

This work is licensed under a
Creative Commons Attribution-NonCommercial-
NoDerivs 3.0 Licence.

To view a copy of the licence please see:
<http://creativecommons.org/licenses/by-nc-nd/3.0/>

INSTITUTE OF
19 FEB 1987
DEVELOPMENT STUDIES
LIBRARY

IMPROVING TEACHER EFFECTIVENESS IN THE
SCHOOLS OF KENYA: APPROACHES TO QUALITY
LEARNING THROUGH COST-SAVING
PROFESSIONAL MANAGEMENT

By

B.M. Makau

DISCUSSION PAPER NO. 281

INSTITUTE FOR DEVELOPMENT STUDIES
UNIVERSITY OF NAIROBI

May, 1986

Views expressed in this paper are those of the author. They should not be interpreted as reflecting the views of the Institute for Development Studies or of the University of Nairobi.

This paper has protection under the Copyright Act. Cap. 130 of the Laws of Kenya.

IMPROVING TEACHER EFFECTIVENESS IN THE SCHOOLS
OF KENYA : APPROACHES TO QUALITY LEARNING THROUGH
COST-SAVING PROFESSIONAL MANAGEMENT

By

B.M. Makau

ABSTRACT

In the developing world the planner is faced with the challenge of developing approaches which lead to higher quality learning while keeping down the costs of education. A well qualified and contented teaching force is regarded as one of the key factors in raising quality. Yet, given financial constraints which are partly explained by rapid growth in enrolments, it may not be feasible for a country to make substantially higher allocations to teacher training and remuneration, and other inputs which facilitate the teacher's work.

This paper conceptualises teacher effectiveness in terms of learning outcomes and explores in-system factors which influence it among Kenya's school teachers. Analysis of data shows that the teacher's work could lead to higher quality through the provision of more funds for physical facilities, learning resources, more attractive remuneration, accelerated replacement of untrained teachers and the improvement of professional management. The discussion centres on the role of management, training and remuneration. It is suggested that while rationally administered attractive salary scales would encourage the teaching force to work for excellence, improvement of professional management would give scope for effective in-service training which would be cheaper than residential pre-service training, and would motivate and guide teachers to facilitate higher achievement by pupils. In order to maximise these outcomes of management, it is recommended that in the primary sector the district infra-structure should be made efficient in all areas; in the secondary sector, administrative and inspection services should be expanded and devolved to the districts, heads of schools should be systematically trained to be better professional managers and the participation of communities in school management should be streamlined.

INTRODUCTION

'The provision of a well-educated, keen, competent, respected and contented teaching force is by far the most important contribution that the Government can make to the Schools of Kenya'. (Republic of Kenya: Report of the Kenya Education Commission, 1964 Part I - p.17).

'The Commission is convinced that the quality of teaching is the most important influence on the quality of the education provided in schools'. (Republic of Botswana: Kagisano ka Thuto - Report of the National Commission on Education, 1977 - p. 127).

The world over the teacher is acclaimed to be a key learning resource, not so much as the main source of knowledge (although given scarcity of other sources this role is crucial), but as the organiser of learning for his pupils. Low pupil achievement, which is characteristic of many developing countries, is regularly blamed on the quality and motivation of teachers. Commenting on Indonesia, May (1978) observes

'A shortage of trained teachers and equipment keeps school standards extremely low; in 1973 only 30% of teachers in elementary schools, 36% in lower secondary, and 54% in the sparse upper secondary schools were listed as fully qualified... Salaries were so small that even unemployed graduates found it not worth their while to enter the profession.'¹

Although there is agreement that teacher quality is an important variable in the quality of pupils' learning, there is no consensus on the order of priority of the aspects which constitute teacher effectiveness, or on how such aspects interact with and are influenced by circumstances beyond the control of the teacher. Depending on the occasion and the speakers, the

May B. (1978) The Indonesian Tragedy, Graham Brash (PTE) Ltd., Singapore - p. 395.

difference teachers make is either negative or positive, and the explanations given vary and are often contradictory. Table 1 illustrates this situation by contrasting two views of 'school failure' which periodically appear in the Kenya newspaper media.

Table 1: TWO VIEWS OF SCHOOL FAILURE IN KENYA

<u>The Community Accuses Teachers of:</u>	<u>Teachers Retort that:</u>
(1) Drunkenness resulting in neglect of duty and providing a poor example to pupils.	(1) The school teacher has a low status in society.
(2) Absenteeism because of involvement in private business.	(2) The remuneration of teachers is poor.
(3) Failure to discipline and guide their pupils.	(3) There is little professional support from the ministry in matters of discipline, guidance and counselling.
(4) Brutality to pupils.	(4) Parents do not help with discipline.
(5) Immoral contacts with pupils.	(5) Sugar daddies distract pupils
(6) Misallocation and misappropriation of school resources.	(6) Resources in schools are inadequate for proper support of learning.
(7) Laziness and unwillingness to exert themselves for the benefit of pupils	(7) Politicians and other outsiders often interfere with schools, e.g. in matters of admission and discipline.

Sources: The explanations have been framed from two articles appearing in The Standard: on June 29, 1985 - Pregnancies Among School Girls Have Reached Alarming Stage; September 6, 1985. School Strikes - The Inside Story.

Table 1 underscores the fact that a full understanding of and, more important, policy action aimed at improving teacher quality, ought to approach the issue from several vantage points.

This paper, which is part of on-going research into the quality of education in Kenya, explores certain factors which influence teacher effectiveness. Without attempting a neat definition, the paper sets out a cause and effect continuum in which teacher effectiveness is best understood. It

is pointed out that an approach which concentrates on only a part of the full range of the factors which determine teacher quality could be useful but it would not tell the whole truth. Pertinent to this argument, three points are highlighted:

- 1) It is not enough to conceptualise learning outcomes, regarded as a good measure of teacher effectiveness, only in terms of pupils' cognitive achievement, e.g. as shown in examination results: non-cognitive outcomes (such as the development of appropriate social attitudes) and changes in the system of education and the community which result from the learning situation, are also important.
- 2) Planning is faulty (and research limited) when it conceptualises improvement of teacher effectiveness only in terms of raising the teachers' competence in the classroom (e.g. through formal training) and ignores or plays down factors which influence the classroom situation from without.
- 3) Research into and planning of the improvement of teacher quality in developing countries should take into account the fact there are acute constraints in the financing of education: solutions which would not require additional heavy expenditures should receive most attention.

National statistics (on public examinations, finance and teachers) and newly collected data are analysed to explore the relationship between the teaching activity, resources and the management of education. The bulk of newly collected data, based on some of the 124 secondary schools in the study sample, comprises of (1) responses by 28 heads to a written questionnaire administered in August 1985 (2) detailed observations of and verbal interviews in 15 of the schools (3) analysis of the inspection reports of 68 of the schools. In addition officers of the ministry responsible for education were interviewed to elicit information on general issues in the financing and management of education.

While analysis of some of the data shows that quality of learning could be improved through the provision of more funds for learning resources, physical facilities, accelerated replacement of unqualified teachers (particularly in secondary schools), and more attractive terms and conditions of service for teachers, scrutiny of current expenditures on education reveals that an infusion of additional substantial financial resources into education is unlikely to take place in the near future. In search for

alternative ways of improving teacher quality and therefore the outcomes of learning, the paper explores current management practices, including supervision, inspection and guidance. Data is analysed to show that there is a major contrast between the primary and secondary sectors of the school system: in spite of significant proportions of untrained teachers, high levels of achievement in the primary sector have resulted from sound management and in-servicing at the district level, while in the secondary sector teacher-support organs - headship of schools, the inspectorate, the provincial/district education office and the boards of governors - have not been as successful as they should be.

THE CONCEPT OF TEACHER EFFECTIVENESS

A planner, and for that matter a scholar, discussing or attempting to devise ways of improving teacher effectiveness needs to have a clear understanding (if not a concise definition) of what he or she means by this phrase. There are at least four reasons why this is necessary. First, what is expected of the teacher is subject to variations depending on the level of development of the society in question and the group judging the teacher's work (Maleche 1974, Avalos & Haddad 1981, Ozumba 1982)². Politicians, planners, administrators, employers, churches, parents, pupils and others are interested in the teachers' work but not necessarily for the same reasons. Secondly, definitions of teaching are derived from several bodies of knowledge which are often in conflict, as Avalos and Haddad observe:

'Learning theories, socio-psychological theories of individual and group behaviour, and macro-social theories concerning the relationship of education to social development and/or to development of cultural independence - each carry different implications for what might be considered an appropriate and "effective" teaching behaviour. Moreover, these theories are abstractions, often

2. Maleche A.J. (1974) Why Join Teaching? East African Educational Journal.
Avalos B. & Haddad W. (1981) A Review of Teacher Effectiveness Research in African, India, Latin America, Middle East, Malaysia, Philippines, and Thailand: Synthesis of Results, International Development Research Centre (IDRC) Ottawa.
Ozumba K. (1981) State of the Art Review of Teacher Effectiveness in Africa, in Teacher Effectiveness: Research in West Africa, IDRC, Ottawa.

standing in opposition to each other and sometimes contradicting the conventional wisdom which parents and students take as their base for setting expectations'³

Thirdly, because of the difficulties associated with the measurement of teacher success in terms of expected outcomes on the learner and society, scholars have biased the concept in favour of definitions which approach teacher effectiveness in terms of expected teacher behaviour in the classroom (Yoloye 1978).⁴ Fourthly, in defining teacher effectiveness in terms of expected outcomes on the learner and society, due account should be taken of the fact that other variables outside the realm of the teacher influence teaching and its outcomes (Schlusmans 1978).⁵

From the fore-going it can be deduced that teacher effectiveness can be approached and defined in several different ways, each being valid in its own right. However, this fact calls for caution. For whatever purpose and whichever approach or definition is contemplated or adopted, cognizance of the other dimensions is essential if a balanced view is to be maintained. This is of crucial importance in formulating policy aimed at improving teacher quality: in such a task several factors need to be juxtaposed such that success of policy is predicted with a high degree of confidence. One way of conceptualising teacher effectiveness in the broadest context possible is to place the activity of teaching in a cause and effect continuum (Figure 1).

A comprehensive understanding of Figure 1 is crucial for a thorough grasp of the basic argument in this paper. The factors at work in the cause and effect relationship inherent in the modern organisation of the teaching profession are grouped into three boxes. Box A contains the conditioning factors (presage variables), B has the teaching situation in the classroom (process variables) and C, the outcomes (product variables). In order to conceptualise the full spectrum of the teaching activity in a society - from 'causes' to process and on to outcomes - vertical relationships

3. Avalos & Haddad, op. cit. - p.8.

4. Yoloye E.A. (1978) Assessing Teacher Effectiveness - Keynote Address to the 1978 Conference of the International Association for Educational Assessment (IAEA), Baden Austria. (Proceedings of the Conference edited by Frances M. Ottobre and published by I.A.E.A. Princeton, New Jersey USA under the title Assessing Teacher Effectiveness)

5. Schlusmans K. (1978) What is an Effective Teacher? Proceedings of the 1978 IAEA Conference, op. cit.

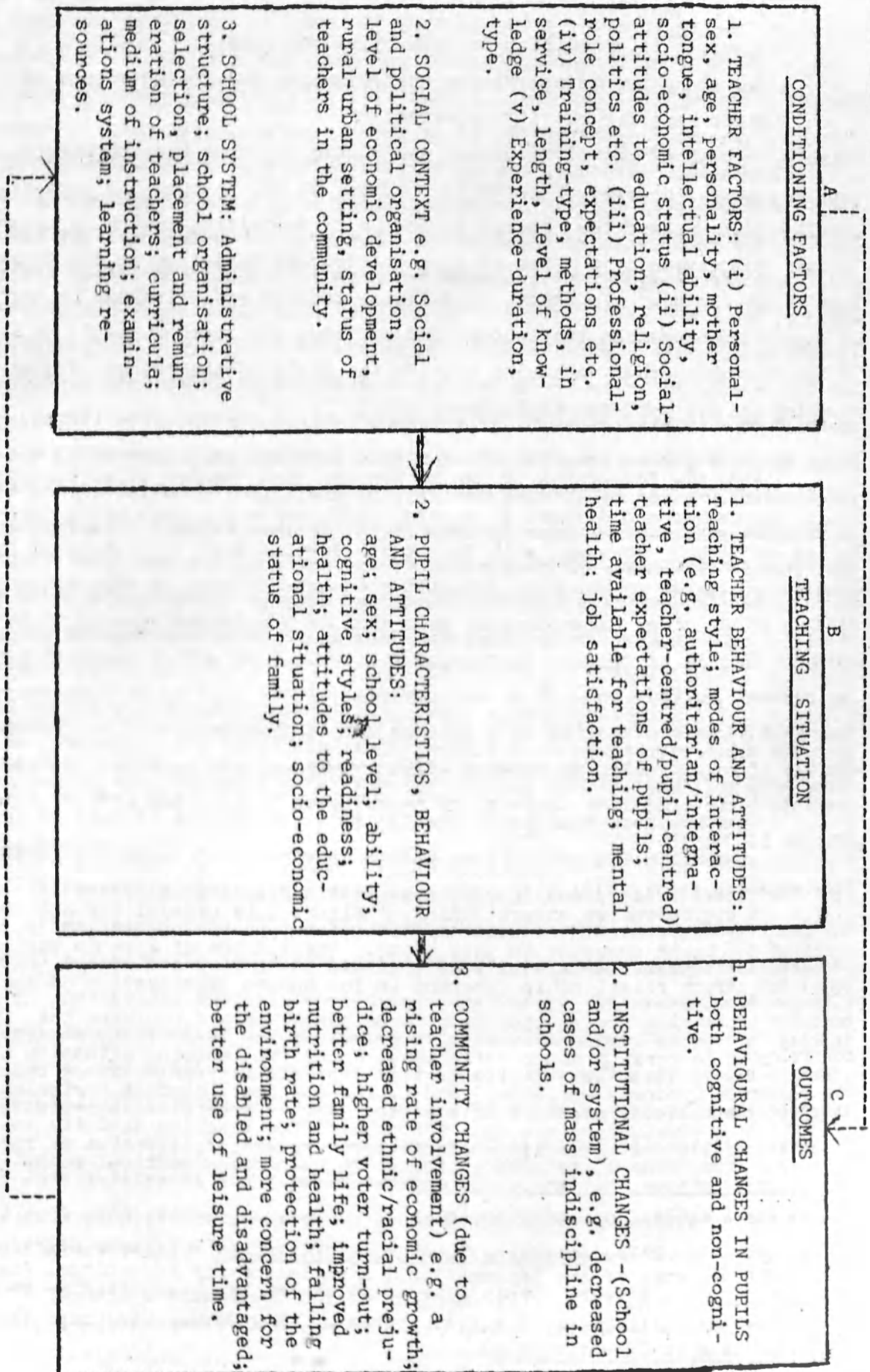


Figure 1 : TEACHING IN A CAUSE AND EFFECT CONTINUUM

Source : Adapted from Avalos B. & Haddad W : Review of Teacher Effectiveness Research, op.cit.

within each box and horizontal relationships between factors in the boxes should be visualised. Vertically, within each of the three groups various factors interact. In box A teacher factors and the school system interact with each other and are influenced by the social context and vice versa. In box B teacher behaviour and attitudes interact with pupil characteristics and attitudes; in C changes in pupils' behaviour, institutions and the community are closely interwoven. Horizontally, the vertical interactions as well as the individual factors in box A influence (cause or condition) the teaching situation in B, and in turn the activity in B leads to the outcomes in C. There is a second set of horizontal influences: the conditioning factors and the outcomes influence each other independent of the teaching situation (dotted arrows in Figure 1). Some of the outcomes, e.g. changes in the attitudes of pupils and many of the community changes, result directly from the conditioning factors particularly the social context, e.g. the evolution of youth's attitudes to religion, politics, employment, sex and marriage are likely to be influenced more by parents and the community than by the teacher. Finally, the changes symbolising the outcomes should result in new forms of most of the conditioning factors.

