigned to NPA work possibly after a brief preparation course at a teachers' college. Furthermore they were not frequently

c) supervised. It was not even clear whether the supervision should be done by the college tutors or local supervisors. The classrooms frequently had no doors, locks, or cupboards for storing material. The end result of the conditions is lack of uniformity in the quality of the NPA programme.⁴⁹

d) In the light of these conditions, the commission recommended a slow down of the programme so that 1970 could be a target by which all standards I would be included in the NPA programme.

The commission outlined the following conditions as prerequisites for the opening of NPA in a school.

- a) That a good large, well lit, weather proof classroom is available, with
 - f) at least two strong lockable cupboards. If there are no cupboards, the classroom itself should be lockable.
- b) That the furniture is sufficient in quantity and quality; at least five large tables and enough individual movable stools for all pupils, and a blackboard.

- c) That funds are available to buy the needed number of copies of all the booklets making up The New Peak Course and these texts will be obtained through District stores well before the class is scheduled to begin.
- d) That there are funds to buy the minimal kit of materials for making visual aids and carrying out pupil activities which the Ford Foundation has been supplying for new NPA standards I.
- e) That a trained, at least a P3 teacher will be assigned to the class, will not be replaced in the course of the year by a teacher of lower grade, and will be encouraged to stay with the class through standards II and III.
- f) That the class will be supervised by a specific individual of at least P1 grade.
- g) That the teacher appointed to the class will have his or her expenses paid to attend a special training course of at least two weeks duration so as to become familiar with NPA methods, and that he or she will be given a minimum of two afternoons per

week for released time to work at the preparation of NPA teachers instead of allowing Local NPA centre.

h) That the school is located within walking or cycling distance or such a centre. All

i) That no more than 40-45 pupils will be admitted to the class.⁵⁰

Fairly stringent conditions; the commission further recommended the extension of the NPA programme to Swahili and other vernacular languages, a thing that has been achieved through the TKK books. Local supervisors were to operate in a smaller area to enable them to be more effective and efforts were to be taken towards the development of local NPA centres; which were to offer demonstration classes supply materials, provide detailed sample lessons, provide opportunity, to up-grade their own oral English.

Teacher Education colleges were to be the custodians of the NPA programme. To this end, they were to lengthen their training period and familiarize students with NPA material, draw up a common syllabus for all the colleges in the

In the Urban areas and in high cost primary schools the NPA teaching methods are still in

preparation of NPA teachers instead of allowing each college to devise its own syllabus.

This the commission pointed out allowed a great variation in the approach to NPA. All students were to prepare for NPA teaching.

The programme could be confined to P2 teachers and attempts were to be made by the Curriculum Development and Research Centre to develop the programme to upper classes and in all the subjects. Teacher education colleges could further organize courses to upgrade P3 and P4 teachers who formed the largest proportion of the teaching force.⁵¹

Following the recommendations of this commission, particularly the conditions governing the expansion of the NPA programme to other schools, the Ministry of Education advised the curtailment of new openings in 1966, when standard I NPA classes had risen to 2,670. The curtailment of the programme was a bit unfortunate. What is reminiscent of NPA is that in areas with effective supervision particularly in the Urban areas and in high cost primary schools the NPA teaching methods are still in

force but in the majority of the primary schools in the rural areas there has been a strong tendency to gravitate back to the formal approach to teaching.

The impact of NPA on the primary school system 1967-1972.

Though the programme declined its influence is still felt in a number of educational programmes connected with primary education.

There is still talk about its apparent presence in the approach to teaching in primary schools.

The present Primary School syllabus is based on teaching through activity methods. Activity methods that were once associated with NPA are now encouraged in the teaching of all subjects in the primary schools. This theme is to be examined in this study in the next chapters.

Colleges no longer regard NPA as a separate subject related only to language teaching; and now introduce their students to the theoretical underpinings and the practical implications of learning through activity,

2. In 1945 the number of untrained teachers was 2,700 and 'discovery'. The subcommittee which surveyed teacher education, in Kenya in 1968 had this to say. 'Teachers should be taught by the same methods which they will be expected to use in teaching children, that is, they should acquire some skills with a degree of independence, and problem solving should be emphasised over against rote memorisation and drilling.'⁵² The General Methods Section of the Curriculum Development and Research Centre has recently produced a Book of Creative Activities which can be used in the teaching of arithmetic, social studies, religious education and the vernaculars. The study turns to assess how much activity methods associated with the NPA programme are reflected in teaching in the primary schools and how they have possibly improved the quality of teaching.
3. A Ten Year Plan for the Development of
1. In 1945 the total number of primary schools was 2,133 and by 1950 they were 2,928; Source: Department of Education, Annual Reports.
21. K.N.A. Circular Letter 20/1949 of the 15/3/1949.

2. In 1945 the number of untrained teachers was 2,708 and by 1950 it had risen to 3,302.
3. African Education Commission Report 1949
(Beecher Report) Government Printer, Nairobi
1949 p. 37.
4. K.N.A. Committee Appointed to Advise the
Director of Education on the organization and
Expansion of African Teacher Training
(Lockhart Committee) - Unpublished.
15/3/1945.
5. Ibid.
6. Ibid.
7. K.N.A. Circular Letter of the 25th March 1946,
Report of the Advisory Committee on the
Training of Teachers in Colonial Territories.
Unpublished. 1952. Oxford University
8. K.N.A. B. 1738/111/66 Letter from the
Honourable Secretary to the Colonial Office.
9. A Ten Year Plan for the Development of
African Education. Government Printer,
Nairobi, 1947.
10. K.N.A. Government Notice 93, Colony and
Protectorate of Kenya: Issue of Teachers'
Certificates in Schools for Arabs and Africans.
11. K.N.A. Circular Letter 20/1949 of the 15/3/1949.

12. Interview with some of the teachers trained during this period.
13. The Beecher Report op. cit. pp. 43-46.
14. Ibid pp. 45-46.
15. Ibid pp. 81-86.
16. K.N.A. Government Notice 414: Issue of Teachers' Certificate in African Schools.
17. C.E. Beeby op. cit. p. 58.
18. Ibid pp. 59-62.
19. K.N.A.5/125/11/215 Inspector's Report - Mumias School, 3rd June 1952.
20. K.N.A. B 823/Vol. 11/56. Examiner's Report, Mumias Teacher Training Centre.
21. E. Stabler, op. cit. p. 36.
22. The African Education Commission Report (The Binns Report), 1952, Oxford University Press 1953 p. 118.
23. Ibid. pp. 124-125.
24. Ibid. p. 125.
25. Ibid. p. 118.
26. Ibid. pp. 88-90.
27. Ibid. p. 89.
28. Ministry of Education File 15/55/58.
29. The First Teacher Education Conference 1956. Kenya Institute of Education File K/1 "The formation of Delgacies" pp. 21.

TEACHERS' CLASS ACTIVITIES AS AN INDEX OF QUALITY

30. Ibid.
31. E.B. Castle op. cit. p. 208.
32. E. Stabler op. cit. 38. Variables.
33. C. O'Hagan "English Medium Teaching in Kenya" Overseas Education Vol. 34 No. 3 Oct. 1962.
As already stated in chapter one, the aim of this study is to investigate into the influence of the New Primary approach on the
34. E.B. Castle op. cit. p. 208.
quality of teaching in the primary schools. In
35. Ibid.
this respect NPA and non-NPA teachers and the
36. Ibid pp. 208-209.
chief independent variables in the data analysis.
37. E. Stabler op. cit. p. 43.
It was, however, observed that other factors apart from the NPA programme could also influence
38. See chapters five and six.
teachers' class behaviour. Consequently, the
39. C. O'Hagan op. cit. p. 103.
following independent variables were also
40. E.B. Castle op. cit. p. 210.
examined; teacher's level of education and
41. E. Stabler op. cit. p. 41.
training; the teacher's attitude to NPA; the
42. E.B. Castle op. cit. p. 211.
observed teaching; whether the teacher was observed
43. Ibid.
teaching the lower or upper classes of the
44. M. Hutasoit and C.H. Prator op. cit. 1.
primary school; the teacher is preparing for an
45. E. Stabler op. cit. p. 55.
external examination or not; his own teaching
46. Ominde Report op. cit. 60.
specification of the subject he was
47. E.B. Castle op. cit. p. 213.
observed teaching.
48. M. Hutasoit and C.H. Prator op. cit. pp. 2-3
49. Ibid. pp. 22-23.
50. Ibid pp. 25-26. Variables.
51. Ibid. pp. 55-57. activities.
52. K.I.E. New Directions in Teacher Educations
The East African Publishing House 1969 p. 21.

CHAPTER FOURTEACHERS' CLASS ACTIVITIES AS AN INDEX OF QUALITY
IN TEACHINGThe Independent Variables.

As already stated in chapter one, the aim of this study is to investigate into the influence of the New Primary Approach on the quality of teaching in the primary schools. In this respect NPA and non-NPA teachers are the chief independent variables in the data analysis. It was, however, observed that other factors apart from the NPA programme could also influence teachers' class behaviour. Consequently the following independent variables were also examined; teacher's level of education and training, thus whether a teacher is a P1, P2, P3 or a P4; whether the teacher was observed teaching the lower or upper classes of the primary school; the teacher is preparing for an external examination or not; his age; teaching experience; his sex; and the subject he was observed teaching.

The Dependent Variables.Teachers' class activities.

Asking narrow questions.

Asking broad questions.

Lecturing or presenting information.

Accepting ideas, behaviour, feelings and helping individual pupils.

Teachers' non-verbal activities.

Pupils' Class Activities.

Pupil's talk response

Pupils' initiated talk

Pupils' simple non-verbal activities

Pupil's more involving non-verbal activities.

Confusion and irrelevant behaviour, giving commands and taking commands.

The occurrence of any of the dependent variables in the classroom situation was recorded as tallies every after five seconds on a recording sheet shown in the appendix II. At the end of the lesson, the total number of tallies for each variable or category number was calculated as well as the total number of the tallies for all the variables. Classroom teaching time was assumed to represent 100 per cent. In this way the percentage of the time spent on each dependent variables in a given lesson is calculated. Time percentage for each of the 245 teachers spent on these dependent variables is tabulated in the appendix III.

In interpreting teacher's, and pupil's, class activities, the first step was to calculate simple means of the time spent on each of the variables through an S04B computer programme. This simple table analysis was useful in interpreting classroom behaviour of each of the independent variables. Using a cross tabulation analysis, it was possible to determine the mean percentages of a group of teachers identified in terms of two independent variables.

A. A SIMPLE ANALYSIS OF MEANS

The influence of the New Primary Approach on teachers' class activities.

	Number of New Primary Teachers	Number of New Primary Teachers (Qualifying)
IPA TRAINERS	85	11.0%
IPA In-service	57	22.0%
Non-IPA	107	11.0%
Means of Sample	249	11.2%

Table 4: The New Primary Approach and teachers' class activities.

	Number of Teachers	Narrow Questions	Broad Questions	Presenting Information	Individual Differences	Non-Verbal Activities
NPA Trained	86	11.0*	3.9	23.9	8.5	13.8
NPA Inservice	52	12.0	4.5	23.0	8.6	12.9
Non-NPA	107	11.0	3.7	27.1	7.7	16.7
Means of Sample	245	11.2	3.9	25.1	8.2	14.9

*Figures for the dependent variables represent percentages.

From Table 4 it is clear that a fairly high proportion of the teachers in the sample had either had some NPA training through their teacher education course or through in-service courses. Their class performance generally, does not seem to reveal striking differences when compared with those teachers who have not attended the course. Both the NPA and the Non-NPA teachers spent as much as 11.0% of the class time asking narrow questions. Those who have been oriented towards the course being slightly higher, 12.0%. Teachers' approach to broad questioning too does not show very marked differences, ranging from 3.9% to 4.5% of the class time. This is an aspect that would reflect an improved quality in teaching. The NPA programme does not have much impact on it. Broad questions which are relatively open-ended, thought provoking requiring expressions of opinion would lead to a pupil-centred lesson than narrow questions.

A very noticeable feature, however, is that the NPA programme sharply reduces teachers' approach to lecturing or presenting information. The NPA teachers are two points below the mean of the group, while the non-NPA teachers are

two points above the mean of the whole group. It is quite remarkable that the programme has made a break through in the traditional approach to teaching which often leads to rote memorization. The impact of the course is somewhat weakly reflected in the way NPA teachers accept pupils' ideas behaviours, feelings and help individual pupils. They are a point above the non-NPA teachers. This perhaps reflects the emphasis laid on individual differences in these activity methods.

Interestingly the non-NPA teachers spent more time (16.7%), about two points above the mean on non-verbal teachers class activities. From my observation these largely consist of giving lengthy notes sometimes short of reproducing handwritten text-books and marking of pupils' exercises.

In sum it is accepted that the NPA programme has to a certain degree reduced teachers' directiveness in their class behaviour. For the NPA teachers, class activities take 61.0% of the teaching time while for the non-NPA it takes 66.0%. But teachers' domination of class is still a remarkable feature

particularly with an activity such as lecturing or presenting information which takes 1/5 of the teaching time. The impact of the NPA programme will be further examined in cross tabulation analysis.

OTHER PROFESSIONAL FACTORS AFFECTING TEACHERS' CLASS ACTIVITIES

The influence of teachers' academic and professional level on class activities.

As already discussed in the last three chapters, teachers' academic and professional level is a widely accepted index for assessing the quality of teaching. An analysis was made to gauge how strongly these aspects are reflected in the teachers' classroom behaviour. Table 5 summarises the activities of the four grades of teachers' that were observed.

	Number of Teachers
P1 Teachers	36
P2 Teachers	90
P3 Teachers	95
P4 Teachers	18
Mean of Sample (SAS)	

Table 5: Teachers' academic and professional level and their class activities.

	Number of Teachers	Narrow Questions	Broad Questions	Presenting Information	Individual Differences	Non-verbal Activities
P1 Teachers	36	11.0	6.0	26.3	4.9	15.7
P2 Teachers	99	12.2	4.0	25.3	8.7	14.9
P3 Teachers	95	10.0	3.5	24.6	8.9	14.0
P4 Teachers	15	12.9	1.3	24.3	7.6	18.2
Mean of Sample	245	11.2	3.9	25.1	8.2	14.9

Taking a general examination of the dependent variables, the data reveals a few striking factors. The four groups of teachers spent a fairly high proportion of their class activities asking narrow questions. P3 teachers ask relatively fewer questions requiring brief answers and P4 teachers ask more of such questions; the P4 group probably demonstrating their limited academic background. An outstanding aspect reflecting teachers' academic and professional level, is their approach to broad questions. The time spent on this variable descends with teachers' academic level; being highest, 6.0% with the P1 teachers and tailing off to 1.3%; of the class time, with P4 teachers. P1 teachers by virtue of their academic level ask more questions which are relatively open ended, more thought provoking and requiring expression of opinion. Their secondary education gives them the security of exploring more deeply into the 'unknown world'. They ask questions to which pupils may give some unexpected answers. P3 and P4 teachers in particular tend to suppress questions requiring expressions of

opinions since they would lead them to the threshold of the unknown. It will be improper to overemphasise this point since there is a small number of P3 teachers whose approach to broad questioning compares favourably with that of the P1 and P2 teachers. X

Lecturing or presenting information presents an entirely opposite picture from that presented in broad questioning. This apparently declines with teachers' academic level. P1 teachers rise a point higher than the mean of the whole group, 26.3% and P4 teachers fall one point below the mean of the whole group, 24.3%. This aspect about P1 teachers, could be an indication of their academic background. Having been in an educational system characterized with the traditional methods of teaching and examination hurdles longest, an imitation of their old teachers is much more strongly established and it is unlikely that a two year teachers' course of largely 'theoretical' teaching would have broken the appeal of the traditional methods.

In the whole, teachers' academic and professional level is reflected in teacher's class activities.

Alternatively the fact that many have to teach in the upper classes, where methods tend to be more formal, perhaps they tend to do a little more lecturing. This is particularly the case since they spent 4.9% of the class time, accepting ideas, behaviour, feelings and helping individual pupils. The rest of the teachers spent proportionately high time accepting pupils as individuals; clarifying building or developing ideas suggested by pupils and recognizing their emotions.

The four groups of teachers spent a relatively high proportion of their class time on non-verbal activities. P1 teachers 15.7%, P2 teachers 14.9%, P3 teachers 14.0%, and P4 teachers 18.2%. From lesson observation, in very rare cases do these activities consist of teacher's demonstration of experiments or ways in which processes have to be carried out. More often they embrace copying notes on the blackboard marking of pupils' work and going round the class to see what pupils are doing (simple exercises).

On the whole, teachers' academic and professional level is reflected in teacher's class activities.

Very noticeable is their approach to asking open ended questions which provide pupil participation. This is a positive approach to the quality of teaching in the primary schools since it is one of the ways through which a spirit of inquiry can be imported into the classroom. On the basis of this aspect of teaching, teachers' academic level seems a much more powerful influence on the quality of teaching than perhaps the New Primary Approach; it is however recognized that the NPA programme has the advantages of reducing the degree of lecturing. But in both cases, teachers' class activities feature more strongly than pupils' activities, taking about 60% of the teaching time.

The influence of teaching experience on class activities.

This is the second professional factor whose influence on the quality of teaching was examined. Teachers' class activities displayed some of the following characteristics recorded in Table 6.

Table 6: Teaching experience and teachers' class activities.

Teaching Experience	Number of Teachers	Narrow Questions	Broad Questions	Presenting Information	Individual Differences	Non-verbal Activities
0-10 Years	137	11.0	3.8	24.6	8.9	14.7
11-20Years	78	11.7	4.6	26.6	6.7	14.5
21-30Years	26	10.4	2.8	23.2	8.9	15.8
31-40Years	4	15.0	2.4	23.3	5.9	22.2
Means of Sample	245	11.2	3.9	25.1	8.2	14.9

does not seem to be true, when the teachers

In interpreting teachers' class behaviour in Table 6, teachers with 31-40 years teaching experience will be ignored, since the sample is too small to yield very reliable information. As has been the case with the independent variables already examined, teachers' approach to asking narrow questions, thus questions requiring brief answers remains one of the aspects taking a fairly high proportion of the class time. Asking broad questions remains quite low, though a little more strongly reflected by the teachers with less than twenty years experience. This could be possibly due to the influence of the New Primary Approach; which also perhaps reduces the degree of lecturing by the teachers with less than 10 years teaching experience, about X 24.6% of the teaching time.

It is not quite clear why teachers with 11 to 20 years teaching experience should have spent, 26.6% of their class time lecturing. Probably this is due to the influence of the traditional methods in which many could be strongly embedded. Though such a conclusion

does not seem to be true, when the teachers whose teaching experience is 21-30 is considered.

The long serviced teachers, 11-30 years teaching experience, fall rather low on accepting pupils' feelings and ideas, 6.7%; though the three groups approach to non-verbal activities do not reveal any marked difference. In general teaching experience does not seem to display a very constant pattern of teachers' behaviour; hence obscuring slightly its impact on the quality of teaching.

INTERNAL SCHOOL FACTORS AFFECTING TEACHERS' CLASS ACTIVITIES.

The influence of the level (lower and upper classes) of the Primary School on teachers' class activities.

Apart from the impact of the professional factors such as the teachers' academic level and the teaching experience, an examination was made into the influence of the internal factors of the school. Table 7 records teachers' class activities in relation to the level of the primary school.

Table 7: The level of the primary school and teachers' class activities.

Class	Number of Teachers	Narrow Questions	Broad Questions	Presenting Information	Individual Differences	Non-Verbal Activities
1.	34	9.2	2.9	18.6	11.6	13.7
2.	33	10.2	2.3	22.6	9.9	14.2
3.	29	12.6	3.3	19.9	8.1	14.1
4	30	11.0	3.8	23.3	6.9	16.2
5	46	13.0	4.6	27.1	6.7	14.2
6	39	11.6	5.2	29.5	7.6	15.1
7	34	10.2	4.7	32.3	6.8	16.9
Mean of Sample	245	11.2	3.9	25.1	8.2	14.9

Teacher class activities reflected in table 7 perhaps present a much more striking phenomenon than those already examined in connection with the other independent variables, NPA teachers' academic level, and teaching experience. Asking brief questions tends to fluctuate in both the lower and upper classes of the primary school. It falls 2.0% points below the mean in standard One and rises with about the same number of points in class Five. It is interesting to note that relatively fewer narrow questions are asked in standard One. One would have perhaps expected more of such questions in this class because of the pupils' mental age. Teachers' approach to asking open-ended and thought provoking questions requiring expressions of opinion seem to back this point. In class One 2.9% of the teaching time is spent on broad questioning and steadily rise to 5.2% in standard Six and falls slightly to 4.7% in standard Seven a fall which is due most probably to the influence of the Certificate of Primary Education Examination in this class.

Lecturing or presenting information, too presents a very striking feature, which perhaps reveals very important information regarding the quality of teaching in the primary schools. In class One, 18.6% of the teaching time is devoted to presenting information and rises very sharply to 32.3% in class seven, almost twice the time spent on the same aspect in class One and 7.2% points above the mean of the whole group.

Recognizing pupils' feeling and ideas seems to strengthen the above point. A fairly high proportion of the teaching time is devoted to this aspect in standard One, 11.6%, about three points above the mean of the whole sample and declines to 6.8% in standard seven. Teachers' non-verbal activities somehow tend to fluctuate; occupying 13.7% in class One, 14.1% in classes Three and Five and rising to 15.1%, 16.2% and 16.9% in classes Six, Four and Seven respectively.

Without minimising the impact of teachers' academic level, and NPA on teachers' class activities, the most powerful factor seems to be the type of class. There is strong evidence

for a more pupil - centred approach to teaching in the lower classes than in the upper classes. Teachers' class activities in class one take 57.0% of the teaching time, while in class Seven it rises to 71.0% of the time. It is quite apparent that the lower classes more strongly influence the quality of teaching than the upper classes. The most probable reasons for this; would be the fact that the NPA programme has for long been confined to the lower classes and secondly the examination factor in the upper classes which will be examined in subsequent chapters.

The influence of the subjects on teachers' class activities.

From the examination of the independent variable, teaching in lower and the upper classes of the primary class, it became apparent that the C.P.E. examination seems to have a very strong influence on the quality of teaching. An attempt was made to assess this influence through the subjects of the primary school curriculum. Teachers' class activities are examined in relation to the examination subjects and the non-examinable subjects.

In comparing the number of lessons for the examinable subjects English, Mathematics, Geography, History and Science with the non-examinable subjects from Table 8, the stress given to the examinable subjects needs no emphasis. English and Mathematics particularly, dominate the time-tables of many primary schools.

In some of the schools visited the non-examination subjects have been totally struck off the time-table in the upper classes, or if they appear on the time-table at all, they are only there in theory and not in practice. The only exception, however, is religious knowledge which is taught once in a week possibly because of pressure from a local pastor or the headmaster, who knows quite well that he partly holds his post by virtue of belonging to the same denomination with the school.

Teachers' approach to asking questions requiring brief answers does not reflect a very marked difference in the examinable subjects. It is not quite clear why English and Science should be characterized by a high proportion of narrow questions. As for Science the cause would be that

Table 8: Subjects of the primary school curriculum and teachers' class activities.

Subject	Number of Teachers	Narrow Questions	Broad Questions	Presenting Information	Individual Differences	Non-Verbal Activities
English	56	14.0	4.9	21.3	8.1	12.5
Maths	75	10.5	3.5	21.2	10.9	15.3
Geography	15	11.6	6.4	27.2	4.4	12.7
History	26	8.5	2.1	41.7	2.2	23.1
Science	23	15.0	5.4	24.7	5.1	14.2
Religious Knowledge	15	14.1	5.4	31.8	6.4	11.2
Swahili	5	11.3	7.0	28.5	7.8	12.3
Reading	5	8.2	0.6	21.2	11.0	6.8
Writing	5	5.3	0.4	24.0	14.2	22.5
Vernacular	5	15.4	5.9	14.4	9.9	12.9
Art/D/Science/Craft	10	1.5	-	22.1	14.9	14.9
Music	5	-	-	32.2	6.6	18.9
Man of Sample	245	11.2	3.9	25.1	8.2	14.9

The P3E Course series and the Safari books are based on a practical approach to the many of the teachers interviewed had not (teaching of English) the W3E series and the studied much of it during their school days, few science which emphasize activity are particularly the P3 teachers and even the P2 and P1 teachers who have been promoted in the field. The non-examinable subjects also reflect a high degree of narrow questions, except for the more practical subjects like Art and Craft and Domestic Science. Broad questionig features fairly significantly in the examinable subjects falling rather low in History. It is remarkable that Swahili rises to 7.0% of the class time on this aspect. This could be largely due to teachers' familiarity with the subject and the absence of the examination pressure.

The traditional approach still occupies a higher proportion of the class time in most of the subjects both the examinable and the non-examinable subjects. There is a lower degree of lecturing in English, Maths and Science possibly due to the regular in-service courses in these subjects. The traditional approach still occupies a higher proportion of the class time in most of the subjects both the examinable and the non-examinable subjects. There is a lower degree of lecturing in English, Maths and Science possibly due to the regular in-service courses in these subjects.

The PEAK Course series and the Safari books are based on a practical approach to the teaching of English; the New Maths and the New Science which emphasise activity are courses in which many teachers in the field have been in-serviced. History and Geography have not had much progress towards creativity. This is particularly so with History which is perceived by many teachers as a lecturing subject; this is why giving information, facts and ideas, occupies 40.0% of the teaching time.

Lecturing is also quite prominent in the non-examinable subjects. In religious knowledge, the tendency is to preach rather than teach; hence a very sharp rise on this dependent variable to 31.8%. In music it is often unavoidable for the teacher to sing together with the pupils just after having demonstrated on how a song has to be sung; this explains why presenting information has to take a very high proportion of the teaching time. There is proportionately less lecturing in vernacular probably as a result of pupils' and teachers' familiarity with the subject matter.

6.24, of the teaching time spent on non-verbal

Accepting ideas, behaviour, feelings and helping pupils are aspects to which teachers give much attention in many of the subjects; particularly for the non-examinable subjects. For the examinable subjects, English, Maths and Science relatively higher time is devoted on these aspects, possibly because of the influence of the in-service courses already discussed above. History tails off due to the fact a greater amount of class time is devoted to lecturing. In the non-examinable subjects, accepting pupils' individuality is a prominent aspect of class teaching except in religious knowledge in which as already pointed out, proportionately much time is spent on preaching. Music falls sharply low since there are rare occasions for individual singing or exercises.

Teachers' non-verbal activities are quite strong in all the subjects. In the examination subjects, this aspect has much time devoted to it in history. Usually the case, being that after the lectures fairly lengthy notes have to be given. In the nonexamination classes, writing by its nature calls for more non-verbal activities. Reading on the other hand has less time, 6.8%, of the teaching time spent on non-verbal

in the practical subjects; though it is noted that the sample of lessons for the non-examination activities. Teachers have to do a little more talking to impart proper reading and speech skills.

THE NON-PROFESSIONAL FACTORS AFFECTING TEACHER'S

Though there is no generalized pattern in which the influence of subject can be interpreted in relation to the quality of teaching, there are a number of points that are discerned from teacher's activities just examined. As already indicated examination subjects dominate many time-tables of the primary school as compared to the non-examination subjects. In drawing a comparison between the examination subjects, one would attribute teacher's tendency to reflect features which would lead to pupil participation in subjects like English, Maths and Science, to the activity method courses in which these teachers have been in-serviced. Whereas subjects like Geography and History in which much progress has still to be made, there is an apparent reflection of traditional methods of teaching. This is particularly the case with History in which there is a high degree of lecturing and copying notes. In the non-examination subjects, there tends to be a stronger approach to activity

in the practical subjects; though it is noted that the sample of lessons for the non-examination subjects is too low to be a basis for a reliable interpretation.

THE NON-PROFESSIONAL FACTORS AFFECTING TEACHER'S CLASS ACTIVITIES.

It is not rare for some educators to judge the quality of teaching in the light of non-professional factors such sex differences, age and the preparation for external examinations. Sweeping statements are often made about men teachers being superior to women teachers, old teachers being better or worse teachers than young teachers; and recently complaints have been voiced about teachers spending their teaching time preparing for external examinations and hence not doing adequate planning for their lessons. An attempt was made to explore the influence of each of these independent variables on teacher's class activities.

The influence of teacher's sex differences on class activities.

Table 9: Teachers' sex differences and class activities.

Sex	Number of Teachers	Narrow Questions	Broad Questions	Presenting Information	Individual Differences	Non-Verbal Activities
Men	169	13.0	4.0	27.1	7.9	15.3
Women	76	11.0	3.6	20.6	8.9	14.0
Mean of Sample	245	11.2	3.9	25.1	8.2	14.9

by teachers' activities than the male teachers (67.3% of the teaching time devoted to teachers' class activities).

The results in Table 9 portray very remarkable features as regards teachers' approach to class activities in relation to their sex differences. Women teachers ask less narrow questions; 2% below the mean of men teachers. Negligible differences exist in the broad questioning technique, though men teachers are slightly better of than the women teachers. A very striking point is that women teachers spent 20.6% of the teaching time lecturing or presenting information; while their male counterparts are 7.1% above them. They further spent a little more time accepting pupils' ideas, behaviour, feelings and helping individual pupils. Men teachers, however spent relatively more time on non-verbal activities; giving notes and writing on the blackboard.

Taking a broad look on both women and men teachers' class activities, the former seem to reflect stronger aspects related to the quality of teaching than the men teachers. They display a much more child-centred approach to teaching, (58% of the teaching time devoted

to teachers' activities) than the male teachers (67.3% of the teaching time devoted to teachers' class activities).

The influence of age on teachers' class activities.

Teachers' age was considered as another non-professional factor affecting the quality of teaching, though it somehow correlates with teachers' experience. Teachers' class activities with respect to their age were as shown in Table 10.

In examining teachers' activities shown in Table 10, the sample for teachers whose age is between 61-70 years is too low to yield reliable information; therefore it will be ignored. Narrow questioning features quite strongly with all age groups. The oldest teachers giving it relatively less time, 9.0% of the teaching time. Open-ended and thought provoking questions are generally low, being a little higher with teachers whose age is 31-40 years.

Table for Teachers' age and class activities.

Age in Years	Number of Teachers	Mean of Various Qualities
21-30	117	10.0
31-40	91	11.7
41-50	26	11.3
51-60	7	9.0
61-70	2	20.5
Total of Sample	145	11.2

Their approach to lecturing appears quite variable; younger teachers spent 23.9% of the teaching time while 31-40 age group rises highest to 27.7%; and 41-50 group falls to 22.8% while the older teachers rise slightly to 24.5%. Recognizing pupils' as individuals is relatively high with all the age groups, though it falls by 3% below the mean of the rest of the groups for 31-40 age-group. Teachers' non-verbal activities is a very prominent aspect of teachers' class activities; and rises somehow sharply with older teachers; probably as a result of their small sample. In general the influence of age on teachers' class activities does not reveal a systematic effect on the quality of teaching.

Table 10: Teachers' age and class activities.

Age in Years	Number of Teachers	Narrow Questions	Broad Questions	Presenting Information	Individual Differences	Non-Verbal Activities
21-30	117	10.8	3.7	23.9	9.1	14.0
31-40	91	11.7	4.3	27.7	6.6	15.5
41-50	28	11.3	3.7	22.8	9.1	15.2
51-60	7	9.0	2.3	24.5	9.9	19.2
61-70	2	20.5	6.2	9.2	6.7	14.5
Mean of Sample	245	11.2	3.9	25.1	8.2	14.9

The effect of external examinations on teachers' class activities.

From the interview with the teachers it was noted that about 80% of them were preparing for one of the external examinations, Kenya Junior Secondary Examination, the East African Certificate of Education, the Higher School Certificate and the London G.C.E. Ordinary or Advanced levels. This factor coupled with the general complaints about teachers ignoring their class duties as a result of concentrating on these promotion examinations, necessitated looking at the effect of external examinations on teachers' class activities.

In comparing the examination and the non-examination groups of teachers' approach to class activities as shown in Table 11 there are a number of differences revealed. Teachers preparing for examinations do more of narrow questioning than the non-examination group; though the two devote equal time 3.9% on broad questions. The effect of the examination is strongly demonstrated in the two groups of teachers' way of presenting information or lecturing. The examination group spends 26.2% of their class time on this directive behaviour, while those who are not preparing for examinations spent 21.0% of the teaching time on the same aspect.

Table 11: External Examinations and class activities:

	Number of Teachers	Narrow Questions	Broad Questions	Presenting Information	Individual Difference	Non-Verbal Activities
External Exam.	177	10.9	3.9	26.2	8.0	14.9
No External Exam.	68	12.0	3.9	22.1	8.7	15.0
Mean of Sample	245	11.2	3.9	25.1	8.2	14.9

ii. Teachers' academic and professional level;
 and the level of the primary school on
 The former probably having less time for preparation
 so as possibly to be able to vary their class
 activities, lecturing becomes a prominent teachers'
 class activity. The two groups' approach to
 accepting pupils' individuality and non-verbal
 activities do not show very marked differences.

Though the examination influence on teachers' class activities seems to be reflected in the teachers' approach to lecturing, it does not appear to have a marked effect on the rest of the dependent variables. This could be probably due to the fact that teachers who might not be preparing for external examinations, might just as well be engaged in taking care of personal business like running a small shop or farm or any related activity.

B. A CROSS - TABULATION ANALYSIS OF MEANS.

From a simple analysis of means, a number of independent variables which seem to have a remarkable influence on teachers' class activities were cross-tabulated to assess their combined effect on the dependent variables. The cross-tabulation was as follows:

- a) i. Teachers' academic and professional level;
 and the New Primary Approach on teachers' class activities.

ii. Teachers' academic and professional level; and the level of the primary school on class activities.

iii. Teachers' academic and professional level; and external examinations on teachers' class activities.

iv. Teachers' academic and professional level; and age of the teacher on teachers' class activities.

v. Teachers' academic and professional level; and sex of the teacher on teachers' class activities.

b) 1. The NPA; and the level of the primary school on teachers' class activities.

ii. The NPA; and teachers' sex on teachers' class activities.

Teachers' academic and professional level; and the New Primary Approach on teachers' class activities.

From a simple analysis of means it appeared that each of the independent variables, teachers' academic and professional level, and the NPA had some considerable influence on the quality of teaching. A further analysis is made here to test their combined effect on the quality of teaching.

* In the cross-tabulation analysis all figures in the brackets represent the number of teachers.

Table 12: Teachers' academic and professional level and NPA on Questioning.

Narrow Questions.

	NPA-Trained	NPA-Inservice	Non NPA	Total
P1 Teachers	(14) 14.3	(9) 9.8	(13) 8.2	(36) 11.0
P2 Teachers	(32) 11.6	(19) 13.7	(48) 12.0	(99) 12.2
P3 Teachers	(40) 9.3	(18) 12.3	(37) 9.3	(95) 10.0
P4 Teachers	-	(6) 9.2	(9) 15.5	(15) 12.9
Total	(86) *11.0	(52) 12.0	(107) 11.0	(245) *12.7

Broad Questions.

	NPA-Trained	NPA-Inservice	Non NPA	Total
P1 Teachers	(14) 6.7	(9) 5.9	(13) 5.2	(36) 6.0
P2 Teachers	(32) 4.0	(19) 4.9	(48) 3.5	(99) 4.0
P3 Teachers	(40) 2.7	(18) 4.6	(37) 3.7	(95) 3.5
P4 Teachers	-	(6) 0.9	(9) 1.6	(15) 1.3
Total	(86) 3.9	(52) 4.5	(107) 3.7	(245) 3.9

* In the cross-tabulation analysis all figures in the brackets represent the number of teachers.

Teachers' approach to narrow questions as seen in Table 12 seem to present many striking points between teachers' academic and professional level and the New Primary Approach. There are no very remarkable differences between the NPA and the non-NPA teachers. The P3 teachers, however, generally ask fewer narrow questions, 9.3% of class time while their P1 counterparts rise to 14.4% of their teaching time; and on the whole, narrow questions decline with the academic level of the teachers. This could possibly be due to the nature of the class they teach; most of the P1 teachers teaching the upper classes. In general both the NPA and the Non-NPA teachers' approach to asking narrow questions tends to fluctuate so considerably that it is somewhat difficult to make a systematic interpretation. At any rate, the impact of NPA on P4 teachers is quite noticeable. The NPA P4 teachers spent 9.2% of the teaching time 3 points below the mean of the whole group while non-NPA P4 teachers spent as much as 15.5% of the teaching time asking narrow questions.