In an ideal society the relationships in Figure 1 should result in a continuously improving quality of life for the population. The teacher is effective to the extent to which s(he) contributes to such improvement.

Unfortunately no society is ideal. As a consequence the policy maker and planner are constantly called upon to formulate measures which, by making the teacher more effective, approximate the continuum to the ideal. This is an onerous task: many problems have to be surmounted, e.g. (1) It is implicit in Figure 1 that policy intervention should aim at making the conditioning factors more favourable (supportive) for the teaching situation so that the latter leads to desired outcomes. However, in formulating such intervention choices have to be made, much more so in developing countries where financial constraints are acute and socio-political sensitivities delicate.

(2) Socio-political sensitivities notwithstanding, how is the planner to identify the conditioning factors in which policy intervention is likely to have the most impact on the teaching situation and therefore the outcomes? For example, which of the following paired approaches should available funds be devoted to: expanding pre-service training V. in- and on-service training; expansion of the inspectorate and field administration services V.

creation of viable community management of schools coupled with an effective system of peer control and guidance between the professionals in the schools; improving teachers' salaries, housing and scheme of service V. providing more funds for (a) learning resources (b) boarding and physical facilities in schools?

(3) To which outcomes should policy intervention give priority? Can the planner count on continued community support if his priorities are at variance with the expectations of parents?

Before embarking on discussion of Kenya data on specific aspects of the above issues it is necessary to make some general remarks with regard to the planner's source of information and the priorities which society gives to educational outcomes.

Scarcity of Relevant Data in Planning the Improvement of Teacher Effectiveness.

Although many developing countries are conscious of the need and make attempts to improve teacher quality, the efforts made are usually not based on a comprehensive and empirical understanding of the cause and effect continuum in Figure 1. It is rare to come across research-based reform in which any two linkages in the continuum, e.g. between the school system and the teaching situation or between the latter and outcomes, have been established. Planning, which often takes place in a political climate requiring urgency (Court and Kinyanjui)⁶, is to a large extent based on what appears to be common sense: for example, a rapidly growing school population resulting in a high proportion of untrained teachers may be regarded as a signal that pre-service training should be expanded if educational standards are to be maintained. Among explanations for this approach to planning, two stand out. First, policy makers and planners may simply not recognise that what appears to be common sense may in fact not be so if subjected to empirical testing. Secondly, the educational research community in developing countries often shies away from issues which are of importance to their societies, with preference being given to non-contr versial topics which lend themselves to production of dissertations

6. Court D. & Kinyanjui K (1985) point out that hurried formulation and implementation of policy affects all important aspects of education - Education and Development in Sub-Saharan Africa : The operation and Impact of Education Systems, University of Nairobi I.D.S. Working Paper No. 421.

and theses within time and financial limitations (Kagia, Kinyanjui & Makau)⁷. The result is that in the third world, particularly in African countries, not only is there little research on teacher effectiveness, but perhaps more important, most of what has been done is not useful to the planner mainly because it does not make linkages. Ozumba (1981), with reference to Africa, makes the point as follows:

'..... it may not be an overstatement to say that not one area (of teacher effectiveness) has received adequate research attention. Even though about 51% of all the studies reviewed were surveys or observations of the general teaching situation, the weight and quality of evidence available does not lend itself to making valid general conclusions. Only one study observed the interrelationship of conditioning (presage) factors, teaching situation (process) factors and outcomes. Only 3 studies (5%) observed school system variables, while 40% of the studies reviewed dealt with teacher characteristics... No study examined the relationship between social context variables and teacher effectiveness. Teaching effectiveness outcomes were studied only in terms of cognitive pupil changes. Research on outcomes in terms of group and community changes at both cognitive and affective levels has not been undertaken. It is remarkable that, in spite of the huge outlays on teacher training, no research was encountered dealing with the costs'.⁸

The paucity of teacher effectiveness research is not uniform in all parts of Africa: Ozumba indicates that in Anglophone west Africa considerably more work has been done than has been the case in East Africa. In his review he cites only one report from Kenya (Sifuna 1975)⁹. Scrutiny of Table 2 seems to indicate that by May 1985 the Kenyan situation had not improved appreciably.

7. In a recent paper, Kagia R.W., Kinyanjui K. & Makau B.M. identified this trend as a major weakness in the educational research community in Kenya - Educational Research in Kenya with Particular Emphasis on Secondary Education - Paper presented at a Workshop on the Promotion of Collaboration and sharing of Information on Educational Research in Eastern and Southern Africa, Nairobi October 3-6, 1985.

8. Ozumba K. : State of the Art Review of Teacher Effectiveness in Africa, op.cit. - p.80.

9. Sifuna D.N. (1975) Factors Determining Teaching Success Among Primary School Teachers in Kenya, Ph.D Thesis, University of Nairobi. He has continued to show interest in the area: In the 5th Supplement of the Directory of Research at the Kenyatta University College (May 1985) he is listed as carrying out a project entitled 'Factors Determining Effectiveness Among Primary School Teachers'.

Table 2 : PUBLICATIONS AND RESEARCH IN PROGRESS AT KENYATTA UNIVERSITY COLLEGE⁽¹⁾ DURING THE TWO ACADEMIC YEARS UP TO MAY 1985

	NUMBER (%s in brackets)				TOTAL
	Ph.D.	Masters	P.G.D.E. ⁽²⁾	Other	
<u>PUBLICATIONS</u>					
Teacher Effectiveness ^(*)		13(52)	20(30)	4(3)	37(16)
Other		<u>12(48)</u>	<u>47(70)</u>	<u>137(97)</u>	<u>196(84)</u>
TOTAL		<u>25(100)</u>	<u>67(100)</u>	<u>141(100)</u>	<u>233(100)</u>
<u>RESEARCH PROJECTS IN PROGRESS</u>					
Teacher Effectiveness ^(*)	2(15)	3(6)		9(13)	14(11)
Other	<u>11(85)</u>	<u>46(94)</u>		<u>61(87)</u>	<u>118(89)</u>
TOTAL	<u>13(100)</u>	<u>49(100)</u>		<u>70(100)</u>	<u>132(100)</u>

Source: Kenyatta University College (May 1985) Directory of Research - Fifth Supplement, Compiled by J.M. Ng'ang'a.

Notes

(1) Kenyatta University College (made into a full university in September 1985) is the only institution training graduate teachers in Kenya. It is expected to carry out research on education as part of its responsibilities.

(2) P.G.D.E. = Post-Graduate Diploma in Education.

(*) The great majority of projects on teacher effectiveness have been aimed at aspects of the teaching situation. Apart from Sifuna's continued work on the effectiveness of primary school teachers, only two other titles (both on-going Ph.D. projects) indicate that linkages will be made: 'Classroom discourse in Chemistry lessons : a study of the relationship between pupils' achievements and classroom events in some Kenyan Secondary Schools'; 'A study of the organisation and effectiveness of in-service education and training and its role in educational innovations in Kenya'.

The intention here is not to imply that every study of teacher quality should attempt to cover the full spectrum in Figure 1. The variables to be sorted out in such an attempt would be too numerous to enable a single study to make headway (Schlusmans 1978).¹⁰ Further, the lack of a sufficiently large and sophisticated research community and resources in

10. Schlusmans K. (1978), *op.cit.*

many countries dictates caution in mounting research which covers conditioning factors, teaching and outcomes. Nevertheless, an awareness is necessary that study on only one of the sets of factors, to the exclusion of the other two, may not be of much help to the planner. Research projects which aim at making linkages while confining themselves to specific policy issues, and in which the scholars collaborate with the planners, provide an excellent way of assisting a country's development effort.

Society and Priorities of Educational Outcomes

The concentration on cognitive changes in pupils which, as noted by Ozumba, characterises process-outcome teacher effectiveness research can be explained in two ways. Firstly, it is a relatively easy matter to associate the acquisition of knowledge as specified in the curriculum with particular actions in the teaching process. It is much more difficult to apportion variance in pupils' affective growth, and institutional and community changes since these developments are outcomes of interaction between many non-school factors (the majority of which are not easy to quantify) and the teaching situation. Secondly, scholarly concentration on pupil cognitive changes is to a large extent a reflection of society's priorities of educational outcomes. In many societies, in particular those of developing countries, cognitive growth-measured in examinations and symbolised by academic certificates - is regarded as the most important outcome of schooling (Dore 1976, I.L.O. 1981)¹¹.

While research and interpretation of process-outcome data in planning improvements of teacher quality should continue to treat cognitive changes as key indicators, the shortcomings of this approach should be understood and measures taken to rectify them. To this end, it is important that the limitations of public examinations as a measure of teacher effectiveness are understood and the necessity of visualising teacher quality in relation to the attainment of all of a society's goals of education, grasped.

11. Dore R.P. (1976) The Diploma Disease, London Allen and Unwin; International Labour Organisation (1981) The Paper Qualifications Syndrome and the Unemployment of School Leavers - I.L.O. Jobs and Skills Programme for Africa, Addis Ababa (2 volumes).

Limitations of Public Examinations as a Measure of Teacher Effectiveness

It is common to assess teacher effectiveness in terms of pupils' success or failure in examinations. Such assessments imply that the examination of the pupils is objective in the sense that only the mental growth stemming from the interaction between teacher in-puts and the pupils' innate ability is measured. In real life several factors intervene to make the measurement criteria less than objective and/or perfect. The measurement process may considerably be distorted by factors outside the control of the teacher and pupils, e.g. the pupils' home background, variations in the availability of learning resources (Makau 1985a),¹² curriculum building (Makau 1985b),¹³ quality of school management, school-community interaction.

A second set of factors which cloud pupil achievement as a measure of teacher effectiveness has to do with the interpretation of test scores. One of the commonest interpretations of examination results by society is to see passing or failing in terms of selection for further education; consider the following excerpts from newspapers in two developing countries:

'A recent happening was a painful demonstration of the present state of our education. The place was the big Senayan sports Stadium. Thousands and thousands of high school students crowded the sports grounds to take a written test for entrance to one of the ten State universities.... The number of students that have to sit the said test is constantly growing by an average of between 30,000 and 40,000 yearly. This year the number reached a total of more than 230,000 while the state universities can only absorb about 16,000 students.'¹⁴

'There was already inevitable and widespread disappointment in the land when it became known the other day that only about a third of all tens of thousands of children who sat the C.P.E. last year had been selected for secondary education'.¹⁵

12. Makau B.M. (1985a) Equity and Efficiency in Financing Secondary Education in Kenya: Key Issues in State-Community Partnership, University of Nairobi, IDS Working Paper No. 429, September.

13. (1985b) Educational Planning and Development in Kenya: The 8-4-4 School Curriculum and Its Implications for Self-Employment, University of Nairobi, IDS Working Paper No.433, November.

14. Indonesia Times (editorial) Jakarta, 28 June 1983.

15. The Standard (editorial) Nairobi, 6 January 1984.

If success or failure is judged according to the number selected for severely limited places in further education, how fair is it to measure teacher effectiveness in terms of performance in the examination?