The broad questioning technique, perhaps reflects a more stronger relationship between teachers' academic and professional level and the NPA programme. The NPA programme combine with the academic and professional level, to better this teachers' class activity. NPA remarkably upgrades

P1 teachers' approach to asking elaborate questions. The NPA P1 teachers spent about 6.3% of the teaching time asking broad questions while their non-NPA counterparts spent 5.2% of the time.

This effect is reflected in all the rest of the groups of teachers with an exception of the P4 teachers.

	NPA Trained	NPA Inservice	Non NPA	Total
P1 Teachers	136 26.3	197 25.9	421 26.8	754 26.3
A combined influence of the New Primary P				
Approach and the teachers' academic and professional level is strongly shown in teachers' approach to lecturing or presenting information. As reflected in Table 13 it reduces the degree of lecturing or presenting information, though the relationship between the NPA and P1 teachers on this dependent variable is quite weak, possibly due to the upper class effect where many P1				

teachers presumably teach. The course has a remarkable effect on the P3 and P2 teachers' approach to lecturing, though it does not seem to affect the P4 teachers.

Table 13: Teachers' academic and professional level and the NPA on lecturing or presenting information.

Discussed in the simple analysis of means compare less favourably with the other groups of

Teachers;	NPA Trained	NPA Inservice	Non NPA	Total
P1 Teachers	(14) 26.3	(9) 25.9	(13) 26.6	(36) 26.3
P2 Teachers	(32) 23.9	(19) 19.0	(48) 28.7	(99) 25.3
P3 Teachers	(40) 23.1	(18) 24.8	(37) 26.1	(95) 24.6
P4 Teachers	-	(6) 25.6	(9) 23.3	(15) 24.3
Total	(86) 23.9	(52) 23.0	(107) 27.1	(245) 25.1

In looking at the teachers' recognition of pupils' individuality in Table 14, P1 teachers as discussed in the simple analysis of means compare less favourably with the other groups of

	NPA Trained	NPA In-service	Non-NPA	Total
P1 Teachers	(34) 3.3	(17) 6.9	(21) 6.1	(30) 4.5
P2 Teachers	(32) 8.3	(19) 10.3	(18) 7.9	(29) 8.7
P3 Teachers	(40) 10.1	(18) 7.7	(37) 8.2	(95) 8.3
P4 Teachers	(-)	(8) 9.4	(21) 8.4	(29) 7.6
Total	(86) 8.3	(52) 8.9	(107) 7.9	(245) 8.2

Table 14: Teachers' Academic and professional level on accepting a pupil's individuality.

	NPA Trained	NPA Inservice	Non-NPA	Total
P1 Teachers	(14) 3.1	(9) 6.0	(13) 6.2	(36) 4.9
P2 Teachers	(32) 8.9	(19) 10.5	(48) 7.9	(99) 8.7
P3 Teachers	(40) 10.1	(18) 7.7	(37) 8.2	(95) 8.9
P4 Teachers	(-)	(6) 9.4	(9) 6.4	(15) 7.6
Total	(86) 8.5	(52) 8.6	(107) 7.7	(245) 8.2

Teachers' non-verbal activities reveal a very interesting point. The non-NPA teachers exercise more non-verbal activities. As already observed in the analysis of simple means in the previous section, these activities in a majority of cases, consist of giving lengthy notes and marking

These are some of the chief characteristics of teaching associated with the traditional approach to teaching; and it does not appear strange that they are reflected more strongly in the non-NPA teachers' approach to teaching. Table 15, summarises these activities.

				Total
P1 Teachers	(38) 12.2	(37) 12.2	(33) 12.2	(108) 12.2
P2 Teachers	(32) 12.2	(30) 12.2	(28) 12.2	(90) 12.2
P3 Teachers	(40) 12.2	(38) 12.2	(37) 12.2	(115) 12.2
P4 Teachers	-	(6) 12.2	(8) 12.2	(14) 12.2
Total	(110) 12.2	(111) 12.2	(106) 12.2	(327) 12.2

Table 15: Teachers' Academic and professional level and NPA on non-verbal teachers' activities.

The NPA programme has not had a profound influence on the quality of teaching, it can be seen from the cross-tabulation that it compares

	NPA Trained	NPA Inservice	Non NPA	Total
P1 Teachers	(14) 12.6	(9) 12.7	(13) 21.2	(36) 15.7
P2 Teachers	(32) 15.3	(19) 11.9	(48) 15.9	(99) 14.9
P3 Teachers	(40) 13.1	(18) 12.2	(37) 15.6	(95) 14.0
P4 Teachers	-	(6) 19.1	(9) 17.6	(15) 18.2
Total	(86) 13.8	(52) 12.9	(107) 16.7	(245) 14.9

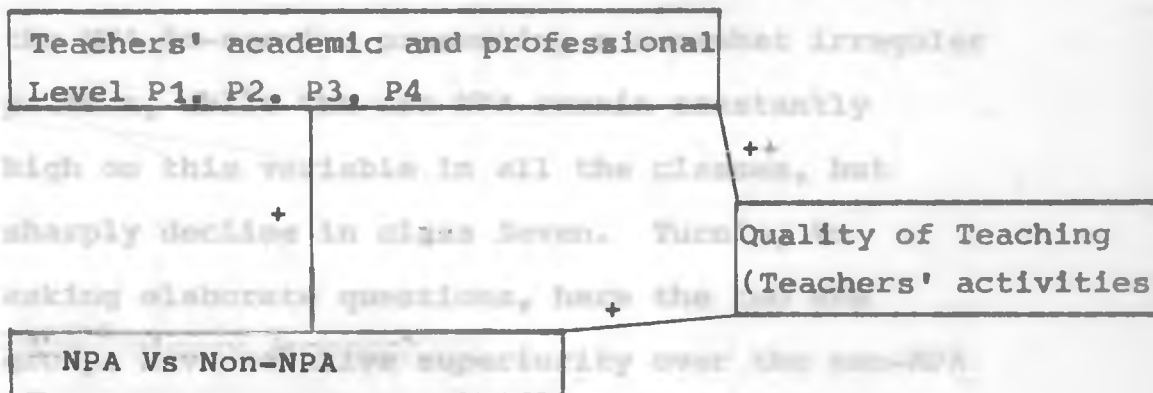
NPA vs Non-NPA

- + Indicates positive relationship
- Indicates negative relationship

The New Brinsford Approach and the Level of the
classroom activity on teachers' class activities.

Though the frequency analysis table in the previous section appeared to indicate that the NPA programme has not had a profound influence on the quality of teaching, it can be seen from the cross-tabulation that it combines with teachers' academic and professional level to improve the quality of teaching. The relationship drawn from these variables is summarised in figure 1.

Figure 1: Relationship between teachers' academic and professional level, NPA and the Teachers' class activities.



- + Indicates positive relationship
- Indicates negative relationship

Generally the structure of the questions reflect pupils' intellectual development.

Being fewer in the lower classes and more in

The New Primary Approach and the level of the
primary school on teachers' class activities.

From a simple analysis of means it became clear that, the level of the primary school has a very powerful influence on teachers' class behaviour. A further attempt was made in this cross-tabulation to ascertain the combined influence of the NPA and this variable on the quality of teaching.

Examining narrow questioning in Table 16, there do not seem to be outstanding differences between NPA and the non NPA teachers. A very striking feature is that the former ask relatively few questions in the lower classes particularly the NPA trained, but rise in the upper classes; the NPA in-service presenting a somewhat irregular pattern, while the non-NPA remain constantly high on this variable in all the classes, but sharply decline in class Seven. Turning to asking elaborate questions, here the two NPA groups have relative superiority over the non-NPA teachers and maintain a fairly high proportion of broad questions in the upper classes. Generally the structure of the questions reflect pupils' intellectual development,

being fewer in the lower classes and many in the upper classes. The non-activity method teachers display a somewhat irregular pattern.

Table 14: IPA and the level of the primary school by teachers' approach to

Active/Inactive Constructing

Class	1	2	3	4	5	6	7
IPA Teachers	(16) 8.2	(17) 7.7	(7) 10.5	(9) 12.9	(13) 15.3	(11) 12.2	(13) 11.0
IPA Inservice	(10) 11.3	(7) 15.0	(7) 7.9	(4) 9.3	(11) 12.3	(6) 13.7	(11) 11.0
Non-IPA	(8) 8.5	(9) 11.2	(18) 16.7	(17) 10.5	(22) 13.0	(22) 10.5	(16) 11.0
Total	(34) 9.2	(33) 10.2	(29) 11.6	(30) 11.0	(46) 13.0	(39) 11.9	(39) 11.2

Active/Inactive Constructing

Class	1	2	3	4	5	6	7
IPA Teachers	(16) 1.9	(17) 2.4	(7) 3.8	(9) 4.5	(13) 5.2	(11) 5.7	(13) 3.0
IPA Inservice	(10) 3.7	(7) 4.2	(7) 3.3	(4) 3.3	(11) 3.9	(6) 7.5	(11) 4.5
Non-IPA	(8) 5.9	(9) 9.5	(18) 6.8	(17) 3.4	(22) 4.2	(22) 5.0	(16) 3.8
Total	(34) 3.9	(33) 2.3	(29) 3.3	(30) 3.8	(46) 4.6	(39) 5.2	(39) 3.7

Table 16: NPA and the level of the primary school on teachers' approach to questioning.

Asking Narrow Questions.

CLASS	1	2	3	4	5	6	7	Total
NPA Trained	(16) 8.2	(17) 7.7	(7) 10.9	(9) 12.9	(13) 15.3	(11) 12.2	(13) 12.3	(86) 11.0
NPA Inservice	(10) 11.3	(7) 15.0	(7) 7.9	(4) 9.3	(11) 10.3	(8) 13.7	(5) 15.9	(52) 12.0
Non-NPA	(8) 8.5	(9) 11.2	(15) 14.7	(17) 10.5	(22) 13.0	(20) 10.5	(16) 6.8	(107) 11.0
Total	(34) 9.2	(33) 10.2	(29) 12.6	(30) 11.0	(46) 13.0	(39) 11.6	(34) 10.2	(245) 11.2

Asking Broad Questions.

CLASS	1	2	3	4	5	6	7	Total
NPA Trained	(16) 1.9	(17) 2.4	(7) 4.6	(9) 4.5	(13) 5.7	(11) 3.7	(13) 5.7	(86) 3.9
NPA Inservice	(10) 3.7	(7) 4.2	(7) 3.0	(4) 3.3	(11) 4.4	(8) 7.7	(5) 4.7	(52) 4.5
Non NPA	(8) 3.9	(9) 0.6	(15) 2.8	(17) 3.6	(22) 4.0	(20) 5.0	(16) 3.9	(107) 3.7
Total	(34) 2.9	(33) 2.3	(29) 3.3	(30) 3.8	(46) 4.6	(39) 5.2	(34) 4.7	(245) 3.9

Table 11: NPA and the Level of the Refereed School in teachers' presentation of information.

CLASS	1	2	Total
NPA Trained	(18)20.0	(27)22.6	(45)23.9
NPA In-service	(8)13.8	(7)12.6	(15)13.0
Non NPA	(-1)16.7	(-1)22.7	(-2)25.2
Total	(25)19.6	(33)22.6	(58)21.1

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It is not only through questioning that the influence of the NPA is felt in teachers' class activities. As seen from the simple frequency tables presenting information remains one of the outstanding teachers' class activity. Table 17 reveals that a fairly high proportion of class time is devoted to this activity, and rises quite remarkably in the upper classes. A very striking feature is that it is reduced somewhat in the upper classes for the NPA teachers. The NPA in-service drop by 5% and 6% respectively below the means of class Five and Six. The non-NPA teachers on the other hand, fall quite strongly to lecturing in the upper classes rising from 25.0% of the teaching time in class Four to 34.3% in seven.

Table 12: The effect of NPA and Individual Differences.

CLASS	1	2	Total
NPA Trained	(18)11.7	(19)20.8	(37)16.5
NPA In-service	(10)12.3	(7) 8.4	(17)10.8
Non NPA	(-6)13.8	(-9)21.7	(-15)17.7
Total	(22)12.8	(27)19.7	(49)16.2

Table 17: NPA and the level of the primary school on teachers' presentation of information.

CLASS	1	2	3	4	5	6	7	Total
NPA Trained	(16)20.6	(17)22.6	(7)15.1	(9)23.0	(13)25.4	(11)29.4	(13)28.9	(86)23.9
NPA Inservice	(10)16.8	(7)22.4	(7)26.7	(4)16.9	(11)23.0	(8)23.4	(5)35.0	(52)23.0
Non NPA	(8)16.7	(9)22.7	(15)18.9	(17)25.0	(22)30.2	(21)31.9	(16)34.3	(107)27.1
Total	(34)18.6	(33)22.6	(29)19.9	(30)23.3	(46)27.1	(39)29.5	(34)32.3	(245)25.1

Table 18: The effect of NPA and the level of the primary school on teachers' approach to individual differences.

CLASS	1	2	3	4	5	6	7	Total
NPA Trained	(16)11.3	(17)10.8	(7)8.7	(9)8.7	(13)6.0	(11)6.8	(13)6.8	(86)8.5
NPA Inservice	(10)11.9	(7)5.4	(7)8.8	(4)11.1	(11)10.0	(8)7.4	(5)3.2	(52)8.6
Non NPA	(8)11.6	(9)11.9	(15)7.5	(17)5.8	(22)5.5	(20)8.2	(16)8.0	(10)7.7
Total	(34)11.6	(33)9.9	(29)8.1	(30)6.9	(46)6.7	(39)7.6	(34)6.8	(245)8.2

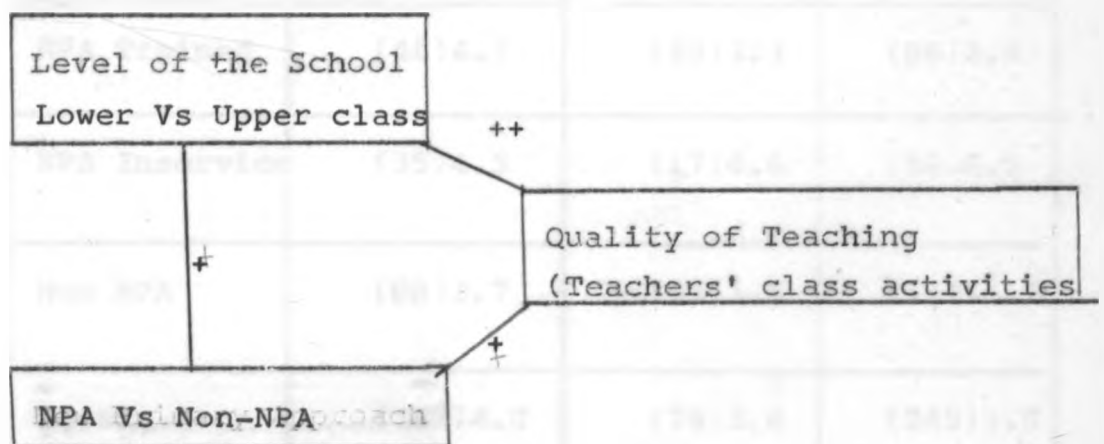
Table 19. The NPA and the level of the primary school on teachers' non-verbal activities

Class	1	2	3	4	5	6	7	Total
NPA Trained	(16)14.4	(17)15.5	(9)12.5	(9)10.6	(13)11.8	(11)17.4	(13)12.9	(86)13.8
NPA Inservice	(10)13.6	(7)13.9	(7)11.6	(4)11.5	(11)13.9	(8)12.5	(5)11.9	(52)12.9
Non NPA	(8)12.5	(9)12.1	(15)15.9	(17)20.2	(22)15.9	(20)14.9	(16)21.7	(107)16.7
Total	(34)13.7	(33)14.2	(29)14.1	(30)16.2	(46)14.2	(39)15.1	(34)16.9	(245)14.9

As shown in table 19, teachers' non verbal activities remain **outstandingly high with non-NPA teachers**. As discussed in simple frequency analysis, they are activities in which note making and the marking of books feature very strongly.

From the cross-tabulation analysis, the level of the school i.e. teaching in lower or upper classes, remains a very prominent influence on teachers' class activity; but the effect of NPA is quite strongly demonstrated in teachers' class behaviour. The relationship between these variables is represented as follows:

Fig. 2: The New Approach and the level of the primary school and the quality of teaching (Teachers' Class Activities).



The effect of NPA and teachers' sex differences on teachers' class activities.

The simple analysis of means showed that women teachers reflect more characteristics associated with good quality teaching than men teachers. A further test was made in the cross-tabulation to find out how each of the groups benefits from the NPA programme. Table 20 does not reveal any marked differences in both men and women teachers' approach to asking narrow and broad questions, though men-NPA teachers are relatively superior to their counterparts without NPA training. Women NPA teachers compare favourably with NPA men teachers.

	Men Teachers	Women Teachers	Total
NPA Trained	(45)4.3	(40)3.3	(85)3.9
NPA Inservice	(35)4.5	(17)4.6	(52)4.5
Non NPA	(88)3.7	(19)3.4	(107)3.7
Total	(168)4.0	(76)3.6	(244)3.9

Broad Questions

	Men Teachers	Women Teachers	Total
NPA Trained	(45)4.3	(40)3.3	(85)3.9
NPA Inservice	(35)4.5	(17)4.6	(52)4.5
Non NPA	(88)3.7	(19)3.4	(107)3.7
Total	(168)4.0	(76)3.6	(244)3.9

Table 20: NPA and teachers' sex differences on teachers' questioning technique.

Information, sex difference tends to be a more

Narrow Questions.

in Table 21. Women teachers spent a less

	Men Teachers	Women Teachers	Total
NPA Trained	(46)11.3	(40)10.6	(86)11.1
NPA Inservice	(35)12.3	(17)11.4	(52)12.0
Non NPA	(88)10.9	(19)11.3	(107)11.0
Total	(169)11.3	(76)11.0	(245)11.2

Broad Questions

	Men Teachers	Women Teachers	Total
NPA Trained	(46)4.3	(40)3.3	(86)3.9
NPA Inservice	(35)4.5	(17)4.6	(52)4.5
Non NPA	(88)3.7	(19)3.4	(107)3.7
Total	(169)4.0	(76)3.6	(245)3.9

In their approach to lecturing or presenting information, sex difference seems to be a more powerful factor than the NPA course as illustrated in Table 21. Women teachers spent a less proportion of the time lecturing. Some impact of NPA is somewhat strongly felt among the NPA men teachers and the non-NPA men teachers.

NPA Trained	(46)26.0	(40)24.5	(86)25.7
NPA Inservice	(35)25.1	(17)28.5	(52)26.8
Non-NPA	(88)28.4	(19)20.7	(107)27.1
Total	(139)27.1	(76)20.6	(215)25.1

The effect of NPA is reflected weakly in teachers' approach to accepting pupils' ideas, behaviour, feelings and helping individual pupils. As shown in Table 22 both NPA women and men teachers give slightly more time to this aspect than the non-NPA group, though sex differences plays a much stronger role.

Table 21: Teachers' sex differences and NPA on presenting information.

	Men Teachers	Women Teachers	Total
NPA Trained	(46)26.0	(40)21.5	(86)23.9
NPA Inservice	(35)25.1	(17)18.5	(52)23.0
Non-NPA	(88)28.4	(19)20.7	(107)27.1
Total	(169)27.1	(76)20.6	(245)25.1

The effect of NPA is reflected weakly in teachers' approach to accepting pupils' ideas, behaviour, feelings and helping individual pupils. As shown in Table 22 both NPA women and men teachers give slightly more time to this aspect than the non-NPA group, though sex differences plays a much stronger role.

On teachers' non-verbal activities, both

**Table 22: Teachers' sex differences and NPA
on accepting pupils' individuality.**

sex differences does not appear to play a prominent

	Men Teachers	Women Teachers	Total
NPA Trained	(46)8.0	(40)9.1	(86)8.5
NPA Inservice	(35)8.2	(17)9.5	(52)8.6
Non-NPA	(88)7.6	(19)7.9	(107)7.7
Total	(169)7.9	(76)8.9	(245)8.2

On teachers' non-verbal activities, both non-NPA women and men teachers devote a little more time than the NPA groups. Teachers' sex differences does not appear to play a prominent role, as illustrated in Table 23.

	Non-Teachers	Teachers	Total
NPA Trained	(46) 12.8	(40) 12.1	(86) 12.5
NPA Inservice	(35) 13.1	(27) 12.7	(62) 12.9
Non-NPA	(88) 17.0	(19) 15.1	(107) 16.7
Total	(169) 15.3	(176) 16.0	(345) 16.9

Table 23: NPA and Teachers' sex differences on Teachers' non-verbal activities.

activities.	Men Teachers	Women Teachers	Total
NPA Trained	(46)13.6	(40)14.1	(86)13.8
NPA Inservice	(35)13.1	(17)12.7	(52)12.9
Non-NPA	(88)17.0	(19)15.1	(107)16.7
Total	(169)15.3	(76)14.0	(245)14.9

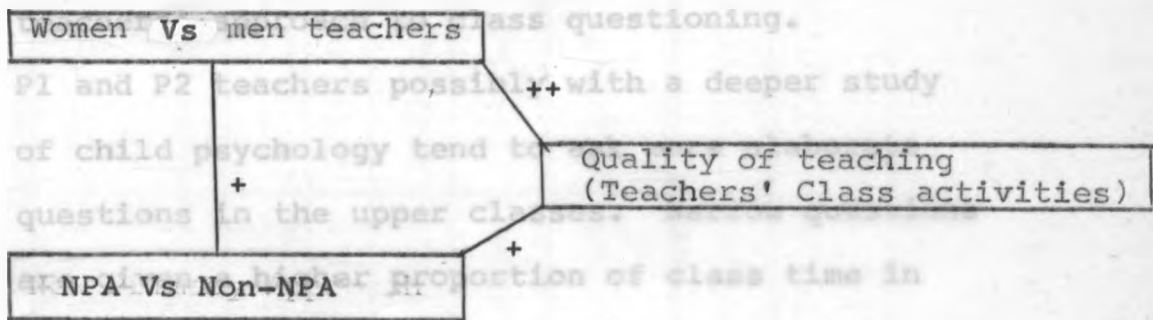
NPA VS NON-NPA

Teachers' academic and professional level and the level of the primary school on teachers' class activities.

The examination of the simple frequency table revealed that teachers' academic and professional level has profound influence on teachers' activities. It was seen that P1 teachers

The relationship between these independent variables is weak but significant. Sex differences as a single factor tends to have a marked influence on teachers' class activities. The association figure for these variables is as follows:

Fig. 3: NPA, Sex differences and the quality of teaching.



Teachers' academic and professional level and the level of the primary school on teachers' class activities.

The examination of the simple frequency table revealed that teachers' academic and professional level has profound influence on teachers' activities. It was seen that P1 teachers

favorably compare with the P4 teachers in relation reflect more activities leading to a high quality teaching than the rest of the grades. This was particularly the case with their approach to broad questioning. An attempt is made here to analyse the combined influence of the independent variables teachers' academic and professional level and the level of the school on the quality of teaching.

An examination of Table 24 seems to reveal a very striking feature in the four grades of teachers' approach to class questioning. P1 and P2 teachers possibly with a deeper study of child psychology tend to ask more elaborate questions in the upper classes. Narrow questions are given a higher proportion of class time in the lower classes and decline in the upper classes; whereas the broader questions are much fewer in the lower classes but increase in the upper classes. The P3 teachers tend to be somewhat constant, but they increase the narrow questions in the upper classes possibly as they approach the limits of their knowledge. It is quite remarkable, however, that they

favourably compare with the P2 teachers in relation to broad questions though they flop sharply in class 7. The P4 teachers also show some decline in asking narrow questions as they approach the upper classes; though their broad questions remain constantly low. Possibly a reflection of their low academic background. A very noticeable feature in the questioning technique, is the ability of the P1 teachers to ask more broad questions in the upper classes.

Class	1	2	3	4	5	6	7
P1 Teachers	(2)36.8	(1)23.6	(3)11.3	(6)11.3	(6)11.3	(6)11.3	(6)11.3
P2 Teachers	(1)16.7	(5)16.7	(3)11.3	(3)11.3	(3)11.3	(3)11.3	(3)11.3
P3 Teachers	(3)16.7	(3)16.0	(3)11.3	(3)11.3	(3)11.3	(3)11.3	(3)11.3
P4 Teachers	(4)36.0	(4)36.0	(5)16.0	(4)11.3	(4)11.3	(4)11.3	(4)11.3
Total	(3)16.2	(3)16.2	(2)16.2	(3)11.3	(3)11.3	(3)11.3	(3)11.3

Table 24: Teachers' academic and professional level and the level of the school on Teachers' approach to questioning:

Asking Narrow Questions:

Class	1	2	3	4	5	6	7	Total
P1 Teachers	-	(2)16.8	(1)11.6	(5)11.9	(6)12.3	(11)10.3	(11)9.4	(36)11.0
P2 Teachers	(11)9.5	(4)14.7	(5)16.1	(13)11.3	(26)13.5	(19)12.8	(21)10.6	(99)12.2
P3 Teachers	(20)8.7	(23)8.0	(18)10.4	(10)11.9	(13)12.6	(9)10.7	(2)11.6	(95)10.0
P4 Teachers	(3)11.1	(4)15.0	(5)16.9	(2)3.2	(1)9.9	(-)	(-)	(15)12.9
Total	(34)9.2	(33)10.2	(29)12.6	(30)11.0	(46)13.0	(39)11.6	(34)10.2	(245)11.2

Asking Broad Questions.

Class	1	2	3	4	5	6	7	Total
P1 Teachers	-	(2)4.0	(1)1.4	(5) 2.7	(6)6.6	(11)8.2	(11) 5.7	(36)6.0
P2 Teachers	(11)2.7	(4)1.4	(5)2.5	(13)4.5	(26)4.8	(19)3.6	(21)4.4	(99)4.0
P3 Teachers	(20)3.3	(23)2.5	(18)4.1	(10)3.9	(13)3.5	(9)4.9	(2) 2.0	(95)3.5
P4 Teachers	(3)1.0	(4)1.1	(5)1.5	(2) 2.0	(1)1.0	-	-	(15)1.3
Total	(34)2.9	(33)3.3	(29)3.3	(30)3.8	(46)4.6	(39)5.2	(34)4.7	(245)3.9

As revealed in Table 25, lecturing or presenting information strongly supports the hypothesis arrived at in the analysis of simple means that teaching the lower classes or upper classes of the primary school is a very powerful factor influencing teachers' class activity. There is a strong inclination to apply lecture methods in the upper classes particularly in the examination class. The P1 teachers, however, portray a unique picture in comparison with the other teacher-grades. They spent less time presenting information even in the upper classes with an exception of the examination class. This could be a reflection of their academic background; though their secondary education has exposed them to lecturing for a long time; it on the other hand makes them a little secure as to minimise too much talk. The P3 teachers strongly stick to this approach of teaching as they operate in classes tending to the limits of their knowledge. P4 teachers with their embedded traditional approach are able to take as much as 30% of the teaching time on presenting information in class 2, 7% above the mean of the class.

Table 25: Teachers' academic and professional level and the level of the school on lecturing.

Class	1	2	3	4	5	6	7	Total
P1 Teachers	(-)	(2)24.7	(1)8.7	(5)19.6	(6)16.7	(11)26.2	(11)36.7	(36)26.7
P2 Teachers	(11)18.1	(4)20.1	(5)19.1	(13)18.4	(26)26.9	(19)29.7	(21)29.6	(99)25.3
P3 Teachers	(20)18.8	(23)21.5	(18)21.3	(10)30.3	(13)31.5	(9) 32.9	(2)36.4	(95)24.6
P4 Teachers	(3)18.9	(4)30.0	(5)17.8	(2)29.7	(1)39.1	-	-	(15)24.3
Total	(34)18.6	(33)22.6	(29)19.9	(30)23.3	(46)27.1	(39)29.5	(34)32.3	(245)25.1

Accepting pupils' individuality is given proportionally high time by all the teachers. It is pronounced in the lower classes, particularly in class One where pupils presumably need 'delicate' care and declines in the upper classes. P1 teachers showing a sharper decline as shown in Table 26. A very remarkable factor is that P3 teachers compare favourably with P2 teachers in sustaining it in the upper classes.

Table 26: Teachers' academic and professional level accepting pupils' individuality.

Class	1	2	3	4	5
P1 Teachers	-	(2) --	(4) 8.1	(5) 7.4	(6) 6.3
P2 Teachers	(11) 12.0	(4) 9.7	(5) 9.1	(13) 7.7	(26) 6.8
P3 Teachers	(20) 11.3	(23) 11.2	(18) 8.6	(10) 6.2	(13) 5.8
P4 Teachers	(3) 12.4	(4) 7.9	(5) 8.0	(2) 4.1	(1) 7.0
Total	(34) 11.6	(33) 9.9	(29) 8.1	(30) 6.9	(46) 6.2

Table 26: Teachers' academic and professional level and the level of the school on accepting pupils' individuality.

Class	1	2	3	4	5	6	7	Total
P1 Teachers	-	(2) -	(1) 8.1	(5) 7.4	(6) 3.6	(11) 6.1	(11) 4.0	(36) 4.9
P2 Teachers	(11) 12.0	(4) 9.7	(5) 9.1	(13) 7.7	(26) 8.3	(19) 8.6	(21) 8.1	(99) 8.7
P3 Teachers	(20) 11.3	(23) 11.2	(18) 8.4	(16) 6.2	(13) 4.9	(9) 7.5	(2) 8.6	(95) 8.9
P 4 Teachers	(3) 12.4	(4) 7.9	(5) 6.0	(2) 4.1	(1) 7.0	-	-	(15) 7.6
Total	(34) 11.6	(33) 9.9	(29) 8.1	(30) 6.9	(46) 6.7	(39) 7.6	(34) 6.8	(245) 8.2

Table 27. Teachers' academic and professional level and level of the school (continued)

activities

CLASS	1	2	3	4	5	6	Total
P 1 Teachers	13/13.5	(1)14.5	(5)17.2	(6)17.9	(11)15.2	(11)15.2	(31)15.7
P 2 Teachers	11/11.4	(1)12.1	(11)15.3	(26)13.5	(19)16.5	(21)16.5	(79)14.0
P 3 Teachers	(10)12.8	(23)13.7	(10)14.2	(13)16.8	(9)12.2	(2)	(55)14.0
P 4 Teachers	(1)17.1	(4)19.5	(9)23.0	(1)23.0	(1)23.0	-	(16)20.8
Total	(34)13.7	(38)15.2	(10)16.2	(46)16.8	(46)15.2	(34)15.2	(214)15.7

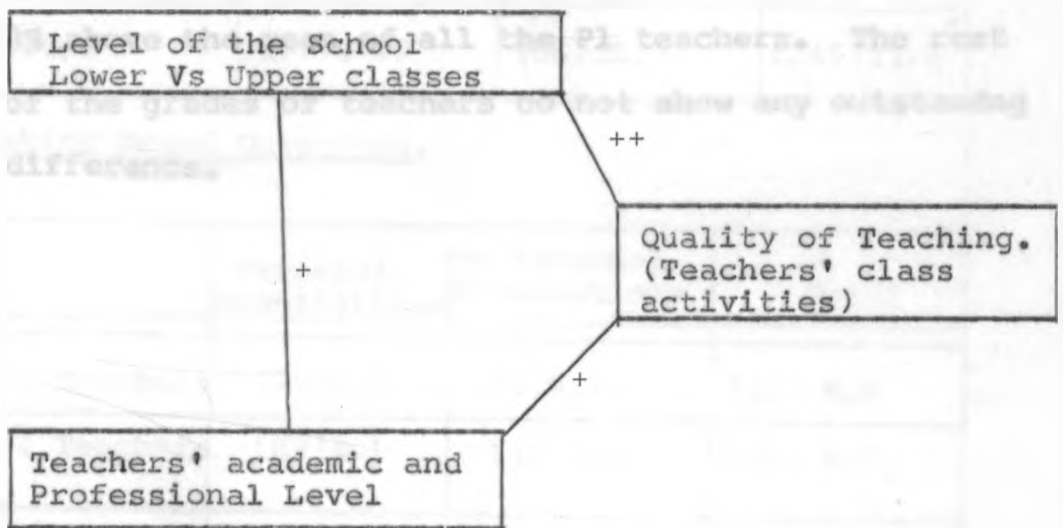
Teachers' non-verbal activities as illustrated in Table 27 rises in upper classes, where the need for giving lengthy notes is quite pressing.

Table 27: Teachers' academic and professional level and level of the School on non-verbal activities

CLASS	1	2	3	4	5	6	7	Total
P 1 Teacher	-	(2)13.5	(1)24.5	(5)17.2	(6)11.9	(11)15.2	(11)17.3	(36)15.7
P2 Teachers	(11)14.4	(4)12.1	(5)9.8	(13)16.3	(26)13.5	(19)16.5	(21)16.5	(99)14.9
P3 Teachers	(20)12.8	(23)13.7	(18)13.9	(10)14.1	(13)16.8	(9)12.2	(2) 18.7	(95)14.0
P4 Teachers	(3)17.1	(4)19.5	(5)17.0	(2)23.0	(1)13.3	-	-	(15)18.2
Total	(34)13.7	(34)14.2	(29)14.1	(30)16.2	(46)14.2	(39)15.1	(34)16.9	(245)14.9

From the cross-tabulation it can be seen that though the level of the primary school remains a very powerful factor affecting teachers' approach to pupils' - centered lessons; teachers' academic and professional level is also strongly felt. The relationship between the three variables, is quite strong.

Fig. 4 Teachers' academic and professional level and the level of the school and the quality of teaching.



Teachers' Academic and professional level; and external examinations on teachers' class activities.

A simple analysis of means revealed that the independent variable external examinations has a

weak influence on teachers' class activities. A cross-tabulation was undertaken to test its effect further on teachers' class activities in combination with the teachers' academic and professional level.

In looking at the teachers' approach to questioning, as shown in Table 28, teachers preparing for examinations ask few narrow questions particularly the P1 and P3 teachers. The P1 teachers not preparing for examinations ask a very high proportion of broad questions, twice the mean of those teachers preparing for examinations, and 3% above the mean of all the P1 teachers. The rest of the grades of teachers do not show any outstanding difference.

	External Examinations	No External Examinations	Total
P1 Teachers	(27)4.9	(9)8.1	(36) 6.0
P2 Teachers	(8)4.1	(20)3.0	(28) 4.0
P3 Teachers	(5)3.2	(34)4.0	(39) 3.5
P4 Teachers	—	(15)1.1	(15) 1.1
Total	(177)3.9	(60)3.9	(237)3.9

Table 28: Teachers' academic and professional level, and external examinations on asking questions.

Asking Narrow Questions.

	External Examinations	No external Examinations	Total
P1 Teachers	(27)9.6	(9)15.0	(36)11.0
P2 Teachers	(89)12.0	(10)13.6	(99)12.2
P3 Teachers	(11)9.8	(34)10.3	(95)10.0
P4 Teachers	-	(15)12.9	(15)12.9
Total	(177)10.9	(68)12.0	(245)11.2

Asking Broad Questions.

	External Examinations	No External Examinations	Total
P1 Teachers	(27)4.9	(9)9.1	(36) 6.0
P2 Teachers	(89)4.1	(10)3.0	(99) 4.0
P3 Teachers	(61)3.2	(34)4.0	(95) 3.5
P4 Teachers	(-	(15)1.3	(15) 1.3
Total	(177)3.9	(68)3.9	(245)3.9

Lecturing or presenting information seems to reveal the impact of the examinations as Table 29 indicates. Teachers preparing for external examinations make it a very outstanding aspect of teaching. The P1 teachers preparing for examinations spent as much as 30.2% of the teaching time, while their counterparts not preparing for examinations spent only 14.9% of the class time. There is no marked difference between the P2 examination group and the non-examination ones. The P3 non-examination spent 4% points below their counterparts engaged in examination preparation.

	Examinations	Non-Examinations	
P2 Teachers	(29) 25.2	(10) 25.2	(39) 25.3
P4 Teachers		(15) 24.3	(15) 24.3
Total	(177) 26.2	(88) 22.1	(265) 25.1

Table 29: Teachers' academic and professional level and external examination on presenting information.

	External Examinations	No External Examinations	Total
P1 Teachers	(27) 30.2	(9) 14.9	(36) 26.3
P2 Teachers	(89) 25.3	(10) 25.2	(99) 25.3
P3 Teachers	(61) 26.0	(34) 22.1	(95) 24.6
P4 Teachers	(-)	(15) 24.3	(15) 24.3
Total	(177) 26.2	(68) 22.1	(245) 25.1

Accepting pupils' individuality as illustrated in Table 30 is an aspect to which the non-examination groups, tend devote more time to pupils' individuality.

	Expected Examinations	No. Expected Examinations	Value
P1 Teachers	(27)15.9	(8) 4.8	(18)11.2
P2 Teachers	(89)8.5	(20)11.2	(99)8.7
P3 Teachers	(61)8.5	(34)7.5	(95)8.2
P4 Teachers	-	(8)7.6	(8)7.6
TOTAL	(177)8.0	(68)6.7	(245)6.2

Table 31 also reveals the impact of the examination on teachers' class activities.

Table 30: Teachers' academic and professional level and External examinations on accepting pupils' individuality.

	External Examinations	No External Examinations	TOTAL
P1 Teachers	(27)5.0	(9) 4.8	(36)4.9
P2 Teachers	(89)8.5	(10)11.2	(99)8.7
P3 Teachers	(61)8.5	(34)9.5	(95)8.9
P4 Teachers	-	(15)7.6	(15)7.6
TOTAL	(177)8.0	(68)8.7	(245)8.2

Table 31 also reveals the impact of the examination on teachers' class activities. Generally teachers preparing for examinations spent a fairly high amount of their time on non-verbal activities. These as already observed largely consist of giving lengthy notes and marking pupils' work.

	Examinations	No-External Examinations	TOTAL
P1 Teachers	(27) 16.4	(9) 13.8	(36) 15.7
P2 Teachers	(89) 15.2	(10) 12.9	(99) 14.9
P3 Teachers	(61) 13.7	(34) 14.4	(95) 14.0
P4 Teachers	-	(15) 18.2	(15) 18.2
Total	(177) 14.9	(68) 15.0	(245) 14.9

Table 31: Teachers' academic and professional Level and External examinations on teachers' non-verbal activities

Teachers' Academic and Professional	External Examinations	No External Examinations	TOTAL
P1 Teachers	(27) 16.4	(9) 13.8	(36) 15.7
P2 Teachers	(89) 15.2	(10) 12.9	(99) 14.9
P3 Teachers	(61) 13.7	(34) 14.4	(95) 14.0
P4 Teachers	-	(15) 18.2	(15) 18.2
Total	(177) 14.9	(68) 15.0	(245) 14.9

activities.

Teachers' academic and professional level and teachers' age on the quality of teaching.

Teachers' age as seen in single analysis of means had a weak, but nevertheless significant influence on the quality of teaching. An analysis was made to gauge the combined effect of this variables and teachers' academic and professional

The cross-tabulation reveals that the examination factor, has some effect on teachers' class activities and present a following figure of variable association.

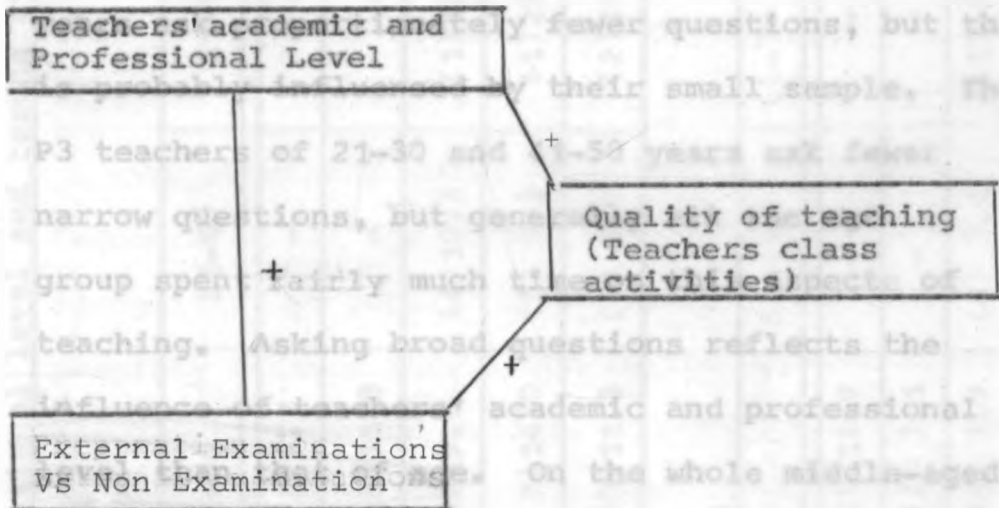


Figure 5:

Teachers' academic and professional level, preparation for External Examinations and Teachers' class activities.

Teachers' academic and professional level and teachers' age on the quality of teaching.

Teachers' age as seen in simple analysis of means had a weak, but nonetheless significant influence on the quality of teaching. An analysis was made to gauge the combined effect of this variables and teachers' academic and professional

level on teachers' class activities. In this interpretation, the 61-70 age group will be ignored because the sample is very small.

Teachers' approach to asking narrow questions does not display very remarkable differences as Table 32 indicates. The P1 teachers of 41-50 years ask proportionately fewer questions, but this is probably influenced by their small sample. The P3 teachers of 21-30 and 41-50 years ask fewer narrow questions, but generally all the age group spent fairly much time on this aspect of teaching. Asking broad questions reflects the influence of teachers' academic and professional level than that of age. On the whole middle-aged teachers of all the grades seem to give a little more time on this aspect of teaching than the younger teachers.

Table 32 Teachers' academic and professional level and age group

Asking Narrow Questions		Asking Broad Questions	
Age	21-30	31-40	41-50
P1 Teachers	(18) 13.1	(15) 11.1	(12) 9.1
P2 Teachers	(18) 12.0	(15) 11.1	(12) 9.1
P3 Teachers	(14) 9.3	(13) 9.6	(11) 8.2
P4 Teachers	-	(2) 2.0	(1) 1.0
Total	(117) 10.5	(101) 11.1	(85) 9.1
Asking Broad Questions			
Age	21-30	31-40	41-50
P1 Teachers	(18) 9.3	(15) 9.1	(12) 8.2
P2 Teachers	(18) 8.8	(13) 8.1	(11) 7.2
P3 Teachers	(14) 8.8	(13) 8.1	(11) 7.2
P4 Teachers	-	(2) 2.0	(1) 1.0
Total	(117) 8.7	(101) 8.7	(85) 7.7

Table 32: Teachers' academic and professional level and teachers' age on approach to questioning.

Asking Narrow Questions.

Age	21-30	31-40	41-50	51-60	61-70	TOTAL
P1 Teachers	(19) 11.1	(15) 11.3	(2) 7.7	-	-	(36) 11.0
P2 Teachers	(51) 12.0	(31) 12.5	(5) 11.8	-	-	(99) 12.2
P3 Teachers	(41) 9.0	(37) 11.0	(12) 9.6	(4) 10.3	(1) 16.0	(95) 12.9
P4 Teachers	-	(2) 10.6	(9) 14.0	(3) 7.3	(1) 25.0	(15) 12.9
Total	(117) 10.8	(91) 11.7	(28) 11.3	(7) 9.0	(2) 20.5	(245) 11.2

Asking Broad Questions.

Age	21-30	31-40	41-50	51-60	61-70	Total
P1 Teachers	(19) 5.3	(15) 9.8	(2) 13.9	-	-	(36) 6.0
P2 Teachers	(51) 3.8	(37) 4.3	(5) 3.1	-	-	(99) 4.0
P3 Teachers	(41) 2.8	(39) 4.0	(12) 3.9	(4) 3.4	(1) 9.0	(95) 3.5
P4 Teachers	-	(2) 0.5	(9) 1.4	(4) 0.8	(1) 3.4	(15) 1.3
Total	(117) 3.7	(91) 4.3	(28) 3.7	(7) 2.3	(2) 6.2	(245) 3.9

Lecturing or presenting information does not seem to support an earlier conclusion that young teachers suffer from the dualism of theory and practice. Comparatively they do less lecturing than the middle aged groups. The effect of academic and professional level does not seem to feature very significantly as shown in Table 33.

In examining Table 34, it is clear that P1 teachers of all age levels do not show a strong recognition of pupils' individuality. This is possibly because many teach in the upper classes for the rest of the grades, younger teachers reveal an apparent superiority over the older teachers.

	21-30	31-40	41-50	51-60	61-70	Total
P1 Teachers	(19) 27.6	(30) 34.8	(18) 21.4	(10) 11.8	(1) 1.2	(78) 90.8
P2 Teachers	(8) 23.6	(17) 20.5	(10) 11.8	(1) 1.2	(1) 1.2	(37) 43.3
P3 Teachers	(4) 22.7	(10) 11.8	(10) 11.8	(1) 1.2	(1) 1.2	(26) 30.7
P4 Teachers	-	(1) 1.2	(1) 1.2	(1) 1.2	(1) 1.2	(4) 4.8
Total	(31) 35.8	(66) 77.3	(38) 44.8	(13) 15.4	(4) 4.8	(152) 178.1

Table 33: Teachers' academic and professional level and age on presenting information.

pupils' individuality.

Age	21-30	31-40	41-50	51-60	61-70	TOTAL
P1 Teachers	(19) 27.6	(15) 26.4	(2) 14.4	-	-	(36) 26.3
P2 Teachers	(57) 23.6	(37) 27.9	(5) 25.1	-	-	(99) 25.3
P3 Teachersf	(41) 22.7	(37) 28.6	(12) 22.2	(4) 18.3	(1) 6.3	(95) 24.6
P4 Teachers	-	(2) 18.2	(9) 24.1	(3) 32.8	(1) 12.2	(15) 24.3
Total	(117) 23.9	(91) 27.7	(28) 22.8	(7) 24.3	(2) 9.5	(245) 25.1

Table 34: Teachers' academic and professional level and teachers' age on accepting pupils' individuality.

Age	21-30	31-40	41-50	51-60	61-70	Total
P1 Teachers	(19)5.5	(15)4.2	(2)4.8	-	-	(36)4.9
P2 Teachers	(57)9.5	(37)6.9	(5)13.0	-	-	(99)8.7
P3 Teachers	(41)10.0	(37)7.0	(12)9.2	(4)14.6	(1) 8.3	(95)8.9
P4 Teachers	-	(2)14.1	(9)7.7	(3) 3.6	(1) 5.2	(15)7.6
Total	(117) 9.1	(91) 6.6	(28)9.1	(7) 9.9	(2) 6.7	(245)8.2

Teachers' non-verbal activities does not seem to present a systematic pattern of teachers' academic behaviour, as shown in table 35.

Table 35: Teachers' academic and professional level and teachers' age on non-verbal activities.

Age	21-30	31-40	41-50	51-60	65-70	70-81
P1 Teachers	(19) 14,9	(15) 17,1	(2) 13,9	-	-	(11) 15,7
P2 Teachers	(57) 14,1	(37) 16,8	(5) 11,4	-	-	(6) 14,0
P3 Teachers	(41) 13,6	(37) 13,8	(12) 15,7	(4) 15,4	(1) 9,3	(5) 14,0
P4 Teachers	-	(2) 25,1	(9) 17,0	(3) 27,2	(1) 20,7	(1) 14,0
Total	(117) 14,0	(93) 15,8	(30) 17,2	(7) 26,8	(2) 14,5	(24) 21,9

Table 35: Teachers' academic and professional level and teachers' age on non-verbal activities.

Age	21-30	31-40	41-50	51-60	60-70	Total
P1 Teachers	(19) 14.9	(15) 17.1	(2) 13.9	-	-	(36) 15.7
P2 Teachers	(57) 14.1	(37) 16.8	(5) 11.4	-	-	(99) 14.9
P3 Teachers	(41) 13.6	(37) 13.8	(12) 15.7	(4) 15.4	(1) 8.3	(95) 14.0
P4 Teachers	-	(2) 12.1	(9) 17.0	(3) 25.1	(1) 20.7	(15) 18.2
Total	(117) 14.0	(91) 15.5	(28) 15.2	(7) 19.5	(2) 14.5	(245) 14.9

Examining the relationship between academic and professional level with teachers' age, it appears as if the two independent variables do not present a very systematic influence on the quality of teaching. There are a number of teachers' activities which seem to be influenced more by the independent variable teachers' age while others are affected by teachers' academic and professional level in isolation.

Teachers' academic and professional level and sex differences on teachers' class activities.

The simple frequency table indicated that the independent variables, teachers' academic and professional level; and sex differences are some of the powerful factors affecting the quality of teaching in the primary schools. A further analysis is made to assess their combined effect on teachers' class activities.

Table 36 indicates that P1 women teachers ask more narrow questions; possibly reflecting some degree of insecurity when teaching in the upper classes, probably in the presence of bigger boys, they tend to be affected by their sex role. P2 teachers do not show a significant difference, while P3 women teachers ask relatively fewer questions than their men counterparts. The interaction figure below strongly points to the influence of teachers' grade on women teachers' class behaviour; information obscured somewhat by cross-tabulations.

P4 women teachers are significantly affected by their small sample; whereas their men counterparts reveal a high devotion of class time to narrow questions. Broad questioning is much more influenced by teachers' academic and professional level than by sex differences. P1 teachers spending slightly more time on broad questions than the rest of the grades.

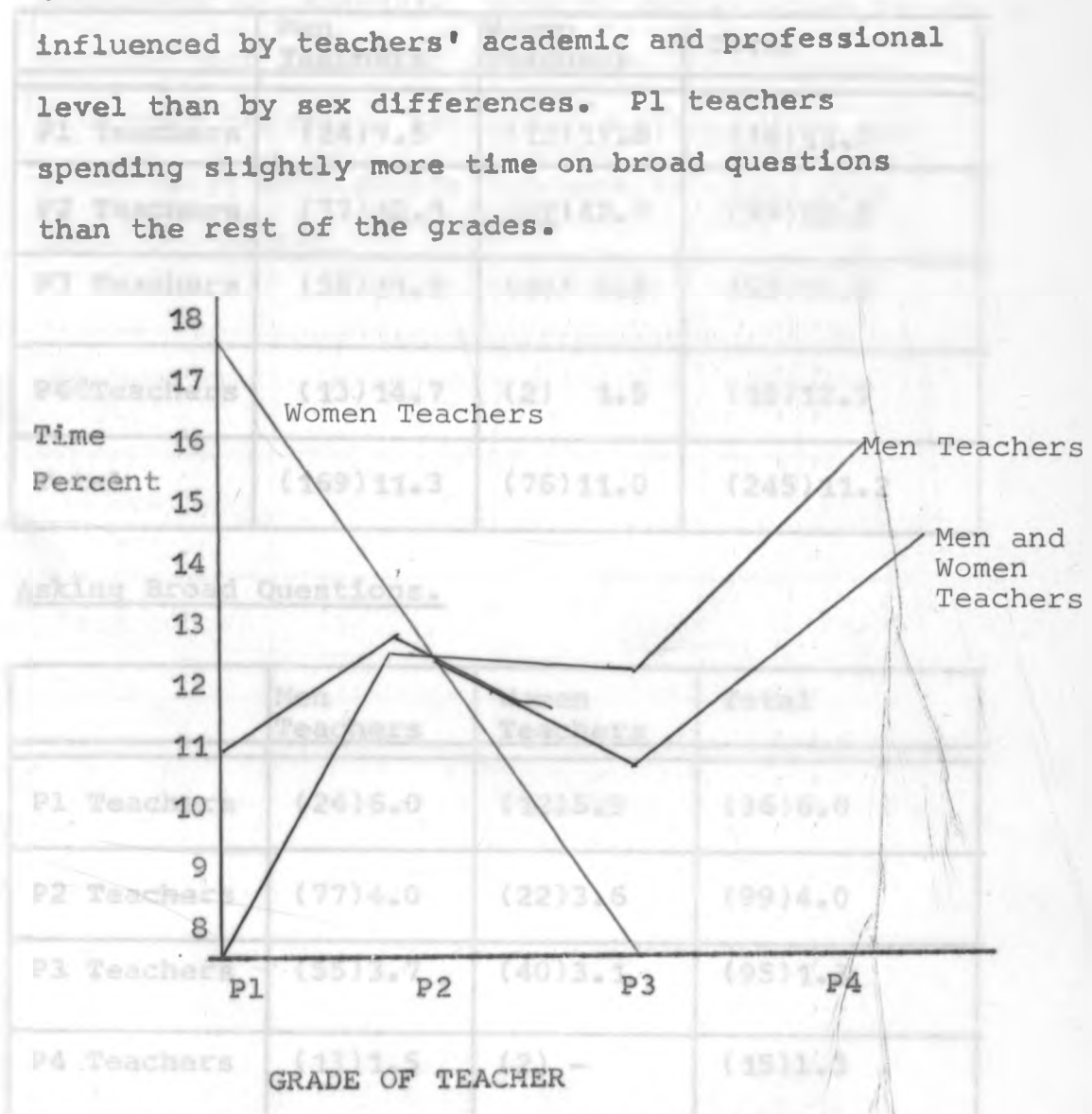


Fig. 6: Interaction between teachers' sex differences, their academic and professional level and asking narrow questions.

Table 36 Teachers' academic and professional level and sex differences on teachers' approach to questioning.

Asking Narrow Questions.

	Men Teachers	Women Teachers	Total
P1 Teachers	(24)7.5	(12)17.8	(36)11.0
P2 Teachers	(77)12.1	(22)12.7	(99)12.2
P3 Teachers	(55)11.1	(40) 8.5	(95)10.0
P4 Teachers	(13)14.7	(2) 1.5	(15)12.9
Total	(169)11.3	(76)11.0	(245)11.2

Asking Broad Questions.

	Men Teachers	Women Teachers	Total
P1 Teachers	(24)6.0	(12)5.9	(36)6.0
P2 Teachers	(77)4.0	(22)3.6	(99)4.0
P3 Teachers	(55)3.7	(40)3.1	(95)1.3
P4 Teachers	(13)1.5	(2) -	(15)1.3
Total	(169)4.0	(76)3.6	(245)3.9

Lecturing or presenting information shows a very strong combination of sex differences and teachers' academic and professional level as indicated in Table 37. Both P1 and P2 women teachers lecture much less than their male counterparts.

With male teachers, lecturing declines with the grade while with female teachers it rises with grade of teacher.

	Men	Women	Total
P1 Teachers	(74)29.9	(12)19.2	(86)26.3
P2 Teachers	(77)28.9	(22)19.4	(99)25.3
P3 Teachers	(55)27.0	(40)21.2	(95)24.6
P4 Teachers	(52)21.1	(2)11.8	(54)24.3
Total	(168)27.1	(76)20.6	(244)23.1

Table 37: Teachers' academic and professional level and sex differences on lecturing.

Influence of the two independent variables.

Women teachers tend to accept pupils' feelings

more than the men teachers, though P1

	Men Teachers	Women Teachers	Total
P1 Teachers	(24)29.9	(12)19.2	(36)26.3
P2 Teachers	(77)26.9	(22)19.4	(99)25.3
P3 Teachers	(55)27.0	(40)21.2	(95)24.6
P4 Teachers	(13)23.1	(2)31.5	(15)24.3
Total	(169)27.1	(76)20.6	(245)25.1

Table 38: Teachers' approach to accepting pupils' individuality also reflects a combined influence of the two independent variables.

Women teachers tend to accept pupils' feelings

much more than the men teachers, though P1

women teachers fall sharply on this dependent

variable. The two groups approach to accepting

pupils' feelings is illustrated in Table 38.

	Men	Women	Total
P2 Teachers	(77)8.4	(22)10.1	(99)9.7
P3 Teachers	(56)8.5	(40)9.4	(96)8.9
P4 Teachers	(13)6.8	(2) 11.0	(15)7.6
Total	(169)7.9	(76) 8.7	(245)8.2

Table 38: Teachers' academic and professional level
and sex differences on recognizing pupils'
individuality.

	Men Teachers	Women Teachers	Total
P1 Teachers	(24)5.2	12)4.3	(36)4.9
P2 Teachers	(77)8.4	22)10.1	(99)8.7
P3 Teachers	(55)8.5	(40)9.4	(95)8.9
P4 Teachers	(13)6.8	(2) 12.8	(15)7.6
Total	(169)7.9	(76) 8.9	(245)8.2

Table 39 points out to the fact that men teachers generally sustain much of the non-verbal activities, which as already discussed, embrace the giving of notes and marking pupils books.

	Men Teachers	Women Teachers	Total
P1 Teachers	(24) 15.6	(12) 10.0	(36) 15.7
P2 Teachers	(77) 15.6	(22) 12.6	(99) 14.9
P3 Teachers	(55) 14.2	(40) 13.7	(95) 14.0
P4 Teachers	(13) 19.3	(2) 20.0	(15) 18.2
Total	(169) 15.3	(76) 14.0	(245) 14.9

From the cross-tabulation analysis, it can be concluded that teachers' academic and professional level combined strongly with sex differences to affect the quality of teaching. The relationship of these variables is summarized in Figure 7.

Table 10: Teachers' academic and professional level and sex differences on teachers' non-verbal activities.

Figure 7: Teachers' academic and professional level, sex differences and the quality of teaching.

	Men Teachers	Women Teachers	Total
P1 Teachers	(24) 15.6	(12) 16.0	(36) 15.7
P2 Teachers	(77) 15.6	(22) 12.6	(99) 14.9
P3 Teachers	(55) 14.2	(40) 13.7	(95) 14.0
P4 Teachers	(13) 17.3	(2) 24.3	(15) 18.2
Total	(169) 15.3	(76) 14.0	(245) 14.9

From the cross-tabulation analysis, it can be concluded that teachers' academic and professional level combined strongly with sex differences to affect the quality of teaching. The relationship of these variables is summarized in figure 7.

Figure 7: Teachers' academic and professional level, sex differences and the quality of teaching.

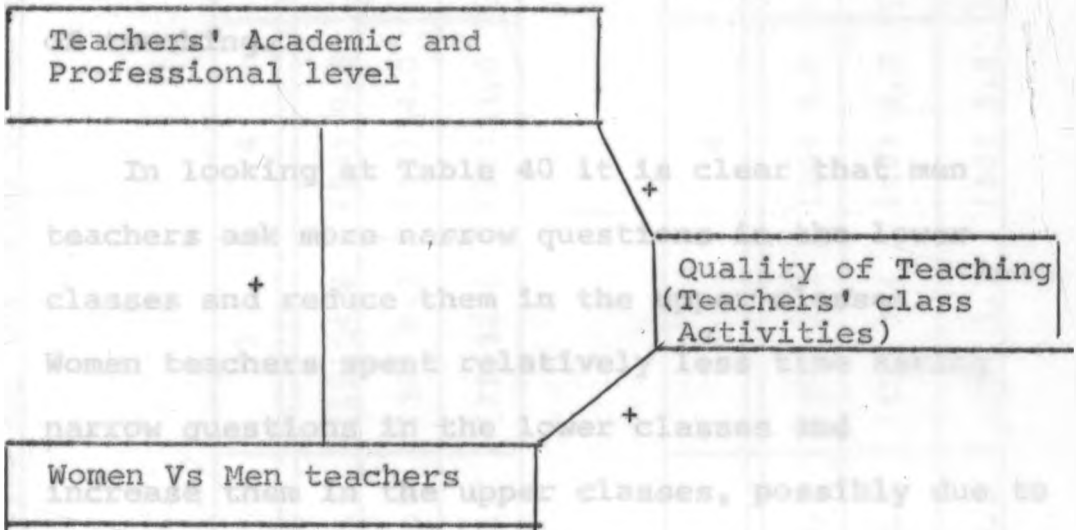


Table 40: Teachers' sex differences and the level of the school on teachers' questioning approach.

Teachers' sex differences and the level of the school on the quality of teaching.

Both the simple analysis of means and the cross-tabulation have pointed to the independent variables the level of the school and teachers' sex differences as having a very powerful influence on the quality of teaching. An analysis of their combined effect on teachers' class activities is examined to assess their effect on the quality of teaching.

In looking at Table 40 it is clear that men teachers ask more narrow questions in the lower classes and reduce them in the upper classes. Women teachers spent relatively less time asking narrow questions in the lower classes and increase them in the upper classes, possibly due to the examination factor. The two groups increase their broad questions in the upper classes, but women teachers remarkably sustain them in classes six and seven.

Asking Narrow Questions

Class	1	2	3	4	5	6	7	Total
Men Teachers	(12) 30.0	(14) 34.4	(13) 32.5	(9) 22.5	(11) 27.5	(10) 25.0	(11) 27.5	(80) 21.3
Women Teachers	(22) 8.0	(19) 7.0	(18) 6.5	(16) 5.8	(14) 5.0	(13) 4.7	(12) 4.4	(95) 11.0
Total	(34) 9.2	(33) 8.5	(31) 7.8	(25) 6.3	(25) 6.3	(23) 5.7	(23) 5.7	(175) 11.0

Asking Broad Questions

Class	1	2	3	4	5	6	7	Total
Men Teachers	(12) 2.0	(14) 2.1	(13) 1.9	(9) 1.3	(11) 1.5	(10) 1.4	(11) 1.5	(80) 14.0
Women Teachers	(22) 5.0	(19) 4.2	(18) 4.0	(16) 3.7	(14) 3.1	(13) 2.9	(12) 2.7	(95) 13.6
Total	(34) 7.0	(33) 6.3	(31) 5.9	(25) 5.0	(25) 5.0	(23) 4.7	(23) 4.7	(175) 27.6

Table 40: Teachers' sex differences and the level of the school on teachers' questioning approach.

Asking Narrow Questions.

Class	1	2	3	4	5	6	7	Total
Men Teachers	(12) 10.0	(14) 11.1	(19) 14.8	(20) 9.6	(40) 13.3	(33) 10.4	(31) 3.9	(169) 11.3
Women Teachers	(22) 8.2	(19) 9.5	(10) 8.3	(10) 14.0	(6) 11.2	(6) 18.4	(3) 24.6	(76) 11.0
Total	(34) 9.2	(33) 10.2	(29) 12.6	(30) 11.0	(46) 13.0	(39) 11.6	(34) 10.2	(245) 11.

Asking Broad Questions.

Class	1	2	3	4	5	6	7	Total
Men Teachers	(12) 2.5	(14) 1.7	(19) 3.3	(20) 3.9	(40) 5.2	(33) 5.0	(31) 3.9	(169) 4.0
Women Teachers	(22) 3.2	(19) 2.7	(10) 3.4	(10) 3.7	(6) 0.8	(6) 6.4	(3) 13.6	(76) 3.6
Total	(34) 2.9	(33) 2.3	(29) 3.3	(30) 3.8	(46) 4.6	(39) 5.2	(34) 4.7	(245) 3.9

On teachers' approach to lecturing or presenting information Table 41 reveals that both groups spent proportionately less time lecturing in the lower classes. Women teachers being slightly superior to men teachers. Lecturing rises in the upper classes though women teachers generally minimize it.

Table 41: Teachers' sex differences and the level of the class on lecturing

Class	1	2	3	4	5	6
Men Teachers	(12) 19.4	(14) 23.7	(19) 20.6	(20) 25.2	(40) 25.9	(33) 30.1
Women Teachers	(22) 18.1	(19) 21.7	(10) 18.5	(10) 19.5	(6) 35.7	(6) 21.1
Total	(34) 18.6	(33) 22.6	(29) 19.9	(30) 23.3	(46) 27.1	(39) 27.1

Table 41: Teachers' sex differences and the level of the class on lecturing.

Class	1	2	3	4	5	6	7	Total
Men Teachers	(12) 19.4	(14)23.7	(19)20.6	(20)25.2	(40)25.9	(33)30.9	(31)34.4	(169)27.1
Women Teachers	(22) 18.1	(19)21.7	(10)18.5	(10)19.5	(6)35.7	(6)21.8	(3)11.0	(76)20.6
Total	(34) 18.6	(33)22.6	(29)19.9	(30)23.3	(46)27.1	(39)29.5	(34)32.3	(245)25.5

Accepting pupils' feelings as shown in Table 42 is strongly maintained in the lower classes by both sexes, though it declines in the upper classes. Men teachers tend to sustain it in the upper classes.

Table 42. Teachers' sex differences and the level of the class on accepting pupils' feelings.

INDIVIDUALS

CLASSES	1	2	3	4	5	6	7	8	9	10	11	12
Men Teachers	(12) 11.5	(18) 10.7	(10) 7.8	(20) 6.8	(40) 6.8	(83) 6.5	(59) 6.5	(75) 6.4	(85) 6.3	(105) 6.2	(125) 6.1	(150) 6.0
Women Teachers	(22) 11.6	(19) 9.4	(16) 8.7	(10) 7.5	(6) 6.0	(6) 4.7	(15) 4.5	(15) 4.5	(15) 4.5	(15) 4.5	(15) 4.5	(15) 4.5
Total	(34) 11.6	(37) 9.9	(26) 8.1	(30) 6.9	(46) 6.7	(138) 7.5	(74) 6.5	(90) 6.4	(100) 6.3	(111) 6.2	(140) 6.1	(165) 6.0

Table 42: Teachers' sex differences and the level of the class on accepting pupils' individuality:

Class	1	2	3	4	5	6	6	Total
Men Teachers	(12) 11.5	(14) 10.7	(19) 7.8	(20) 6.8	(40) 6.8	(33) 8.2	(31) 7.0	(169) 7.9
Women Teachers	(22) 11.6	(19) 9.4	(10) 8.7	(10) 7.6	(6) 6.0	(6) 4.7	(3) 4.4	(76) 8.9
Total	(34) 11.6	(33) 9.9	(29) 8.1	(30) 6.9	(46) 6.7	(39) 7.6	(34) 6.8	(245) 8.2

Teachers' non-verbal activities take a high toll of the class time with both sexes in all the classes though much of it is done in the upper classes. Women teachers reduce it in the upper classes as compared to men teachers. Teachers' non-verbal activities are summarized in Table 43.

Table 43. Teachers' non-verbal activities in lower or upper classes.

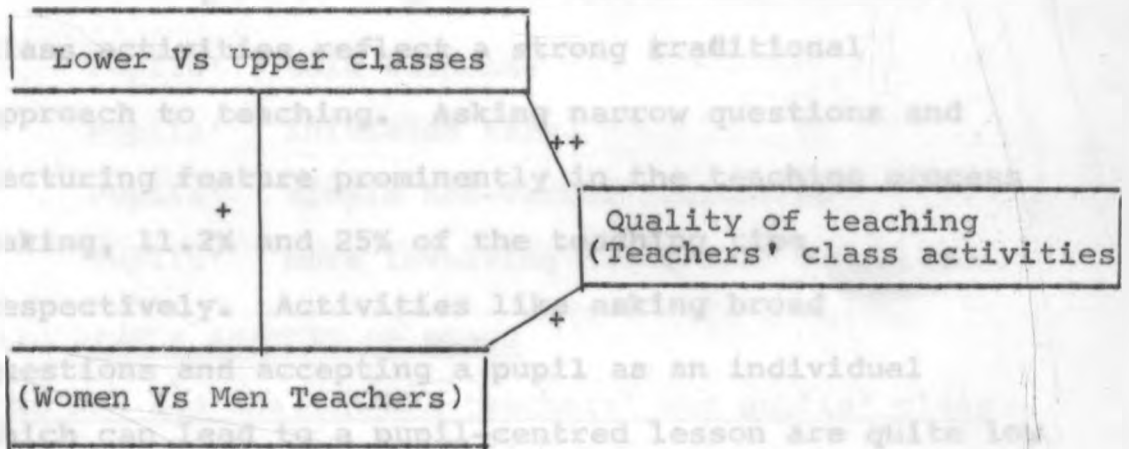
Class	1	2	3	4	5	Total
Men Teachers	(12) 12.5	(18) 18.5	(10) 10.1	(22) 20.8	(42) 37.8	(104) 15.7
Women Teachers	(12) 14.4	(19) 15.7	(13) 10.8	(40) 31.8	(61) 47.7	(145) 14.0
Total	(36) 13.7	(37) 14.2	(23) 10.8	(62) 30.2	(103) 35.7	(249) 14.9

Table 43: Teachers' sex differences and teaching in lower or upper classes on Teachers' non-verbal activities.

Class	1	2	3	4	5	6	7	Total
Men Teachers	(12)12.5	(14)13.1	(19)15.1	(20)16.9	(40)13.8	(33)15.8	(31)17.8	(169)15.3
Women Teachers	(22)14.4	(19)15.1	(10)12.0	(10)14.8	(6)17.1	(6)11.6	(3) 7.7	(76)14.0
Total	(34)13.7	(33)14.2	(29)14.1	(30)16.2	(46)14.2	(39)15.1	(34)16.9	(245)14.9

From the cross-tabulation of these independent variables it has been ascertained that a strong relationship exists between teachers' sex differences and the level of the school and the quality of teaching. Teaching lower or upper classes remains one of the most powerful factors influencing teachers' class behaviour as shown in figure 8.

Figure 8: Teachers' sex differences, teaching in lower or upper classes and the quality of teaching.



What emerges from this analysis is that generally lessons in primary school are still teacher dominated. The NPA programme has slightly improved the quality of teaching. Teachers' class activities take 61% of the teaching time for the NPA teachers while for the non-NPA it is 66%.

PUPIL CLASS ACTIVITIES AS AN INDEX OF QUALITY IN

A very significant feature affecting the quality of teaching appears to be teaching in lower or upper classes. There is a stronger reflection of pupil-centred lessons in the lower classes than in the upper class. In class One teachers' class activities take 57.0% of the teaching time rising to 71.0% in class Seven. A second strong factor is the sex differences of the teachers. Women teachers class activities take 58.0% of the teaching time while for men teachers it is 67.0%.

Looking at the dependent variables, teachers' class activities reflect a strong traditional approach to teaching. Asking narrow questions and lecturing feature prominently in the teaching process taking, 11.2% and 25% of the teaching time respectively. Activities like asking broad questions and accepting a pupil as an individual which can lead to a pupil-centred lesson are quite low 3.9% and 8.2% of the teaching time respectively.

Examining each of these dependent variables, it is seen that NPA in-service teachers, teaching in the lower classes, the P1 teachers, women teachers and teachers not preparing for external examination reflect strong features towards pupil-centred lessons.

CHAPTER FIVE

PUPILS' CLASS ACTIVITIES AS AN INDEX OF QUALITY IN TEACHING.

In the previous chapter the quality of teaching in the primary schools was examined in relation to teachers' class activities. In this chapter an attempt is made to analyse the problem of quality in teaching with respect to pupils' class activities. The independent variables used in the previous chapter will be retained. Their influence on the quality of teaching will be discussed in the light of the following dependent variables;

- Pupils' talk response
- Pupils' initiated talk
- Pupils' simple non-verbal activities
- Pupils' more involving non-verbal activities.

A. SIMPLE ANALYSIS OF MEANS

The NPA and the non-NPA teachers' and pupils' class activities.

Table 44 reveals that NPA teachers slightly involve pupils more than non-NPA teachers in teachers' solicited responses, an average of 15.0% and 13.0% respectively. Possibly the NPA teachers perceive pupil involvement through teachers' solicited talk as a way of departing from lecturing.

Pupils are asked more questions, particularly broad questions as a means of helping them to discover their own information. Unfortunately as discussed in the previous chapter more time is devoted to narrow questions.

A very perturbing feature of teaching in the primary school classes is the absence of pupil - initiated talk. NPA trained and the NPA inservice spent 0.3% and 2.1% respectively, while the non NPA spent 0.5% of their teaching time on this aspect. One author argues that the way African traditional education was transmitted could be a cause of the formal approach to teaching. He suggests that much of it was prescriptive, the young sat at the feet of the elders and were told.¹ Whether this statement has much substance is a subject that is open to debate. Perhaps a majority of the teachers' educational background is a better factor on which the absence of pupil initiated talk in the classroom could be attributed. Many having only primary school education, and having been taught through traditional methods of teaching, would be afraid of any questions in the classroom, except what they themselves ask; for they are the only ones to which they are sure of knowing the answers. Pupils' initiated talk is shunned because it can too easily lead to the brink of the unknown.