The researcher or planner needs to be aware that popular interpretation of examination results more often than not fails to take into account that there may be no complementarity between the teaching situation and the processes of public examinations. Firstly, test papers (which in most third world countries are not developed by practising teachers at the level examined) may often not test what the teacher has taught or what the pupils have learned. The papers may be too easy in that they do not give candidates an opportunity to display the full range of what they have learned, or too difficult because they unexpectedly require cognitive abilities whose growth teachers were not required to nurture. The scores obtained in such papers are a poor indicator of teacher quality. Secondly, even if test papers are a fair measure of the teaching/learning situation distortions may arise at the grading stage. The grading process, through which candidates' raw scores are cast into the grades which are made public, is the responsibility of central examining bodies and not of the teachers. In many countries, especially those influenced by the British model of grading, there are no fixed points for various grades. For example, in Kenya in each subject examined at the O level the pass mark is expected to 'float' - say between 30% and 40% of correct marks - from year to year. For any one year certain professional criteria are applied so as to determine the pass mark. By and large if the grading criteria, which aim at maintaining standards of achievement at a level commensurate with acceptable application of learning in life after school, is carefully observed the results ought to be a fair reflection of the teaching/learning situation. If on the other hand, the grading exercise is subjected to non-professional criteria, in particular the frequent and tempting¹⁶ idea that in no cohort

16. The temptation is associated with a misapplication of the assumed natural (normal) distribution of intelligence in a population. The interaction between natural (inherited) ability and experience, i.e. the learning/teaching situation, is the dominant factor in achievement. Good teaching (as opposed to bad) can result in a negative skew in the distribution of achievement scores. For a detailed discussion of this theme, see Bloom B.S. et.al. (1971) Handbook of Formative and Summative Evaluation of Student Learning, New York McGraw-Hill, Bloom B.S. (1976) Human Characteristics and School Learning, New York McGraw-Hill. For research directly relevant to Kenya, see Makau B.M. & Somerset H.C.A. (1980) Primary School Leaving Examination, Basic Intellectual Skills and Equity: Some Evidence from Kenya, IDS, Discussion Paper No.271, University of Nairobi.

should the percentage passing be lower than that for the preceding group, the pass mark could dangerously slide towards 0% of correct marks. In such a case the points at which candidates 'pass' are too low to be a meaningful measure (in terms of the application of learning to real life situations) of the teaching/learning exercise; but because only a few people within the examining body know the pass marks, the rest of the community continue to believe that school quality (including that of teachers) is improving.¹⁷

Table 3, which reflects the effects of grading in individual subjects, provides a framework for detailed study of the conduct of the O level examination in Kenya over the last decade.

Social Goals of Education and Teacher Effectiveness

In most developing countries national goals of education have been comprehensively articulated in written form. In Kenya, education is expected to promote national unity by creating respect for Kenyan cultural traditions, cultivating healthy attitudes and relationships, promoting social equality, as well as passing on skills necessary for economic development (Republic of Kenya, 1964).¹⁸ In pursuit of these goals, school curricula have been devised with objectives aimed at the development of self-discipline, integrity, adaptability, co-operation, self-reliance and patriotism, as well as preparing learners for further education and training (Republic of Kenya 1973, 1985, 1986).¹⁹ The articulation of educational goals and objectives implies that the teacher is expected to play a role in their achievement. Thus the success of teacher intervention in the growth of youth is expected to be measured by the extent to which it has positively influenced the achievement of all stated goals. Of great importance is the need to ascertain the extent to which teachers are assisting national cohesion in the new third world states.

17. Belief along these lines can influence the planning and development of education. Whereas the 1974 Annual Report of the Ministry of Education maintained that form 5 places were not filled because there were not enough qualified candidates, the 1978 report states that the government decided to open 50 extra form 5 classes in order to cope with 'public demand'. Since only candidates in divisions 1 and 2 in the O level exam were deemed to be qualified for entry into form 5, the increase in candidates with these qualifications between 1974 and 1977 (Table 3) must have fueled the reported public demand.

18. Republic of Kenya (1964) Report of the Kenya Education Commission Part I - p.25

19. (1973) Curriculum Guide for Secondary Schools Vol.1, Jomo Kenyatta Foundation.

(1985) Secondary School Syllabuses for the 8-4-4 System of Education, Ministry of Education, Science and Technology.

(1986) Syllabuses for Kenya Primary Schools Volume II - Upper Primary, Ministry of Education, Science and Technology.

Table 3 - KENYA O LEVEL RESULTS : SCHOOL CANDIDATES, 1974 - 1985

Year	Total Candidates	Number of Candidates By Division (% in brackets)				Fail
		1	2	3	4	
1974	29142	2153(7.4)	4722(16.2)	7190(24.7)	9031(31.0)	6046(20.7)
1975	38391	2556(6.7)	6298(16.4)	10269(26.7)	6694(17.4)	12574(32.8)
1976	47623	3093(6.5)	7096(14.9)	12384(26.0)	7740(16.3)	17310(36.3)
1977	54559	4487(8.2)	9384(17.2)	14253(26.1)	10762(19.7)	15673(28.2)
1978	60742	4062(6.7)	9638(15.9)	16190(26.7)	12296(20.2)	18556(30.5)
1979	70953	2646(3.7)	7959(11.2)	16851(23.8)	18725(26.4)	24772(34.9)
1980	86828	2893(3.3)	9015(10.4)	18919(21.8)	26187(30.2)	29814(34.3)
1981	87191	2630(3.0)	8585(9.8)	18724(21.5)	27736(31.8)	29516(33.9)
1982	94834	2923(3.0)	10005(10.6)	22621(23.9)	30135(31.8)	29150(30.7)
1983	108605	3508(3.2)	11448(10.6)	25628(23.5)	35311(32.5)	32710(30.5)
1984	120553	4689(3.9)	15540(12.9)	32067(26.6)	36666(30.4)	31592(26.2)
1985	126198	5743(4.5)	19471(15.4)	35918(29.5)	35572(28.2)	29494(23.4)

Sources: Annual Reports of the Ministry of Education and Archives of the East African Examinations Council and the Kenya National Examinations Council.

Notes

- (1) Between 1974 and 1979 the O level was known as the East African Certificate of Education. In 1980 it was renamed and became Kenya Certificate of Education. For the entire period the examination has been taken after 4 years of secondary school.
- (2) The O level is a group Certificate: a candidate's performance in all subjects is aggregated to arrive at a division. Division 1 denotes the highest quality of performance and division 4, a weak pass (see Table 4 p. 20).
- (3) Performance has been influenced by rapid growth in secondary school enrolments. First, learning resources, both financial and human, have not kept pace with enrolments. Secondly, increase in enrolments has meant a decrease in the level of innate ability of the candidature. As a consequence of the fore-going, it is reasonable to assume that if grading were held constant at the pre-1974 standards, the percentages of candidates in the better divisions would have decreased over the decade.

Although the teacher is not the only catalyst in shaping the social and political attitudes of youth, there is evidence to suggest that the teacher and the school play an important role in the process. Iyengar (1980)²⁰ shows that the age of formal schooling is crucial in the socialisation of Indian youth towards the acceptance of dissent as an important democratic norm. Koff and Von der Muhll (1971)²¹ in a study on Kenya and Tanzania found that primary and secondary pupils regarded teachers as the most important source of knowledge about good citizenship. In his study of secondary education in Kenya, Keller Jr (1980)²² concludes that the 'school does provide the student with some of the characteristics of good citizenship, namely his cognitive awareness and political inquisitiveness, and it does teach him to value constructive change and to take on equalitarian propensities', although 'it is not so influential in insuring loyalty to the political system. To the extent that modern education in less developed countries (L.D.Cs) is in essence foreign and geared to the socialisation of youth into the socio-economic and political model of society adopted from developed countries (D.C.s), Saha (1980) argues that the teacher in an L.D.C. is a much more powerful agent of change than is the case in D.C.s. -

'... the foreign nature of the school in many less developed societies means that its relevance for and continuity with traditional society is problematic. This discontinuity can virtually obstruct any input that traditional educational agents in developing countries might have on school achievement. Thus family members, (traditional) religious leaders, village elders and age peers cannot provide the cultural enrichment and reinforcement needed even though they might provide encouragement. On the other hand, the teachers who are in effect "outsiders" to the traditional cultures, and who impart non-traditional perspectives and knowledge, are virtually the only sources of school knowledge and thus control access to it'.²³

20. Iyengar S (1980) Socialization Toward Democratic Norms in a Developing Nation: Approval of Dissent Among Indian Youth - The Journal of Developing Areas Vol. 14 No.4, July.

21. Koff D. & Von der Muhll G. (1971) Political Socialization in Kenya and Tanzania - A Comparative Analysis, in Prewitt K. (ed) Education and Political Values: An East African Case Study, East African Publishing House.

22. Keller Jr E.J. (1980) Education, Manpower and Development - The Impact of Educational Policy in Kenya, Kenya Literature Bureau - p. 197.

23. Saha L.J. (1983) Social Structure and Teacher Effects on Academic Achievement: A Comparative Analysis, Comparative Educational Review Vol.27 No. 1, February - p.86.

With the foregoing in mind, and inspite of the methodological complexities involved, it is important that scholars endeavour to measure teacher effectiveness in terms of social outcomes in pupils. This exhortation does not necessarily imply advocacy of longitudinal tracer studies (although these are important) the results of which can only be known after students have left school. The interaction between the staff and students in schools provides data from which the latter's future social attitudes could be predicted with a fair degree of confidence and, of major immediate importance, a base on which better management of schools could be planned and implemented. A variable which readily lends itself to the sort of study being advocated for here is indiscipline in schools.

Outright defiance of teachers by students in a school is a clear indication that the norms of respect, fair play and acceptable modes of communications have been shoved aside and that the school is failing to impart values and attitudes which the learners will need after school. A number of studies carried out in Kenya, while acknowledging the influence of forces external to the school, have shown that serious breakdown in school discipline (locally known as school strikes) are sparked off by identifiable actions of the teaching staff, particularly the head teacher (Kipkorir 1970, Osogo 1970, Oxlade 1973, Kinyanjui 1976).²⁴ In discussing the strike in October 1956 at Mangu High School, Osogo points out that although the nationalist struggle for independence which was then being violently waged in Kenya influenced the events at the school (not unlike in the 1940 strike at Alliance High School (A.H.S.), discussed by Kipkorir), it was the attitude and treatment of the African teachers and students by the Irish priest - teachers (including the head) which was the root cause. Prior to the strike, the African teachers had submitted a memorandum to the head complaining about unsatisfactory and unwritten terms and conditions of service including poor housing (Kipkorir notes a similar complaint at A.H.S. in 1940) and the fact that they were not allowed to interact with the students outside the classroom. The head and priest teachers seem to have been unnecessarily heavy handed in their approach to discipline, as

24. Kipkorir B.E. (1970) The Alliance High School and the Origins of the Kenya Elite 1926-1962, Ph.D. Thesis Cambridge University; Osogo J.N.B. (1970) The History of Kabaa - Mangu High School and the Contribution of the Holy Ghost Fathers Upon Education in Kenya, M.A.Thesis, University of Nairobi; Oxlade D. (1973) A Study of the English Public School Tradition in the Former Government European Secondary Boarding Schools in Kenya and Its Influence on other Secondary Schools, Ph.D. Thesis, University of Nairobi; Kinyanjui K. (1976) Secondary School Strikes: The Art of Blaming the Victim, IDS, Discussion Paper No. 243, University of Nairobi.

revealed by the demands in the students' written memorandum - freedom to go where they liked at weekends, to receive visitors without having to seek for permission, to write and receive letters without censure; no further compulsory learning of catechism; abolition of fines and penances; withdraw of all supervision 'so that students may develop their will power and personality'. Both Osogo and Kipkorir hint that a dissatisfied section of the staff which had discerned latent tension between the student body and the school authority sought to channel student action into open rebellion by interpreting the school situation in terms of the socio-economic and political problems in the wider society. This dynamic, which Kinyanjui - and more recently Nkinyangi (1981)²⁵ - show has been widened to include instigation of students by non-teachers (e.g. politicians, parents and members of school boards who have grudges against the head and school system), provides a fertile ground from which variables for the analysis of serious indiscipline can be drawn.

THE STATE OF TEACHER EFFECTIVENESS

In Kenya there is much concern that the majority of schools are not adequately facilitating both the affective and cognitive growth of pupils. This phenomenon, which is associated with the rapid growth in the number of schools and enrolments since 1963 (Republic of Kenya 1963, 1984)²⁶, is thought to be more serious in the secondary sector, where wide qualitative disparities exist between schools in one geographical area with more or less the same natural environment. Frequent cases of serious indiscipline and poor performance in the O level examination are frequently cited as manifestations of school failure. Assuming that there is a positive correlation between serious indiscipline and poor academic achievement, data is analysed below with a view to (1) showing the extent of school failure (2) shedding light on the causes (3) making suggestions for possible reform.

25. Nkinyangi J.A. (1981) The Origins of Student Disturbances: The Kenyan Case, IDS Working Paper No. 378, University of Nairobi.

26. Republic of Kenya (1963) Annual Report of the Ministry of Education; (1984) Economic Survey, Ministry of Finance and Planning. Between 1963 and 1983 primary school enrolments grew from about 892,000 to 4,324,000, a growth of 485%; in the same period secondary enrolments grew from 31,000 to 494,000, i.e. by 1594%.

Indiscipline in Secondary Schools

The phenomenon of student indiscipline, although neither new or unique to this country, has been a major problem in Kenyan secondary schools since 1963. Teachers, heads and school boards have continued to deal with minor and/or isolated cases of indiscipline as part of the normal school routine; most such incidents do not draw the attention of society. It is not so with regard to indiscipline involving the whole or a large section of a school's student body. Although since the mid-1960s no year has been without a single case, mass indiscipline (strikes) in Kenyan institutions has been known to be more intensive during some years.

Kinyanjui notes that 1974 was a particularly bad year:

'In 1974 the Kenyan educational system experienced an unprecedented number of student strikes. In the period between March and September, there were seventy secondary school strikes, two technical school strikes, two university strikes, one teacher training college strike and a Roman Catholic seminary strike'.²⁷

1981 marked another bad period: in Central province alone, 16 maintained secondary schools (13%) out of 120 were involved in mass indiscipline (Republic of Kenya 1981).²⁸ It is noteworthy that 1974 was associated with the beginning of severe financial constraints resulting from rapid rising petroleum prices, and in 1981 the considerable hikes in parental payments for secondary education instituted in 1980, coupled with severe food shortages in the country, were beginning to bite.

In addition to the destruction of school property worth thousands of shillings (the entire school has been known to have been burned down) and sometimes physical injury to heads and teachers, strikes are traumatic and disruptive events with long lasting outcomes. Students who go on strike are suspended from school and lose variable learning time, some are expelled permanently thereby losing a life time chance, interaction between staff and students is grossly impaired, school-community relations are strained and in many cases innocent students, parents and teachers suffer both

27. Kinyanjui K. : Secondary School Strikes, op.cit. - p.1.

28. Republic of Kenya (1981) Central Province Annual Report.

psychologically and materially. It can safely be assumed that a strike seriously undermines learning.