Pupils' non-verbal simple activities seem quite prominent in the teaching of the three groups of teachers; being more outstanding with the NPA trained teachers, 17.4%; less time, however, is spent on more involving pupils' non-verbal activities. Activities like drawing, modelling project work and dramatization have very little time devoted to them.

Though table 44 portrays a fairly strong traditional approach to teaching, the impact of the NPA programme on teachers who have attended it through in-service courses deserves some comment. These being long serviced teachers might have recognized the 'evils' of a traditional methods and appear more ready to change to activity methods than those who trained in activity methods. Teachers who have trained in activity methods directly at college largely know the 'evils' of a traditional approach to teaching rather theoretically. After all they passed the examination hurdles through traditional methods which have obviously an immediate appeal to them.

The apparent influence of the NPA programme on the long serviced teachers perhaps contradicts a New York research finding which concluded that behaviour patterns which are ingrained as those of teachers with many years of teaching experience

cannot be changed overnight.² And yet most of the NPA in-service courses lasted barely two weeks, although regular daily group meetings for preparation were important especially in Nairobi.

Table 44 NPA and pupils' class activities.

	Number of Teachers	Talk Response	Initiated Talk	Simple non-verbal activities	Initiating
NPA trained	86	14.6	0.3	17.4	
NPA Inservice	52	15.7	2.1	13.7	
Non-NPA	107	13.2	0.5	13.4	
Mean of Sample	245	14.2	0.8	14.8	

Table 44 NPA and pupils' class activities.

	Number of Teachers	Talk Response	Initiated Talk	Simple non-verbal activities	More involving activities
NPA trained	86	14.6	0.3	17.4	5.5
NPA Inservice	52	15.7	2.1	13.7	6.3
Non-NPA	107	13.2	0.5	13.4	5.5
Mean of Sample	245	14.2	0.8	14.8	5.7

Teachers' academic and professional level and pupils' class activities.

The dependent variable teachers' academic and professional level reveals a striking feature on pupils' class activities as shown in table 45. Pupil talk response seems a very important feature of pupil class activity. All the four grades of teachers reflect it quite strongly in their teaching behaviour. The P1 teachers fall a little below the mean of the whole group while P2 teachers rise a point above the mean. Pupil initiated talk is 'dead' with all the grades of teachers with an exception of P1 teachers who spent 3.6% of the teaching on allowing pupils' unsolicited talk. As already discussed in chapter 4 this is a reflection of their academic background. The rest of the teachers, particularly P3 and P4 teachers tend to suppress pupil initiated activities because these would lead them to tread on the brinks of the known.

The P3 teachers devote a higher proportion of their teaching time on more involving pupils' activities than the rest of the teachers, this would largely be as a result of many having to be

confined to the lower classes. It is remarkable that though a majority of the P1 teachers are confined to upper classes they devote as much as 5.3% of their teaching on more involving pupils' activities. P2 and P4 teachers are remarkably low on this dependent variable; though the former gives much emphasis on simple non-verbal activities.

Though table 45 presents a more spectacular picture of pupils' class activities than that of NPA, in both cases pupils' class activities occupy barely 40% of the teaching time. Activities reflecting a positive approach like pupils' initiated talk, that is, pupils' unprompted talk or pupils' expressions of personal opinions, and group discussions; and more involving pupils' activities like drawing, modelling, painting, project work outdoor and indoor activities and performing experiments are seriously lacking in pupils' class activities. Very little time is devoted to them.

Teacher Category	Mean of Sample
P1 Teachers	5.3
P2 Teachers	1.0
P3 Teachers	2.0
P4 Teachers	1.0
Mean of Sample	2.0

Table 45 Teachers' academic and professional level and pupils' class activities

	Number of Teachers	Talk Response	Initiated Talk	Simple non-verbal activities	More involving non-verbal activities
P1 Teachers	36	13.1	3.6	13.7	5.3
P2 Teachers	99	15.2	0.2	18.3	3.3
P3 Teachers	95	13.7	0.4	12.0	8.5
P4 Teachers	15	14.1	0.1	9.6	4.7
Mean of Sample	245	14.2	0.8	14.8	5.7

Teaching experience and pupils' class activities.

Pupils' class activities hardly rise above 35% of class time on the independent variable, teaching experience as is the case with the other two independent variables already examined, as illustrated in Table 46.

Pupils' talk response takes a high proportion of pupils' class talk. Teachers with 11-20 years teaching experience devote a little more time on this item and reflect a stronger tendency to allow for pupil - initiated talk. As seen earlier in this chapter, this could probably be traced back to the influence of the NPA. Surprisingly teachers with less than ten years' teaching experience, a majority of whom have trained when there is a strong emphasis on the role of the pupil in lesson processes, fail to reflect this feature in their teaching. This is likely to be due to the point discussed in the last chapter, that they suffer from the dualism of theory and practice. At college they have certainly been taught the evils of mere rote memorization as the basis of all education, but it is unlikely they have been given the detailed instructions and techniques of breaking out the circle when they take up their first position in schools whose practice is traditionally

based on memorizing, associated with strigent examination hurdles. This as Beeby concludes, makes colleges the worst offenders. They teach the aims and ideas regarding pupil-centred lessons by lecture. The ultimate result is that what lingers in the young teachers' mind is precept rather than practice and it is not surprising that a similar dualism should develop in the young teachers' teaching techniques.³

Table 46 further illustrates a very high proportion of pupil non-verbal activities in all the groups of teachers. Much emphasis is placed on simple non-verbal activities which most teachers perceive as representing outstanding pupil activities. Pupils are asked to work out exercises from text-books and those given by teachers and do silent reading. Very little time but nonetheless significant, is portioned to more involving activities. Though this pupils' class activity is given a fairly high proportion of the teaching time with 21-30 years teaching experience; those with 31-40 years experience hardly reflect it in their teaching.

Table 46. Teaching experience and pupils' class activities.

Teaching Experience	Number of Teachers	Talk Response	Initiated Talk	Simple Activities	Involving Activities
0-10 years	137	14.0	0.3	15.8	5.5
11-12 years	78	15.2	1.7	13.0	4.9
21-30 years	26	12.5	-	15.3	9.7
31-40 years	4	15.4	-	14.1	-
Mean of sample	245	14.2	0.8	14.8	5.7

Pupils' class activities and the level of the primary school.

As reflected in table 47, pupils' class activities display a very striking pattern of class behaviour as was the case with teachers' class activities and teaching in lower classes or the upper classes examined in chapter 4. Pupils' solicited responses are noticeably given a high proportion of the teaching time in all the classes. They tend to rise from class one 11.8% to 16.0% and slightly decline to 13.3% in class 7. Pupil - initiated talk is remarkably absent in many classes. Whereas it may be appreciated that pupils in the lower classes may not possibly initiate very sensible discussions, that can hardly be the case in the upper classes of the primary school. Unless pupils are allowed in a classroom situation to ask their "awkward" questions, the principles of modern activity methods can hardly be put into effect. From the field observation, it was realized that even in the so called NPA classes pupils were mostly given rigid instructions on what they should do.

Pupils' simple non-verbal activities and more involving pupil activities have very revealing features in relation to the quality of teaching. The simple non-verbal activities rise as high as 19.5% and more demanding activities rise as

high as 11.7% in class One. Generally these activities fall very steeply with the upper classes. Simple non-verbal activities fall from 19.5% in class One to 12.5% of the teaching time in class seven; while more demanding activities fall to 1.2% in the same class. While this steep fall can be explained in terms of the activity method courses which as discussed in chapter 3 were confined to the lower classes of the primary school, the examination factor has a very important part to play. The lower classes with an absence of this factor, teachers spend a fairly significant amount of the teaching time involving pupils in activities requiring a high degree of pupil-participation, drawing, modelling and a little of project work. I recall a very impressive lesson on local geography in class Three in which pupils were put in groups to discuss and record the means of transport in the locality of the school, a thing that was virtually absent in the upper classes of the primary schools. In the same locality in another primary school a teacher was teaching class 7 a lesson on tea growing, but he could not take the class to a small holder tea plantation which was barely

a quarter of a mile from the school. The effect of the C.P.E. examination on teachers' class activities will be discussed in the next and last chapters. Suffice here to mention that pupils' class activities tend to point to it as a major factor influencing the quality of teaching.

Table 16. Teacher class activities and the level of the content

Class	Number of teachers	Class activities	Initiated by	Steps initiated
1	14	14.0	14.0	14.0
2	14	14.0	14.0	14.0
3	14	14.0	14.0	14.0
4	14	14.0	14.0	14.0
5	14	14.0	14.0	14.0
6	14	14.0	14.0	14.0
Total	84	84.0	84.0	84.0

Table 47. Pupils' class activities and the level of the classes.

Class	Number of Teachers	Talk Response	Initiated Talk	Simple Activities	Involving Activities
1	34	11.8	-	19.5	11.7
2	33	13.4	0.7	17.1	9.0
3	29	15.8	0.8	15.9	8.5
4	30	14.4	0.5	14.7	8.3
5	46	16.0	1.9	12.4	2.2
6	39	14.4	1.0	13.1	1.4
7	34	13.3	0.2	12.5	1.2
Means of Sample	245	14.2	0.8	14.8	5.7

Pupils' class activities in the subjects of the primary school.

As examined in chapter four, the independent variable subjects of the primary school is best discussed when the subjects are grouped in the examination subjects and the non examination subjects.

Table 48 shows that pupils' talk response is a very prominent aspects of pupil activity in all the examination subjects, English, Maths, Geography, History and Science, being quite remarkable in English, geography and science. Pupils also exercise a lot of talk response to teachers' questions in the non-examination subjects except for the practical subjects like writing, Art and craft and Domestic science. Initiated discussions remain quite low in the examination subjects, rising a little bit in English and Geography. The non-examination subjects show complete 'deadness' on this dependent variable except for swahili and vernacular in which probably teachers tend to be more at home with the subject matter. They therefore do not fear being driven in the 'abyss' of the unknown.

Simple non-verbal activities remain prominent even in the examination subjects falling rather low in history; though more demanding activities continue to have less time devoted to them. The non-examination

subjects display a somewhat irregular pattern, but very remarkable features are shown in the practical subjects to which as high as 25.6% of the teaching time is spent on more involving activities, five times the mean of the whole group.

Subjects	Number of Practises	Total Experiments	Actual Time Spent	Percentage of Total Time
English	16	16.0	3.7	23.1
Maths	76	16.0	10.1	63.1
Science	15	16.0	1.8	11.3
History	14	16.0	-	0.0
Art	23	16.0	1.0	6.3
Physical	11	16.0	1.0	6.3
Music	4	16.0	1.0	6.3
Home	18	16.0	-	0.0
Religion	4	16.0	-	0.0
Practical	5	16.0	4.0	25.6
Arithmetic	10	16.0	-	0.0
Geography	11	16.0	-	0.0
Total	160	16.0	20.6	12.9

Table 48. Pupils' class activities in the subjects of the school curriculum.

Subject	Number of Teachers	Talk Response	Initiated Talk	Simple Activities	Involving Activities
English	56	18.9	1.7	13.7	3.4
Maths	75	12.7	0.3	18.3	5.9
Geography	15	17.3	1.4	12.0	4.9
History	26	10.9	-	9.6	1.3
Science	23	16.8	0.4	10.1	7.4
R/Knowledge	15	19.1	0.9	9.7	0.2
Swahili	5	15.9	3.1	9.5	2.8
Reading	5	25.4	-	25.5	-
Writing	5	4.6	-	27.8	0.4
Vernacular	5	17.5	1.9	13.6	8.1
Art/craft/D/Sc.	10	1.4	-	19.3	25.6
Music	5	23.4	-	15.3	-
Means of Sample	245	14.2	0.8	14.8	5.7

Teachers' sex differences and pupils' class activities.

It was revealed in the previous chapter that women teachers devote a little more than 40% of their teaching time on pupils' activities, reflecting a stronger tendency towards pupil-centred lessons than the men teachers who only give 30.0% of their teaching time to pupils' activities. An attempt is made here to analyse the nature of pupil activities in which pupils are engaged in relation to the sex differences.

As illustrated in table 49 pupils exercise equal amounts of time in their talk responses, in both men and women teachers' lessons. In women lessons, however, there is a little more pupil-initiated talk. Women teachers remarkably allow a high degree of pupils' simple non-verbal activities and more demanding activities. These activities seem to strengthen an earlier conclusion that sex differences correlates strongly with the quality of teaching.

	Men Teachers	Women Teachers	Total
Initiated			
Non-verbal			
Verbal			

19. Teachers' sex differences and pupils' class activities.

	Number of Teachers	Talk Response	Initiated Talk	Simple Activities	Involving Activities
Men Teachers	169	14.2	0.7	13.7	4.6
Women Teachers	76	14.2	1.0	17.3	8.1
Mean of Sample	245	14.2	0.8	14.8	5.9

Teachers' age and pupils' class activities.

Table 50 tabulating pupils' class activities in relation to age does not appear to present a pattern of pupils' activities similar to the one presented above. Pupil talk response is given a fairly high proportion of the teaching time with all the four groups of teachers (note the age group of 61-70 years is ignored because the sample is very small), falling to 10.1% with teachers whose age is 51-60 years. Pupil initiated talk tails off with the older teachers, being absent with the oldest teachers.

Simple non-verbal activities is fairly high with the younger teachers, falling with the middle aged and rises again to 19.2% with the oldest teachers. More demanding activities are relatively high with all the age groups, though tends to fluctuate. The first two groups spending 5.6% and 5.0% of their teaching time involving pupils in more demanding activities. They rise quite remarkably to 8.2% with 41-50 age group and falling to 4.5% with the oldest group.

Table 50. Teachers' age and pupils' class activities.

Age in Years	Number of Teachers	Talk Response	Initiated Talk	Simple Activities	Involving Activities
21-30	117	14.3	1.0	16.3	5.6
31-40	91	14.1	0.3	13.2	5.0
41-50	28	14.7	0.3	13.3	8.2
51-60	7	10.1	-	19.2	4.5
61-70	2	23.0	-	21.1	9.9
Mean of Sample	245	14.2	0.8	14.8	5.7

Teachers' external examination factor and pupils' class activities.

As shown in table 51, teachers' preoccupation with preparation for external examinations does not affect pupils' class activities much except that the non-examination group allow for a very high proportion of more demanding pupils' class activities. This factor alone reveals that preparation for external examination has a remarkable effect on teacher's class activities that constitute good quality.

	Number of Pupils	Pupils' Response	Percentage
Examination Pupils	177	1122	6.3
Non-Exam	66	1649	25.0
Total of group	243	2771	11.3

Table 51. Teachers' external examination factor and pupils' class activities.

	Number of Teachers	Talk Response	Initiated talk	Simple	Involving Activities
External Exam.	177	14.1	0.9	15.2	4.6
No. Exam	68	14.6	0.5	13.9	8.4
Mean of group	245	14.2	0.8	14.8	5.7

B. A CROSS - TABULATION ANALYSIS OF MEANS.

A cross-tabulation of independent variables analysed in the last chapter is examined in this section in relation to pupils' class activities to gauge their effect on pupils' class activities.

Teachers' academic and professional level, the New Primary Approach and pupils' class activities.

The effect of teachers' academic and professional level and the New Primary Approach on the quality of teaching were examined in the previous chapter in relation to teachers' class activities. A further analysis is made to examine their influence on pupils' class activities.

Looking at table 52 it can be seen that pupils' talk response feature fairly strongly in the NPA teachers' lessons. Possibly in the face of external conditions like lack of apparatus as will be examined in the next chapter, the NPA teachers view pupils' talk response as one of the ways of making lessons pupil - centred. Pupils' unsolicited talk is as dead as ever, though P1 NPA inservice powerfully demonstrates the influence of the programme by relegating 10.7% of their teaching time to pupils' unsolicited talk.

Table 52. Teachers' academic and professional level and the NPA on pupils' class talk.

	NPA Trained	NPA Inservice	Non NPA	TOTAL
P1 Teachers	(14)18.4	(9)13.6	(13)7.1	(36)13.1
P2 Teachers	(32)14.8	(19)17.1	(48)14.6	(99)15.2
P3 Teachers	(40)13.1	(18)17.4	(37)12.6	(95)13.7
P4 Teachers	(-)	(6) 9.8	(9)17.0	(15)14.1
TOTAL	(86)14.6	(52)15.7	(107)13.2	(245)14.2

Pupil - initiated talk

	NPA Trained	NPA Inservice	Non NPA	TOTAL
P1 Teachers	(14)1.1	(9)10.7	(13)1.4	(36)3.6
P2 Teachers	(32) -	(19)0.1	(48)0.3	(99)0.2
P3 Teachers	(40)0.2	(18)0.7	(37)0.7	(95)0.4
P4 Teachers	-	(6) -	(9)0.1	(15)0.1
TOTAL	(86)0.3	(52)0.2	(107)0.5	(245)0.8

Pupils' non-verbal activities shown in table 53 reveal a contrary picture to the one shown above as regards P1 teachers and pupils' class activities. Their approach to allowing pupil simple non-verbal activities lack consistency. P2 and P3 teachers allow more of these activities in their lessons than the non-NPA. P4 teachers on the other hand do not show that their class activities are influenced by the NPA programme. The influence of the programme lacks a regular pattern when more involving pupils' activities are examined.

Teacher	Non-verbal activities	Percentage
P1	100/100	100%
P2	100/100	100%
P3	100/100	100%
P4	100/100	100%
Total	100/100	100%

Table 53. Teachers' academic and professional level and the NPA on pupils' non-verbal class activities.

Simple non-verbal activities

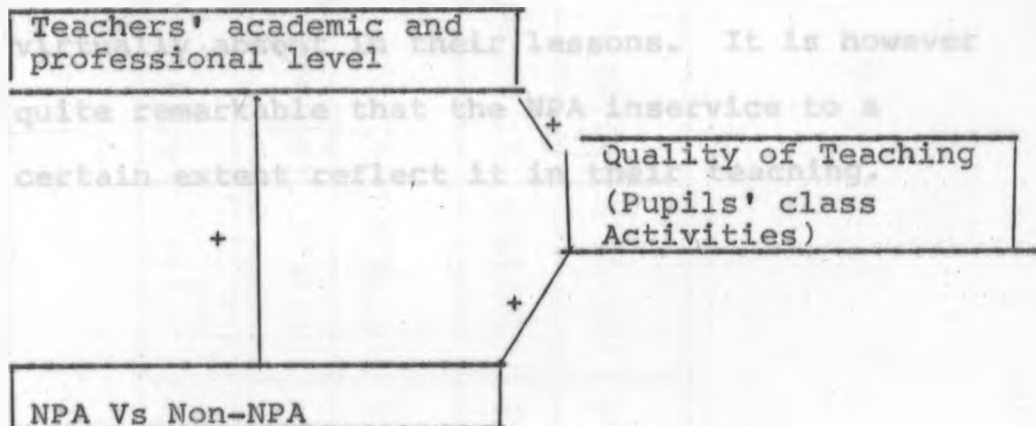
	NPA Trained	NPA Inservice	Non NPA	TOTAL
P1 Teachers	(14)13.8	(9)7.9	(13)14.8	(36) 12.7
P2 Teachers	(32)17.4	(19)15.7	(48)13.3	(99)15.1
P3 Teachers	(40)18.6	(18)14.6	(37)12.2	(95)15.3
P4 Teachers	-	(6)13.7	(9)16.5	(15)15.3
TOTAL	(86) 17.4	(52)13.7	(107)13.4	(245)14.8

Pupils' more involving non-verbal activities.

	NPA Trained	NPA Inservice	Non NPA	TOTAL
P1 Teachers	(14)2.7	(9)6.7	(13)7.1	(36)5.3
P2 Teachers	(32)3.3	(19)5.7	(48)2.3	(99)3.3
P3 Teachers	(40)8.3	(18)5.0	(37)10.5	(95)8.5
P4 Teachers	-	(6)11.7	(9)0.1	(15)4.7
TOTAL	(86)5.5	(52)6.3	(107)5.5	(245)5.7

From the cross tabulation it can be seen that though the relationship between teachers' academic and professional level and the NPA is strong, their combined effect on the quality of teaching does not seem to be as strong as it appeared to be the case with teachers' class activities, as shown in figure 9.

Fig. 9 Teachers' Academic and Professional level; The New Primary Approach and the Quality of teaching.



The New Primary Approach and the level of the classes and pupils' class activities.

From the simple frequency analysis in the first section it was shown that teaching in lower or upper classes of the primary school is a very powerful factor affecting the quality of teaching.

An attempt is made here to gauge its combined effect with the NPA on pupils' class activities.

Table 54 shows a lot of pupil talk response in the lessons of the three groups of teachers. The NPA influence is reflected in pupils' activities in that pupil talk response is sustained in all the classes of the NPA teachers' lessons, whereas the non-NPA teachers appear to decline quite remarkably in class seven, almost with half the points below the mean of this class. The view that pupils have only to talk when talked to, also lingers in the minds of the NPA teachers, consequently pupil initiated talk is virtually absent in their lessons. It is however quite remarkable that the NPA inservice to a certain extent reflect it in their teaching.

Table 54. New Primary Approach and the level of the school and pupil class talk.

Pupil Talk Response.

Class	1	2	3	4	5	6	7	TOTAL
NPA Trained	(16)10.1	(17)11.7	(7)15.4	(9)18.4	(13)19.6	(11)13.9	(13)16.8	(86)14.6
NPA Inservice	(10)14.9	(7)19.8	(7)12.5	(4)14.8	(11)13.5	(8)17.6	(5)19.2	(52)15.7
Non NPA	(18)11.6	(9)11.8	(15)17.5	(17)12.3	(22)15.1	(20)13.4	(16)8.7	(107)13.2
TOTAL	(34)11.8	(33)13.4	(29)15.8	(30)14.4	(46)16.0	(39)14.4	(34)13.3	(245)14.7

Pupil initiated talk

Class	1	2	3	4	5	6	7	TOTAL
NPA Trained	(16) -	(17)0.5	(7)0.3	(9)0.4	(13) -	(11)0.4	(13)0.4	(86)0.3
NPA Inservice	(10) -	(7)1.4	(7)0.6	(4) -	(11)7.1	(8)2.2	(5)0.6	(52)2.1
Non NPA	(18) -	(9)0.4	(15)1.1	(17)0.8	(22)0.4	(20)0.8	(16) -	(107)0.5
TOTAL	(34)-	(33)0.7	(29)0.8	(30)0.5	(46)1.9	(39)1.0	(34)0.2	(245)0.8

In table 55 it appears as if the lower and upper class effect has stronger influence on pupil class activities than NPA. Simple non-verbal activities take a high proportion of the class time for both the NPA and the non-NPA teachers. It is noticeable that the NPA trained teachers sustain it quite strongly in all the classes. More involving activities feature quite prominently in the lower classes and decline sharply in the upper classes and obscuring the influence of the NPA programme.

Table 55. The NPA and non-NPA groups of the classes in question
 (continued from article 1)

Class	1	2	3	4	5
Non-NPA	1000000	1000000	1000000	1000000	1000000
NPA	1000000	1000000	1000000	1000000	1000000
TOTAL	1000000	1000000	1000000	1000000	1000000

Table 55. The NPA and the level of the class on pupils' non-verbal activities.Simple non-verbal activities.

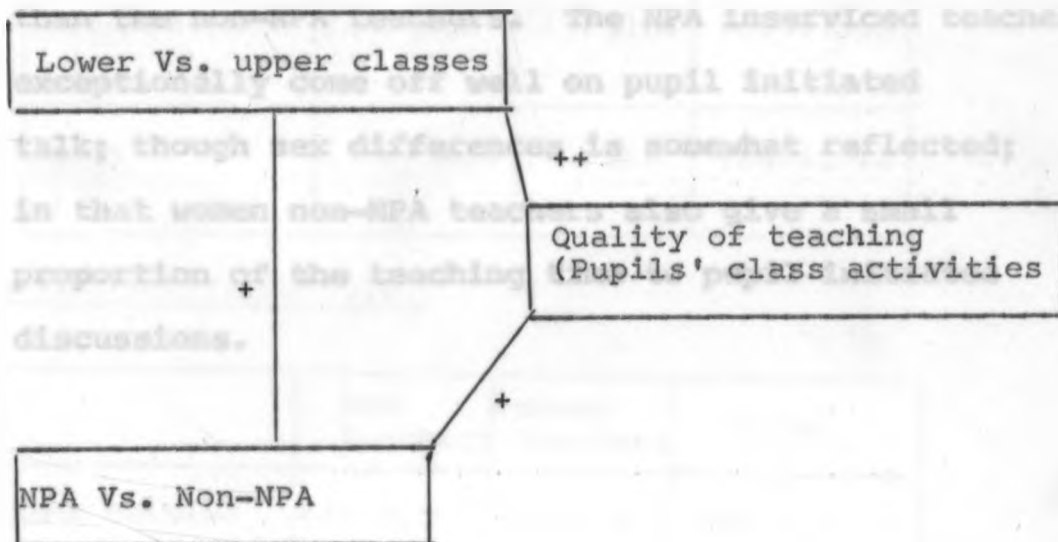
Class	1	2	3	4	5	6	7	Total
NPA Trained	(16)13.4	(17)18.3	(7)21.9	(9)16.5	(13)14.6	(11)14.3	(13)12.1	(86)17.4
NPA Inservice	(10)17.9	(7)13.3	(7)15.2	(4)8.9	(11)13.4	(8)13.9	(5)8.7	(52)13.7
Non NPA	(8)13.7	(9)17.7	(15)13.5	(17)15.2	(22)10.6	(20)12.2	(16)13.9	(107)13.4
TOTAL	(34)19.5	(33)17.1	(29)15.9	(30)14.7	(46)12.4	(39)13.1	(34)12.5	(245)14.8

More involving pupil activities

Class	1	2	3	4	5	6	7	TOTAL
NPA Trained	(16)9.0	(17)9.4	(7)9.8	(9)5.4	(13) -	(11)1.0	(13)3.1	(86)5.5
NPA Inservice	(10)9.1	(7)4.1	(7)11.0	(4)23.3	(11)3.3	(8)0.5	(5) -	(52)6.3
Non NPA	(8)20.5	(9)12.2	(15)6.8	(17)6.2	(22)3.0	(20)2.1	(16)0.1	(107)5.5
Total	(34)11.7	(33)9.0	(29)8.5	(30)8.3	(46)2.2	(39)1.4	(34)1.2	(245)5.7

The relationship figure below for the three variables indicates a strong relationship between pupils' class activities and the NPA, and teaching in the lower classes, but a much stronger relationship exists between pupils' class activities and the level of the class.

Fig. 10 The NPA and class effect and pupils' class activities.



The New Primary Approach and teachers' sex differences and pupils' class activities.

From the simple analysis of means it was apparent that NPA and teachers' sex, each independently affect pupils' class activities. Their combined effect is examined in relation to pupils' class talk and non-verbal activities.

Table 56 suggests that both men and women NPA teachers allow more pupil talk in their lessons than the non-NPA teachers. The NPA inserviced teachers exceptionally come off well on pupil initiated talk; though sex differences is somewhat reflected; in that women non-NPA teachers also give a small proportion of the teaching time to pupil initiated discussions.

	Non-NPA	NPA	Total
Male	100000	100000	200000
Female	100000	100000	200000
Non-NPA	100000	100000	200000
NPA	100000	100000	200000

Table 56. NPA and sex differences and pupils' class talk.

Pupil Talk Response.

	Men Teachers	Women Teachers	Total
NPA Trained	(46)15.2	(40)13.9	(86)14.6
NPA Inservice	(35)15.8	(17)15.6	(52)15.7
Non-NPA	(88)13.1	(19)13.4	(107)13.2
Total	(169)14.2	(76)14.2	(245)14.2

Pupil initiated Talk.

	Men Teachers	Women Teachers	Total
NPA Trained	(46)0.2	(40)0.4	(86)0.3
NPA Inservice	(35)2.3	(17)1.9	(52)2.1
Non-NPA	(88)0.3	(19)1.5	(107)0.5
Total	(169)0.7	(76)1.0	(245)0.8

In table 57, though the influence of the NPA programme is reflected, sex difference seems a very powerful factor affecting pupils' class behaviour. In looking at the simple non-verbal activities, women teachers allow more of these activities than their men counterparts, through the programme slightly improves the NPA men teachers as compared to the non-NPA men teachers. Pupils' more involving activities demonstrate more pupil participation in lessons taught by women teachers than in lessons given by men teachers.

	(100) 100.0	(100) 100.0	(100) 100.0
Total	(100) 100.0	(100) 100.0	(100) 100.0

	Men Teachers	Women Teachers	Total
Non-NPA	(100) 100.0	(100) 100.0	(100) 100.0
NPA	(100) 100.0	(100) 100.0	(100) 100.0
Total	(100) 100.0	(100) 100.0	(100) 100.0

Table 57. NPA and sex differences and pupils' non-verbal activities.

Pupil simple non-verbal activities.

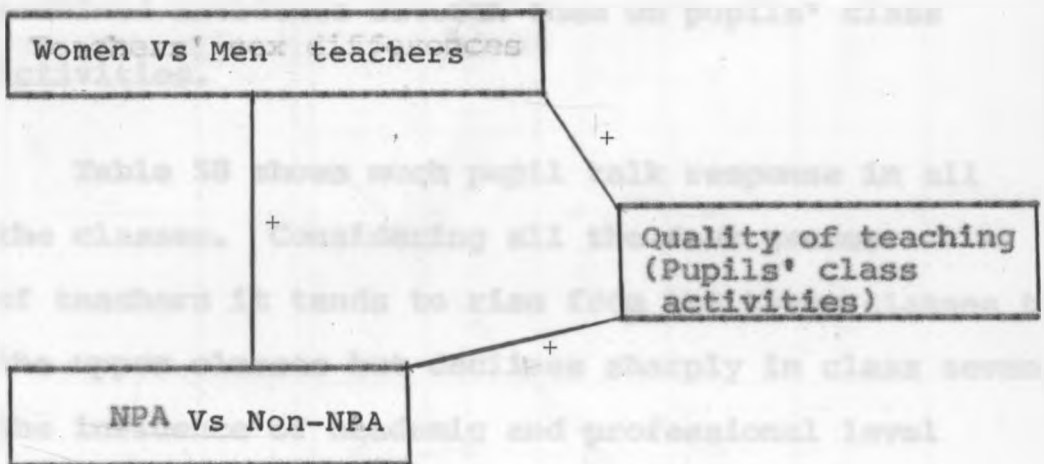
	Men Teachers	Women Teachers	Total
NPA Trained	(46)15.8	(40)19.2	(86)17.4
NPA Inservice	(35)13.0	(17)15.2	(52)13.7
Non-NPA	(88)12.9	(19)15.3	(107)13.4
Total	(169)13.7	(76)17.3	(245)14.8

More involving pupil non-verbal activities.

	Men Teachers	Women Teachers	Total
NPA Trained	(46)4.5	(40)6.7	(86)5.5
NPA Inservice	(35)4.7	(17)9.8	(52)6.3
Non-NPA	(88)4.6	(19)9.7	(107)5.5
Total	(169)4.6	(76)8.1	(245)5.7

The cross - tabulation reveals a weak but nonetheless significant relationship between the independent variables NPA and teachers' sex differences. A very strong relationship however, exists between teachers' sex differences and the quality of teaching.

Fig. 11 NPA and teachers' sex differences and the quality of teaching.



Teachers' academic and professional level and the level of class effect on pupils' class activities.

The independent variables teachers' academic and professional level and teaching in the lower or upper class did not demonstrate much relationship between them when examined in relation to teachers' class activities (Chapter 4). It was, however, observed that each strongly influences the quality of teaching. In this section an attempt is made to gauge if there is any combined influence between them on pupils' class activities.

Table 58 shows much pupil talk response in all the classes. Considering all the four grades of teachers it tends to rise from the lower classes to the upper classes but declines sharply in class seven. The influence of academic and professional level is strongly reflected in pupils' unsolicited talk response. It is reflected in all the P1 teachers lessons only declining in class seven.

Table 58. Teachers' academic and professional level; and the level of the class effect on

Pupils' talk

Pupils' talk response.

Class	1	2	3	4	5	6	7	TOTAL
P1 Teachers	-	(2)18.6	(1)13.3	(5)7.3	(6)16.3	(11)15.8	(11)10.4	(36)13.1
P2 Teachers	(11)10.1	(4)16.8	(5)15.9	(13)17.9	(26)16.1	(19)14.6	(21)14.9	(99)15.2
P3 Teachers	(20)12.7	(23)12.3	(18)14.7	(10)15.3	(13)16.1	(9)12.3	(2)12.0	(95)13.7
P4 Teachers	(3)12.3	(4)13.8	(5)19.8	(2)4.9	(1)10.9	-	-	(15)14.1
TOTAL	(34)11.8	(33)13.4	(29)15.8	(30)14.4	(46)16.0	(39)14.4	(34)13.3	(245)14.2

Pupils' initiated talk

Class	1	2	3	4	5	6	7	TOTAL
P1 Teachers	-	(2)5.0	(1)4.3	(5)1.3	(6)12.5	(11)2.4	(11)0.7	(36)3.6
P2 Teachers	(11) -	(4)1.0	(5) -	(13)0.2	(26)0.4	(19) -	(21) -	(99)15.2
P3 Teachers	(20) -	(23)0.4	(18)0.9	(10)0.7	(13) -	(9)1.3	(2) -	95)0.4
P4 Teachers	(3) -	(4) -	(5)0.3	(2) -	(1) -	-	-	(15)0.1
TOTAL	(34) -	(33)0.7	(29)0.8	(30)0.5	(46)1.9	(39)1.0	(34)0.2	(245)0.8

Table 59. Teachers' academic and professional level, and the level of class on pupils' non-verbal activities.

Pupil - simple non-verbal activities.

CLASS	1	2	3	4	5	6	7	TOTAL
P1 Teachers	-	(2)17.2	(1)17.4	(5)7.5	(6)18.6	(11)13.8	(11)9.5	(36)12.7
P2 Teachers	(11)21.6	(4)18.6	(5)16.6	(13)19.4	(26)12.6	(19)11.7	(21)14.2	(99)15.1
P3 Teachers	(20)18.8	(23)17.7	(18)14.9	(10)12.7	(13)9.2	(9)15.5	(2)10.6	(95)15.3
P4 Teachers	(3)16.2	(4)12.1	(5)18.9	(2)12.4	(1)14.1	-	-	(15)15.3
TOTAL	(34)19.5	(33)17.1	(29)15.9	(20)14.7	(46)12.4	(39)13.1	(34)12.5	(245)14.8

More involving pupils' activities.

Class	1	2	3	4	5	6	7	TOTAL
P1 Teachers		(2) -	(1)10.4	(5)24.1	(6) -	(11)1.7	(11)3.7	(36)5.3
P2 Teachers	(11)10.2	(4)3.9	(5)9.8	(13)3.2	(26)2.9	(19)1.4	(21)0.1	(99)3.3
P3 Teachers	(20)12.9	(23)12.3	(18)10.4	(10)4.4	(13)2.0	(9)1.2	-	(95)8.5
P 4 Teachers	(3)9.8	(4) -	(5)0.2	(2)20.6	(1) -	-	-	(15)4.7
TOTAL	(34)11.7	(33)9.0	(29)8.5	(30)8.3	(46)2.2	(39)1.4	(34)1.2	(245)5.7

Pupils' class activities, unlike teachers' class activities reveal a strong relationship between the independent variables, teachers' academic and professional level; and the level of the class. The two combine to influence the quality of teaching.

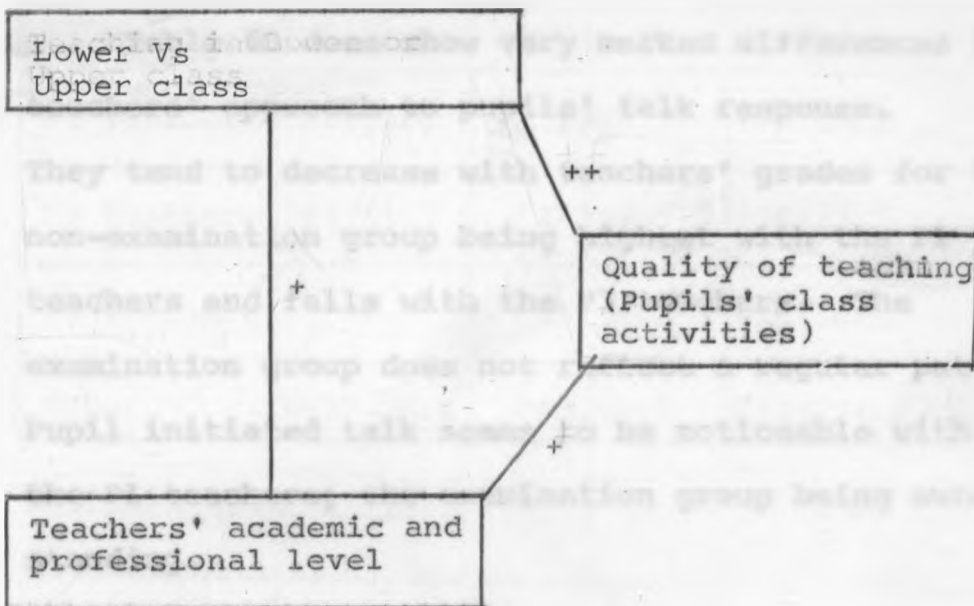


Fig. 12 Teaching in lower or upper class, Teachers' academic and professional and the Quality of Teaching.

Teachers' academic and professional level and the external examination factor on pupils' class activities.

A simple mean analysis early in this chapter indicated that teachers' involvement in preparing for external examinations has some effect on pupil class activities. A further analysis through cross-tabulation is examined here to assess how the examination factor affects each of the grades of teachers.

Table 60 does show very marked differences in teachers' approach to pupils' talk response. They tend to decrease with teachers' grades for the non-examination group being highest with the P1 teachers and falls with the P3 teachers. The examination group does not reflect a regular pattern. Pupil initiated talk seems to be noticeable with the P1 teachers; the examination group being outstanding.

	Non-Exam	Exam	Total
P1 Teachers	12712.8	11922.8	12315.8
P2 Teachers	10310.2	11015.8	10610.2
P3 Teachers	10110.8	10410.2	10210.4
P4 Teachers	—	10110.2	10110.2
Total	117722.8	108110.8	113766.8

Table 60. Teachers' academic and professional level and the external examination factor on pupils' class talk.

Pupil talk response.

	External Exam.	Non Examination	TOTAL
P1 Teachers	(27)11.8	(9)17.2	(36)13.1
P2 Teachers	(89)15.1	(10)15.7	(99)15.2
P3 Teachers	(61)13.7	(34)13.7	(95)13.7
P4 Teachers	-	(15)14.1	(15)14.1
Total	(177)14.1	(68)14.6	(245)14.2

Pupil initiated talk.

	External Exam.	Non Examination	TOTAL
P1 Teachers	(27)3.9	(9)2.6	(36)3.6
P2 Teachers	(89)0.1	(10)0.4	(99)0.2
P3 Teachers	(61)0.6	(34)0.2	(95)0.4
P4 Teachers	-	(15)0.1	(15)0.1
TOTAL	(177)0.9	(68)0.5	(245)0.8

Pupil simple non-verbal activities as table 61 shows, does not portray a systematic pattern, though P2 and P3 examination teachers' lessons show a higher proportion of these activities than the P1 teachers. The examination factor, however, is strongly reflected in more involving activities. The non-examination groups remarkably allow much of these activities in their lessons; P1 and P3 teachers exercising them more strongly.

P1 Teachers	(62) 25.2	(130) 21.2	(195) 25.2
P2 Teachers	—	(13) 15.2	(17) 15.2
Total	(177) 25.2	(143) 21.2	(212) 26.8

Non-examination groups

	Non-examination	Examination	Total
P1 Teachers	(27) 18.7	(8) 10	(35) 15.2
P2 Teachers	(18) 15.7	(10) 12.8	(28) 15.2
P3 Teachers	(18) 15.8	(10) 12.8	(28) 15.2
Total	(63) 15.2	(28) 12.8	(91) 15.2

Table 61. Teachers' academic and professional level and the external examination factor and pupils' non-verbal activities.

Pupils' simple non-verbal activities.

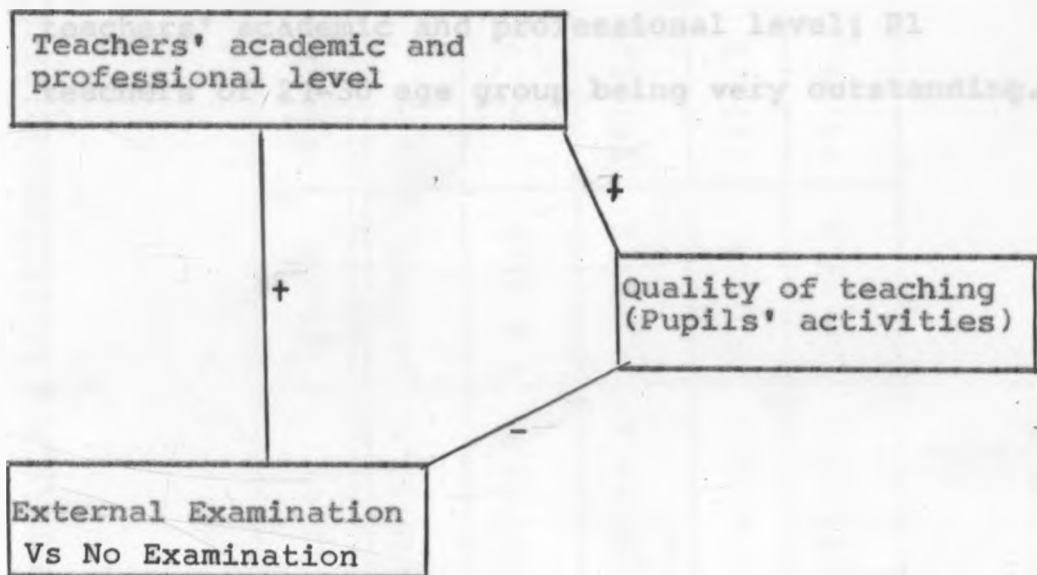
	External Exam.	Non Examination	Total
P1 Teachers	(27)11.9	(9)15.0	(36)12.7
P2 Teachers	(89)15.3	(10)13.6	(99)15.1
P3 Teachers	(61)16.1	(34)13.2	(95)15.3
P4 Teachers	-	(15)15.3	(15)15.3
Total	(177)15.2	(68)13.9	(245)14.8

More involving pupil activities.

	External Exam.	Non Examination	Total
P1 Teachers	(27)4.7	(9)7.0	(36)5.3
P2 Teachers	(89)3.3	(10)2.8	(99)3.3
P3 Teachers	(61)6.6	(34)12.0	(95)8.5
P4 Teachers	-	(15)4.7	(15)4.7
Total	(177)4.6	(68)8.4	(245)5.7

From the analysis of pupils' class behaviour it can be seen that the external examination factor has some negative effect on the quality of teaching. Its relationship with teachers' academic and professional level is shown in the figure below.

Fig. 13 Teachers' academic and professional level, the examination factor and the quality of teaching.



Teachers' academic and professional level and teachers' age on pupils' class activities.

Since teachers' academic and professional level is accepted as an outstanding factor in the determination of quality, it was cross-tabulated

With a number of other independent variables to gauge its impact on the quality of teaching. Here it is examined in relation with teachers' age.

As reflected in table 62 pupils talk response remains one of the leading aspect of pupils' class activities; it is quite pronounced with teachers of all age levels, though P2 teachers are slightly better than the other grades. Pupil unsolicited talk continue to reflect teachers' academic and professional level; P1 teachers of 21-30 age group being very outstanding.

Age	18-20	21-30	31-40	41-50	51-60
P1	120/110	120/110	120/110	120/110	120/110
P2	120/110	120/110	120/110	120/110	120/110
P3	120/110	120/110	120/110	120/110	120/110
P4	120/110	120/110	120/110	120/110	120/110
P5	120/110	120/110	120/110	120/110	120/110

Table 62: Teachers' academic and professional level and teachers' age on pupils' class talk

Pupil Talk Response

Age	21-30	31-40	41-50	51-60	61-70	Total
P1 Teachers	(19) 13.3	(15) 12.1	(2) 19.3	-	-	(36) 13.1
P2 Teachers	(57) 15.1	(37) 15.3	(5) 14.6	-	-	(99) 15.2
P3 Teachers	(41) 13.6	(37) 13.8	(12) 13.6	(4) 12.1	(1) 19.3	(95) 13.7
P4 Teachers	-	(2) 13.3	(9) 15.2	(3) 7.3	(1) 26.7	(15) 14.1
Total	(117) 14.3	(91) 14.1	(28) 14.7	(7) 10.1	(2) 23.0	(245) 14.2

Pupil initiated talk.

Age	21-30	31-40	41-50	51-60	61-70	TOTAL
P1 Teachers	(19)5.4	(15)1.9	(2) -		-	(36)3.6
P2 Teachers	(57)0.2	(37)0.1	(5)0.1	(-	(99)0.2
P3 Teachers	(41)0.2	(37)0.7	(12)0.6	(4)-	(1)-	(95)0.4
P4 Teachers	-	(2) -	(9)0.1	(3)-	(1)-	(15)0.1
Total	(117)1.0	(91)0.7	(28)0.3	(7)-	(2)-	(245)0.8

Table 63: Teachers' academic and professional level and teachers' age on pupils' non-verbal class activities.

Simple non-verbal activities.

Age	21-30	31-40	41-50	51-60	61-70	Total
P1 Teachers	(19)11.0	(15)14.1	(2)17.9	-	-	(36)12.7
P2 Teachers	(57)16.5	(37)12.9	(5)15.2	-	-	(99)15.1
P3 Teachers	(41)18.5	(37)13.0	(12)11.0	(4)17.3	(1)19.0	(95)15.3
P4 Teachers	-	(2)15.7	(9)14.2	(3)21.8	(1)5.3	(15)15.3
Total	(117)16.3	(91)13.2	(28)13.3	(7)19.2	(2)12.1	(245)14.8

More involving pupil non-verbal activities.

Age	21-30	31-40	41-50	51-60	61-70	Total
P1 Teachers	(19)5.2	(15)5.2	(2)7.1	-	-	(36)5.3
P2 Teachers	(57)4.1	(37)1.8	(5)4.3	-	-	(99)3.3
P3 Teachers	(41)8.0	(37)7.5	(12)12.7	(4)8.0	(1)19.8	(95)8.5
P4 Teachers	(-	(1)15.3	(9)4.5	(3) -	(1) -	(15)4.7
Total	(117)5.6	(91)5.0	(28)8.2	(7)4.5	(2)9.9	(245)5.7

Simple non-verbal pupils' activities do not seem to present a regular pattern of pupils' class behaviour in relation to teachers' academic and professional level and age as table 63 illustrates particularly for P4, P3 and P2 teachers of all age groups. More involving activities tend to rise with age of teachers, for P1 and P3 teachers but lacking a systematic pattern with P2 and P4 teachers.

From this cross-tabulation it is apparent teachers' age has some impact on the quality of teaching, though it does present a systematic pattern on pupils' class behaviour.

Teachers' Academic and professional level and teachers' sex differences on pupils' class activities.

A simple analysis of means examined in the first section of this chapter revealed that the independent variables, teachers' academic and professional level and sex differences have a marked influence on the quality of teaching. A further examination is made to assess their combined effect on the quality of teaching.

Examining table 64 it can be seen that pupils' talk response in men teachers' lessons does not present a systematic picture. They fall with the grade for women teachers, being strong with the P1 women teachers and fall sharply with the P4 teachers. Figure 14, however, reveals a considerable influence of teachers' grade. Pupils' unsolicited talk reflects sex differences as well as teachers' academic and professional level. Men P1 teachers allow more pupil discussion than their women counterparts. Pupil initiated discussion is virtually absent in the rest of teachers' classes.

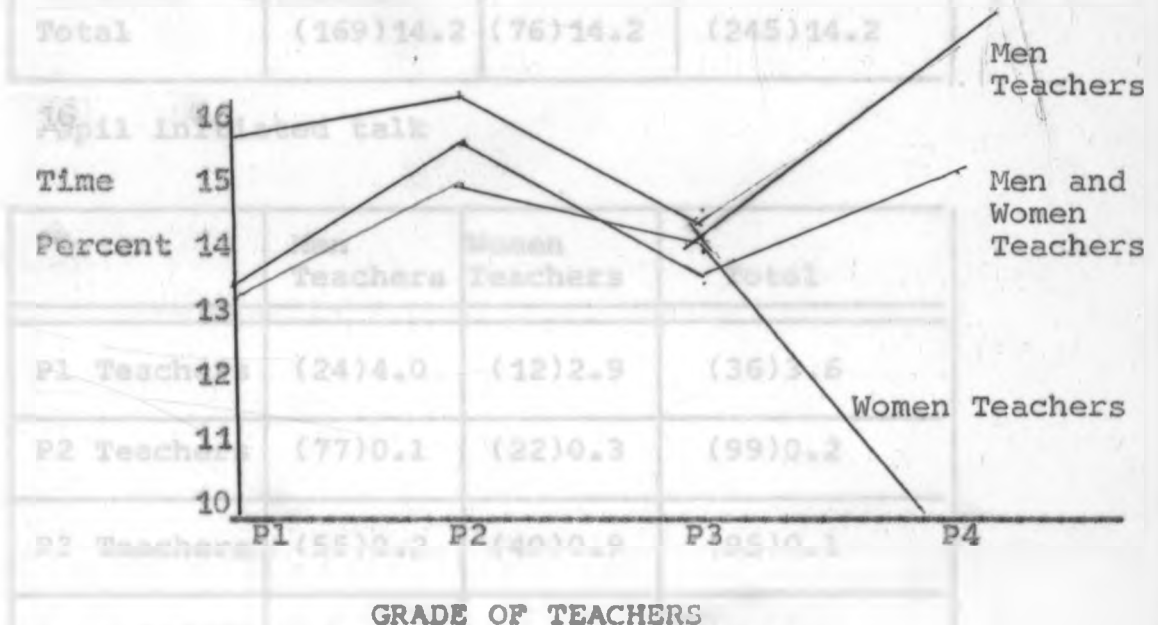


Fig. 14. Interaction between teachers' sex, their academic and professional level and pupil talk response.

Table 64. Teachers' academic and professional level and sex differences on pupils' talk.

Pupil talk response

	Men Teachers	Women Teachers	Total
P1 Teachers	(24)11.7	(12)15.9	(36)13.1
P2 Teachers	(77)15.0	(22)15.8	(99)15.2
P3 Teachers	(55)13.9	(40)13.4	(95)13.7
P4 Teachers	(13)16.1	(2)1.0	(15)14.1
Total	(169)14.2	(76)14.2	(245)14.2

Pupil initiated talk

	Men Teachers	Women Teachers	Total
P1 Teachers	(24)4.0	(12)2.9	(36)3.6
P2 Teachers	(77)0.1	(22)0.3	(99)0.2
P3 Teachers	(55)0.2	(40)0.9	(95)0.1
P4 Teachers	(13)0.1	(2) -	(15)0.1
Total	(169)0.7	(76)1.0	(245)0.8

Both simple and less demanding pupil non-verbal activities to a high degree reflect sex - differences between teachers than the academic and professional level of the teachers. Women teachers allow as many simple non-verbal activities as they do with the more demanding activities in their lessons as shown in table 65.

	Male Teachers	Female Teachers	Total
All Teachers	(77)16.7	(100)28.7	(177)22.7
P1 Teachers	(35)14.9	(60)28.7	(95)21.7
P2 Teachers	(30)15.5	(40)26.2	(70)20.8
Total	(100)15.7	(140)27.3	(240)21.5

More involving non-verbal activities

	Male Teachers	Female Teachers	Total
P1 Teachers	(21)8.8	(32)15.2	(53)12.1
P2 Teachers	(17)8.5	(22)14.8	(39)11.7
P3 Teachers	(35)17.6	(40)26.2	(75)21.9
All Teachers	(100)15.7	(140)27.3	(240)21.5

Table 65 Teachers' academic and professional level and sex differences on pupils' non-verbal class activities.

Simple non-verbal pupils' activities

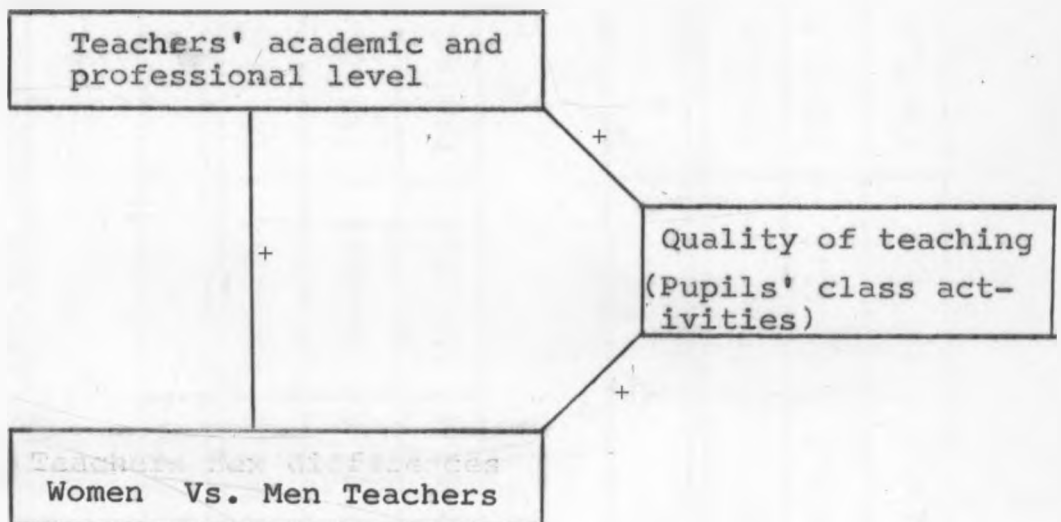
	Men Teachers	Women Teachers	Total
P1 Teachers	(24)12.9	(12)12.2	(36)12.7
P2 Teachers	(77)14.3	(22)17.9	(99)15.1
P3 Teachers	(55)12.9	(40)18.7	(95)15.3
P4 Teachers	(13)15.5	(2)14.2	(15)15.3
Total	(169)13.7	(76)17.3	(245)14.8

More involving non-verbal activities.

	Men Teachers	Women Teachers	Total
P1 Teachers	(24)5.4	(12)5.0	(36)5.3
P2 Teachers	(77)2.5	(22)5.9	(99)3.3
P3 Teachers	(55)7.4	(40)10.0	(95)8.5
P4 Teachers	(13)3.2	(2)14.7	(15)4.7
Total	(169)4.6	(76)8.1	(245)5.7

From the foregoing analysis it can be concluded that the relationship between teachers' academic and professional level and teachers' sex differences is weak, but nonetheless significant. Teachers' sex differences emerges as a powerful factor influencing the quality of teaching, as shown in figure 15.

Fig. 15: Teachers' academic and professional level and sex differences and the quality of teaching.



Teachers' sex differences and the level of the class effect on pupils' class activities.

Teachers' sex differences does not only appear a prominent factor influencing the quality of teaching when examined in relation to teachers' academic and professional level, but also in relation to the lower and upper class factor.

Table 66 supports an earlier conclusion that women teachers reflect more features of good teaching in their classes than men teachers. They allow more pupil talk response well into the upper classes while men teachers tend to reduce them in the upper classes. Though approach to pupil initiated talk appears remarkably low with both sexes, women teachers are able to reflect it in all the classes.

Table 66: Pupil initiated and reflected and the form and most of the class talk

Table 66: Pupil initiated and reflected and the form and most of the class talk

Class	1	2	3	4	5
Male Teachers	152/1500	150/1500	150/1500	150/1500	150/1500
Female Teachers	150/1500	150/1500	150/1500	150/1500	150/1500
Total	150/1500	150/1500	150/1500	150/1500	150/1500

Table 66: Pupil initiated and reflected and the form and most of the class talk

Class	1	2	3	4	5
Male Teachers	150/1500	150/1500	150/1500	150/1500	150/1500
Female Teachers	150/1500	150/1500	150/1500	150/1500	150/1500
Total	150/1500	150/1500	150/1500	150/1500	150/1500

Table 66: Teachers' sex differences and the lower and upper class effect on pupils' class talk.

Pupil talk response

Class	1	2	3	4	5	6	7	Total
Men Teachers	(12)12.8	(14)12.1	(19)17.4	(20)13.1	(40)17.0	(33)13.4	(31)11.9	(169)14.2
Women Teachers	(22)11.3	(19)14.4	(10)12.6	(10)17.1	(6)9.1	(6)19.8	(3)28.0	(76)14.2
Total	(34)11.8	(33)13.4	(29)15.8	(30)14.4	(46)16.0	(39)14.4	(34)13.3	(245)14.2

Pupil initiated talk.

Class	1	2	3	4	5	6	7	Total
Men Teachers	(12) -	(14) -	(19) -	(20)0.3	(40)2.1	(33)0.5	(31)0.2	(169)0.7
Women Teachers	(22) -	(19)1.2	(10)2.2	(10)1.0	(6) -	(6)3.7	(3) -	(76)1.0
Total	(34) -	(33)0.7	(29)0.8	(30)0.5	(46)1.9	(39)1.0	(34)0.2	(245)0.8

It is not only through pupil talk that women teachers reflect a more positive approach to pupil-centred lessons. This is also demonstrated in pupils' non-verbal activities. Table 67 shows a high proportion of simple non-verbal activities in the lessons of the two groups, though women teachers reflect them much more than the men teachers. Both sexes of teachers allow more involving pupils' activities in most of the classes, though these tend to decline more sharply in the upper classes than the simple non-verbal activities.

Class	Men Teachers	Women Teachers
Year 1	12011.0	12011.0
Year 2	12011.0	12011.0
Year 3	12011.0	12011.0
Year 4	12011.0	12011.0
Year 5	12011.0	12011.0
Year 6	12011.0	12011.0

Class	Men Teachers	Women Teachers
Year 1	12011.0	12011.0
Year 2	12011.0	12011.0
Year 3	12011.0	12011.0
Year 4	12011.0	12011.0
Year 5	12011.0	12011.0
Year 6	12011.0	12011.0

Table 67: Teachers' sex differences and the lower and upper class effect on pupils' non-verbal class activities.

Simple non-verbal pupil activities.

Class	1	2	3	4	5	6	7	Total
Men Teachers	(12)17.9	(14)16.0	(19)14.3	(20)14.2	(40)12.2	(33)13.5	(31)12.6	(169)13.7
Women Teachers	(22)20.4	(19)17.9	(10)19.0	(10)19.0	(6)13.8	(6)11.2	(3) 10.5	(76)17.3
Total	(34)19.5	(33)17.1	(29)15.9	(30)14.7	(16)12.4	(39)13.1	(34)12.5	(245)14.8

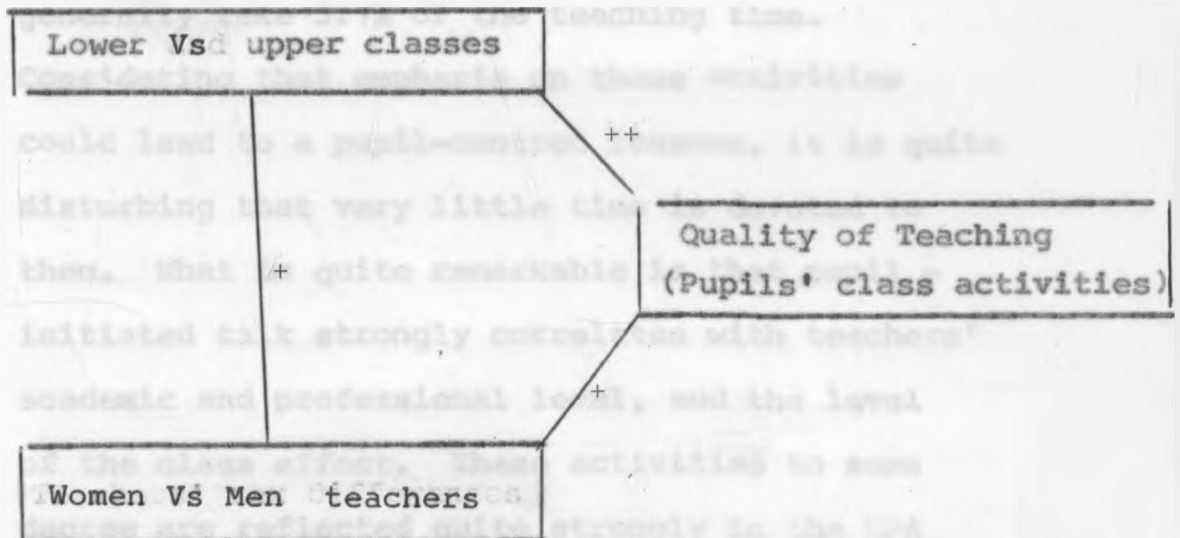
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More involving non-verbal pupil activities.

Class	1	2	3	4	5	6	7	Total
Men Teachers	(12)11.7	(14)12.0	(19)5.6	(20)9.8	(40)1.9	(33)1.4	(31)1.4	(169)4.6
Women Teachers	(22)11.7	(19)6.8	(10)14.2	(10)5.2	(6)4.4	(6)1.8	(3) -	(76)8.1
Total	(34)11.7	(33)9.0	(29)8.5	(30)8.3	(46)2.2	(39)1.4	(34)1.2	(245)5.7

The relationships between teachers' sex differences and the level of the class effect and the quality of teaching is summarised in figure 16.

Fig. 16 Teachers' sex differences the lower, and upper class effect, and the quality of teaching.



From the analysis of pupil activities as an index of quality in teaching, generally pupil class activities take a lesser proportion of the teaching time. They however feature somewhat strongly in the NPA teachers' lessons than the non-NPA teachers' lessons; and are quite strongly reflected in the lower classes of the primary schools and in Women teachers' lessons.

The individual dependent variables seem to point strongly to traditional class activities. Pupils' talk response and simple non-verbal activities feature prominently in the lessons; taking 14.2% and 14.8% of the teaching time respectively. Pupils' initiated talk is remarkably 'dead' in many of the lessons taking 0.8% of the teaching time and more involving pupil activities generally take 5.7% of the teaching time. Considering that emphasis on these activities could lead to a pupil-centred lessons, it is quite disturbing that very little time is devoted to them. What is quite remarkable is that pupil - initiated talk strongly correlates with teachers' academic and professional level, and the level of the class effect. These activities to some degree are reflected quite strongly in the NPA teachers' classes, women teachers' classes and in lessons of teachers not preparing for external examination.

1. E. Stabler op. cit. p. 40
2. N.L. Gage op. cit. p. 52
3. C.E. Beeby op. cit. p.86.

CHAPTER SIXTEACHER* - STUDENT VIEWS ABOUT THE NEW PRIMARY APPROACH AND THE QUALITY OF TEACHING.

It was important in this study to find out the relationship between what primary teachers actually do and what they say about the NPA programme. To avoid repetition the views of tutors and students in colleges about NPA are also discussed in this chapter. In chapters four and five it was apparent that the influence of the NPA methods on teacher and pupil class activities was low but nonetheless significant. In this analysis an attempt is made to assess the possible contribution of teachers' attitudes to the NPA programme on their class activities.

Teacher - student views discussed here are based on the responses to the questionnaire items for primary teachers, college students and tutors which appear in the appendix II of the study. In the questionnaire, teachers, students and tutors were asked to say what they think are the most important points of the NPA programme and the advantages and disadvantages of NPA.

* This includes college tutors.

College tutors in particular were asked whether NPA was taught as a separate subject or part of every subject and to recommend the best method of teaching the subject. From their observation they were to give what they thought were students' general attitudes about NPA. Being an open ended questionnaire one would have to reckon with the problem of recording a wide variety of views expressed. For convenience the discussion will be centred on the introduction of the NPA, impression about it and problems of its application. In the discussion it will be seen that none of the above aspects can be analysed in isolation.

Table 68: shows that a very high proportion of tutors, students and primary teachers, 85.7%, 77.7% and 76.8% respectively feel that the methods should not have been confined to English and P3 teachers. This is probably why a fairly high percentage of the tutors and primary teachers, 45.7% and 43.5% tend to think the materials on which NPA is based are foreign. This too explains why 44.3% of the tutors, 41.3% of the students and 55.8% of the primary teachers think that the method only develops verbal communication of the pupils. Attention is drawn

on a very high proportion of primary teachers who feel that the NPA is synonymous with language development. This has naturally impaired the application of activity methods. It is, however, important to note that a low but fairly high proportion of the tutors, students and teachers do not think the materials on which the subject is built are foreign; 50.4% of the students. Also quite noticeable is that a low proportion see the subject as developing both written and verbal aspects of the child.

The introduction of the NPA.

Views were expressed which reflected some concern about the way the NPA programme was introduced. They were as follows:

to be introduced in all schools	11.7	20.2	11.2
to be introduced in some schools	20.2	30.4	21.0
to be introduced in some schools	20.2	31.1	21.0
to be introduced in some schools	11.7	-	-
to be introduced in some schools	11.7	-	-
to be introduced in some schools	11.7	-	-

* All figures represent percentages.

Table 68: Opinions about the introduction of the NPA Programme.

	Tutors	Stu- de- nts	Primary Teachers
1. Should not have been confined to English or P3 teachers.	85.7	77.7	76.8*
No specific information	14.3	22.3	23.2
2. Method only develops verbal communication	46.3	41.3	55.8
Can develop all aspects of the child	31.4	34.5	31.2
No specific information	24.3	24.2	21.0
3. Materials (books cards etc.) reflect a foreign background	45.7	28.2	43.5
Do not think material foreign	30.3	50.4	39.9
No specific information	24.0	21.4	16.6
4. Method be integrated in all subjects	81.4	-	-
Be taught separately	9.0	-	-
No specific views	9.6	-	-

* All figures represent percentages.

A number of the colleges still teach NPA as a separate subject, though during the interview with the tutors a very high percentage 81.4% felt that it should be integrated in the method courses of all the subjects. What seemed interesting is that a good proportion of tutors most of whom were expatriates felt that the subject should continue to be taught separately; 9.0% of the sample. Their resistance to the integration of the subject is understandable. Many were specifically posted to colleges to teach English Medium or NPA. A deputy principal observed that in a number of cases some of these tutors do not even teach activity methods but teach English. Nor has the method any longer got a common name. Some colleges refer to it as lower primary method. This dichotomy seems to linger in the minds of student teachers when they take their teaching posts and might not be quite enthusiastic to apply methods, whose aims probably the college never made clear. All these problems bounce back to the fact that the introduction of NPA programme did not have straight forward objectives, as already discussed in chapter three.

Impressions about the NPA.

Table 69 summarises the impressions of primary teachers, students and tutors about NPA. A fairly high percentage of the tutors 51.4%, 63.0% of the primary students and primary teachers respectively expressed views that the activity methods constitute a very practical way of teaching, for pupils are actively involved. The child is at the centre of learning. Interest is focused on the child rather than the teacher. The children are encouraged to learn according to their own interests with the guidance of the teacher. In other words, stress is on training and encouraging the child to learn through discovery or finding out things for himself. They generally saw it as learning, through practical work in which the child is actively engaged in his own education.

As opposed to a traditional approach, the child's mind is not considered a 'tabula rasa' on which the teacher has to write completely new material. This implies that the teacher is not the 'king of knowledge', or has to assume an authoritarian approach to teaching. Activity methods were perceived as recognizing that children have basic ideas and concepts about

knowledge according to their own experience. The methods recognize the natural curiosity of the children to explore things.

These views were strongly subscribed to by teachers in the field and yet their classroom activities did not reflect them. Teachers' beliefs were strongly consistent with this modern educational philosophy and yet their activities do not correlate positively with the philosophy.

Attention is, however, drawn on the small proportion of teachers, tutors and students who do not subscribe to the above impressions about NPA methods. A fairly high proportion of tutors 25.7% and 13.6% of the students and 19.6% teachers do not think the method enables pupils to discover their own information.

Another very remarkable percentage of tutors 27.1%, 27.2% of the students and 24.6% of the primary teachers feel activity methods cannot be appropriately applied in large classes without disciplinary problems. Low as these critical views about NPA methods might be, in a study of this nature in which the sincerity of the

subjects could be doubted, perhaps these responses represent the actual feelings of the groups.

After all a very significant anomaly exists in what the teachers actually do in the classes and what they say about the NPA Programme.

Some problems of application.

Despite these impressions, a number of problems were said to be limiting the effectiveness of NPA. These included problems pertaining to material and class procedure, problems concerning teachers and pupils.

In table 70 it is seen that 37.7% of the primary teachers were of the view that NPA or activity methods are too slow and if followed the syllabus cannot be covered in time. A fairly high percentage 41.3%, however, felt that the syllabus can be covered under any methods. A very outstanding feature is that 71.4% of the tutors, 77.7% of the students and 73.2% of the primary teachers expressed views that the application of activity methods is seriously limited by the unavailability of teaching material.

Table 69: Impressions about NPA

	Tutors	Students	Primary Teachers
1. Most practical way of teaching, pupils are actively involved.	51.4	63.6	63.0
Do not consider it a practical way of teaching	25.7	13.6	19.6
No specific views	29.9	22.8	17.4
2. Pupils discover information and making learning real	54.3	62.6	60.9
Pupils do not discover their own information	20.0	14.4	19.6
No specific views	25.7	20.0	19.5
3. Better teacher pupil relationship hence relaxed discipline	32.9	36.9	44.2
Cannot be applied without disciplinary problems	27.1	17.2	24.6
No specific views	40.0	35.9	31.2

Anybody who is familiar with primary schools particularly in the rural areas would be quite aware of this problem. A good number of the many primary schools visited showed poor classroom facilities and a lack of teaching equipment. It was not a rare feature to see pupils learning under a tree or in a church. Pupils had to sit and write on church benches for a whole morning and sometimes part of the afternoon. The many semi-permanent classrooms that are available have no shutters to enable teachers to store their teaching equipment. Some of these buildings can indeed inevitably hamper activity teaching, depress the spirit of the children and sap the enthusiasm of the teachers. Desks are lacking and the few that are available are of traditional type sometimes posted firmly into the ground. With the concentration of the supply of equipment, teachers complained that materials generally do not arrive in schools in good time and sometimes materials is despatched for which the headmaster did not place an order. Under such depressing conditions, one would surely require the patience of a Job, the wisdom of a Solomon and the strength of a Samson' for one to do very effective teaching.

Table 70: The problem of class procedure and teaching facilities.

	Tutors	Students	Primary teachers
1. Activity methods are too slow and if followed syllabus cannot be covered.	-	-	37.7
Syllabus can be covered under any methods.	-	-	41.3
No specific view	-	-	21.0
2. Effectiveness and applicability of NPA is limited, by teaching facilities.	71.4	77.7	73.2
Do not consider teaching facilities a problem	5.9	2.9	11.6
No specific views	22.9	19.4	15.2

Teachers' attitudes towards their profession is perhaps another powerful militating factor against the effectiveness of activity methods. Table 71 shows that 76.1% of the teachers feel that they have a very heavy teaching load which does not enable them to make preparations for activity methods.

They revealed that they generally have a heavy teaching load of 45 periods a week. This they complained made lessons planning impossible let alone preparing for activity methods. This problem coupled with that of high staff turnover, could very seriously frustrate the efforts of a primary teacher who might be genuinely interested in promoting modern activity methods of teaching. As a result of staff shortage, there is a noticeable proportion of untrained teachers employed on tripartite or such like terms. These could be a very strong factor militating against improving the quality of teaching in primary schools; since they tend to teach as they were themselves taught.

While the problem of understaffing is appreciated, a very strong factor militating against activity methods is the teachers' attitudes. Table 71 further reveals that 58.6% of the tutors feel that students in college

tend to resent activity methods because they think them too involving, 63% of the students feel them quite involving, 50.0% of the teachers share such views. Attention is drawn on the 63.0% of the students who after a few lessons during the teaching practice already think the methods too involving. This naturally makes the chances of student teachers applying activity methods when they have taken up their posts remote. As a result of these attitudes little or no efforts are made to plan lessons. Lessons taught on Mondays by primary teachers after the weekend showed no signs of having been planned as those taught on Fridays. Generally teachers' class activities reflect slackness, apathy and negligence and lack of interest in teaching. Half of primary teachers, 50.0% admitted that it was difficult to break through traditional methods; though a sizeable percentage, 27.5% did not think this a problem. At any rate these resigned attitudes make the application of activity methods very difficult.