Evidence of Poor Performance in the O Level Examination

Table 4 shows performance in the 1981 O level examination in the eight subjects offered by the majority of candidates. Performance in these subjects more or less determines the overall results shown in Table 3. The 1981 performance has been chosen as an example because this was the first year in which the Kenya National Examinations Council (formed in August 1980) took full responsibility for the conduct of the examination. As can be seen from the table failure rates in the eight subjects are high and therefore a major cause for worry.

Table 4 - PERFORMANCE IN SELECTED SUBJECTS IN THE 1981 O LEVEL EXAMINATION

<u>Subject</u>	<u>No. of Candidates</u>	<u>Distinctions</u>	<u>Percentage of:</u>		
			<u>Credit</u>	<u>Passes</u>	<u>Failures</u>
English Language	92938	1	13	27	59
Mathematics	91439	1	10	14	75
Geography	85000	1	25	17	57
Kiswahili	73599	1	24	28	47
Christ. Rel. Education	72411	1	29	30	40
History	53599	1	14	28	57
Biology	43241	1	21	33	45
General Science	37034		12	26	62

Source: Archives of the Kenya National Examinations Council.

Notes

Raw scores in each subject are graded into 9 categories as follows:

- Grades 1 & 2 - Distinctions
- Grades 3 - 6 - Credits
- Grades 7 & 8 - Passes
- Grade 9 - Failures

In order to arrive at the overall result for a candidate (see Table 3), a candidate's lowest six subject grades are aggregated. The range of

aggregate points for divisions are:

Division 1 : 6 to 23 points

Division 2 : 24 to 33 points

Division 3 : 34 to 44 points.

Division 4 is awarded to a candidate who fails to obtain division 3 but passes at grade 6 or better in at least one subject, or at grade 7 in at least two subjects, or grade 8 in at least three subjects.

Heads' Explanations of Student Indiscipline and Poor Performance in Public Examinations

Twenty eight heads of secondary schools responded to a written questionnaire containing questions on the management and financing of schools. Two of the questions aimed at tapping the heads' perceptions of the causes of student indiscipline and poor academic achievement as revealed in performance in public examinations. Analyses of the heads' responses are presented in Tables 5 to 8.

The question on indiscipline had the following opening sentence: 'Smooth and healthy relationships in a school are essential for high quality learning'. Five commonly mentioned causes of student indiscipline were then given; each head was asked to think and write down another five causes. Out of the total of ten causes, each head was required to select and rank five causes which s(he) 'considered pose the greatest threat to discipline' in her/his school; the head was asked to repeat the selection and ranking exercise for 'secondary schools in general'. Table 5 shows the results of the heads' ranking. Table 6 is a synthesis of the causes suggested by heads.

The question on performance in public examinations had two parts. In the first part, each head was asked to indicate the degree of negative influence of each of ten factors on her/his 'schools performance in public examinations in the last five years' : for each factor, the head was required to tick one of four boxes graded from 'Significant' to 'Insignificant'. In the second part of the question, the head was asked to write down the main reasons which s(he) considered had the most negative influence on her/his school's performance. The responses to the first part are summarised in Table 7 and to the second part, Table 8.

Table 5 - HEADS' RANKING OF CAUSES OF STUDENT INDISCIPLINE IN SECONDARY SCHOOLS (WEIGHTED INDICES⁽¹⁾)

N = 28 Heads

<u>Causes</u>	<u>For Own School</u>	<u>For Other Schools</u>
1. A natural tendency in adolescents to challenge authority	87	74
2. Breakdown in traditional values and mores of society	76	59
3. Rumours and interferences from without the school	57	42
4. Frequent changes in the teaching staff of the school	45	36
5. Breakdown in communications between staff and students	42	49
6. Suggestions by heads	115	128

(1) Heads ranked the five causes they had selected in order of importance. The index was constructed by tallying five points each time a cause was ranked first, four points for second and so on.

The data in Tables 5 - 8 give important insights into the position with regard to material provision and teacher factors in the running of secondary schools.

Material Provision

The heads pin-point inadequacies in the material provision for schools as an important cause of student indiscipline. In Table 6 poor boarding conditions and shortages of learning resources constitute 30% of the frequency of mention of causes of indiscipline. Inadequacies of learning resources (library, textbooks and science laboratories) rank high as causes of poor performance in public examinations (Table 7). As a main cause of poor performance (Table 8), constraint in resources (inadequacy of facilities and materials, students living arrangements, students' home background) are mentioned 20 times (29.4%) out of 58.

Table 6 - CAUSES OF STUDENT INDISCIPLINE IN SECONDARY SCHOOLS : A SYNTHESIS OF SUGGESTIONS BY HEADS

	N = 28 Heads	<u>Frequency of Mention</u>	<u>Representative Statements</u>
1. INADEQUACIES IN MATERIAL PROVISION FOR SCHOOLS			
(i) Dissatisfaction with boarding conditions	14(14.9%)	14(14.9%)	Food inadequate or of poor quality; shortage of water and light; dirty kitchen, dining hall, toilets; crowded dormitories. Lack of essential textbooks and equipment; poor physical facilities.
(ii) Inadequacies in learning materials and facilities	28(29.8%)	28(29.8%)	
2. POOR ADMINISTRATION AND MISMANAGEMENT BY HEADS			
(i) Poor programming of learning activities	5(5.3%)	5(5.3%)	Non-involvement of students in co-curricular activities; ill attitude to a sense of time and urgency. Heads' absence from and lack of interest in the school; no counselling of students; lack of effective punishment; teacher's incitement of students. Loose team effort among teachers; disharmony amongst teachers; indiscipline among the staff; Misuse of school funds. Ineffective, bad or no teaching. Neglect of boarding duties; refusal to take part in co-curricular activities; negligence of professional ethics. Frequent unauthorised absence from school Teachers doing a minimum. Continued overleaf.
(ii) Poor supervision and guidance of learning	13(13.8%)	13(13.8%)	
(iii) Poor co-ordination and leadership of the staff	6(6.4%)	6(6.4%)	
(iv) Mismanagement of resources	3(3.2%)	3(3.2%)	
3. NEGATIVE TEACHER CHARACTERISTICS			
(i) Poor class teaching	7(7.4%)	7(7.4%)	Continued overleaf.
(ii) Unwillingness to do more than class teaching	5(5.3%)	5(5.3%)	
(iii) Absenteeism	2(2.1%)	2(2.1%)	
(iv) Laziness	1(1.1%)	1(1.1%)	
	15(15.9%)	15(15.9%)	

Table 6 continued.

	<u>Frequency of Mention</u>	<u>Representative Statements</u>
4. INADEQUATE DELEGATION AND SUPPORT FROM THE AUTHORITIES AND SOCIETY		
(i) Inadequate delegation from the ministry of education	4(4.2%)	Reduced power of schools in disciplining and expelling students; apathy of the ministry : delays and arbitrary decisions.
(ii) Understaffing and unqualified teachers	4(4.2%)	Inadequate staff; too many untrained A level teachers.
(iii) Lack of formal employment for school leavers	2(2.1%) <u>10(10.5%)</u>	Decreasing opportunity of finding future employment.
5. NEGATIVE STUDENT CHARACTERISTICS	8(8.5%)	Students not willing to do manual work; students copying others who are indisciplined; 90% of students in Harambee schools are carefree; clashes between student and staff ideas of school organisation.
6. UNFAVOURABLE STUDENT HOME BACKGROUND	6(6.4%)	Social/emotional instability in the home e.g. in one parent families; parents have abandoned the discipline of their children to schools; financial status of homes.
	Total Frequencies of Mention <u>94(100%)</u>	

Table 7 - HEADS' RANKING OF CAUSES OF POOR PERFORMANCE IN PUBLIC EXAMINATIONS, 1980 - 1984 (WEIGHTED INDICES⁽¹⁾)

N = 28 Heads⁽²⁾

<u>Causes</u>	<u>Government Schools</u>		<u>Assisted and Harambee Schools</u> ⁽³⁾	
	<u>Index</u>	<u>Rank</u>	<u>Index</u>	<u>Rank</u>
1. Lack of a well-stocked library	40	1	43	3
2. Students' qualifications at entry	34	2	51	1
3. School unable to provide enough textbooks	33	3	37	5
4. Inadequate material incentives for teachers	30	4	31	7
5. High rate of teacher turn-over	26	5	28	8
6. Inadequate science laboratories	23	6 ⁼	38	4
7. Inappropriate training of teachers	23	6 ⁼	26	9
8. Understaffing in key subjects	21	8	32	6
9. Too many untrained teachers	19	9 ⁼	46	2
10. Inadequate number of classrooms	19	9 ⁼	17	10

(1) Heads ranked the negative influence of each cause in a significant to insignificant continuum of four boxes. The index was constructed by tallying 4 points each time a cause was ranked first, three points for second and so on.

(2) 14 heads represented government maintained secondary schools and 14, assisted and Harambee schools. A number of heads did not respond to some of the causes: there were six such cases among heads of government schools and three among the assisted and Harambee schools.

(3) Assisted schools are non-government maintained schools some of whose teachers' salaries are met through government funds. Harambee schools are fully financed by the communities which set them up.

Table 8 - MAIN CAUSES GIVEN BY HEADS OF SECONDARY SCHOOLS FOR POOR PERFORMANCE IN PUBLIC EXAMINATIONS

N = 28 Schools

<u>Causes</u>	Frequency of Mention ⁽¹⁾ (% in brackets)		
	<u>Government Maintained Schools</u>	<u>Assisted & Harambee Schools</u>	<u>Total</u>
Students' qualifications at entry	3(13.6%)	9(25.0%)	12(20.7%)
Inadequacy of facilities and materials	2(9.1%)	8(22.2%)	10(17.2%)
Untrained teachers	1(4.6%)	7(19.5%)	8(13.8%)
High rate of teacher turn-over	2(9.1%)	1(2.8%)	3(5.2%)
Inadequate material incentives for teachers	3(13.6%)		3(5.2%)
Students' living arrangements		3(8.3%)	3(5.2%)
External (political) interference	1(4.6%)	1(2.8%)	2(3.4%)
Student characteristics ^(*)	5(22.7%)	3(8.3%)	8(13.8%)
Students' home background ^(*)	3(13.6%)	4(11.1%)	7(12.1%)
Attitude of society and the system	1(4.6%)		1(1.7%)
Other	1(4.6%)		1(1.7%)
TOTAL	<u>22(100%)</u>	<u>36(100%)</u>	<u>58(100%)</u>

(1) Heads were encouraged to give more than one reason.

* Representative Statements

(*) On Student Characteristics: Students have no interest in learning on their own, especially through reading text-books: they rely on what teachers teach and notes given; students attitudes towards some essential subjects; adolescence problems in a mixed school; lack of initiative.

On Students' home background: Lack of serious support by parents; delays in payment of fees lead to infrequent class attendance, hence insufficient coverage of course by students; parents inform their daughters who attend this school that they are in 'Harambee school', hence the girls have come here to physically, rather than mentally, grow.

Research evidence substantiates the heads' assertions that constraints in resources are important causes of problems in schools. In four case studies of school strikes carried out by Kinyanjui (1976)²⁹, the 'quality and quantity of food and uniforms given to students', and 'the shortage and quality of library and text books provided' feature prominently. Makau (1985a)³⁰ shows that as per prices current in June 1985, the cost of feeding a secondary school boarder and providing him/her with the basic minimum of text books for the O level course is three times the per capita allocation in the government grant-in-aid to maintained schools.

Inadequacy of resources and facilities is not uniform across all categories of schools. Data obtained from the 28 schools indicate that non-government maintained schools, whose performance in public examinations is on average poorer than that of government schools, are more disadvantaged in material provision. Each of the 14 government maintained schools responding to the questionnaire reported that it had a library of some sort, while of the 14 assisted and Harambee schools 5 reported that they had no libraries. The position with regard to science laboratories for the two categories of schools is shown in Table 9.

Table 9 - SCIENCE LABORATORIES IN KENYA'S SECONDARY SCHOOLS, 1984

N = 28 schools

<u>Category of School</u>	<u>Number of schools</u>	<u>Schools with no Labs.</u>	<u>Total number of streams</u>	<u>Total number of Labs.</u>	<u>Ratio of streams to Labs.</u>
Government Maintained	14	-	79	52	3:2
Assisted & Harambee	14	6	29	13	7:3

The Teacher Element in the Running of Secondary Schools

Data in Tables 5 - 8 indicate that heads recognise the importance of teacher factors in the running schools. Amongst the heads' suggestions for causes of indiscipline (Table 6), teacher factors (poor administration and management by heads, negative teacher characteristics, understaffing and unqualified teachers) are mentioned 46 times (49.3%) out of 94. Heads

29. Kinyanjui, op. cit. - p. 19.

30. Makau B.M. (1985a) - op.cit. - Tables 2, 3 and 4a.

of assisted and Harambee schools rank the prevalence of untrained teachers second as a cause of poor performance in examinations, while heads of government maintained schools place teacher incentives, high turn-over rate and inappropriate training 4th, 5th and 6th respectively (Table 7). In Table 8, teacher factors (training, turn-over and incentives) are mentioned 14 times (24.2%) out of 58 as main causes of poor performance.

The high ranking given to teacher training by heads is in line with popular belief that there are too many unqualified and professionally untrained teachers in the Kenya school system. Tables 10a and 10b contain data on the academic and professional training of primary and secondary school teachers

Table 10a - PRIMARY SCHOOL TEACHERS BY QUALIFICATIONS, 1984 & 1985⁽¹⁾

YEAR	(%s in brackets)							
	U.T.	P4	P3	P2	P1	S1	AP./GR	Total
1984	33,629 (28.3)	351 (0.3)	13,498 (11.4)	24,856 (20.9)	43,878 (36.9)	2563 (2.1)	168 (0.1)	118,963 (100)
1985	44,839 (32.0)	240 (0.2)	13,442 (9.6)	26,639 (19.0)	51,028 (36.5)	3313 (2.4)	477 (0.3)	139,978 (100)

Source: Teachers Service Commission (T.S.C.) Payroll.