Table 71: Teachers' attitudes towards activity methods.

	Tutors	Students	For Primary Teachers
1. Understaffing does not make it possible for NPA preparations.	-	-	76.1
Do not think understaffing a problem	-	-	7.2
No specific views	-	-	16.7
2. Teachers' resent NPA because it is too involving	58.6	63.0	50.0
Do not think too involving	28.6	27.0	17.4
No specific information	12.8	10.0	32.6
3. It is difficult to break through traditional methods	-	-	50.0
Do not consider break in traditional methods a problem	-	-	27.5
No specific views	-	-	22.5

Primary teachers' attitudes and lack of teaching facilities are not the only problems that limit the application of activity methods; pupils' attitudes also play a very significant role to influence primary teachers' adoption of a formal approach to teaching. A good percentage of teachers 37.7% felt that pupils learn more in traditional methods; though a fairly high proportion 40.6% did not hold such views. Table 72 goes further to point out that 45.7% of the tutors, 41.7% of the students and 54.4% of the primary teachers hold that pupils in the upper classes of the primary school resent the method because they consider it time wasting. Note the fairly high percentage of primary teachers who do hold such opinions.

A simple test was administered in a standard seven class in one of the primary schools - Losengeli school N. Maragoli, to assess pupils' views about the methods that teachers should actually apply in teaching class seven. The pupils were asked to write in order of importance what they thought about some of the class activities. Teachers teaching them should help

Table 72: Views about pupils' attitudes to activity methods.

	Tutors	Students	Primary Teachers
1. Pupils learn more under traditional methods	-	-	37.7
Pupils could learn as much through activities	-	-	40.6
No specific information	-	-	21.7
2. Pupil in upper classes consider the method time wasting	45.7	41.7	54.4
Can be applied in upper class depending on the approach	28.6	13.6	15.5
No specific information	25.7	17.2	26.1
3. A homogenous grouping in activity methods has a psychological effect on pupils	-	49.5	32.6
A homogenous grouping has no effect	-	41.6	22.5
No specific views	-	35.9	44.9

them to write many essays, discuss what they learn between themselves in groups, do some project like visiting villages, markets, dramatize stories, work through multiple choice questions of the past Certificate of Primary Education examination, and work out many exercises from the text-books. The views expressed in order of importance were as summarized in table 73. Figures are expressed as percentages.

1. Give more questions of the past C.P.E. examination	47.0
2. Work out many exercises from text-books	15.0
3. Write many essays	10.0
4. Attend lessons regularly	5.0
5.
6. Do some projects like visiting villages, markets, etc.	...

NOTE: Views expressed by people in order of importance

Table 73: Class seven pupil views about teaching Methods.

Item	Percentage
1. Work through multiple choice questions of the past C.P.E. examination	67.0
2. Work out many exercises from text-books	15.0
3. Write many essays	10.0
4. Discuss between themselves	4.0
5. Dramatize	2.0
6. Do some projects like visiting villages, markets, etc.	2.0

Note: Total number of pupils in class was 57

Table 73 strongly supports the general views expressed by tutors, students and teachers about the position of activity methods in the upper classes. Pupils generally tend to regard time spent on class activities such as composition writing, project work, dramatization or field study as time wasted. Thus primary teachers trained at colleges which stressed the need for such activities in teaching, find themselves in a situation where pupils come close to refusing to work on such skills that are not directly examined. In each of the subjects the CPE is seen as requiring a very close acquaintance with a body of fact. The right answer culled from the previous six or so years' papers, are carefully memorized and worked over. Pupils tend to see the examination as a technique in which long and sustained practice is vital for success. There is a general trend in which pupils know from their C.P.E. texts to which reference will be made later, what are the answers or definitions and scientific laws that they are expected to know; and increasingly regard as a waste of time proving by rudimentary experiments

what they already know. The pupils have a very fine perception of how much is required of each subject and a teacher who begins to give too much may find himself out of repute or in extreme cases face a showdown. They have restricted interests in some subjects; definitions and outstanding features are given full note of because the examination does not test coherent knowledge.

This problem is aggravated by the presence of a high proportion of repeaters in classes six and seven. The requirements of fresh pupils in these classes are that new material on the standard six or seven syllabus be taught through rudimentary methods. The sole need of the repeaters, however, is to concentrate on some of the more complex areas and have ever more practice at the multiple choice tests. The end result is that the repeaters force the pace of the class activity and the fresh pupils must reconcile themselves to picking up on their own the basic upper class curriculum. Thus making standard seven in particular exclusively a revision class even for those who have not yet learnt what the others know have to revise. This explains lack of much

pupil activity in class seven and the general decline of pupil activities in the upper classes.

On the application of activity methods in the lower classes a fairly high proportion students and a sizeable number of teachers felt that grouping pupils according to ability as advocated in the NPA methods had a very serious psychological effects on pupils class behaviour. The best group in the class adopts attitudes of intellectual superiority and the worst group always feels withdrawn.

It can be seen that college tutors and students, primary teachers hold strong views about the NPA as being a revolutionary method of teaching and learning in which pupils are at the centre of the educational process. A very disturbing feature, however, is the dichotomy between what primary teachers say and what they actually do in their classes. This is partly due to a lack of clear objectives in the NPA during its introduction and partly as a result of some of the critical constraints as lack of good teaching facilities, teachers' and pupils' attitudes; some of which will be subject to further scrutiny in the concluding chapter.

CHAPTER SEVENTEACHER EDUCATION AND THE QUALITY OF TEACHING.

Though the term teacher education embraces the pre-service and the in-service education of teachers, much attention in this chapter will be focused on the pre-service education of teachers. Educators involved in the actual education of teachers have sometimes been known to voice the opinion that most teachers do not teach in accordance with the pattern prescribed by teacher education institutions, but rather teach in accordance with the pattern observed when they were pupils and which they believe is expected of them.¹ Very extreme views are sometimes held to the effect that pre-service education itself does not matter. Such views do not reflect well about the place of teacher education on the quality of teaching.

In the light of some of these assumptions a very simple experiment was carried out to discern the impact of the pre-service teacher education programme on student concept of modern activity methods. First and second year students were given a sheet of paper and pencil each and were instructed to draw a simple drawing of the teacher with a class. The aim was to let each group express what teachers could do in the classroom.

They were advised to draw a complete and simple drawing as much as they could, not minding about their artistic ability. The drawings were rated on the following criteria:

- (1) activity outside the control of the teacher (e.g. some pupils studying by themselves).
- (2) Situations in which there was partial or total pupil control.
- (3) Tension in the relationship between pupil and teacher.
- (4) Teacher and pupil working together.
- (5) Teacher conveying information while pupils are listening.

Significant differences were found on each of these criteria between beginning students and those who were completing their course. On each of the criteria the drawing of the beginning group portrayed a more teacher-dominated class than that of the completing group.

This simple drawing revealed that when student teachers pass out they seem to have a very strong concept about pupil-centred education. Looking at the NPA trained teachers' class practice and young teachers' class behaviour,

they do not seem to concur with the philosophy the teachers hold on modern education. The dualism between theory and practice points to a number of critical issues in the programmes of teacher education.

To discern some of these issues, college tutors, students and primary teachers were given a questionnaire which contained items on the curriculum of teacher education institutions, the techniques of teaching in these institutions, the teaching practice and some miscellaneous items. The questions were open ended, hence making the codification of the results rather difficult.

The Curriculum.

The respondents were asked to say whether the subjects of the teacher education curriculum were too many too few or they thought they were right in number. In a further question they were asked to recommend or suggest any changes to be made to improve this curriculum.

Table 74: Summarises the views expressed on the curriculum.

Table 74: the curriculum of teacher education.

	Tutors	Students	Primary Teachers
1. Curriculum is crowded	34.4	60.2	27.9
2. Subjects are just the right number	51.4	35.9	64.0
3. Subjects are very few	7.1	2.4	8.1
No specific information	7.1	1.5	-
2. There should be specialization	41.4	52.9	16.3
Curriculum should include practical subjects	10.0	2.4	6.8
- No specific views	48.6	44.7	77.9

Table 74 shows that a high percentage of students 60.2% are of the opinion that the curriculum is crowded; but many of the tutors and primary teachers feeling that the subjects are just of the right number. Students being directly involved in the curriculum, are much more conscious of the load it imposes on them. Though many tutors expressed views that subjects were enough, they pointed out that this was in relation to the demands of the primary schools.

Examining the structure of the primary college curriculum, there are strong reflections of crowdedness. It includes all the subjects taught in the primary school with some emphasis on the needs of the Kenya Junior Secondary Examination (K.J.S.E.)², the East African Certificate of Education (E.A.C.E.) and the Higher School Certificate.³ Normally in each subject course, two thirds of the time is devoted to improving the students academic background and a third to the methods. The professional aspect embraces subjects like child psychology, school management and organisation; and teaching practice. Given the brief period in which

the teacher has to learn so much and yet be adequately prepared for his fundamental job which is classroom teaching, it should not perhaps be doubted that his teaching is poor as already examined. In general students are exposed to a multiplicity of curriculum courses with a strong dichotomy between the academic and the professional studies and this dichotomy lingers in teachers' minds when they take up their posts in primary schools.

A fairly high proportion of tutors 41.4% and 52.9% of the students stressed the need for specialization in primary teacher education. It is perhaps needless to point out that teachers are significantly more effective in dealing with one subject rather than another.

Methods of instruction during the pre-service courses.

Techniques of teaching in teacher education are a factor of constant controversy. The sub-committee on teacher education of 1968 recommended that 'teachers should be taught by the same methods which they will be expected to use in teaching children'⁴.

Other authorities holding the same views, argue that students cannot be expected to be creative, when their tutors are not creative themselves. They could be themselves involved in the learning process not believing themselves above it or allowing 'their students to see them as being outside it, for this is likely to initiate the same behaviours among the students towards their children',⁵ Tutors on the other hand argue that they cannot use activity methods because students are mature and in any case a college is not a primary school.

Table 75 tabulates students', tutors' and to a lesser degree primary teachers' views about the place of academic and professional studies in teacher education and the techniques of teaching in teacher education. Many students, 66.5%, were of the opinion that the professional aspect of teacher education should have more time devoted on it, 11.7% preferred academic studies, 10.7% were in favour of balancing academic and professional education. Most of the tutors, 38.6% were in favour of professional studies, 32.9% for academic studies and 14.3% would desire a balance in the academic and professional studies. Both students and tutors

are rather unhappy about the stress laid upon academic courses for intending primary teachers as a means of furthering the students' own intellectual development.

With a stress laid on professional studies a majority of the students 67.0% emphasise that their tutors should use activity methods of instructions; 38.6% of the tutors share the same views. Some students suggest that they had not seen activity methods in practice and it is only at the college that these could practically be done. About a quarter of the tutors prefer lecturing methods and the same fraction would favour a combination of lecture, activity, tutorial and seminar methods. A very small proportion of the tutors and students prefer tutorial methods.

Table 75 further reveals that 60.0% of the tutors have observed students imitate their methods during the teaching practice, 62.6% of the students admit that they imitate their tutors' methods of teaching when on teaching practice, while 80.2% of the

primary teachers agreed that they imitate their former tutors' ways of teaching. A very small percentage of tutors 21.4%, 28.2% of the students and 14.0% of the primary teachers holding contrary views.

Imitation is a well established phenomenon. The long period of exposure to teachers during their school years perhaps provide a body of experiences and pattern to imitate which may well serve the new teacher as a guide to action. This background of direct experiences with teaching probably provides a much more vivid guide to action in the classroom than the period of pre-service training if it is largely theoretical. Lack of activity in teacher education perhaps succeeds in polarizing the inherited tradition.

As one conference ⁶ observed, the choice of teaching methods in an institution for the education of intending teachers is a much more complex issue than it is in other educational establishments. In devising teaching methods for intending teachers, not must the chosen methods prove to be serviceable in equipping students with a prescribed body

of knowledge but must also be regarded as possible examples or models that students may be disposed to imitate subsequently when they become teachers themselves. Unlike the majority of other students, intending teachers, when they attend a class or lecture are just as much interested in the form of teaching displayed as well as the substance. Being committed to the profession of teaching they are naturally disposed to pay attention to any demonstration of that art that they are preparing themselves to practice. Thus tutors must expect to find their own methods of instruction submitted to close scrutiny and may find them being adopted by their students.

Professor Senteza Kajubi has the following to say on the same theme:

'I think that a useful comment which brings us back to the vicious circle of teachers who go out and teach the way they were taught in primary or secondary school. The teacher trainers themselves don't often speak about the methods they use in training students. They talk about the methods to use in teaching primary school children or secondary school children, but not about the methods of instruction in centres where teachers are produced.'

Very often methods used in teacher colleges and Universities are as traditional as anything can be. Many lecturers spent so much time lecturing to students on the subjects of not lecturing to students or pupils and then they are disappointed when they go to schools to find teachers lecturing to pupils just as their teachers in the college or University lecture to them'.⁷

Teaching Practice.

This is one of the most important aspects of teacher preparation. Table 76 summarises a variety of opinions that were expressed about it. A very outstanding feature is that a majority of the students, 85.4%, and primary school teachers 82.6%, liked teaching practice. Their views were supported by 72.9% of the tutors. A rather depressing thing is that 60.2% of the students and 46% of teachers had not seen demonstration lessons before beginning teaching practice and 70.0% of the tutors admitted that they do not carry out lesson demonstration. Of the few demonstrated lessons not many were said to have been successful. Most of the tutors defended the absence of demonstration lessons by the fact that there are no proper time-table arrangements between the colleges and the demonstration schools;

and this was largely because colleges did not have direct control over these schools. A few of the tutors, however, admitted that they did not demonstrate lessons before teaching practice because they dislike the artificiality of the demonstration lessons. Demonstration lessons were believed to be very important since students before their teaching practice might rarely have seen a really good lesson given and hence might have no practical criteria by which to judge good lessons or bad ones. To send students into schools after a brief and largely theoretical introduction course is perhaps to invite them to turn to other sources for help and influence. Very often they will always turn to the long serviced teachers in the field, or application of methods in which they have no confidence or even understand.

Number of students	100	100	100
Number of schools	10	10	10
Number of teachers	100	100	100
Number of lessons	100	100	100

Table 75: Teaching techniques in teacher education.

	Tutors	Students	Primary Teachers
1. Professional studies be given more time	38.6	66.5	-
Academic studies be given more time	32.9	11.7	-
Professional and academic studies be balanced	14.3	10.7	-
No specific information	14.2	11.1	-
2. Lecturing be a method of teaching	24.3	10.2	-
Tutorial methods be used in teaching	11.4	14.1	-
Activity methods	38.6	67.0	-
A combination of all the above methods	25.7	8.8	-
3. Imitates tutors/seen students imitate methods	66.0	62.6	80.2
Do not imitate/not seen students imitate methods	21.4	28.2	14.0
No specific views	18.6	9.2	5.8

Table 76 goes further to illustrate this point by the fact that about 18.9% of the students and 5.8% of the teachers expressed opinions that they applied methods that their tutors had taught as a result of tutors' pressure, and 34.3% of the tutors seem to support the view. In response to the question about some of the methods they applied due to tutors' pressure, about 85% of them pointed at the activity methods. A small percentage of the students 8.7 and 29.1% of the teachers were of the opinion that they applied methods partly due to pressure and partly because they understood them. A majority of the students 63.1% and 59.3% suggested that they applied methods genuinely and 34.3% of the tutors supported these views; but the reliability of this information is perhaps questionable. This is particularly the case when 72.9% and 50.0% of the students and 77.9% of the primary teachers feel that when students are on teaching practice they should not be **restricted** to methods they have been taught, but be given opportunity to initiate their own methods.

A very critical aspect of the teaching practice would appear to be that of assessment. Though each college has some agreed, pattern of lesson assessment, it seems from table 76 that there are no common things that tutors look for in student lessons. From interviews held with tutors it was clear that tutors of the same college would hold a wide range of views about a good student lesson and very often views which were quite contradictory. It is clear from the table that though colleges might be emphasising pupil - centred education most tutors, 58.7%, still consider teacher based activities such as language, blackboard work and presentation as points constituting a good student lesson. A large proportion of students 62.6% and 77.9% of the primary teachers suggest that these are the points their tutors emphasised when they supervised them on teaching practice. Only 22.9% of the tutors stress pupil based activities like project work, pupil discussions and dramarization as points constituting a good student lesson; and only 18.5% of the students and 12.8% of the primary teachers indicated that tutors stressed a pupil-centred lesson; and almost the same percentage suggesting that tutors stressed a combination of teacher and pupil centred points.

The role of the colleges to inculcate the modern philosophy of pupil-centred education was contested by the tutors when 37.3% of them admitted that student classroom behaviour during the teaching practice leans more heavily to teacher domination of the class; 25.6%, however, feel that it is pupil-centred; while 21.4% thought it was a combination of pupil-centredness and teacher-domination. From the student and primary teachers' stand point only 19.2% and 15.1 respectively seemed to have considered the course practical and intended to put methods that were taught in practice; 40.0% and 50.0% felt that they did not generally find the course quite practical; though a similar percentage of students had no specific views about it. All these views hinge on the ineffectiveness of teaching practice.

A very vital point that perhaps militates against the effectiveness of teaching practice is that, tutors often have a dual role. That of supervisor and helper. It is notoriously difficult for psychological reasons to operate

simultaneously, the assessing role and the helping role, the two contradict each other. Another problem is that of ascertaining the reliability and validity of the instruments used for lesson assessment.

As has been examined, the curriculum in teacher education, teaching techniques, and teaching practice are a very critical factor in the improvement of quality in teaching. A further analysis on the possible ways of improving them will be made in next chapter.

	Factor 1	Factor 2	Factor 3
1. Lesson assessment			
a. As has been examined, the curriculum in teacher education, teaching techniques, and teaching practice are a very critical factor in the improvement of quality in teaching. A further analysis on the possible ways of improving them will be made in next chapter.			
b. Lesson assessment	72.2	71.8	70.5
c. Specific Instruction	71.4	68.8	68.5
2. Generalized teaching practice	72.8	69.6	68.8
a. Generalized teaching practice	67.7	6.2	6.7
b. Specific class	68.2	6.3	12.7
3. Ability of teaching practice			
a. Ability of teaching practice	69.1	63.1	62.7
b. Ability of teaching practice	66.8	66.4	6.8
c. Ability of teaching practice	68.4	6.7	20.1
d. Ability of teaching practice	65.7	6.4	6.8

Table 76:(a) Opinions on teaching practice and the evaluation of the pre-service education.

	Tutors	Students	Primary Teachers
1. Lessons are/were demonstrated	28.6	36.9	53.5
No demonstration lessons	70.0	60.2	46.5
2. Demonstrated lessons were successful	14.3	20.9	30.2
Demonstrated lessons were not successful	7.1	3.3	4.7
Some were successful others not	7.2	7.8	18.6
No specific information	71.4	68.0	46.5
3. Students like/liked teaching practice	72.9	85.4	82.6
Do not/did not like teaching practice	12.9	8.3	4.7
No specific views	14.2	6.3	12.7
4. While on Teaching Practice applies/applied methods taught genuinely	37.1	63.1	59.3
Applied/Apply methods due to tutor's pressure	34.3	18.9	5.8
A combination of pressure and genuineness	12.9	8.7	29.1
No specific information	15.7	6.3	5.8

Table 76:(b) Opinions on teaching practice and the evaluation of the pre-service teacher education.

	Tutors	Students	Primary Teachers
1. Students be given opportunity to initiate their own methods	72.9	50.0	77.9
Students be restricted to methods taught to them	25.7	36.9	18.6
No specific views	1.4	13.1	3.5
2. Most important points in a good student lesson (Teacher based activities)	58.7	62.6	77.9
Pup -centred activities	22.9	18.5	12.8
Combination of teacher and pupil activities	21.4	18.9	9.3
3. Students dominate class while on teaching practice	37.3	-	-
Student lessons are pupil-centred	25.6	-	-
Student lessons are pupil as well teacher dominated	21.4	-	-
No specific views	15.7	-	-
4. Course is/was practical applies/will apply method taught	-	19.2	15.1
Did not/does not find course quite practical	-	40.0	50.0

1. Proceedings of the Universities of Eastern Africa Conference 1970. C. Manone (Ed.) National Institute of Education, Makerere University, Kampala p. 17.
2. Kenya Institute of Education, Circular Letter 18/15/1/B/25, 19 May 1970.
3. K.I.E. Circular Letter 15/6/14/B/69 18 February 1970.
4. New Directions in Teacher Education, Op. cit. p.21
5. E. Stones - Towards Evaluation. School of Education University of Birmingham 1970 p.38
6. A Yates (Ed.) Current Problems of Teacher Education UNESCO Institute for Education, Hamburg 1970. p. 55
7. Proceedings of the Universities of Eastern Africa Conference op. cit. p. 17.

CHAPTER EIGHT

CONCLUSIONS AND SUGGESTIONS.

Quality of teaching

What emerges from this study is that despite seven decades of talk about the quality of teaching and all the attempts made to improve it, Kenya's primary education largely remains teacher-dominated. The teacher as the 'centre of knowledge' constitutes a greater proportion of the class activities, over 60%. In his directive behaviour the teacher emphasises activities which put premium on rote memorization, rather than helping a pupil to become part of the knowledge he acquires. The teacher asks stock questions to which he expects stock answers. Short or narrow questions requiring brief answers is a very important aspect of the teacher's class behaviour, taking 11.0% of the teaching time. Broad questions which are relatively open-ended, thought provoking requiring expressions of pupils' own opinion are shunned, generally taking 3.9% of the teachers' class activities, lest they lead all too easily to the brink of the unknown.

Mechanical drilling through lecturing or presentation of information loom strongly, 25.0% of the class activities, in the primary class today as it perhaps loomed in the classroom of the catechist teacher fifty years ago.

This factor alone makes it hard to have any place for understanding or for the cultivation of a creative and imaginative mind. It is however important to note that there is a significant proportion of teachers' activities in which ideas, behaviour feelings of individual pupils are given attention, 8.0% of class time.

Pupils' class activities hardly take more than 40.0% of the class time. Most of these activities are confined to giving stock answers to stock questions asked by the teacher, 14.2% of the class activities and working out solutions to problems and exercises from text-books or given by the teacher to which he doubtlessly knows the answers. Pupils' class activities which are perhaps the pivot of the modern educational philosophy of pupil-centred learning, pupil initiated talk are noticeably 'dead' in the teachers' classroom practice. Teachers tend to be 'afraid' of any other questions in the classroom, but those they themselves ask, for probably they are

the ones to which they know the answers best. This fact alone throws their teaching methods back into the last century. As Beeby observes, if the pupils' cannot be encouraged to ask their own awkward questions, most of the techniques of the good modern classroom become impossible.¹ This feature in the primary school classroom is hardly noticeable, taking 0.8% of the teaching time.

Creative activities which stress discovery exploration and inquiry just feature weakly, 5.7% of the teaching time. If pupils are not encouraged to discuss, draw, model, paint undertake outdoor and indoor project work, record and perform experiments, it can be hardly imagined how Kenya can fulfil its educational aims.

Examining a number of factors influencing the quality of teaching it was however, apparent that some progress has been made. Before analysing some of the factors, it is important to stress that the improvement of quality in teaching should remain the objective of the education authorities, if education has to reflect the principles on which the Kenya society is built. As already discussed in

chapter one, the objectives of education in Kenya have been set forth in numerous statements ranging from the Ominde Report (1964), the Ndegwa Report (1971) and the Bessey curriculum Report (1972). Broadly conceived, the objectives include self-realization, human relationships, economic efficiency and civic responsibility. In detail, the objectives have included physical health, mental and emotional health, communication, a quantitative understanding, social relationships, understanding the social environment moral and spiritual values, understanding the physical world, critical thinking and aesthetic and creative development.

A type of teaching based on these aims must recognize as its major educational objective the guidance of children towards 'becoming effective in the process through which they seek to understand the social and physical environment of the human condition and wherein they relate themselves to the human enterprise.'

The country aspires to remain democratic hence the teaching must obtain its basic direction from

a philosophy which asserts that 'democracy is a good way of life for man because in it is the quest by the individual for self-value and social value is encouraged and sustained.' Teaching should provide early opportunities wherein the child starts this quest. It is essential that the people of a democracy conceive the role of education as one in which the individual is encouraged, guided and sustained as he seeks to understand and relate to the human conditions of his age. Inevitably, the critical level of decision and action is found to be in the primary school system and in the individual classroom. The aims of education might not be accomplished or will not be functional unless and until they are translated into specific learning experiences and behaviour characteristics.

The New Primary Approach and the quality of teaching

From this study it is apparent that the extent to which the NPA introduced 'principles and methods of progressive education in which the child is an active and equal partner in his own learning' is quite doubtful. The NPA teachers

revealed a strong tendency towards directive behaviour as much as the non-NPA, though the former were slightly better. They reflected a tendency to ask many narrow questions, though the course has had some influence on their approach to asking broad questions. A remarkable aspect is that it has reduced the amount of lecturing and slightly increased their approach to accepting pupils' individuality. On pupil class activities it has hardly had an impact on activities which would constitute good teaching like pupil initiated talk and more involving class activities. It is however reckoned that it has influenced teachers who attended the course through in-service to reflect traces of teacher initiated talk and broadened their approach to more involving non-verbal pupil activities. Though as an independent factor NPA might not have had much impact on the quality of teaching, it was seen through cross-tabulation that it combined with teachers' academic and professional level to have a marked influence on the teachers' progressive approach in their class activities. Its impact was also

reflected in teachers' activities in the lower classes where for sometime it was confined during its introduction.

At any rate the effects of NPA on pupil and teacher class activities are quite scattered and are not consistent with the earlier assertions that it represented the practices of modern education. Possibly it was a factor in the quality of teaching when the programme was actively into operation, but it appears that its significance today is not as great as often suggested. To a considerable extent one would interpret its popularity and the 'high sounding impressions' as having been derived from the fact that it introduced English as a medium of instruction from class one, a thing that was quite revolutionary indeed. But today with the teaching of English beginning in class one, its popularity has been on the decline, despite a lot of talk about it. English teaching cannot in itself be regarded as being an index of good teaching; and it is important that the continued association of English and NPA should not lead to exaggeration of the probable effects of its improvement of the quality of teaching.

This points to one of the factors that has limited the influence of the NPA on the quality of teaching. As outlined in chapter three the introduction of the programme lacked clear and straight forward objectives. Initially terming it the English Medium, attempts were made to have it reflect a revolutionary approach to teaching in the primary school - teaching through activity. Later efforts were made to term it NPA. These efforts to tinker with the name without changing its objectives, which were centred on the instruction of English hardly convinced primary teachers about the role of NPA. They continue to see the method basically as a teaching of English and nor do they perceive that the activities associated with teaching of English are generally geared to a total revolution in methodology. What is remarkable is that teachers see NPA in relation to the philosophy of a pupil - centred education. But their classroom practice does not seem to support the philosophy they hold. This is largely because of the problems of the introduction of NPA.

As already outlined there are a number of problems possibly countervailing the effectiveness of NPA. Most crucial is perhaps that of availability of good teaching facilities and as already discussed in chapter three, it led to the curtailment in the expansion of the programme. As will be examined shortly this problem is exaggerated and in any case reflects the misplaced objectives of the NPA at the time of its introduction. The most crucial problem to be reckoned with in the improvement of quality is the examination factor to which attention will be turned later.

Since the training of teachers in activity methods is conceived as one of the ways of improving quality of education in the primary schools, efforts should be made to reorganize the NPA programme. First and foremost the methods should not be described as 'New Primary Approach' for the name is somewhat confusing and connotes a new methodology, when actually there is nothing new in the activity methods. Philosophers and psychologists have talked about them though in different parts of the world.

The methods should be simply called 'activity methods' and should be taught to all students during their pre-service courses and should be made aware that the methods are applicable to all the classes of the primary school.

For teachers already in the service, regular in-service courses could be organised to familiarize them further with methods; as it has already been pointed out they are less liable to suffer from the dualism between theory and practice.

The pre-service and the in-service teachers should be made conscious to the fact that activity methods are not founded on the supply of sophisticated teaching apparatus.

The Certificate of Primary Education Examination and the quality of teaching.

The study has revealed that the C.P.E. examination is a very critical constraint to the quality of teaching in the primary schools. It was seen in chapters four and five that there are reflections of pupil-centred lessons in the lower classes of the primary school and decline quite sharply in the upper classes.

In class one for instance teacher class activities take 57% of the teaching time and rise to 71.0% of the teaching time in class seven, narrow questions take 9.2% of the class activities in class one but rise to 10.2% in class seven; broad questions seem to correlate with the pupils' intellectual development but tend to decline in class seven; lecturing or presenting information takes 18.6% of the teaching time in class one but rises sharply to 32.3% in class seven; accepting pupils' individuality declines with the classes being higher in class one. Pupils' talk response is noticeably dead in the two classes, but pupils' more involving non-verbal activities take 11.7% of the teaching time and sharply decline to 1.2% in class seven. The cross-tabulation of means too revealed that lower and upper class effect was a much more powerful influence than any other independent variable. That the examination tends to dictate teacher pupil class activities was revealed by the opinions expressed on NPA by tutors, teachers and students and by the simple test administered to one of the class seven pupils.

Teaching in the upper classes, especially in class seven consists of skimming through the syllabus by very elaborate lectures followed by drilling pupils more often than not using the most popular book the 'C.P.E. 1973, Pupils' Companion in all the subjects - The Complete C.P.E. Guide Book.' The examination factor alone seems to make nonsense of the modern activity methods.

The introduction of a multiple approach to C.P.E. has had far reaching effects on the quality instructions in the upper classes of the primary school. At the time of its inauguration, it was felt that the total number of C.P.E. candidates made the assessment of written or essay work prohibitive consequently there is no occasion to write anything long hand in the examination beyond ones' name. This has introduced the unfortunate impact in which pupils are not systematically prepared for the paper through conscientious work other than drilling and guessing; and has even introduced an element of luck in the examination, there have been cases when mediocre pupils have been

known to perform well on the paper while very bright pupils who work systematically through the paper fail to score high grades. The examination generally does not test subject ability; so in thousands of schools, whose reputation is based on the number of pupils that qualify for government secondary schools, teachers feel themselves forced to pay scant attention to the structural skills of the subjects. A good number of teachers are not by any means complacent about their role as cramming advisors for this critical examination, but their disenchantment with this approach to teaching in the light of the current emphasis on teaching through discovery conflicts with their knowledge that the reputation of the school and the staff is almost entirely derived from success in C.P.E. Sometimes the intensity for secondary school preparation is so acute that methods of teaching conceived for as necessary for success pervade teaching as far as class 4.

King observes in his paper "Primary Schools in Kenya",² (Discussion Paper, Institute for Development Studies, University of Nairobi)

that the style of the C.P.E. examination has to a great extent switched the interest of teachers away from whatever books of the syllabus that require pupils to have a pupil-based approach to teaching, towards those that provide practice in multiple choice answers. Books prescribed in the syllabus however good they may be for other purposes are of little direct value in coaching pupils for success in C.P.E. Many teachers therefore go outside the official syllabus to find books that would directly aid them in preparing for secondary school selection. What have become the standard texts in upper classes are the Indian published books, one of which has been quoted above. Selection pressures have proportionately given them great popularity above books prescribed in the syllabus for one thing, they are absolutely up to date in that there is a new edition each year and each fresh edition contains as an appendix to all the previous years C.P.E. questions with answers, but more crucially gives the teacher and the pupils a large number of question types raised by the C.P.E. If any

new type of question is introduced in the C.P.E., say in 1972, that particular item will be discussed and analysed and reproduced in a variety of multiple choice contexts for the candidate preparing for C.P.E. in 1973.

As a matter of expediency therefore primary teachers are forced to adopt methods of teaching they are convinced are 'unpopular'. This is apparently a problem with most of the developing countries, for the All India Council³ observes that the effect of examinations on teaching is apparent where major decisions are based primarily on examination performance of students. An Indian teacher is under great pressure from students, parents and even educational administrators to prepare the student for the type of the official achievement examination to be given. Though the examination factor is a world-wide problem there is an urgent need for education authorities to look into it with a view of improving the quality of teaching. First a separate research should be undertaken to gauge the force of the examination in influencing a teacher's class

activity in relation to other factors. Recommendations of such a study would effectively direct the trend of future innovations in the approach to teaching through activity. An immediate step towards reducing the examination control of class activities should be that instead of having the examination set largely by the subject specialists of the Inspectorate of the Ministry of Education there could be a small educational testing unit possibly attached to the Ministry and yet as much decentralized as possible (possibly having centres at provincial level). Such a body would work closely with the Inspectorate and explore the chances of having the examination test achievement and have it reflect a pupils' knowledge of self acquired ideas based on his own immediate environment. The Unit would also look into the possibilities of pupils' continuous assessment contributing to their selection for secondary school.

Teachers' sex differences and the quality of teaching.

From the analysis of teacher and pupil class activities it was clear that women teachers

are a very important element in improving the quality of teaching. It was revealed that their class activities take 58.0% of the teaching time, while those of their men counterparts rise to 67.0%. There is less lecturing in their activities than the men teachers and they do recognize pupils' individuality much more than the men teachers. On pupils' activities, they reflect a stronger tendency to engage pupils in more involving non-verbal activities. A cross-tabulation with other independent variables reinforced the superiority of women teachers. As a general improvement of quality there is a need to increase the proportion of women teachers particularly for the lower classes of the primary school.

Teachers' academic and professional level and the quality of teaching.

The study supports the assumed criterion for determining the quality of teaching; teachers' academic and professional level. It was seen that teachers' approach to broad questioning tends to decline with the teachers' academic and professional level; P1 teachers

spent 6.0% of the teaching time on this aspect of teaching while the P4 teachers spent only 1.3% of the teaching time. P1 teachers further reflect a stronger tendency to allow more pupil-initiated discussion. Their educational background gives them confidence to ask more latitude questions and expect latitude answers, and it enables them to allow pupils to temper with classroom procedure. It is important that plans are underway to eliminate the lowest grades of teachers. Further attempts should also be made to upgrade the large proportion of P3 and P4 teachers, but this should not be only through external examinations for as already discussed, preparation for examination robs a majority of the teachers the time for preparation of their class work. Promotions should largely be centred on professional achievements through short in-service courses in teacher colleges. Here teachers can undertake further professional and academic studies which would be succeeded with an internal examination.

Teaching materials and the problem of quality in teaching.

In the questionnaire it was apparent that

primary teachers, students and tutors see the inadequacy in the supply of teaching material as a major factor against the use of activity methods. The point that is perhaps ignored in looking at the unavailability of materials is that whatever the wealth or poverty of a school and whatever the abundance or privation of experience the children bring to it, the quality of learning in any classroom depends to a large extent on the initiative of the teacher. Of course a good teacher can do a better job if he has appropriate materials and equipment. But a good teacher in a deprived situation can with a creative spirit and warm personality, ameliorate some of the effects of deprivation.

By lack of equipments, many primary teachers tend to envisage a situation in which they are provided with fairly 'sophisticated' teaching apparatus as was the case with the introduction of the New Primary Approach; tape recorders, radios teach master cards, paints and plastic material for modelling. Many teachers see such equipments as a necessary prerequisite for activity teaching. In this respect very little

is done to exploit the surrounding and make some local teaching apparatus from the materials available, a thing that appears quite alive during the teaching practice. More often than not very little is done even to use the equipment available. Maps are 'gaily' hung in the staff rooms or headmasters offices rarely appearing in the classrooms as if their purpose is to decorate the walls on which they are hung. In very few cases are the teach master cards used, or sketch maps drawn.

Not many sophisticated apparatus are required to teach practical lessons in primary schools. In the teaching of science for instance, what is clear is that children are avid explorers of their environment, ceaseless collectors, eager questioners of why and how things happen. Observing, guessing, testing, discovering, thinking about what happened are fundamental activities of the scientific methods. Teaching science should involve helping children to learn to make useful observations of details and describe their observations carefully.

Why can't the child see for himself the effects of overcropping, see the major parts of the flower instead of telling him in a tight classroom atmosphere which might take him to sleep? A child can learn much by watching safari ants carrying their loads, the effect of sunlight on plant growth and the segments of an insect. The teacher in directing children attention to such things, he would be careful not to take away the thrill of discovery by telling them what they expect. They too can utilise situations that may arise in the classroom, such incidents as carrying a load that is too big, about the nature of various materials, which may break, bend, dent, scar, shatter or bounce to explain certain scientific laws. Children can be explained things within their experience with little effort. Things like seed dispersal animal foods are within the experience of many children in the rural schools. They have much experience with matter in solid, liquid and gaseous forms and experiences with heat, sound and light, the impact of moving objects and the presence of flowing water and force of gravity.

Simple experiments could be arranged to lead them to discoveries that are simple but scientifically accurate.

In the teaching of languages one of the basic points the teacher has to note is that children are such good imitators of speech and sounds and language patterns that the influence of their teacher can be great. Even a child who comes to school with speech and language habits well developed for his age could easily acquire a speech defect or bad grammar from a teacher who has faulty speech or poor language habits or from a teacher who is careless in the way he speaks. Classroom procedure could include ample opportunity for children to speak freely among themselves and with the teacher to share ideas and exchange information. This as seen in chapter five is an aspect to which scant or no attention is given in the primary teaching. Pupils have to sit still, and be quiet. Talking is against the rules except by virtue of raising ones hand to answer a question from the teacher.

This practice fails to recognize the bare truth that children need to develop through oral communication. Casual face to face conversations among pupils, group conversations, telling ones experiences on the way to school or from school or about home, story telling are things that could be encouraged. Children have abundance experiences in story-telling, and riddles from grandma or aunts, these could be exploited in the teaching situation. The teaching of foreign languages in particular, pupils cannot learn things in abstract. The teacher could point and let pupils touch objects, the use of teach master cards action songs and simple games. In written work attempts could be made to have children write original experiences, apart from text-book material.

Many children enter school with considerable mathematical experience. They have counted a number of domestic objects like sheep or cattle, bought a kilogram of sugar and possibly a litre of milk. These things have made them conscious of number, quantity, time, space; and when a teacher plans for the lower classes he by no means

starts with a blank slate. Classroom objects could form an initial aspect of counting before bottle-tops or sticks are used. In advanced classes too children need abundant opportunities to handle fractional pieces with full awareness of the whole which they are part; they could be helped to acquire a memory of a unit be it a centimeter or a meter. They can best understand linear measurements by letting them measure actual distances between places that are familiar to them. This would equally apply to area, measurements of capacity, weight, through shopping activities and learning about the concept of money.

In subjects like geography, history and religious knowledge, an activity approach should also be stressed. In these subjects too pupils have a practical experience. The type of plants or crops grown in the village or the type of activities in which the people engage. Legends about some famous heroes of the clan or tribe, the concept of day and night, rain and draught, temperature and the concept of the supreme being who controls all the earthly activities.

These could be utilised by the teacher and thereby helping him not to push geographic, historic and religious content on a verbal basis. The use of picture maps, discussions, recording, dramatization and any means that will extend childrens' geographical, historic and religious concepts from their direct experiences. Children will learn best about the saving Power of God, life of an early man through dramatization and pictures; from maps and pictures they will learn about regional variations in products, in flora and fauna due to differences in climate, and variations in styles of life where climate and land forms differs. Field trips is an added resource to classroom knowledge. For primary children these would be kept simple in content and short in time and distance. Excitement fatigue and confusion of too many things to see could take a toll of young childrens' learning. A visit to a small local peasant farm, or coffee processing plant may be more useful than a large and more distant coffee plant which though is more spectacular is too complex for children to follow the sequence of operation. Someone

reporting on an incident or aspect of forming could be utilised. Through art and craft subjects, the cave home of an early man and familiar shopping centres could be modelled.

None of things discussed above is probably new. Many primary teachers have probably heard about them during their pre-service or in-service courses but the point they serve is that practical child-centred teaching can be carried out in an ordinary primary school classroom.

At any rate general improvements should be made to raise the educational standards of primary education. Everything possible could be made to encourage parents to raise building funds through harambee and the faculty of Architecture of the University of Nairobi could work out a cheap building design as has been the case the primary schools of Ghana³ in order to offset the possibilities of sinking heavy funds in very uneconomic traditional buildings. The Ministry of Works would also prepare simple designs for local fundis to make furniture for the classrooms. It is unfortunate that a revolution made in furniture setting with the coming of NPA is dying and there is a tendency to gravitate back to the

traditional desks. The 'Kenya Equipment Scheme' could improve its supply of teaching materials or otherwise have it decentralized to provincial levels.

It might also be desirable to improve the supervision level. The assistant education officers should take a little more of the role of helping teachers in their class activities instead of laying emphasis on the administrative role which apparently is strongly resented by teachers. Apart from the supervision and help given by the recently instituted Teachers Advisory Centres, the colleges should also assume the role of supervision for primary schools within their proximity. Such a partnership between the colleges and primary schools would help in enhancing the success of modern teaching methods.

There are now positive signs that teachers' apathy in their profession would be eliminated with the implementation of the Ndegwa Commission recommendations on primary teachers' terms of service. This might help in solving the

problem of teachers seeing themselves as being refugees in their own profession.

Teacher education and the quality of teaching.

It has earlier been pointed out that the majority of the students interviewed feel that the course is too crowded and there is a need for specialisation to improve the quality of the teacher produced. They also felt that emphasis should be placed on professional work and not academic studies. For their personal satisfaction, it is reasonable to make provision for some further study of subjects. The academic course provided, however, should be related to the subject matter that they will subsequently be called upon to teach. As regards specialisation in the academic subjects, what needs to be done is to study and research into the extent to which it is necessary and desirable to have some degree of specialization in the academic courses provided for intending primary teachers. The Kenya Institute of Education, in consultation with the colleges and primary schools, should identify various groups of

academic subjects in number and composition that might satisfy both the needs of the students and those of the schools. The courses so devised should be regarded as experimental in character and their outcome examined with regard to their immediate effects in the progress and morale of the students involved and also in the long term to their effects on life and work of the primary schools to which these students eventually proceed.

With the running #down of the P3 courses there is an urgent need to reduce the time spent on academic study, and a comprehensive review be undertaken on the contribution that each of the professional disciplines; child study, school organization and management and general methods can be expected to make to the preparation of teachers and on the basis of such review an attempt be made to establish priorities. There is a need to introduce some elementary course in educational philosophy with special emphasis on the development of teaching methods (a study of Plato, Comenius, Pestalozzi, Montessori, Rousseau,

Dewey and others and their emphasis on pupil - centred education) to dispel such ridiculous phrases like the 'New Primary Approach'. To design priorities is no suggestion that all other disciplines of education are irrelevant to the preparation of a primary teacher. The point to be stressed here is that intending teachers cannot be expected to make a complete study of education during their pre-service courses. In both depth and breadth of such a study it should be conceived as an extended process involving in-service courses. The study of psychology, methodology and philosophy are relevant to the immediate needs of a young teacher and could be given priority than perhaps the emphasis on school management and organization. Even within the priorities, micro-fields must be discerned.

The practical aspect of the college curriculum should be stressed if it is going to redirect the traditional authoritarian educational practice. It should be realistic in what it sets out to achieve. The core of its practical nature should be based on guided observation

of individual children and of small groups of children and what philosophers and psychologists say about these children. The study of methodology should include the execution of activity methods, the preparation of visual aids, practical methods of testing and evaluation and all related aspects.

An examination should be centred on the techniques of teaching in schools of education. The effectiveness and influence of all the methods should be determined through some critical analysis. Colleges are obviously the starting place for a new approach to education. Students must be given experience to explore through trial and error and consolidate their future methods of teaching. Students cannot effectively break loose from the old bookish, rote methods until they have themselves shared the exhilaration of autonomous learning. They have a strong recollection of their own school days; and they are inclined consciously or otherwise to model their behaviour on one or more of their teachers. It should not, however,

be surprising that it is that way; when they commit themselves to the teaching profession, they may perhaps do so through the influence of some of their great teachers. It is therefore inevitable that they should observe or try to remember the ways in which their own teachers behaved in the classroom.

Steps should be taken by the Ministry of Education and the Institute of Education to enable colleges to have a direct control over the demonstration schools to make it possible for them to carry out model lessons. An approach to demonstration lessons could be through tutor demonstrated lessons which are accompanied with a detailed questionnaire on what aspects of class-teaching should be observed. These could be followed with discussion lessons. Such demonstration lessons could be succeeded with students teaching of small groups of pupils and micro-teaching before they deal with the whole class. This means that students should familiarise themselves with and develop confidence in whatever methods are desirable in situations that are less demanding than those they will encounter in their work at practice schools.

Most important could be ascertain reliability and validity of the instruments used for lesson assessment. An instrument similar to that used in this study based on the Flanders Interaction Analysis Categories could be designed for lesson assessment. Once students understand what is looked for in their lessons it would be possible for them to use it by themselves. Since the objectivity of such an instrument can be easily established, students will, to a great extent, not question the assessment of their lessons by the tutors and will have some clear understanding of lesson evaluation. Such an instrument will also help students to know what proportion their activities and those of the pupils are reflected in their lessons. This could be a major step towards the improvement of quality in teaching.

APPENDIX ITHE EDUCATION SYSTEM AND TEACHER EDUCATIONThe Education system 1938 - 1949

18 LITERARY EDUCATION	TEACHER EDUCATION	
17		
16		
15 MAKERERE COLLEGE	MAKERERE TEACHER TRAINING	IV
14		
13		
12		
11 SENIOR SECONDARY	PRIMARY AND LOWER	III
	PRIMARY TEACHER TRAINING.	II
10 JUNIOR SECONDARY		FORM I
9		
8 GOVERNMENT AND	ELEMENTARY	VI
7 MISSIONARY PRIMARY	TEACHER EDUCATION	V
6 SCHOOLS.		IV
5 ELEMENTARY SCHOOLS		III
4 ASSISTED AND		II
3 UNASSISTED.		I
2		SUB.ELB
1		SUB.ELA

Source: Department of Education - Annual Report 1938.

The Education system and teacher

Education 1950.

HIGHER EDUCATION AND PROFESSIONAL
TRAINING OVERSEAS.

MAKERERE T. TRAINING

HIGHER EDUCATION AND
PROFESSIONAL TRAINING

KTI T.T.C.

SENIOR SECONDARY SCHOOL

FORMS 5 AND 6

DEPT. TRAINING SCHOOLS

T2 T.T.C.

SENIOR SECONDARY SCHOOL

FORMS 3 - 4

T3 T.T.C.

TRADE & AGRI.SCHOOLS

JUNIOR SECONDARY

SCHOOLS FORMS 1 AND 2

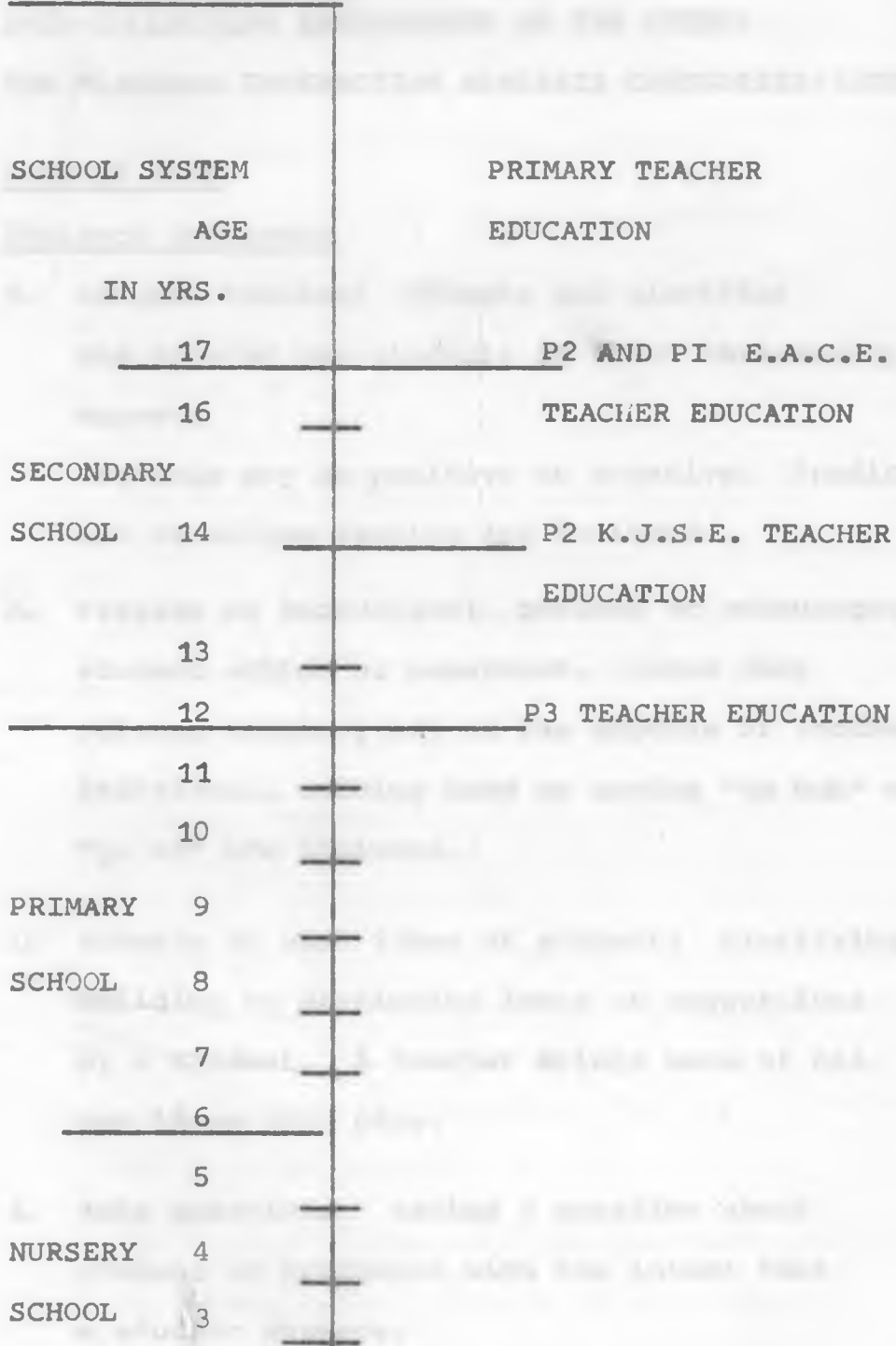
T4 T.T.C.

PRIMARY SCHOOLS

STD. I TO IV

NOTE: After the Beecher Report Junior Secondary school officially became the minimum entry for T4 teachers.
Source: Dept. of Education. Annual Report 1950.

THE SCHOOL SYSTEM AND PRIMARY TEACHER EDUCATION
AFTER INDEPENDENCE.



A P P E N D I X I I

DATA COLLECTING INSTRUMENTS OF THE STUDY:

THE FLANDERS INTERACTION ANALYSIS CATEGORIES: (SUMMARY)

TEACHER TALKIndirect influence

1. Accepts feeling: accepts and clarifies the tone of the students in a non threatening manner.
Feelings may be positive or negative. Predicting and recalling feeling are included.
2. Praises or encourages; praises or encourages student action or behaviour. Jokes that release tension, not at the expense of another individual, nodding head or saying "uh huh" or "go on" are included.
3. Accepts or uses ideas of student: clarifying, building or developing ideas or suggestions by a student. A teacher brings more of his own ideas into play.
4. Asks questions: asking a question about content or procedure with the intent that a student answers.

Direct Influence.

Lecture: giving facts or opinions about content or procedure, expressing his own idea, asking rhetorical questions.

6. Gives directions: directions commands or orders with which a student is expected to comply.
7. Criticizes or justifies authority: Statements intended to change student behaviour from non-acceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing, extreme self reference.

STUDENT TALK.

8. Student talk-response: Talk by students in response to teacher. Teacher initiates the contact or solicits student statement.
9. Student talk-initiation: Talk by students, which they initiate.
10. Silence or confusion: pauses short periods of silence, and periods of confusion in, which communication cannot be understood by the observer.

LESSON OBSERVATION INSTRUMENT.

TEACHERS' CLASS ACTIVITIES.

1. Asking narrow questions and giving directions:
This category includes short form questions requiring a brief answer like 6 divided by 3.
2. Asking broad questions:
Questions which are relatively open-ended; thought provoking requiring expressions of opinion like "why do you think Nairobi is the capital of Kenya?". Such questions may be asking pupils' opinion regarding content or procedure.
3. Lecturing or presenting information:
In this category fall situations when the teacher gives information, facts opinions or ideas to children. This may be for a brief time or extended time, making self-justifications and criticising an authority.
4. Accepting ideas, behaviour, feeling and helping individual pupils.

This embraces all teachers' activities which accept a pupil as an individual. Clarifying building or developing ideas suggested by a pupil for instance when a pupil makes a suggestion the teacher may paraphrase it, restate it more simply or summarise what is said. He may say "well that is an interesting point of view; "I see what you mean, Good".

Accepting or recognising pupils' emotional state fear, anger, anxiety, happiness and pleasure. Encouraging positive emotions and discouraging negative emotions. Helping an individual pupil with the aim of enabling him understand a point.

5. Teachers' non-verbal class activities:
Writing on blackboard, demonstrating an experiment or way a process has to be done, marking pupils' work and going round to see what pupils are doing.

III PUPILS' CLASS ACTIVITIES.

6. Pupils' talk response:

In this category fall teacher initiated contact or solicited pupils' statements, when a pupil answers a question asked by the teacher when he responds verbally to a direction given by the teacher.

Anything that the pupil says that is clearly in response to initiation by the teacher.

7. Pupil initiated talk:

Pupil raising hand to make a statement or to ask a question when he has not been prompted to do so by the teacher. Comments which ask for information about procedure or opinions. Any conversation which one pupil initiates with another expressing their own ideas; like in group discussion. The pupils have the freedom to develop opinions or express their own ideas.

8. Simple non-verbal pupil activities:

This includes instances when the pupils are contemplating or thinking out a solution to a problem, working out exercises from a textbook given by the teacher and silent reading.

9. More involving pupil non-verbal activities:

In this category fall periods of silence when pupils are drawing, modelling, painting project work both outdoor and indoor, recording and performing experiments, watching demonstrations by the teacher.

10. Confusion, irrelevant behaviour, giving and taking commands:

Includes all occasions when more than one person is talking and neither person can be understood (excepting unison responses) or when the noise level of the class is so high that no person speaking can be understood. Giving commands and taking them. Confused behaviour or a command or direction, irrelevant comments that have no relation to the purpose of the classroom and non functional periods of silence when teacher answers to a knock on the door.

SHEET FOR CODING TALLIES DURING LESSON
OBSERVATION

	CATEGORY NUMBER	TALLIES	TOTAL TALLIES	PERCE- NTAGE
TEACHERS' CLASS ACTIVITIES	1			
	2			
	3			
	4			
	5			
PUPILS' CLASS ACTIVITIES	6			
	7			
	8			
	9			
CONFUSION	10	TOTAL		100%

THE SCOTTS' COEFFICIENT OF RELIABILITY

Lesson	Observer	Agreement	Expected Agreement	Scott's Coefficient	Reliability
1	A	10	10	0.0	0.00
2	A	15	10	0.5	0.50
3	A	20	10	1.0	1.00
4	A	25	10	1.5	1.50
5	A	30	10	2.0	2.00
6	A	35	10	2.5	2.50
7	A	40	10	3.0	3.00
8	A	45	10	3.5	3.50
9	A	50	10	4.0	4.00
10	A	55	10	4.5	4.50
11	A	60	10	5.0	5.00
12	A	65	10	5.5	5.50
13	A	70	10	6.0	6.00
14	A	75	10	6.5	6.50
15	A	80	10	7.0	7.00
16	A	85	10	7.5	7.50
17	A	90	10	8.0	8.00
18	A	95	10	8.5	8.50
19	A	100	10	9.0	9.00
20	A	100	10	9.0	9.00

$$II = \frac{Po - Pe}{1 - Pe}$$

II = The amount that two observers exceed chance of agreement divided by the amount perfect agreement exceeds chance.

Po = The Proportion of agreement

Pe = The agreement expected by chance which is the proportion of tallies in each category and summing the overall categories.

The first six lessons with my assistant, the Scott's coefficient varied from 0.40 - 0.65; the next half a dozen it varied from 0.73 - 0.89. Training continued till it was constantly above 0.85. On Seventeenth lesson our observation was as follows:

$$II = \frac{100 - 10}{100 - 10} = \frac{90}{90} = 1.00$$

CATE- GORIES	OBS.A	OBS.B	%A	%B	%DIFF.	(AV.%) ²
1	59	51	14.1	13.9	0.3	1.94
2	34	24	8.1	6.5	1.6	0.53
3	160	151	41.0	38.0	3.2	15.62
4	9	12	2.1	3.2	1.2	0.07
5	25	25	5.9	6.8	0.9	0.41
6	97	76	23.1	20.7	2.4	4.31
7	4	3	0.9	0.8	0.1	0.01
8	22	19	5.4	5.1	0.2	0.14
9	4	3	0.9	0.8	0.1	0.01
10	7	3	1.8	0.8	1.0	0.02
TOTALS	421	367	100.0	100.0	11.0	23.06

$$\text{II} = \frac{(100-11) - 23.1}{100 - 23.1} = \frac{65.9}{76.9} = .856$$

I INTERVIEW WITH PRIMARY TEACHERS.

COURSE:

1. Where and when did you take your teachers' course?

2. What are the subjects you learnt while at
College? _____

3. Would you think these subjects were too
many, too few or just enough?

From your experience in the field would
you suggest any changes that could be made
in the subjects?

4. New Primary Approach is an aspect of the
primary college curriculum. Did you attend
any NPA course while at college or in the
field? _____

What in your view are the most important
points about NPA? _____

II From your practical experience what could you say are the advantages and disadvantages of NPA? _____

II PRACTICE TEACHING

5. While being prepared for Practice teaching did your tutors occasionally demonstrate lessons? _____

What can you say about the lessons they demonstrated? _____

6. When students are at college they often have mixed feelings about Teaching practice, some like and others not, What were your personal feelings about it? _____

What led you to have such feelings? _____

7. When on Teaching Practice what most important points were considered in a good lesson? _____

8. In your opinion what do you regard the most important points in a good lesson and why? _____

9. While on Teaching Practice would you generally say you applied methods of teaching taught to you at college because you understood and liked them or you applied them because of tutors' pressure?

Which methods for instance did you not like or understand but you applied them because of tutors' pressure? _____

Have you changed these methods in the light of your field experience?

10. Would you say while on Teaching practice students should be restricted to the methods taught to them or ar occasionally they would be allowed to initiate their own methods? _____

Why do you say so? _____

III TEACHING IN THE FIELD.

11. In your daily teaching, do you ever imitate your former tutor? _____

Which methods do you imitate?

12. When you completed your teachers' course, what problems did you experience in introducing some of the methods you learnt while at college? _____

13. From your experience in the field what do you notice in classroom teaching that you think your course did not adequately prepare you for?

14. Have you attended any in-service courses?

What would you generally say about them?

IV MISCELLANEOUS.

15. Are you preparing for any external examination or do you have business to which you have to attend?

For which examination are you preparing or which business do you attend to?

16. Age _____

17. Professional qualifications. _____

18. Did you willingly enter the teaching profession or did you do so because of lack of a better alternative?

19. How is this subject taught at the college level? (Please describe the main concepts, points of view, etc.)

Is this subject in this college as a separate subject or is it taught as part of other subjects? _____

20. In your opinion, is it the best way of teaching this subject? (Please give your reasons.) _____

INTERVIEW WITH PRIMARY COLLEGE TUTORS.

I CURRICULUM

1. I would like to start off by asking for your opinion about the subjects taught in the college. Would you say they are too many, too few or just about the right number? _____

What changes would you perhaps recommend to improve the college Curriculum?

- _____
- _____
- _____
2. NPA is now an aspect of the Primary College Curriculum. What in your view are the most important points of NPA? _____

Is it taught in this college as a separate subject or it is taught as part of every subject? _____

In your opinion is it the best way of teaching NPA or would you rather see it taught differently? _____

What are your personal views about NPA?

What have you noticed to be students' general attitudes towards NPA?

II TECHNIQUES OF TEACHING.

3. What would you say about the time you allocate to methods or professional study and academic study in your teaching; is it balanced or which area is given more time? _____

What do you think should be given more time, and why should it be so? _____

- _____
- _____
4. In teaching our students in the college, what methods should we perhaps best use? Lecture, tutorial methods, Activity methods or any other? _____
- _____
- _____

5. Have you ever observed a student or students try to imitate your ways of teaching? _____
- _____
- _____

What would be the possible reasons for his or their doing so? _____

III TEACHING PRACTICE.

6. Has the college got a demonstration school?
- _____

Do you find it valuable to demonstrate lessons before students begin their teaching practice? _____

What are your experiences about these demonstrated lessons? _____

7. Students often have mixed feelings about their teaching Practice, some like it and others do not like it, what would you generally say to be your students' reactions towards teaching practice?
- _____
- _____
- _____

8. What most important points do you personally consider in a good student lesson?
- _____
- _____
- _____

9. Considering your special subject, would you say students genuinely apply the methods you teach them or they do so because of tutors' pressure? _____
- _____
- _____

What are your opinions about allowing students to initiate their own methods? _____

-
-
10. From your observation of the teaching practice, what would you say generally is students' classroom behaviour, does it lean to teacher- domination of class or pupil - centred lessons or any other?
-

IV GENERAL

11. Does the college have any system of contact with its former students? _____
-

In case you have met some of your old students what do they generally say about the training they received in relation to their class teaching? _____

12. Age _____
13. Professional qualifications _____
-
14. Teaching experience: Primary _____
 Teachers' College _____
 Secondary School _____
-

QUESTIONNAIRE FOR PRIMARY COLLEGE STUDENTS.

The purpose of this questionnaire is to enable you to make a personal evaluation of the teaching course you are undertaking; and there is no right or wrong answer to any of the questions below; nor is there a need to try and please anyone with the replies you make.

I CURRICULUM.

1. What subjects do you learn in college?

2. Do you think these subjects are too many, too few or just right number? _____

What changes would you like to see made in the college curriculum? _____

3. New Primary Approach is an aspect of the primary College curriculum, have you done any study of this subject? _____

What in your view are the most important points about NPA? _____

In your opinion what are the advantages and disadvantages of NPA? _____

II TEACHING TECHNIQUES AT COLLEGE.

4. What would you say about the time allocated to methods and academic study, is it balanced or which one is given more time? _____

And why do you think it should be so? _____

5. What methods of teaching would you prefer your tutors to use in teaching you, lecture, tutorial methods, activity methods or any other? _____

Why do you prefer the method you have selected? _____

6. While on your teaching practice do you ever imitate your tutors' ways of teaching you? _____

What are the possible reasons for your doing so? _____

III TEACHING PRACTICE.

7. While being prepared for Teaching Practice do your tutors occasionally demonstrate lessons? _____

What can you say about these lessons? _____

8. Students' attitudes about Teaching Practice are mixed, some like it and others not, What are your personal feelings about it? _____

What led you to have such feelings?

9. What do your tutors consider to be the most important points of a good lesson?

And what do you personally consider to be the most important points in a good lesson, and why?

10. While on your teaching practice would you generally say you apply most of the methods of teaching taught to you because you understand and like them or you apply them due to tutors' pressure?

11. Would say while on teaching practice students should be restricted to using

methods taught to them or should occasionally be allowed to initiate their own methods?

Why do you say so?

12. What general criticisms and suggestions would you like to make about the teaching course you are receiving?

IV GENERAL.

13. Age _____
14. Course of study _____
15. Did you willingly enter the teaching profession or you did so because you lacked a better and immediate alternative?

APPENDIX III

DATA OF LESSON OBSERVATION

KEY TO OBSERVED DATA.

Independent Variables**I Teachers' Grade**

- | | | |
|---|---|-------------|
| 1 | = | P1 Teachers |
| 2 | = | P2 Teachers |
| 3 | = | P3 Teachers |
| 4 | = | P4 Teachers |

II New Primary Approach course (NPA).

- | | | |
|---|---|--|
| 1 | = | NPA Trained Teachers |
| 2 | = | NPA through an in-service course. |
| 3 | = | Neither trained nor attended an NPA course through in-service. |

III Class teacher was observed teaching.

- | | | |
|---|---|-----------------|
| 1 | = | standard One |
| 2 | = | standard Two |
| 3 | = | standard Three |
| 4 | = | standard Four |
| 5 | = | standard Five |
| 6 | = | standard Six |
| 7 | = | standard Seven. |

IV Preparing for one of the external examinations
C.P.E., K.J.C.E., E.A.C.E., H.S.C.,
London G.C.E. ordinary and Advanced.

- 1 = Preparing for an External
Examination.
- 2 = Not preparing for any of
the external examination.

V Age of the teacher

- 1 = 21 - 30 years of age
- 2 = 31 - 40 years of age
- 3 = 41 - 50 years of age
- 4 = 51 - 60 years of age
- 5 = 61 - 70 years of age

VI Teachers' teaching experience.

- 1 = 0 - 10 years teaching experience
- 2 = 11-20 years of teaching
experience.
- 3 = 21-30 years teaching experience
- 4 = 31-40 years teaching experience

VII Teachers' sex

- 1 = male teachers
- 2 = female teachers.

- VIII Subject the teacher was observed teaching.
- 1 = English
 - 2 = Mathematics
 - 3 = Geography
 - 4 = History
 - 5 = Science
 - 6 = Religious Knowledge
 - 7 = Swahili
 - 8 = Reading
 - 9 = Writing
 - 10 = Vernacular
 - 11 = Art/Craft/Domestic Science
 - 12 = Music.

Dependent variables

- IX Asking narrow questions and giving directions.
- X Asking broad questions
- XI Lecturing or presenting information
- XII Accepting ideas, behaviour feelings and helping individual pupils.
- XIII Teachers' non-verbal activities.
- XVI Pupils' non-verbal activities.
- XVI Pupils' talk response
- XV Pupils' initiated talk
- XVI Pupils' simple non-verbal activities.
- XVII Pupils' more involving non-verbal activities
- XVIII Confusion and irrelevant behaviour.

DING OF OBSERVATIONS.

VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII
2	11.9	1.2	23.1	10.7	13.1	14.5	0.0	25.5	0.0	0.0
1	7.5	2.4	39.1	7.0	13.3	10.9	0.0	14.1	0.0	4.7
12	0.0	0.0	46.7	13.3	13.0	0.0	0.0	33.3	0.0	3.7
2	17.5	1.5	8.6	13.8	8.1	18.1	4.0	20.4	5.1	2.9
2	10.6	4.4	9.8	10.2	5.0	26.7	0.0	20.5	12.8	0.0
3	8.0	10.0	15.8	2.0	2.0	19.6	15.0	7.4	20.0	0.0
5	12.1	3.1	15.5	6.2	12.2	17.3	0.0	11.2	20.0	2.0
4	3.2	0.0	54.3	4.0	24.3	1.6	0.0	12.6	0.0	0.0
11	9.7	0.0	10.8	10.7	9.9	9.7	0.0	22.1	27.1	0.0
1	10.8	5.0	27.1	3.6	15.8	25.0	0.0	1.6	4.1	0.0
2	18.3	2.7	4.8	12.2	3.2	43.5	0.0	12.9	0.0	2.4
4	14.0	5.5	35.4	8.0	11.0	18.7	0.0	6.4	0.0	1.0
3	11.6	11.0	14.0	5.3	16.1	21.0	0.0	21.0	0.0	0.0
12	0.0	0.0	15.5	6.2	27.4	17.3	0.0	11.2	20.0	2.0
5	11.0	6.2	41.8	4.2	12.0	15.0	0.0	9.8	0.0	0.0
2	28.3	0.0	27.3	10.9	11.2	17.7	0.0	3.3	0.0	1.3
1	27.0	3.5	27.3	0.5	5.5	27.3	0.0	8.7	0.0	0.2
2	24.2	4.2	5.2	12.7	20.7	26.7	0.0	15.3	0.0	1.5
4	3.5	0.6	38.9	1.0	31.8	4.8	0.0	19.4	0.0	0.0
8	15.3	0.0	5.5	5.5	5.7	17.2	0.0	25.5	25.3	0.0
5	14.3	8.3	14.0	5.3	16.1	21.0	0.0	21.0	0.0	0.0
5	17.4	4.8	13.7	0.0	18.3	21.4	0.0	14.9	9.5	0.0
2	11.2	3.5	7.8	20.0	15.0	14.8	0.0	16.7	10.3	0.7
4	6.1	0.0	83.0	1.5	3.2	6.2	0.0	0.0	0.0	0.0
1	20.0	4.0	18.6	13.2	13.2	22.4	0.0	8.6	0.0	0.0
2	18.8	3.0	15.0	10.0	15.2	17.0	0.0	20.0	0.0	1.0
2	23.1	0.0	7.9	12.1	14.5	20.7	0.0	21.6	0.0	0.2
1	10.8	11.0	3.9	6.9	6.9	18.9	0.0	4.9	36.7	0.0
1	21.3	1.0	13.4	9.5	5.6	26.6	0.0	21.3	1.3	0.0
1	10.2	1.8	24.2	12.2	33.6	6.0	0.0	9.0	0.0	3.0
2	16.0	3.9	23.1	14.6	11.5	13.0	0.0	18.9	0.0	0.0
2	12.5	0.7	19.8	13.9	12.8	16.5	0.0	22.9	0.0	1.0
3	9.3	11.3	18.0	2.8	15.5	23.8	0.0	10.3	9.0	0.0
6	11.4	12.1	29.7	3.1	7.2	27.7	5.2	3.4	0.0	0.0
1	10.0	5.0	9.8	10.2	5.0	26.7	0.0	31.5	1.8	0.0
1	9.0	6.2	15.5	6.2	12.2	17.3	0.0	11.2	20.0	2.0
4	6.4	0.0	46.7	0.0	34.1	4.5	0.0	8.3	0.0	0.0
1	20.0	9.0	19.6	13.4	8.0	28.0	0.0	2.0	0.0	0.0

5	14.0	8.8	11.6	7.0	14.0	22.0	0.0	10.2	12.4	0.0
9	11.7	0.0	28.3	6.2	16.5	15.0	0.0	20.3	2.0	0.0
1	18.8	0.0	27.1	3.6	18.8	25.0	0.0	12.6	4.1	0.0
2	12.1	4.9	33.0	11.0	13.0	16.0	0.0	10.0	0.0	0.7
3	16.0	2.0	40.7	5.0	10.7	10.3	0.0	14.6	0.0	1.8
5	10.0	9.2	17.5	7.5	14.4	18.4	0.0	5.0	22.1	0.9
5	20.5	1.0	27.8	4.8	11.3	20.0	0.0	13.7	0.0	0.0
2	7.6	1.3	22.7	8.6	15.2	9.7	0.0	11.5	23.8	2.3
6	13.0	4.2	25.0	6.6	14.1	18.8	0.0	16.0	0.0	0.0
1	25.1	5.5	16.2	8.1	7.1	27.4	0.0	10.6	0.0	1.3
1	20.3	8.0	27.3	10.9	11.2	17.7	0.0	3.3	0.0	1.5
2	28.4	0.0	12.2	5.2	20.7	26.7	0.0	5.3	0.0	1.0
1	10.0	1.9	22.7	9.7	16.9	15.8	0.0	21.9	0.0	1.4
2	11.4	1.2	20.3	14.9	12.0	14.4	0.0	24.4	0.0	2.2
8	8.4	3.4	27.1	2.5	13.8	23.1	0.0	9.5	0.0	0.2
2	6.2	5.0	11.2	7.2	8.9	11.2	3.6	10.8	35.7	0.8
9	5.0	0.5	18.5	13.0	29.6	1.9	0.0	30.6	0.0	0.0
11	0.0	0.0	9.7	15.3	12.3	0.0	0.0	62.7	0.0	1.8
2	17.0	4.0	20.0	8.0	10.0	20.2	1.0	18.0	0.0	1.9
1	11.2	0.8	17.1	9.8	15.9	19.6	0.0	16.5	7.2	1.0
5	12.0	8.8	15.0	8.3	11.7	20.0	2.7	17.5	3.0	2.4
1	15.0	6.0	12.9	10.6	13.9	18.9	3.0	14.1	3.0	4.7
1	9.9	1.0	39.1	7.0	13.3	10.9	0.0	14.1	0.0	0.8
2	12.8	0.0	18.9	16.2	14.3	12.8	0.0	24.2	0.0	1.0
5	15.0	4.5	35.4	8.0	11.0	18.7	0.0	6.4	0.0	2.4
6	10.0	11.0	12.2	3.2	4.8	43.5	0.0	12.9	0.0	2.9
2	14.0	5.0	13.8	8.6	8.1	18.1	4.0	20.4	5.1	1.2
4	13.3	0.0	6.85	0.7	1.7	13.0	0.0	1.6	0.0	0.0
4	5.0	0.9	53.3	0.0	35.4	4.4	0.0	2.0	0.0	0.8
1	14.8	5.2	28.6	7.3	10.1	21.00	0.0	12.2	0.0	3.2
2	10.0	9.2	9.8	1.6	3.6	26.8	0.0	36.8	0.0	1.1
2	10.7	2.5	18.2	13.2	11.5	13.4	0.0	10.2	19.2	1.7
1	8.0	7.0	1.0	1.2	9.2	35.8	3.3	32.8	0.0	0.0
4	20.0	5.7	21.6	3.4	17.6	25.0	0.0	6.7	0.0	0.0
4	10.3	2.8	31.7	1.4	26.7	12.5	0.0	14.6	0.0	0.0
1	24.2	4.1	27.3	10.9	11.2	19.0	0.0	3.3	0.0	0.0
1	9.2	3.3	25.5	11.6	25.4	13.4	0.0	11.6	0.0	0.0
2	0.0	0.0	15.2	15.2	12.6	0.0	0.0	0.0	57.0	0.0
2	0.0	0.0	16.7	7.7	6.6	0.0	0.0	0.0	69.0	0.0
2	11.6	7.4	6.8	16.6	18.6	16.6	0.0	16.6	16.8	0.0
1	12.6	0.5	24.7	8.5	17.5	13.1	0.0	23.1	0.0	0.0
10	20.3	10.3	3.7	4.3	0.0	19.4	0.0	21.4	20.6	0.0