(1) The 1984 figures are for December while those for 1985 are for September.

U.T. = Professionally untrained teacher. The 1985 Economic Survey gave the number of U.Ts as 33,860 with academic qualifications as follows: A level leavers - 764 (2.2%), O level leavers - 22,908 (67.7%), Junior secondary leavers - 8428 (24.9%), C.P.E. holders - 1733 (5.1%) and other - 27 (0.1%).

P4 = Completed primary school but did not pass primary leaving exam; received 2 years professional training.

P3 = Passed primary exam; had 2 years professional training.

P2 = 2 years secondary education + 2 years training; some P2s have a division 4 pass at the O level examination.

P1 = Division 3 O level certificate + 2 years training.

S1 = Either Division 1 or 2 O level + 3 years training, or A level + 2 year training.

AP./GR = Approved teacher (S1 promoted to the salary scale of a graduate or university graduate).

Table 10b - SECONDARY SCHOOL TEACHERS IN THE PAY-ROLL OF THE TEACHERS
SERVICE COMMISSION - September 1985
 (%s in brackets)

<u>Academic/Professional</u> <u>Qualifications</u>	<u>Government</u> <u>Schools</u> ⁽¹⁾	<u>Assisted</u> <u>Schools</u>	<u>Total</u>
O level leavers (untrained)	13 (0.15)	8 (0.23)	21 (0.17)
A levels leavers (untrained)	441 (5.10)	411 (11.73)	853 (7.01)
P2	1 (0.01)		1 (0.01)
P1	15 (0.17)	15 (0.43)	30 (0.25)
S1	2740 (31.70)	1587 (45.27)	4327 (35.62)
Graduates (including untrained) ⁽²⁾	5431 (62.83)	1455 (41.51)	6886 (56.68)
Other	3 (0.04)	29 (0.83)	32 (0.26)
TOTAL	8644 (100)	3505 (100)	12,149 (100)

Source: T.S.C. September 1985 pay-roll.

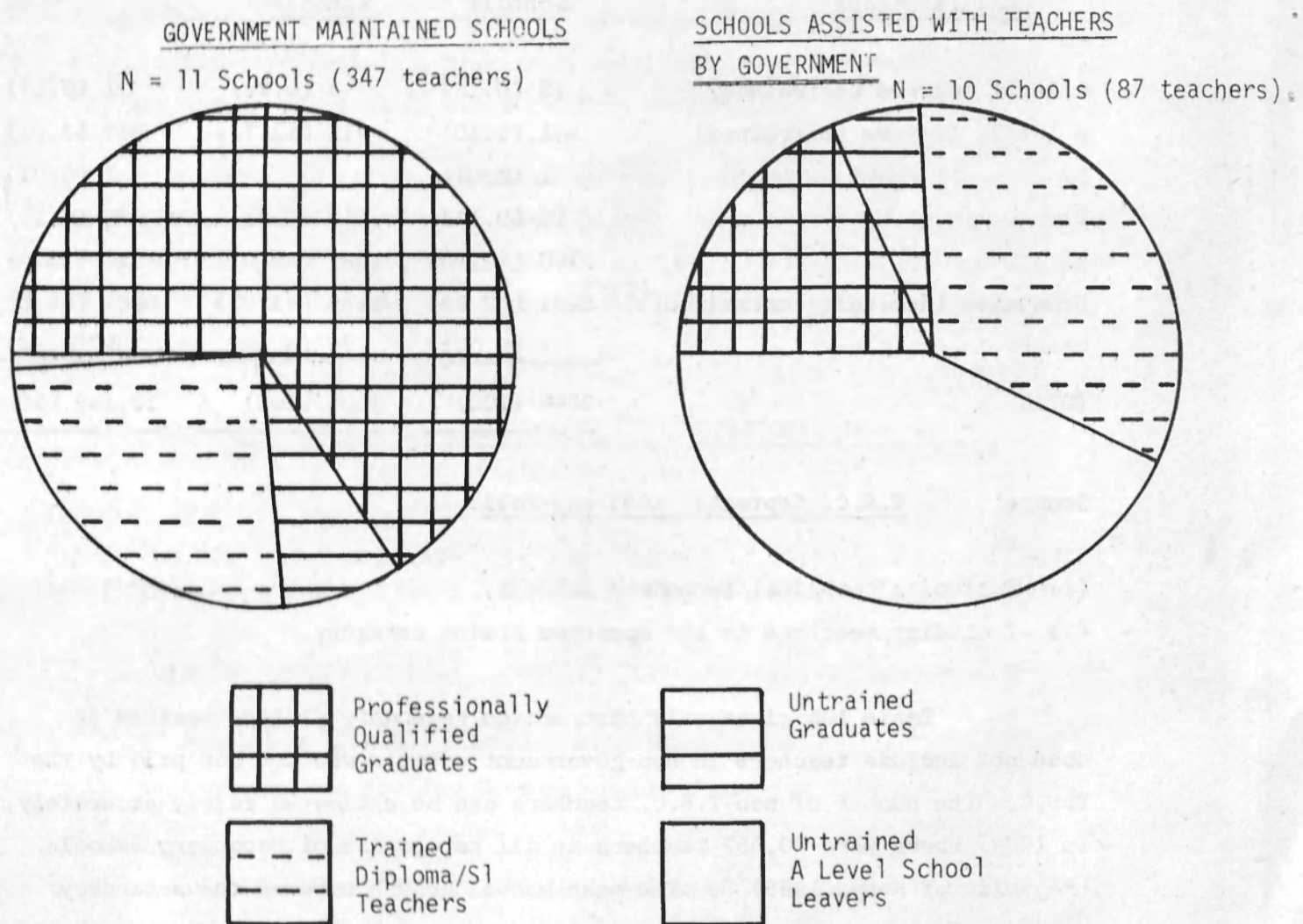
- (1) Excluding technical secondary schools.
 (2) Including teachers in the approved status category.

Table 10b gives only part of the secondary picture because it does not include teachers in non-government schools who are not paid by the T.S.C. The number of non-T.S.C. teachers can be estimated fairly accurately. In 1984, there were 20,662 teachers in all categories of Secondary Schools (Republic of Kenya 1985)³¹. The mean annual growth rate of the secondary teaching force between 1976/77 and, 1983/84 was 7.7125%. If this growth rate is applied to the 1984/85 period the teaching force in 1985 would be 22256. Thus in 1985 the number of teachers not in the T.S.C. payroll is estimated at 22256-12149 = 10107. Hence the number of teachers in non-government secondary schools in 1985 was over 13,600. As can be imagined, the great majority of these teachers are academically and professionally unqualified³². Figure 2, which is constructed from data obtained from 21 of the 28 schools surveyed in August - September 1985, make the relevant comparisons between the government and assisted

31. Republic of Kenya (1984) Economic Survey, CBS, Ministry of Finance and Planning.

32. It is unlikely that most trained teachers would volunteer for service in non-maintained schools, and, since there are no indications of oversupply of trained secondary school teachers, it can be assumed that only an insignificant number is in the payroll of non-government agencies.

Figure 2 - QUALIFICATIONS OF SECONDARY SCHOOL TEACHERS IN KENYA
September 1985



categories of schools. Much higher proportions of unqualified teachers are likely to be found in Harambee schools.

On the basis of the data in Tables 10a and 10b, and Figure 2, it would appear that the acceleration of teacher training is necessary if schools are to improve their efforts to foster affective and cognitive growth of learners.

The Heads' Role in Managing Education

A prominent feature of the data in Tables 5 to 8 is the trend whereby indiscipline and poor academic performance are to a considerable extent explained in terms of causes over which the heads feel they have no control. Inadequate material provision (Tables 6 to 8), the natural intransigence of adolescents, breakdown of traditional values, external interference (Table 5), students' qualifications at entry, quantitative and qualitative inadequacy in teacher training and remuneration, and a high rate of teacher turn-over (Table 7) are all given prominence by heads. It could be argued, with some justification, that the questionnaire 'put words into the heads' mouths', however, Tables 6 and 8 which summarise the free responses of heads introduce negative teacher characteristics, unfavourable student home background, and attitude of and insufficient support by the society and system as important causes of problems in schools.

Obviously individual heads of secondary schools have no control over such issues as the academic progress of pupils in primary school, the socio-economic status background of students, and the administrative policy of the ministry of education; moreover, the heads' influence over the allocation of resources to schools or the changing values of society,³³ and the deployment of teachers may be only partial, negligible or non-existent. However, the heads' apparently diminished or non-existent control over the above phenomena does not mean that the heads' position is left with no authority or influence. Sarason (1982), basing his argument

33. Both Saha and Yoloye (op.cit.) show that as societies in L.D.C.s evolve to become like those in D.C.s, the professional staff in schools increasingly lose influence in shaping the ideas and values of youth.

on careful participant observation, points out that the head is important 'because any kind of system change puts him or her in the role of implementing the change in one's school.'³⁴ Sarason contends that all too frequently the head's 'conception of the system serves as a basis for inaction and rigidity, or as a convenient target onto which one can direct blame for most anything'³⁵. He argues that society and the system of education define the head's job description in 'a set of generalizations' and that it is for the head to define his job in detail, to plan the utilisation of whatever resources the school has, and to expose his ideas and values not only to the authorities external to the school, but also to his staff and students, with a view to guiding educational change. He concludes:

'The available literature on educational change efforts points to the principal's crucial role, especially in regard to the seriousness with which he or she redefines the role of teachers in planning and implementation. The implications of that finding for the redefinition of parents and other community groups in matters of policy and change should be obvious. What is at stake is not only the principle that those who are or may be affected by proposed changes should be in some meaningful relationship to planning and change. What is also at stake is a political-tactical principle: How do you develop constituencies that maximise the chances that goals of change will be approximated?'³⁶

The causes of indiscipline given most weighting in Table 5 are variables which the head and his staff should mould into desirable outcomes through a well planned and executed interactive system. If heads would see one of their roles as the nurture of a sound system of communications between the education system, the community, the staff, parents and students (Walker 1965)³⁷, rather than the defence of the head's nominal authority, ^{discipline} might not turn out to be a major problem. A head of a well-managed large

34. Sarason S.B. (1982) The Culture of the School and The Problem of Change, 2nd Edition, Allyn and Bacon Inc. - p. 140.

35. Ibid., - p. 164.

36. Ibid., pp. 295-296.

37. Walker W.G. (1965) The Frincipal at Work - Case Studies in School Administration, University of Queensland Press Brisbane.

school in the study sample recently argued that many heads in Kenya are failing because they attempt to disguise their lack of vision of what a good school should look like by avoiding dialogue with their students and staff, parents, the community and the authorities.

In both Tables 7 and 8, heads of assisted and Harambee schools identify students' qualifications at entry as the most important variable in explaining performance in public examinations. In Table 7, heads of government maintained schools place the same variable second after poor library facilities. As far as the O level examination (offered by all schools in the study sample) is concerned, qualifications at entry mean the quality of certificate issued in relation to the primary leaving examination. It is true, as pointed out by Njoroge (1977)³⁸ and is observable from the procedure for secondary school selection, that assisted and Harambee schools select form 1 students whose primary leaving examination grades are on average lower than those of entrants into government schools. Further, among government schools, some, because of their reputation, attract and select better applicants than others. As a consequence of these variations, if the primary examination is a fair ranking of cognitive growth, 'qualifications at entry' could rightly be seen as influencing performance at O level. However, if qualifications at entry were the dominant variable, one would expect government schools to perform invariably better than the others. Table 11, in which the performance of ten single and double stream sample schools is shown, indicates that the foregoing is not the case. It is obvious that other variables are at work. At the risk of generalizing on the basis of what may appear to be circumstantial evidence, it seems reasonable to assume that government maintained schools, in which untrained teachers are not a major problem (Table 10b) and resources are superior to those in the other types of schools, ought to utilise the four years of the O level course to develop the above average primary school leavers they select into extremely high achievers.

38. Njoroge R.W. (1977) Some Factors Influencing Performance in Harambee Secondary Schools, B.A. Dissertation, University of Nairobi.

Table 11 - PERFORMANCE IN THE O LEVEL EXAMINATION, 1978 - 1984.
(Ten Schools in the Study Sample)⁽¹⁾

<u>Name of School</u>	<u>Cand.</u> 1983 ⁽²⁾	<u>Position in the Schools' Order of Merit⁽³⁾</u>							
		<u>78</u>	<u>79</u>	<u>80</u>	<u>81</u>	<u>82</u>	<u>83</u>	<u>84</u>	<u>Mean</u>
1. Kyome Secondary (H)	33	143	31	73	123	282	94	29	111
2. Eldoret Harambee Sec.(H)	79	135	163	152	204	239	246	226	195
3. Wareng' Secondary (M)	76	149	69	83	304	187	294	431	217
4. Bungoma Secondary (M)	94	352	309	320	211	101	186	180	237
5. Kisasi Secondary (M)	37	648	340	417	202	185	100	102	285
6. Njoro Girls Sec. (M)	88	361	366	238	464	425	260	239	336
7. Nyakach Girls Sec. (M)	88	231	248	413	287	299	592	290	337
8. St.Xaviers' Secondary (P)	47	303	439	424	345	594	398	410	416
9. Othaya Boys' Sec. (M)	93	245	428	923	552	283	370	316	445
10. Ngoto High School (H)	44	516	497	316	510	568	342	457	458

Sources: Archives of the East African and Kenya National Examinations Councils

H = Harambee M = Government maintained P = Private

(1) The sample has 50 maintained schools, 21 assisted, 40 Harambee and 13 private.

(2) Cand. = Number of candidates.

(3) In 1984 about 1750 schools took the examination. In the schools' order of merit the school with the overall best performance is ranked 1.

With perhaps the exception of teacher incentives (discussed elsewhere in this paper), the head's management is the key determinant of school success or failure in the secondary sector. There is evidence to suggest that 'negative teacher characteristics' (Table 6) to an extent reflect 'poor administration and mismanagement by the head' and that the latter largely explain not only indiscipline but also poor performance in examinations. Goodwin (1968) makes the point about the centrality of the head's management in school success as follows:

'In the last resort, a thoroughly good school is one where the pupils apply themselves to their work and play with a steady and successful zeal. If this does not obtain the head must call the

quality of his own leadership into sternest question. The fault will almost certainly lie there, not with the staff, and less still with the pupils'.³⁹

Recent discussions with various individuals involved in education (field and headquarter officers in the ministry, members of school boards, heads and teachers) and scrutiny of written communications (in particular, reports of school inspection, audit reports and proceedings of meetings of the Kenya Secondary School Heads' Association - K.S.S.H.A.) indicate that poor quality of headship is a major contributor to low standards in secondary schools. For example, in the minutes of the K.S.S.H.A. executive committee meeting held in July 1978, 'instability caused by poor management', frequent transfer of heads and a 'lack of dedication and professional commitment' were ranked 1st, 2nd and 4th (out of 15) respectively as general causes of poor academic standards.⁴⁰

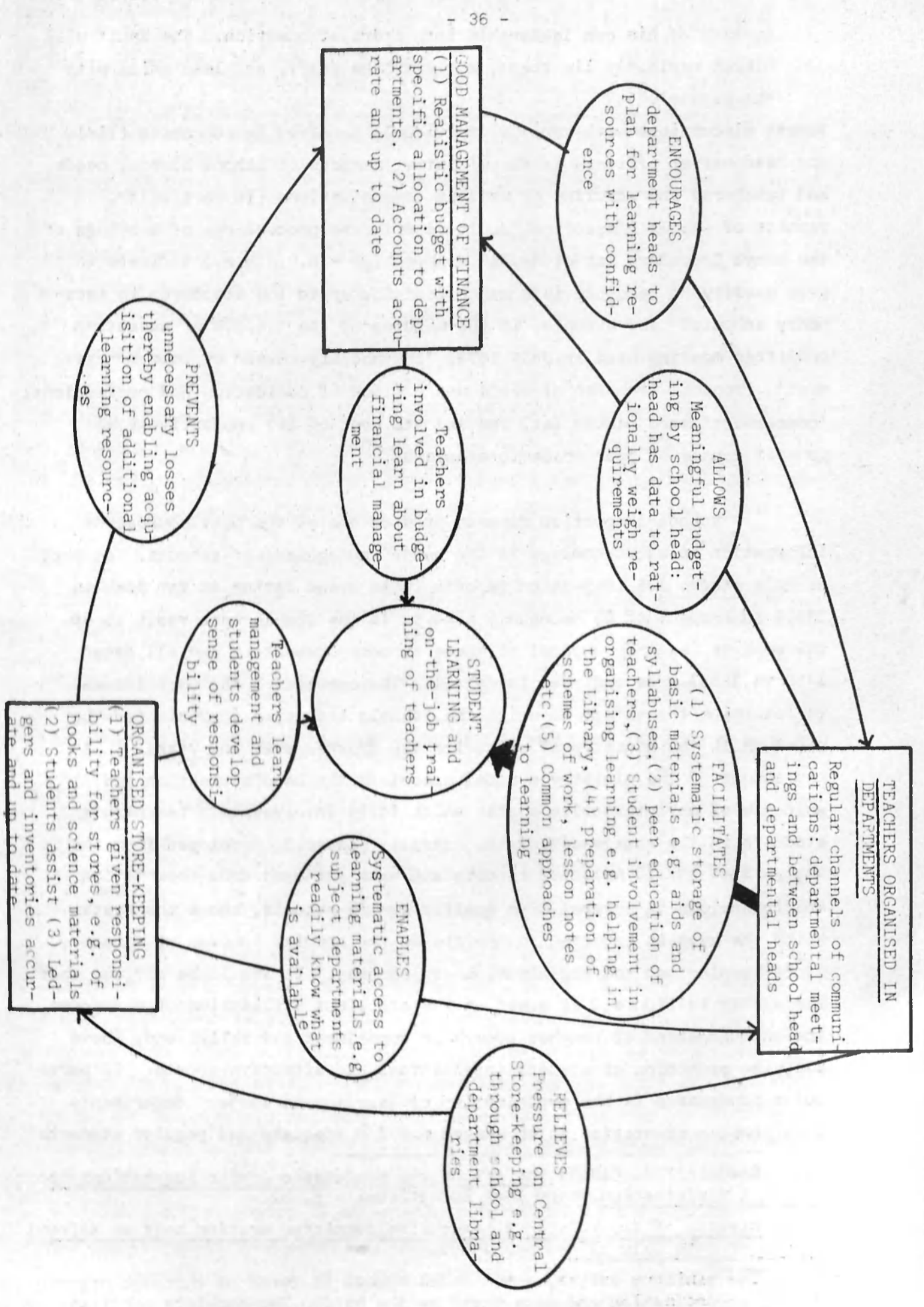
School inspection reports provide one of the best sources of information on short-comings in the heads' management of schools. As part of this study, 136 inspection reports (with a few dating as far back as 1959) in respect of 68 secondary schools in the sample were read; 15 of the reports (each by a panel of three or more inspectors and all dated 1980 to 1985) were analysed in detail. The purpose of the exercise was to determine the extent to which the schools inspected approximated the model which the ministry of education has created over the years.⁴¹ A key aspect of the ministry's model school is the head's creation and guidance of an interactive system which fully involves both teachers and students in the management of the school. Figure 3, developed from the analysis of the 15 selected reports and data gathered from observation and interviews in several high quality sample schools, shows the system which the head is expected to operate in the crucial spheres of finance, store-keeping and the organisation of learning. It should be obvious that the system in Figure 3 is aimed at the efficient utilisation of resources, the encouragement of teacher growth in commitment and skills and, above all, the promotion of student intellectual and affective growth. Of particular importance is the organisation of learning in subject departments: this enables strategies to be worked out for adequate and regular students'

39. Goodwin F.J. (1968) The Art of the Headmaster - With Suggestions on School Administration, Ward Lock Educational - p. 32.

40. Minutes of the K.S.S.H.A. executive committee meeting held at Nairobi School on 14th July 1978 - pp. 1 & 2.

41. The ministry envisages the model school in terms of thorough organisation, co-ordination and management by the head. Two booklets published by the ministry lay down what is expected - Accounting Instructions for Maintained and Assisted Institutions (1975) and A Manual for Heads of Secondary Schools in Kenya (1979).

Figure 3 - INTERRELATIONSHIP BETWEEN MANAGEMENT OF RESOURCES AND THE ORGANISATION OF LEARNING IN A S.S.H. SCHOOL



home work, private study, formative assessment (including uniform methods of recording scores), remedial teaching and counselling of weak learners, and the maintenance of records of work covered by teachers (essential for continuity in light of high rates of teacher-turnover). Charts similar to Figure 3 could be drawn in respect of the organisation of out-of-class learning activities and the administration of boarding.

To what extent have secondary schools been approximating the model? In only a few of the inspection reports read was there evidence that heads were operating a system which resembled the model, a fact borne out by observations and interviews in several sample schools. In the great majority of the reports statements such as the following predominated:

- (1) School X 'has a mass of problems covering areas of administration, financial control and an overall lack of commitment from the Headmaster' (September 1982).
- (2) 'Accounts books were written up only to January 1984. Only cheques were being banked, and payment vouchers were unnumbered and some had no supporting documents such as invoices and statements' (October 1984).
- (3) 'Textbooks were seen stocked in the store but, without proper ledgers and inventories, it was not possible to tell whether the school was qualitatively and quantitatively well supplied with these' (January 1985).
- (4) 'The schemes of work seen were mere lists of content with no attempt being made to indicate teaching methods, pupils' activities or books for reference by teachers and pupils. Records of work covered were not kept and the marking of pupils' work was not regular (July 1984).
- (5) 'There does not seem to be adequate professional interaction between teachers in the English department. Formal and informal departmental meetings could be held once in a while to serve as a forum for the exchange of views. Such forums would enable the more experienced teachers to impart their wealth of experience to the less experienced ones. On the other hand, such opportunities would enable even the experienced ones to enrich, broaden, deepen and up-date their knowledge of the subject matter, teaching experience and techniques' (September 1982).

It is important that those responsible for education fathom the causes of failure for Kenya to develop a sufficiently large cadre of heads to effectively man secondary schools. One cause has been the assumption that, as is the case in developed countries, heads should emerge from the teaching force without the necessity for special training. While implicitly accepting this evolutionary mode, Cammaerts (1969) points out that in a developing country it is imbued with difficulties:

'While Kenya will rapidly supply her own leadership in the form of secondary school headmasters and headmistresses, many of these will be relatively young and inexperienced in the problems of management of increasingly large institutions'.⁴²

Bearing in mind the rapid increase in the number of schools, high turn-over of secondary school teachers, and the varied local and overseas educational backgrounds of likely candidates for headship, Umbina (1974) concurs -

'There is a dearth of mature and experienced teachers especially for the leadership grade. It takes a long time to produce such teachers and inevitably young and inexperienced Africans are stepping into positions they cannot carry easily'.⁴³

Adherence to the evolutionary mode has been a self-fulfilling prophecy: in the eyes of the community since heads (never mind their quality!) have been found for all new schools, the need for special training has been obscured. What has not been grasped is that the rapid expansion of secondary education has created a set of circumstances - e.g. the need for education to serve new and relevant goals (Anderson (1970),⁴⁴ diminished missionary and English public school influence (Oxlade 1973),⁴⁵ deployment of primary school teachers in secondary schools and inexperienced Harambee school committees (Gachuhi 1970),⁴⁶ taking on unqualified 'local boys' as teachers in Harambee schools (Annes 1977, Njoroge 1977),⁴⁷ pressure on physical facilities indicating need for experienced handling (Smith 1973)⁴⁸ which underscore the need for special training for heads.

42. Cammaerts F.C.A. (1969) Priorities for the Preparation of Secondary Teachers in Kenya, East African Journal, November - p. 7.

43. Umbina W.E. (1974) Librarians and Education in Kenya: Problems and Prospects, with Particular Reference to the British Influence, M.A. Thesis, University College London School of Library, Archives & Information Studies - p. 55.

44. Anderson J. (1970) The Struggle for the School - The Interaction of Missionary, Colonial Government and Nationalist Enterprise in the Development of Formal Education in Kenya, Longman.

45. Oxlade D. : A Study of the English Public School Tradition - op. cit.

46. Gachuhi J.M. (1970) The Role and Impact of Self-help Schools on a Kenyan Community of Chinga, Ph.D. Thesis, State University of New York at Buffalo.

47. Annes A. (1977) Education and Its Role in Rural Development: Geographical Aspects of Kenya's Harambee Secondary Schools, University of Bergen.

Njoroge R.W. : Some Factors Influencing Performance - op. cit.

48. Smith J.S. (1973) The History of the Alliance High School, Heinemann

The need to train educational administrators has been recognised in government circles. In the keynote address to the 1971 Education Administration Conference, the Permanent Secretary for Education stated:

'With the best will in the world, no new and inexperienced officer can find his way about an office without some careful induction into what normally goes on there'.⁴⁹

Two years later the Director of Education, in a similar conference, was much more specific -

'The vast majority of our officers in this Ministry are really teachers and were trained in the first place as professional people in academic matters rather than in matters of administration... We are evidently faced with many new problems which actually require the services of professional Education Administrators with adequate training in administration of school affairs... The more our educational system expands, the more complex will be its administration. Proper selection and continued education and training of field staff of all levels is thus most necessary.'⁵⁰

Despite the acknowledged need, the training of secondary heads has been confined to peer education under K.S.S.H.A., occasional short seminars organised by the ministry (particularly under the auspices of its staff institute), limited cases of attendance at management courses at the Kenya Institute of Administration and overseas study tours. A systematic and regular training programme for heads has yet to be worked out. (K.S.S.H.A. 1978)⁵¹.

Remuneration of Teachers

Dissatisfaction with terms and conditions of service for teachers, which the heads in Table 7 rank as an important cause of poor student achievement, has been a feature of the secondary education scene for a long time (Grieves 1969, Osogo 1970).⁵² The Kenyanisation of the teaching force has

49. Republic of Kenya (1971) Report of the Education Administration Conference held at the Kenya Science Teachers' College, April 19-22 - p.10.

50. Republic of Kenya (1973) Report of the Education Administration Conference held at the Kenya Polytechnic, August 28-31 - pp. 4-5.

51. In a memorandum dated 22 November 1978 and entitled 'A Recommended Scheme of Service for the Heads of Secondary Schools - Kenya', K.S.S.H.A. recommended that 'Newly appointed Heads should be given an induction course on administration of schools for at least 6 months and then be appointed on acting capacity for further 12 months probation period before they are confirmed'.

52. Greaves L.B. (1969) Carey Francis of Kenya, Rex Collings London. Carey Francis, one of the greatest heads of all time, held views on teachers remuneration which are not unlike current suggestions from several influential donors to education in Kenya; Osogo J.N.B. - op. cit.

not led to stability in schools because of high attrition rates resulting from what is perceived as poor remuneration. At a consultative meeting between the Teachers Service Commission (T.S.C.) Secretary and the national executive committee of K.S.S.H.A. in October 1978, the chairman of the latter observed that 'graduate teachers have little to aspire to except the annual increments, which explains why many of them move out to institutions like colleges or the private sector where remuneration is lucrative.'⁵³ Loubser (1983) found that 'there is a relatively high attrition rate of 11 per cent per year for graduate teachers'.⁵⁴ Perusal of the relevant records at the T.S.C. indicates that between July 1984 and June 1985 at least 230 graduate teachers resigned in writing.⁵⁵ Table 12 shows that desertions and irregular resignations constitute by far the biggest proportion of cases of indiscipline reported to the T.S.C.