81	2	1	7	1	1	1
82	2	1	7	1	1	1
83	1	2	4	1	1	1
84	1	3	7	1	2	1
85	2	3	6	1	1	1
86	2	1	5	1	2	2
87	3	1	1	1	2	1
88	3	2	3	1	2	1
89	3	3	1	1	1	2
90	1	3	4	1	2	1
91	3	2	3	1	2	2
92	2	3	5	1	1	1
93	2	2	5	1	2	1
94	4	2	2	2	4	3
95	2	2	1	1	1	2
96	2	3	7	1	2	2
97	3.	1	6	1	1	1
98	2	1	7	1	2	1
99	3	3	1	2	3	2
100	3	1	3	1	1	1
101	3	3	4	1	2	1
102	3	2	6	2	3	3
103	2	3	1	1	1	1
104	2	3	5	1	1	1
105	2	2	6	1	2	2
106	3	3	2	2	4	3
107	1	1	7	1	1	1
108	3	3	3	2	4	4
109	2	1	1	1	1	1
110	2	1	7	1	1	1
111	2	3	5	1	2	1
112	3	3	6	2	2	2
113	2	3	5	2	2	1
114	2	1	4	1	1	1
115	3	1	6	1	1	1
116	2	1	1	1	1	1
117	1	3	4	2	3	2
118	3	3	3	2	2	2
119	3	3	4	2	2	2
120	2	3	5	1	2	2
221	2	1	4	1	1	1

1	1	8.1	7.1	17.0	8.9	18.9	14.3	0.0	35.7	0.0	0.0
1	2	10.0	0.7	40.7	5.0	10.7	14.6	0.0	10.3	0.0	0.0
2	5	0.0	0.0	20.0	13.3	16.7	0.0	0.0	0.0	50.0	0.0
1	2	6.0	15.0	16.0	10.0	10.0	0.0	0.0	20.0	3.0	0.0
1	4	8.2	2.2	32.3	0.0	32.4	15.8	0.0	9.8	0.0	0.0
1	1	14.6	3.4	40.7	5.0	10.7	14.6	0.0	10.3	0.0	0.7
2	2	9.0	1.0	39.1	7.0	18.0	10.9	0.0	14.1	0.0	0.0
2	3	0.0	0.0	39.5	9.8	9.8	0.0	0.0	20.4	20.5	0.0
2	2	6.4	4.6	20.0	8.0	20.0	12.0	0.0	20.0	10.0	0.0
1	12	0.0	0.0	14.9	13.7	14.9	0.0	0.0	0.0	56.6	0.0
1	4	10.2	31.1	68.5	1.9	1.7	13.0	0.0	1.6	0.0	0.0
1	6	2.0	4.1	83.0	1.5	3.2	6.2	0.0	0.0	0.0	0.0
1	4	11.4	5.1	17.2	6.2	17.2	14.3	0.0	14.3	14.3	0.0
2	2	3.0	0.0	40.0	7.0	30.0	2.0	0.0	18.3	0.0	0.0
2	2	9.5	10.5	6.4	8.3	8.3	19.0	0.0	19.0	19.0	0.0
1	2	1.0	0.0	40.0	7.0	30.0	2.0	0.0	18.0	0.0	2.0
2	3	16.7	2.0	19.7	1.4	12.6	18.7	4.4	15.3	9.2	0.0
1	2	2.0	0.0	40.0	7.0	30.0	2.0	0.0	18.0	0.0	1.0
1	11	0.0	0.0	24.2	19.7	24.2	0.0	0.0	0.0	31.9	0.0
2	2	10.3	5.5	26.7	6.8	7.8	14.3	0.0	14.3	14.3	0.0
1	2	18.2	1.3	25.4	8.0	11.0	18.7	0.0	6.4	0.0	1.0
1	1	8.0	4.0	20.0	14.0	20.0	10.0	0.0	20.0	0.0	4.0
2	2	10.1	1.1	15.8	11.4	10.3	10.9	0.0	13.9	25.0	1.5
1	6	26.0	4.6	20.1	4.9	8.5	27.0	3.9	5.0	0.0	0.0
1	5	15.5	1.6	27.8	4.1	14.5	19.6	0.0	13.9	3.0	0.0
1	11	0.0	0.0	14.4	19.0	10.8	0.0	0.0	23.8	32.0	0.0
1	4	11.6	1.1	32.4	2.3	24.1	12.2	0.0	16.3	0.0	0.0
1	10	16.0	3.7	22.8	14.4	22.8	15.2	0.0	3.9	0.0	1.2
2	2	8.2	1.8	25.0	15.0	25.0	8.3	0.0	16.7	0.0	0.0
1	1	17.0	2.0	33.6	10.3	17.2	17.2	0.0	1.9	0.0	0.9
1	1	19.0	0.0	33.6	10.0	17.0	17.4	0.0	1.8	0.0	1.2
1	6	22.0	4.0	30.0	5.2	5.8	24.0	0.0	5.0	0.0	4.0
1	1	15.4	2.6	27.1	3.6	18.8	5.7	0.0	25.0	0.0	0.0
2	1	16.1	4.1	19.2	3.5	19.2	0.0	0.0	0.0	0.0	0.0
1	2	6.7	5.0	28.3	16.5	15.0	6.2	0.0	20.3	0.0	0.0
1	2	12.0	3.0	20.0	7.0	20.0	14.0	0.0	24.0	0.0	0.0
1	3	15.4	7.1	12.1	2.5	14.6	18.6	0.0	13.9	14.3	1.5
1	11	6.1	0.0	14.7	14.7	14.7	5.2	0.0	3.5	41.3	0.0
1	2	14.0	4.9	31.1	14.6	11.5	13.0	0.0	18.9	0.0	0.0
1	6	30.7	16.0	23.3	3.3	1.7	21.7	0.0	3.3	0.0	0.0
1	1	7.0	14.0	4.0	6.0	6.0	21.0	0.0	21.0	21.0	0.0

122	3	3	6	1	2	1	1
123	2	3	5	1	2	1	1
124	3	2	1	2	4	3	1
125	2	14	4	1	1	1	1
126	1	3	6	1	1	2	1
127	3	1	2	1	1	1	1
128	3	2	1	2	4	3	1
129	1	2	7	1	2	2	1
130	3	3	5	2	2	2	2
131	3	3	6	2	2	2	1
132	4	2	2	2	4	4	1
133	2	3	7	1	2	1	1
134	3	3	6	1	1	2	1
135	2	3	6	2	3	2	1
136	1	3	7	1	2	3	1
137	3	2	5	2	3	3	1
138	2	3	6	1	2	1	1
139	2	3	7	1	2	2	1
140	3	1	1	1	1	1	2
141	2	2	1	1	2	1	1
142	2	1	5	1	1	1	1
143	3	3	1	2	2	2	2
144	3	1	3	1	2	2	1
145	3	3	5	1	2	2	1
146	3	1	3	2	2	3	2
147	2	3	5	1	2	1	1
148	2	3	4	1	2	2	1
149	3	1	2	1	1	1	2
150	3	2	2	1	2	2	2
151	2	2	5	1	2	2	1
152	2	2	2	1	2	1	1
153	1	1	6	1	1	1	1
154	1	3	6	1	2	1	1
155	3	2	2	1	2	2	1
1563	3	1	1	1	1	1	2
157	3	1	5	2	3	2	1
158	3	1	2	1	2	1	2
159	2	1	3	1	1	1	1
160	1	3	7	1	1	1	1
161	2	3	4	1	2	1	1
162	3	3	5	2	3	2	1
163	3	3	1	1	1	1	2

2	8.0	10.0	40.7	5.0	10.7	10.3	0.0	14.6	0.0	0.0
7	10.8	8.0	27.1	3.6	18.8	25.0	0.0	2.6	4.1	0.0
2	10.2	5.0	17.0	8.9	8.9	14.3	0.0	35.7	0.0	0.0
5	11.2	8.0	8.3	8.3	7.2	18.8	0.0	19.1	19.0	0.0
7	10.9	9.7	11.9	9.4	13.1	12.5	12.2	10.3	10.0	0.0
2	0.0	0.0	27.0	27.0	15.5	0.0	0.0	21.0	9.5	0.0
10	15.1	5.1	19.2	16.83	19.2	19.2	0.0	5.9	0.0	0.0
4	5.6	0.0	82.7	0.0	4.8	6.9	0.0	0.0	0.0	0.0
4	0.0	0.0	57.0	0.0	30.0	0.0	0.0	13.0	0.0	0.0
7	11.2	4.5	46.3	9.8	9.3	15.2	0.0	3.7	0.0	0.0
6	19.0	2.5	30.0	4.0	20.0	20.0	0.0	5.0	0.0	0.0
2	3.0	0.0	33.3	11.0	33.6	2.3	0.0	16.8	0.0	0.0
3	2.0	0.0	58.1	4.9	22.0	2.0	0.0	10.0	0.0	0.0
2	0.0	0.0	40.0	20.0	20.0	0.0	0.0	19.0	0.0	1.0
4	0.0	0.0	53.6	0.0	43.5	0.0	0.0	2.4	0.0	0.0
1	18.6	9.4	10.0	10.0	14.0	26.0	0.0	12.0	0.0	0.0
1	12.0	3.2	46.3	9.8	9.8	15.7	0.0	3.7	0.0	0.0
6	10.3	5.4	46.2	9.7	9.2	15.2	0.0	3.0	0.0	1.3
2	16.00	3.6	0.9	6.1	6.1	22.1	0.0	22.4	22.8	0.0
2	18.8	5.0	16.4	15.6	12.7	13.8	0.0	10.6	6.2	0.9
2	17.2	1.8	40.7	5.0	10.7	10.3	0.0	14.6	0.0	0.7
10	12.4	4.3	9.7	10.0	6.6	17.0	0.0	20.0	20.0	0.0
1	20.1	4.0	15.7	8.6	8.6	25.7	0.0	17.3	0.0	0.0
1	5.0	5.0	30.0	10.0	24.0	6.0	0.0	6.0	0.0	14.0
2	8.0	2.0	35.0	5.0	25.0	8.3	0.0	16.7	0.0	0.0
2	6.3	5.3	25.0	12.5	25.4	13.4	0.0	11.6	0.0	0.0
2	8.4	4.0	25.5	11.6	25.4	11.6	0.0	13.4	0.0	0.0
9	0.0	0.0	21.2	19.2	27.2	0.0	0.0	32.4	0.0	0.0
10	13.3	6.3	16.9	4.9	15.9	16.9	9.9	16.9	0.0	0.0
1	10.3	8.3	14.0	6.0	4.4	18.0	0.0	20.0	19.0	0.0
5	16.2	2.0	21.4	6.0	14.8	17.10	0.0	14.0	8.5	0.0
5	9.3	8.4	37.7	10.1	16.2	16.1	0.0	2.2	0.0	0.0
2	4.3	8.2	16.7	16.5	16.7	10.7	0.0	27.3	0.0	0.0
6	15.0	6.0	40.0	0.0	14.0	20.0	0.0	5.0	0.0	0.0
8	7.8	0.0	23.4	10.9	23.4	7.3	0.0	24.6	0.0	2.6
1	23.7	2.2	15.4	5.4	5.9	27.3	0.0	15.4	0.0	4.0
11	0.0	0.0	30.3	23.2	4.8	0.0	0.0	9.6	32.1	0.0
4	10.2	4.0	16.7	9.5	16.7	14.0	0.0	14.0	15.0	0.0
2	4.3	6.0	25.8	12.8	25.0	7.7	0.0	17.6	0.0	0.0
4	15.7	1.4	26.7	1.1	25.1	17.4	0.0	12.6	0.0	0.0
1	11.0	4.8	27.1	3.6	15.8	25.0	0.0	1.6	4.1	0.0
9	10.0	1.7	28.3	16.5	15.0	6.2	0.0	20.3	0.0	2.0

164	3	1	2	1	1	1
165	3	3	3	2	5	2
166	2	3	6	1	1	1
167	2	1	5	1	2	1
168	2	1	1	1	1	1
169	1	2	7	1	1	2
170	3	3	6	2	3	3
171	1	3	7	1	2	1
172	2	3	7	1	1	1
173	3	1	6	1	2	2
174	2	3	7	1	2	2
175	3	2	1	1	1	2
176	2	2	5	1	2	1
177	4	3	4	2	3	3
178	4	2	1	2	3	3
179	1	3	6	1	1	1
180	2	1	7	1	1	1
181	1	2	6	2	3	2
182	2	3	6	1	1	1
183	2	3	5	1	1	1
184	2	2	5	1	2	2
185	3	2	3	2	3	3
186	3	3	4	1	2	2
187	4	3	3	2	4	4
188	4	2	4	2	3	3
189	1	1	1	1	1	1
190	2	1	6	1	1	1
191	2	3	6	2	3	2
192	3	1	5	1	1	1
193	3	3	4	1	2	2
194	4	3	3	2	3	3
195	3	1	5	1	1	1
196	2	1	6	1	2	1
197	2	3	1	2	3	3
198	2	1	6	1	1	1
199	4	3	3	2	5	4
200	4	2	1	2	2	2
201	2	3	4	1	1	1
202	2	3	7	1	1	1
203	3	3	5	1	2	2
204	3	3	3	1	2	2

1	6	0.0	0.0	28.0	26.8	27.2	0.0	0.0	18.0	0.0	0.0
1	1	16.1	9.0	6.3	8.3	8.3	19.3	0.0	19.0	19.8	0.0
1	2	8.1	6.2	22.7	7.6	30.3	9.9	0.0	15.2	0.0	0.0
1	2	7.5	6.0	18.5	18.5	18.5	12.5	0.0	18.5	0.0	0.0
2	6	0.0	0.0	30.0	20.0	25.0	0.0	0.0	25.0	0.0	0.0
1	3	10.5	11.3	24.3	5.8	28.8	19.2	3.0	7.0	0.0	0.0
1	7	12.0	13.0	16.7	11.5	9.7	16.7	3.7	16.7	0.0	0.0
1	4	0.0	0.0	40.0	2.0	40.0	0.0	0.0	18.0	0.0	0.0
1	1	10.1	7.1	17.2	15.3	17.2	16.7	0.0	16.6	0.0	0.0
1	1	3.0	1.6	29.6	13.0	18.5	1.9	0.0	30.6	0.0	0.8
1	2	3.0	0.0	38.6	8.0	32.4	3.0	0.0	9.0	0.0	6.0
2	2	8.4	3.3	20.3	14.8	15.8	10.4	0.0	27.0	0.0	0.0
1	5	21.6	1.7	23.3	4.5	15.9	22.6	0.0	10.4	0.0	0.0
1	4	6.0	4.0	32.3	0.0	32.4	9.8	0.0	15.1	0.0	0.0
1	2	5.0	3.0	21.7	13.3	11.9	10.3	0.0	33.3	0.0	1.5
1	5	14.0	6.0	49.8	5.7	11.2	13.3	0.0	0.0	0.0	0.0
1	1	0.0	21.0	4.8	12.2	3.2	43.5	0.0	12.9	2.4	0.0
1	2	0.0	20.8	16.7	7.2	13.3	20.0	0.0	22.0	0.0	0.0
1	1	14.0	4.6	21.0	10.0	19.0	16.0	0.0	15.4	0.0	0.0
2	7	12.0	6.0	40.7	5.0	10.7	10.3	0.0	14.6	0.0	0.7
1	3	4.5	6.4	39.1	7.0	13.3	19.9	0.0	14.1	0.0	4.7
1	2	14.0	2.1	22.9	14.4	15.6	14.9	0.0	16.1	0.0	0.0
1	1	13.1	10.2	21.7	5.0	11.5	23.7	0.0	13.8	0.0	1.0
1	12	0.0	0.0	28.5	0.0	25.4	0.0	0.0	42.2	0.0	3.9
1	11	0.0	0.0	27.1	8.2	13.7	0.0	0.0	9.8	41.2	0.0
2	9	0.0	0.0	23.9	16.4	24.2	0.0	0.0	35.5	0.0	0.0
1	4	6.3	1.9	36.4	0.7	29.4	9.3	0.0	14.1	1.9	0.0
1	6	22.6	2.5	25.9	4.6	6.1	25.4	0.8	9.6	2.5	0.0
2	5	16.0	0.0	51.0	6.0	9.0	15.0	0.0	3.0	0.0	0.0
1	5	9.6	0.8	32.8	10.0	28.1	10.9	0.0	16.7	0.0	1.1
1	4	15.5	3.3	27.1	3.6	18.8	25.0	1.6	4.1	0.0	0.0
1	2	13.0	5.0	40.7	5.0	10.7	10.3	0.0	14.6	0.0	0.7
1	1	20.1	8.2	27.3	10.9	11.2	17.7	0.0	3.3	0.0	1.3
1	8	8.8	0.0	20.3	13.4	2.9	9.8	0.0	25.8	19.0	0.0
1	2	11.7	0.5	24.0	9.8	17.6	13.7	0.0	22.7	0.0	0.0
1	2	25.0	3.4	12.2	5.2	20.7	26.7	0.0	5.3	0.0	0.0
2	11	0.0	0.0	18.7	18.7	0.0	0.0	0.0	10.2	29.4	0.0
1	2	3.1	2.5	18.5	13.0	29.6	1.9	0.0	30.4	0.0	0.8
1	1	11.0	10.0	20.0	9.0	13.0	20.0	0.0	17.0	0.0	0.0
1	5	15.9	4.9	13.3	4.2	11.0	16.8	0.0	11.2	22.7	0.0
1	6	15.1	3.9	27.7	2.8	15.1	21.1	0.0	10.9	0.0	3.4

205	2	3	5	1	1	1
206	3	3	5	1	2	2
207	2	3	7	1	1	1
208	3	1	1	1	1	1
209	1	1	5	1	1	1
210	1	2	7	1	2	2
211	1	1	6	1	1	1
212	1	3	4	1	1	1
213	2	3	3	1	1	2
214	2	1	1	1	1	1
215	3	2	6	1	2	2
216	3	1	4	1	1	1
217	2	3	2	1	1	1
218	2	1	5	1	2	1
219	3	1	1	1	1	1
220	2	3	6	1	1	1
221	3	12	2	1	1	1
222	3	3	4	2	3	2
223	1	1	7	2	1	1
224	1	2	6	2	1	1
225	1	1	5	2	1	1
226	2	2	3	1	1	1
227	2	1	1	1	1	1
228	1	1	4	1	1	1
229	2	3	5	2	1	1
230	1	3	6	1	2	2
231	3	1	2	1	1	1
232	2	1	6	1	1	1
233	3	3	4	1	2	2
234	2	3	4	1	1	1
235	1	1	2	1	2	2
236	1	1	2	1	2	2
237	1	2	3	2	2	2
238	1	3	5	2	2	2
239	1	1	7	2	2	2
240	2	2	4	1	1	1
241	2.	1	1	1	1	1
242	1	2	5	1	1	2
243	1	2	6	2	2	1
244	2	2	5	1	1	1
245	2	2	4	2	1	1

2	2	7.7	0.0	24.1	17.0	8.3	8.9	0.0	6.0	26.5	1.5
1	3	23.2	1.8	18.7	7.7	12.3	25.0	0.0	10.5	0.0	0.8
1	2	12.3	6.3	23.1	11.6	14.6	13.0	0.0	18.9	0.0	0.0
1	8	6.5	3.4	39.5	9.8	0.0	0.0	0.0	20.4	20.5	0.0
1	3	20.5	13.2	16.3	2.8	7.2	29.7	0.0	7.3	0.0	3.0
1	1	22.1	0.4	26.7	4.4	14.7	21.7	0.0	6.8	0.0	3.2
1	4	7.4	2.0	25.3	0.7	29.5	11.1	0.0	24.0	0.0	0.0
2	5	27.4	3.3	24.4	2.6	30.0	0.0	6.8	5.5	0.0	0.0
1	1	22.1	0.0	25.5	1.6	4.3	24.4	0.0	20.9	0.0	0.0
2	2	12.1	5.1	25.0	6.6	14.1	18.8	0.0	16.0	0.0	0.0
2	6	15.2	4.8	27.2	0.8	6.8	16.0	4.0	23.6	1.6	0.0
1	4	14.4	4.4	27.1	3.6	18.8	25.0	0.0	2.6	4.1	0.0
1	2	13.7	2.4	22.3	12.9	9.3	17.3	0.0	19.9	0.0	0.0
1	3	15.7	12.4	18.7	2.7	10.6	24.5	0.0	13.9	0.9	0.6
2	8	2.7	0.0	17.4	15.4	2.0	3.1	0.0	31.5	29.7	0.0
1	11	0.0	0.0	27.0	15.5	27.0	0.0	0.0	9.5	21.0	0.0
2	11	0.0	0.0	40.0	4.2	13.8	0.0	0.0	42.0	0.0	0.0
1	4	6.4	4.6	35.0	5.0	25.0	8.3	0.0	16.7	0.0	0.0
1	2	3.1	2.5	17.0	5.5	5.5	5.5	5.5	16.7	38.7	0.0
2	1	11.0	4.5	32.7	8.9	17.8	14.9	0.0	10.2	0.0	0.0
2	1	16.7	2.8	33.3	5.5	16.7	13.9	0.0	9.7	0.0	0.0
2	1	5.3	1.7	11.3	13.9	1.7	5.5	0.0	25.0	34.2	1.4
2	2	8.9	3.0	28.7	5.7	28.7	5.7	0.0	19.3	0.0	0.0
2	1	16.7	3.3	26.7	5.0	10.0	18.3	0.0	18.3	0.0	1.7
1	4	11.7	2.8	41.7	3.0	27.8	11.2	0.0	1.6	0.0	0.2
1	12	0.0	0.0	55.6	0.0	12.5	0.0	0.0	30.6	0.0	1.3
2	1	16.5	4.5	23.8	6.1	11.1	19.0	0.0	19.0	0.0	0.0
1	3	12.5	4.7	46.7	3.9	12.5	13.4	0.0	5.0	0.0	1.3
2	2	10.0	3.3	26.7	10.0	16.7	12.0	0.0	20.0	0.0	1.3
2	5	13.3	2.2	27.0	3.1	18.5	12.3	0.0	12.7	0.0	0.9
2	2	18.1	2.4	16.3	0.0	13.9	20.0	8.7	18.7	0.0	0.0
2	5	15.5	4.7	33.2	0.0	13.2	16.3	1.3	15.8	0.0	0.0
2	1	11.6	1.4	8.7	8.1	24.5	13.3	4.3	17.4	10.4	0.3
2	2	15.3	2.1	8.2	2.8	28.3	6.5	0.0	26.8	0.0	0.0
2	5	34.5	27.1	2.8	0.0	0.0	35.6	0.0	0.0	0.0	0.0
2	2	17.1	10.3	3.8	7.9	10.6	26.0	0.0	23.0	0.0	1.0
2	2	6.4	1.1	1.3	18.4	1.9	2.0	0.0	45.5	16.4	7.0
1	1	0.0	1.5	18.8	4.0	0.0	0.0	75.5	0.0	0.3	0.0
2	1	27.6	13.6	2.7	2.8	4.0	26.6	14.3	8.8	0.0	0.0
1	2	4.6	1.1	4.0	42.5	2.4	1.7	0.0	43.7	0.0	0.0
2	1	20.2	3.2	16.7	15.3	5.2	33.4	0.0	2.8	2.8	1.0

A P P E N D I X I V
B I B L I O G R A P H Y .

CONFERENCES (Arranged Chronologically).

- 1956 Report of the proceedings of a conference
 on Teacher Training. August 27-30 Nairobi
 Kenya. Mimeograph, File K/1 K.I.E.
- 1964 - Reports of the University of East Africa
1968 Conferences on Teacher Education;
 Manone, C. and Lieb, L.V. Ed.
- 1968 New Directions in Teacher Education.
 Proceedings of the Second Kenya Conference.
 East African Publishing House 1969.
- 1969 - Reports of the University of East Africa
1971 Conferences on Teacher Education, Manone, C. Ed.
- 1972 Conference on Education in Malawi 17th -
 19th April, 1972. Unpublished pp 4.

BOOKS.

- Amidon, E.J. Improving Teaching: the Analysis
 of classroom verbal Interaction,
 New York, Holt, Rinehart and
 Winston 1966.
- Anderson, J. The Struggle for the School, Longman
 Group Ltd. 1970.

- Battle, V.M.(Ed.) Essays in the History of African Education
Teachers' College Columbia Press
1970.
- Beeby, C.E. The Quality of Education in Developing Countries. Havard
University Press.
Cambridge, Massachusetts, 1966.
- Best, J.W. Research in Education, Prentice-
Hall, Inc., Englewood, New Jersey, 1965.
- Boultwood, M.E.A. & Curtis, S.J. A short History of Educational Ideas. London University Tutorial
Press. 1965.
- Burns, D.G. African Education, London University
Press 1965.
- Bryne, H.J. Primary Teacher Training,
London, Oxford University Press
1960.
- Calthrop, K. Teachers for Tomorrow,
Heinemann Educational Books Ltd.
London 1971.
- Cameroon, J. The Development of Education in E. Africa, I.I.S. Teachers'
College, Columbia 1969.
- Castle, E.B. Principles of Education for teachers in Africa. Oxford
University Press 1965.

- Daniel, M.V. Activity in the Primary School.
Basil Blackwell Oxford 1962.
- Deaden, R.F. The Philosophy of Primary Education,
The English Language Book
Society 1969.
- Dodd, W.A. Teacher Education in the Developing
Countries of the Commonwealth,
Commonwealth Secretariat,
London 1970.
- Dunhill, J. A teacher training Manual. London
University Press 1965.
- Gage, N.L.(Ed.) Handbook of Research in Teaching
Chicago, and McNally 1963.
- Huey, J.F. Teaching Primary children, Hold,
Rinehart and Winston Inc. U.S.A.
1965.
- Jolly, R. Research in Education in Africa,
E.A.P.H., 1969.
- Jowitt, H. Principles of Education for
Teachers in Africa. Longman,
Green and Co. Ltd., London 1931.
- Kays, B. Participation in Learning, George
Allen and Unwin Ltd., London 1970.

- King, K.J. Pan Africanism and Education,
Clarendon, Press 1971.
- Morgan, G.D. Practices, Problems and Issues
in East African Education,
University of Akansas, 1969.
- Oliver, R. Missionary Factor in East Africa.
Longman and Green 1952.
- Painter, K. Hill of Vision, Yearly Meeting
of Friends 1966.
- Popham, W.J. Educational Statistics, Harper and
Row Inc. New York 1965.
- Renswick, I.(Ed.) Tanzania Revolution Through
Education , Longman Tanzania
Ltd., 1968.
- Sadler, J.E. Training for Teaching, George
Allan and Unwin Ltd., London 1962.
- Sarason, S.B. The Preparation of Teachers,
John Wiley and Sons Inc. New York 1962.
- Sheffield, J.R. Education in the Republic of Kenya.
U.S.A. Government Printing Press,
Washington 1971.

- Stabler, E. Education Since Uhuru, the Schools of Kenya, Wesleyan University Press 1969.
- Stones, E. Towards Evaluation, Robert Cunningham and Sons Ltd., 1970.
- Tibble, J.W. The future of teacher Education Routledge and Kegan Paul, 1971, London.
- Yates, A.(Ed.) Current problems of Teacher Education, UNESCO Institute for Education, Hamburg, 1970.

JOURNALS.

- Anderson, J. 'Training Teachers for E. Africa', East Africa Journal, V. 3 No. 3 June 1966, pp. 21-27.
- Cammaerts, F.C.A. "Institute of Education in Eastern Africa". Canadian Teachers' Federation Distribution Service No. 10 March 1970, p. 8
- Clement, J. "Some problems of Teacher Training" Kenya Educationist 1:9-12 December 1957.

- Creaser, H. "The Demonstration School in Teacher Training", Teacher Education 2: 19-24, May 1961.
- Dain, R. "Contributions of Christian Missions to Education in Kenya" Kenya Education 1: 12-16 December 1957.
 "Protestant Contribution to Kenya Education" Kenya Education Journal 1: 16-19 Nov. 1960.
- Dykstra, G. "Active teaching and learning of Spoken English" Teacher Education V. 3 No. 2, November 1962 pp. 134-319
- Fane, R. 'Teaching the Teacher' Kenya Weekly News No. 1685, May 1950.
- Furley, O.W. "The Role of Chiefs in Education" Faculty of Education, Makerere University. Mimeograph.
- Hooper, C.J.D. "Teacher Training and the Community" Overseas Education 24: 22-25 October 1952.
- Indire, F.F. "Students reasons for Choosing teaching" Kenya Education Vol. 5 No. 1.

- Jackman, C.W. "A Composite Training Centre: Siriba in Kenya" Overseas Education 25: ;36-138 October 1953.
- Larby, N. "The Beecher Report and the Teacher".
The East African Teachers Journal 1: 7-9 April 1951.
- O'Hagan, C. "Education and Language" Teacher Education Vol. 4 No. 3 February 1964 pp. 196-206.
"English Medium Teaching in Kenya" Overseas Education Vol. 34 No. 3 October 1962.
- O'Meara, J. "Catholic Contribution to Kenya Education". Kenya Education Journal 1: 21-24 May 1960.
- Osogo, J. "Pepping up Kenya's teaching profession".
Kenya Education Journal Vol. 2 No.5 May 1965 pp. 18-20.
- Wilkinson, C.G. "In defence of African Teachers" Kenya Weekly No. 1735. 29 April 1960 p. 51.

- Williams, E.M. "The Creation of a National
profession in Kenya" Education
for Teaching 45: 11-15
February 1958.
- Ayany, S.G. "The future of the African teacher"
Panorama Vol. 1 No. 4 1959.
18-20.

KENYA NATIONAL ARCHIVES.

- KNA File 1/1421 Report of Inspector of Schools 4/1/1929.
- KNA File 1/2251 Report of Inspector of Schools 1931.
- KNA File 1/110 Director of Education Circular Letter.
KNA File 1/137 25th March 1937. Circular Letter.
- KNA B. 2191/1 Government School Kagumo Primary
Teachers.
- KNA File 1/81 C.M.S. Embu Elementary Teacher
Training.
- KNA File 1/351 C.M.S. Butere Normal School.
- KNA File 1/931 Minutes of Inspectors of School
Conference 24th April, 1941.
- KNA File 1/160 Kaimosi School, Inspectors
Report.
- KNA File 3/910 Letter addressed to P.C. Nyanza.

KNA File 242/1/12 Thogoto Agricultural School.
48/Vol. 11/2

Many files were consulted at the Kenya National Archives, but the above are the ones which yielded relevant information.

NEWSPAPERS.

(Arranged Chronologically.)

African Standard 11 June and 28th July 1906

E.A. Standard Weekly 1st February 1928 p. 52.

"Problems of Training African Teachers".

E.A. Standard Weekly 23rd February 1928. pp. 38-40.

"Mill Hill Native Teachers' Training School at Yala".

E.A. Standard Weekly 1st September 1930 p. 38.

"Training African Teachers: The Jeanes School".

E.A. Standard Weekly 16th October 1953 p. 11.

"Students learning to understand the other men's job. Siriba College".

"First Women's training College in Rift Valley".

E.A. Standard 29th October 1955 p. 6

"Urgent need for Teachers' Training Schools".

E.A. Standard 25th October 1957.

"Siriba College Widens Scope of African Education".

OFFICIAL DOCUMENTS (Arranged Chronologically)

- 1919 Report of the Education Commission of the East African Protectorate
Swift Press, Nairobi.
- Evidence of the Education Commission of the East African Protectorate,
Swift Press, Nairobi.
- 1922 The Phelps Stokes Commission to East Africa, Edinburgh House Press 1925.
- 1924 Memorandum on Certain Aspects of Arab and African Education,
J.R. Hussey, Government Printer, Nairobi.
- 1924-1970 Education Department Annual Reports.
- 1925 Native Education in British Tropical Africa H.M.S.O.
- 1945 Lockhart Committee on the Training of Native Teachers KNA. Mimeograph.
- 1946 Report of the Development Committee.
Vols. i and ii. Government Printer, Nairobi.

- 1948 A Ten Year Plan for the Development of African Education, Government Printer, Nairobi.
- 1949 African Education in Kenya (The Beecher Report): A Report of a Committee Appointed to enquire into African education, Government Printer, Nairobi.
- 1952 African Education. A study of Policy and Practice in Tropical British Africa. (Binns Report)
Nuffield Foundation Colonial Office O.U.P. 1952
- 1953 Historical Survey of the Origin and Growth of Mau Mau. London H.M.S.O.
- 1964 Kenya Education Commission Report Vol. I and II Government Printer, Nairobi.
- 1966-70 Development Plan. Government Printer Nairobi, 1966.
- 1971 Ndegwa Commission Report. Government Printer, Nairobi 1971.
- 1972 James Report on Teacher Education and Training in England and Wales. H.M.S.O.

1972 Curriculum Development in Kenya,
Government Printer, Nairobi.

PAPERS.

Institute for Development Studies, University of Nairobi

- Brownstein, L. Primary results' a Survey of 1964
C.P.E. Candidates in Embu.
- King, K. Primary Schools in Kenya.
- Mook, J.L. Pragmatism and the Primary School.
- Prewit, K. The S04B. Computer Programme.
- Somerset, H.C.A. The effect of Elementary School
Quality on Secondary School
Achievement.

Other Papers.

- Hutasoit, and
Prator, C.H. A study of the New Primary
Approach in the Schools of Kenya.
Nairobi Ministry of Education
(unpublished).
- Kimokoti, E.K. New Primary Approach (Faculty of
Education, University of Nairobi -
Student Research Paper).

- Nkubi, S. A development of Primary Teacher Education. Faculty of Education University of Nairobi, Student Research Paper.
- Stabler, E. and others The Localizing and Upgrading of teacher training tutors in Kenya: Working Paper 2 produced by an ad hoc Committee. Nairobi University College 1966.
- THESIS
- Gorman, T.P. A survey of Language Policy. Ph.D. Thesis, University of E.A. 1971.
- Kipkorir, B.E. Alliance High School 1926-1963 and the Origin of the Elite in Kenya Ph.D. Thesis, University of Oxford. 1969.
- Osogo, J.N.B. A History of Kabaa-Mangu and Contribution of the Holy Ghost Fathers to Education in Kenya. M.A. Thesis. University of E.A. 1969.
- Peacock, E. The Role of a Primary Teacher as a Counsellor. M.A. Thesis, University of McGill. 1971.
- Sheffield, J.R. Policies and Progress in African Education in Kenya 1949-1963. D.Ed. Thesis University of Michigan 1964.