Recent interviews of heads and teachers indicate that scarce and/or inappropriate housing for teachers is a major source of dissatisfaction and undermines the smooth running of secondary schools, particularly if they are boarding : teachers who cannot live on the school compound are unable to devote much time to out-of-class activities at the end of formal classes; further, preparation for teaching and professional growth is hampered if a teacher has to live in rowdy surroundings e.g. lodgings next to bars and markets. Table 13, based on data collected from the 28 schools surveyed in August - September 1985, gives an indication of the scarcity of teachers' houses.

The current salary scales for professionals in secondary schools are shown in Table 14. At the lowest scale, the S1 teacher receives a salary similar to that of an assistant education officer, a police inspector or an administration chief grade I. At the highest scale, the head grade I is the equivalent of an assistant director of education, an under Secretary, an

53. K.S.S.H.A. (1978) Minutes of the Meeting held on Friday 13 October in the T.S.C. Conference Room between the T.S.C. Secretary and the National Executive Committee of the K.S.S.H.A. - p. 1.

54. Loubser J.J. (1983) Human Resource Development in Kenya: An Overview, a consultant's report prepared for the Canadian International Development Agency, November - p. 36.

55. This number is about one third of the trained graduates who join the service from Kenyatta University. However, Rees Hughes recently pointed out that a sizeable number of Kenyan university graduates take up teaching as a temporary measure - Human Capital: The Wealth of Nations or Drain on Resources, I.D.S. Working Paper No.423 University of Nairobi, July 1985.

assistant commissioner of police or a district commissioner II.

Table 12 - CASES OF TEACHER INDISCIPLINE REPORTED TO THE TEACHERS SERVICE COMMISSION⁽¹⁾ 1981 - 1984

TYPE OF CASE	NUMBER OF CASES (%s in brackets)			
	1981	1982	1983	1984
1. Desertions and Irregular resignations	523 (61.5)	476 (41.5)	625 (60.2)	568(63.0)
2. Immoral contacts with pupils	124 (14.6)	112 (9.8)	87 (8.4)	71(7.9)
3. Absenteeism and lateness	42 (4.9)	245 (21.3)	60 (5.8)	65(7.2)
4. Involvement in criminal offences	41 (4.8)	26 (2.3)	75 (7.2)	53(5.9)
5. Insubordination (including refusal of transfer)	45 (5.3)	83 (7.2)	27 (2.6)	25(2.8)
6. Misappropriation and mismanagement of school resources	28 (3.3)	47 (4.1)	26 (2.5)	24(2.6)
7. Other Cases ⁽²⁾	48 (5.6)	159 (13.8)	138 (13.3)	96(10.5)
TOTAL	851 (100)	1148 (100)	1038 (100)	902 (100)

Source: Discipline records of the Teachers Service Commission (T.S.C.)

- (1) The T.S.C. does not directly supervise the management of institutions. Cases of indiscipline are reported through its agents, viz. the secretaries of boards of governors (heads) of post-primary institutions and with regard to primary teachers, the district education officers who are employees of the Ministry of Education, Science and Technology.
- (2) Other cases include drunkenness and general misconduct in public, forgery of certificates and other documents, inciting pupils to indiscipline, inefficiency and negligence of duty and unauthorised beating of pupils.

Table 13 - ESTABLISHMENT AND TEACHERS' HOUSES IN SECONDARY SCHOOLS, 1985

N = 28 Schools

<u>Category of School</u>	<u>Number of Schools</u>	<u>Total Teaching Establishment</u>	<u>Total Teachers' Houses</u>	<u>Ratio of Establishment to Houses</u>
Government maintained	14	438	245	3:2
Assisted & Harambee	14	169	55	7:3

Table 14 - CURRENT SALARY SCALES FOR PROFESSIONAL STAFF IN SECONDARY SCHOOLS

<u>Scale</u>	<u>Equivalent Civil Service Job Group</u>
1. Sl Teacher : Kf1302x48 - 1494x60 - 1794x72 - 2154x90 - 2334 p.a.	G - H
2. U.T. Technical Teacher: Kf1302x48 - 1494x60 - 1674 p.a.	G
3. Trained Tech. Teacher: Kf1674x60 - 1794x72 - 2154x90 - 2514 p.a.	H
4. Graduate Teacher III: Kf1674x60 - 1794x72 - 2154x90 - 2424 p.a.	H
5. Graduate Teacher II: Kf2010x72 - 2154x90 - 2604x108 - 2928 p.a.	J
6. Graduate Teacher I: Kf2424x90 - 2604x108 - 3144x132 - 3540 p.a.	K
7. Head Grade II: Kf2928x108 - 3144x132 - 3804x156 - 4116 p.a.	L
8. Head Grade I: Kf3672x132 - 3804x156 - 4584x186 - 5142 p.a.	M

Source: Republic of Kenya (1985) Civil Service Review Committee - 1985: New Conditions of Service for the Kenya Civil Service, Office of the President Personnel Circular No.2, September 25.

p.a. = per annum

Salary scales in the civil service are graded from Job Group A (lowest scale) to Job Group T (highest); the letters I and O are not used.

The position of head grade I, whose establishment is small (there were only 53 such posts in secondary schools in September 1985), defines the upper limit of the status attached to secondary school teaching. Above Job Group M in the civil service there are six groups in ascending order of salary scales. However strong the professional inclination or the

beneficial effect of remaining in a secondary school, the grade I head who aspires to a higher salary must opt for a position outside the schools. In other words, the material incentives in secondary school teaching and administration discourages the intellectually and professionally able (in many cases more so than former university class mates in the civil service) from making work in a school a life-time occupation.

For the classroom teacher a number of discouraging circumstances exist. Firstly, inspite of evidence to the effect that general education rather than specialist scientific and technical training is a more satisfactory preparation of learners for the task of development (Makau 1985b)⁵⁶, the system rewards technical, graduate mathematics and science teachers better than those in arts: the trained technical teacher salary scale is considerably better than that for the S1 teacher, inspite of the fact that the cadres undergo the same period of training; a trained graduate science teacher enters the graduate teacher III scale four increments from the bottom, while his arts (language and humanities) equivalent is allowed only three increments⁵⁷. If the intention is to attract the more intellectually able to science and mathematics teaching, one can visualise a situation in which achievement in key subjects e.g. English, is likely to be lowered. Secondly, inspite of repeated injunctions to that effect, the system has not implemented a scheme aimed at keeping the good teacher in the classroom by offering a clear promotional ladder. Waruhiu (1980)⁵⁸ recommended that graduate teacher scales III, II and I should be made 'segments of one long scale so that the promotion of classroom teachers is made 'possible in the same manner that civil servants can be promoted from one job group to another.' Segmentation has not been carried out. Graduate teacher scales II and I are for the lowest ranks of heads. Thus a teacher in grade III must opt for an administrative position or leave school teaching if he is not to stagnate vis-a-vis his colleagues in the civil service. In contrast, a graduate teacher who on first appointment is posted to a teachers' collegé, can be promoted to assistant lecturer (the same salary scale as graduate teacher II), to lecturer (same as graduate I), senior lecturer

56. Makau B.M. (1985b), op. cit.

57. This distinction instituted after 1971 reflected, the severe shortage of science and maths teachers as well as the dubious belief that science education is more important for development than a grounding in the liberal arts.

58. Republic of Kenya (1980) Report of the Civil Service Review Committee 1979-80 (Chairman S.N. Waruhiu) Government Printer, September - p. 116.

(same as head grade II) and principal lecturer (same as head grade I), and remain in the classroom. Thirdly, although the principle, suggested by Ndegwa (1971),⁵⁹ has been accepted that heads of department in schools should be paid allowances, implementation has yet to be undertaken. As pointed out by K.S.S.H.A. (1984),⁶⁰ this is a further cause of disillusionment of teachers and strains relationships between them and heads when the latter attempt to delegate subject duties.

Research shows that teaching experience is an important variable in student learning (e.g. Alexander and Simmons 1975, Husen et. al. 1978, Avalos and Haddad 1981, Ozumba 1981).⁶¹ For example Ozumba argues that 'for the beginning teacher, the first three years may be regarded as a period of socialisation to the teaching culture, after which the teacher may be regarded as more or less socialised' and therefore ready to contribute his best.⁶² With regard to the organisation of learning within a school, Cammaerts (1969) emphasises staff stability as the base for a concerted and innovative academic programme, and he maintains that student affective growth is interfered with by instability:

'Incidents of student strikes and disaffection inevitably increase when students cannot visualise their teachers as stable elements in their schooling'.⁶³ It can thus be concluded that if improving the remuneration of teachers would help retain them in schools for most of their working lives, the move would result in improved quality of learning.

59. Republic of Kenya (1971) Report of the Commission of Inquiry (Public Service Structure and Remuneration Commission) 1970-71 (Chairman D.N. Ndegwa) Government Printer Nairobi, May - p. 192.

60. K.S.S.H.A. (1984) Issues Requiring Attention and Action, a memorandum addressed to the Permanent Secretary for Education, Science and Technology - (day and month not given).

61. Alexander L. & Simmons J. (1975) The Determinants of School Achievement in Developing Countries : The Education Production Function, World Bank Staff Working Paper No. 201, March; Husen T. et. al. (1978) Teacher Training and Student Achievement in Less Developed Countries, World Bank Staff Working Paper No. 310; Avalos and Haddad, op. cit.; Ozumba, op. cit.

62. Ozumba, op. cit. - p. 77.

63. Cammaerts, op. cit. - p. 12.

THE ROLE OF MANAGEMENT

The discussion so far would seem to lead to the conclusion that more resources are needed in two areas of the factors which condition teacher effectiveness, viz. teacher training (accelerating the replacement of untrained teachers and mounting a training programme for heads of secondary schools) and the school system (making more funds available for learning resources and improving teachers' remuneration). However, in order to place a recommendation along such lines in the national perspective, two observations are necessary. Firstly, the social context in which education is financed must be taken into account. Secondly, data on the functioning of the education system should be analysed so that a priority list of areas requiring additional funds is arrived at. An important criterion in deciding whether or not an area needs more funding is the extent to which alternative and cheaper methods are unable to lead to improved teacher effectiveness.

The Context in which Education is Financed

The ministry responsible for education is currently consuming more than 30% (the ceiling government would like to observe)⁶⁴ of the total civil budget. Parents and communities are also spending considerable proportions of their incomes on education. Bertrand and Griffin (1983)⁶⁵ estimated that in the early 1980s non-government expenditures on education were 21-29% at the primary level, 69% at secondary and around 50% at the university level, of Kenya's total expenditures on education. These proportions are likely to have risen as a result of current educational policy which stresses passing on heavier financial responsibility to parents and communities (Development Plan, 1984-1988)⁶⁶. If education is to remain within the reach of an increasing number of households,⁶⁷ the extent of parental contribution must be seen as limited. There are indications that

64. The policy was first enunciated in Sessional Paper No. 4 on Economic Prospects and Policies, 1975. The expenditure of the ministry responsible for education is about 35% of the budget. If training programmes under other ministries were considered the proportion would rise to over 40%.

65. Bertrand T.J. & Griffin R. (1983) The Economics of Financing Education: A Case Study of Kenya, Country Policy Department, The World Bank.

66. Republic of Kenya: Development Plan, 1984 - 1988, Government Printer Nairobi.

67. Equity in the provision of educational opportunities is an important goal of education in Kenya - see Makau 1985a, op. cit.

in the secondary sector this limit has been exceeded: Makau (1985a)⁶⁸ observes that current financial charges on a parent in respect of an upper secondary student are above the income of 80% of Kenyan households.

Allocations to various sectors of education are given in Table 15. The recurrent figures show that 60% of the education budget goes to the primary sector and that the largest proportions of the allocations to the primary and secondary sectors go towards teachers' remuneration. These two facts severely limit the extent of possible manouvre in the budget. The non-teacher salary elements in the allocations to the school sectors are small and inadequate for provision of necessary requirements: for example, the Kf2 per head currently allocated for learning resources in primary schools cannot meet provisions for a single subject at the upper primary level. In both sectors teachers' salaries, which are not high in comparison with other public sector jobs, cannot but keep on rising. Some savings could be made if user charges were increased in all educational institutions, but, given that many parents cannot meet current expenses for the education of their children (Makau 1985a),⁶⁹ the funds so realised would not be so massive as to make substantial financial infusion into the school system.

Thus given a constrained financial base, ways of improving teacher effectiveness without incurring heavy financial outlays, need be seriously contemplated.

Supervision and In-Servicing as Alternatives to Formal Teacher Training

There is evidence to suggest that formal teacher training is not the most important factor in improving academic achievement in schools. Table 16 shows the relative performance of ten districts in the examination for the Certificate of Primary Education (C.P.E.) between 1980 and 1983. Table 17 pairs out the ten districts into provincial clusters and gives the district percentages of teachers' professional qualifications for

68. Makau 1985a, op. cit.

69. Ibid.

Table 15 - ESTIMATES OF EXPENDITURE FOR THE KENYA MINISTRY RESPONSIBLE FOR EDUCATION, (1) 1974/75, 1980/81 & 1985/86
(in '000s of Kenya £; %s in brackets)

SECTOR	RECURRENT ESTIMATES			DEVELOPMENT ESTIMATES		
	1985/86	1980/81	1974/75	1985/86	1980/81	1974/75
1. Pre-Primary	222 (0.1)	75 (0.1)	-	-	-	-
2. Special Education	1,231 (0.5)	499 (0.4)	176 (0.3)	983 (5.7)	165 (1.3)	459 (11.8)
3. Technical Education (2)	5,937 (2.1)	3,429 (2.7)	1,443 (2.9)	1,764 (10.2)	4,575 (36.6)	365 (9.5)
4. Teacher Education	10,810 (3.8)	4,138 (3.3)	1,900 (3.8)	3,889 (22.6)	1,439 (11.5)	399 (10.3)
5. Administration and Planning (3)	21,586 (7.6)	8,034 (6.4)	2,569 (5.2)	1,301 (7.6)	981 (7.8)	73 (1.9)
6. University Education	30,036 (10.1)	14,752 (11.7)	6,592 (13.2)	5,930 (34.4)	1,626 (13.0)	845 (21.9)
7. Secondary Education	40,292 (14.2)	14,545 (11.5)	8,310 (16.7)	1,843 (10.7)	1,740 (13.9)	1,579 (40.8)
8. Primary Education	173,029 (60.1)	80,555 (63.9)	28,864 (57.9)	1,523 (8.8)	1,992 (15.9)	148 (3.8)
TOTAL	283,143 (100)	126,027 (100)	49,854 (100)	17,233 (100)	12,518 (100)	3,867 (100)

AMOUNT EARMARKED FOR TEACHERS' REMUNERATION AND AS A % OF THE

SECTOR ALLOCATION:

Secondary	29,528 (73.3)	9,869 (67.9)	4,013 (48.3)
Primary	145,512 (84.1)	64,448 (80.0)	25,129 (87.1)

Source: Republic of Kenya: Estimates of Recurrent and Development Expenditure, 1974/75, 1980/81 and 1985/86.

(1) Between December 1979 and September 1983 there were two ministries responsible for education.

(2) The amounts include those for technical secondary schools and post-secondary technical institutions other than universities.

(3) Includes funds for miscellaneous expenses.

Table 16 - POSITIONS OF TEN RURAL DISTRICTS⁽¹⁾ IN THE C.P.E. ORDER OF MERIT, 1980 - 1983

<u>District</u>	<u>Candidates in 1983</u>	<u>Position in:</u>				<u>Mean Total Standard Scores⁽²⁾ in 1983</u>
		<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	
Murang'a	15,381	8	3	1	1	169.50
Machakos	25,542	35	25	16	5	155.20
Siaya	11,904	2	2	5	8	153.11
Kiambu	20,981	10	14	12	13	151.16
Kakamega	25,104	26	24	20	19	147.76
Kericho	18,334	18	21	23	21	145.54
Uasin Gishu	6,683	3	9	6	22	144.40
Meru	19,847	36	35	28	23	144.36
Bungoma	14,661	38	39	35	27	141.67
Kisii	20,744	39	38	39	34	138.10

Source: Republic of Kenya - C.P.E. Newsletters for 1980-1983, K.N.E.C.

- (1) There are 39 rural districts; in 1983 these ten districts accounted for 50.56% of the total candidature.
- (2) The maximum total standard score obtainable by a candidate was 297. In 1983 Eldoret Municipality had the highest mean total standard score of 172.59 and Lamu district the lowest at 130.37.

Table 17 - PERCENTAGES OF PRIMARY SCHOOL TEACHERS BY QUALIFICATIONS (1) 1981 - 1983

DISTRICT	1981						1982						1983								
	No. of Teachers	UT	P4	P3	P2	P1	S1	No. of Teachers	UT	P4	P3	P2	P1	S1	No. of Teachers	UT	P4	P3	P2	P1	S1
A. Kiambu	5020	10	1	18	35	32	4	4968	8	1	16	33	38	4	5170	8	1	15	32	42	3
Murang'a	5122	14		16	34	32	4	5321	14		13	31	38	4	5534	12		12	30	42	4
B. Machakos	9042	34	1	19	25	20	1	9114	31	1	17	23	27	1	9542	30	1	16	23	30	1
Meru	7096	33	1	15	25	24	2	7131	31	1	13	23	30	2	7260	28	1	13	22	34	2
C. Kericho	5059	37	1	17	23	21	1	5221	37		13	20	29	1	5425	33		12	20	34	1
Uasin Gishu	2086	33		12	24	30	1	2099	31		9	20	39	1	2161	28		9	20	42	1
D. Kakamega	8378	34	1	16	24	23	2	8927	33	1	13	22	29	2	9260	29	1	12	22	34	2
Bungoma	4666	31	1	16	26	24	2	4908	30	1	13	23	31	2	5072	27	1	12	24	35	1
E. Siaya	3655	34	2	16	24	22	2	4150	39	1	13	20	25	2	4214	35	1	12	20	30	2
Kisii	7880	42		17	20	19	2	8157	41		14	18	25	2	8367	33		13	18	29	2
KENYA	107074	32	1	16	25	24	2	111936	32	1	13	22	30	2	115763	30		12	22	34	2

Source: Archives of the Teachers Service Commission (For each of the years, the figures are for the month of December).

Provincial Clusters:

- A = Central
 B = Eastern
 C = Rift Valley
 D = Western
 E = Nyanza

(1) For full definitions of abbreviated qualifications see Table 10a on page 28. In this table, the S1 category includes the few approved status and graduate teachers in primary schools.

the years 1981 to 1983. The provincial clusters contain districts with similar environmental conditions.

If professional qualifications of teachers were the most important variable in C.P.E. performance, there should have been a positive relationship between the patterns in Tables 16 and 17. Comparative scrutiny of the tables does not show such a relationship. In none of the provincial clusters does the distribution of teacher qualifications seem to be the main explanation of performance: for example, in the Central province cluster, in which the two districts had better than average qualified teaching forces, Murang'a climbed to the top while Kiambu stagnated. The proportion of untrained teachers does not seem to have made much difference: Siaya and Uasin Gishu with proportionately more than three times the number of untrained teachers Kiambu had, performed better than the latter between 1980 and 1982, with Siaya maintaining a better position in 1983. Dramatic improvements in performance, such as registered by Machakos (as opposed to Meru in the same province and with a slightly better qualified teaching force), or deterioration - such as took place in Uasin Gishu between 1982 and 1983, were not accompanied by equally dramatic changes in the qualifications of teachers.

The data in Tables 16 and 17 indicate that teacher credentials are an insufficient explanation of variations in academic achievement in Kenya's primary schools. It is known that in-school factors, as opposed to external factors (such as pupils' socio-economic background), are more important in determining performance in the C.P.E examination (Makau & Somerset 1980).⁷⁰ The pattern which emerges in Table 16 - that variations in performance are explainable along district boundaries - suggests a corresponding distribution of the in-school independent variables, a fact borne out by Somerset (1982).⁷¹ Thus, what happens within the district as a unit in the administration and management of primary education seems to be of crucial importance.

70. Makau B.M. & Somerset H.C.A. (1980), op. cit.

71. Somerset H.C.A. (1982) Examinations Reform: The Kenya Experience - A Report prepared for the World Bank.

The field administration and management of education in Kenya, which largely coincides with the country's civil general administration, is organised into 8 provinces (Nairobi has the status of a province), 39 rural districts and 5 municipalities. Each district has a District Education Officer (D.E.O.) who is answerable to the ministry responsible for education through the Provincial Education Officer (P.E.O.). Although lately the D.E.O. has been required to handle all educational issues in the district, since colonial times his most important charge has been the management and administration of primary schools, with his responsibilities including:

- (1) establishing and maintaining standards through supervision and inspection of schools;
- (2) the management of the district teaching force (e.g. advising the T.S.C. on the recruitment and deployment of heads and teachers, discipline, and the administration of remuneration);
- (3) acquiring and distributing learning materials to schools; and
- (4) co-ordination of the construction of school buildings by parents and communities.

Since 1963 the following infra-structure has been developed to facilitate the D.E.O.'s work:

- (1) A cadre of assistants now include education officers (E.Os), assistant education officers (A.E.Os), a District Primary School Inspector (D.P.S.I.), assistant primary school inspectors (A.P.S.I.s) and tutors at Teacher Advisory Centres (T.A.C.s).
- (2) The number of schools and the pupil enrolment is taken into account in arriving at the personnel establishment in each district.
- (3) Most of the officers assisting the D.E.O. are deployed in divisional and zonal centres, the idea being that they should be as close as possible to the schools.
- (4) In the populous districts the zone with about 30 primary schools under an A.P.S.I. is the smallest geographical unit of organisation; within each zone there is a T.A.C. with a tutor to provide local professional reinforcement to teachers.

At the national level certain reforms have been undertaken in order to strengthen the district infra-structure: the development of the curriculum has been standardised and so has the preparation or prescription, purchase and distribution of learning materials. An important aid to the D.E.O. has

been reform in the primary examination. Because the examination offers regular and powerful feedback, its improvement has been seen as one of the best ways of improving the quality of learning. The reform of the primary examination, initiated in the early 1970s, has been geared to guiding schools, teachers and pupils into concentrating on the development of desirable abilities and skills, and has been regularly explained through feedback documents and seminars for teachers, heads, D.E.Os. and their assistants.

Although the infra-structure through which quality could be improved exists in all districts, it has not been fully exploited in every case. Observation based on verbal interviews of some of the professionals (both teachers and officers) and written reports from the ten districts in Table 16 reveal that:

- (1) The district management of primary education exercises more influence on schools than any other single factor.
- (2) Good performance in some districts is associated with individual D.E.O.s who, having analysed the opportunities offered by the infra-structure, have galvanized their assistants, heads, teachers, pupils, parents and the community into making efforts to improve learning in the schools.

In the districts where performance has been good two universally accepted aspects of modern management-strong leadership and good human relations - have been observable. On leadership in education, Thompson and Cooley (1984) state

'The absence of administrative leadership is the most critical issue facing education. Initiation and modification of curricular and staff development programmes are impossible tasks without strong administrative leadership'.⁷²

In discussing the inspector's role (similar to that of the Kenyan D.E.O.) in Australian primary schools, Ball (1961) points out that leadership which aims at bringing out the best from the personnel in schools is a necessary condition for success:

72. Thompson J. & Cooley van E. (1984) Improvement in Leadership, Curriculum, Staff Development Can Lead to Long Term Gains, in The Journal for Middle Level and High School Administrators, December - p.1.

'Participants in any enterprise respond favourably to control, guidance and direction so long as they see this as firm, just, equitable and exercised sympathetically and with understanding... One important measure of an inspector's worth is therefore the extent to which he has been able to create an atmosphere of mutual confidence and interdependence within which each teacher is challenged and encouraged to put forth all his efforts towards the realization of the common goal'.⁷³

Machakos District as a Case Study of the DEO's Role

Machakos is the biggest district in Kenya in terms of the number of primary schools, enrolments and the teaching force. It is characterised by considerable diversity and contrasts in climate and altitude, ranging from the semi-arid plains in the south and east to the hilly, cool and reasonably wet central and northern areas. Most of the district is prone to periodic famines due to drought, with most of its population being dependent on subsistence agriculture and pastoralism.

In the mid-1970s the district's primary schools were be-devilled by several problems, in particular:

- (1) a high proportion of untrained teachers;
- (2) low morale in the teaching force, symbolised by increasing incidents of indiscipline;
- (3) high rates of dishonesty in the C.P.E. examination;
- (4) severe inadequacies in physical facilities in schools;
- (5) a lowly position in the C.P.E. examination order of merit for rural districts.

A sense of helplessness pervaded the community, with poor achievement to a large extent being attributed to the large size of the district, a terrain which made transport difficult, lack of commitment by some community leaders, and the low level of household incomes allegedly hindering the construction of school buildings and parental provision of learning resources.

73. Ball D.G. et al. (1961) Supervision and Inspection of Primary Schools, Australian Council for Educational Research, Melbourne - p. 174.

From 1977 the district began to go through a transformation in its primary schools; the change resulted from a succession of D.E.O.s with a vision and the drive to improve school quality. Applying a sticks and carrots strategy, the D.E.O.s set out to minimise indiscipline in the teaching force, improve the working conditions of teachers (particularly rationalising appointments and deployment, speedy resolution of salary problems, organised in-servicing within the district), and carrying out a public relations campaign to mobilise community support and encourage healthy competition between schools in all areas of learning. The first sign of improvement was the virtual eradication of teacher-instigated dishonesty in the C.P.E. examination: in 1979 only one school was involved in mass cheating as compared to 144 in 1975.

The dramatic improvement in the district's C.P.E. performance between 1980 and 1983 which built on the earlier efforts coincided with the tenure in the district - April 1980 to June 1984 (Republic of Kenya, 1984)⁷⁴ - of a D.E.O. who, through a regular system of inspection, supervision, in-servicing and organised testing at the district level, had played a major part in steering most of the Central province districts to high quality performance.⁷⁵ The 1981 Central Province Annual Report highlights the basis of school success as follows:

'Where more teachers were reached and advised on ways and means of improving the quality of education, the districts concerned witnessed better C.P.E. results as shown by Murang'a and Nyandarua districts... Regular tests were organised to... ensure that all teachers in all classes were effectively involved. Mock and other tests did a lot to

74. Republic of Kenya (1984) District Education Office Machakos, Annual Report - p. 3.

75. The officer referred to was the deputy DEO in Nyeri district from the late 1960s to 1976. Nyeri was consistently the top rural district in the C.P.E. exam throughout the 1970s; she was dislodged into the 2nd position by Murang'a district in 1982. The Central province districts have been creeping up to the top of the order of merit: in the 1985 exam. Nyandarua, Kirinyaga, Murang'a and Nyeri occupied the first four positions, with Kiambu being placed 11th among the rural districts. The system developed in Nyeri helped her sister districts who sought to emulate her in way of healthy competition; some of the officers trained on-th-job in Nyeri subsequently transferred to neighbouring districts and helped to set up a similar system.

cultivate and inject a competitive spirit among the teachers and ultimately the pupils'.⁷⁶

In describing the system which, inspite of 'the big number of untrained teachers' and a 'large number of old P3 and P2 Headmasters' whose 'less ability to understand and a bullying attitude cause low standards in our schools',⁷⁷ launched Machakos to success, the 1984 district education report states:

'Inspection of schools by the A.E.O.s/A.P.S.I.s was carried out successfully... Each A.E.O./A.P.S.I. made sure that every school was visited and inspected. The inspection covered administration of schools, teachers' work and physical facilities... Equipment and stationery available in the district stores was successfully and well distributed to schools... Evaluation tests, subject panels, inservice courses and seminars were properly organised and manned by T.A.C. tutors and A.P.S.I.s in the zones. One district evaluation test was done at the end of the year'.⁷⁸

In contrast to the stories of success in Central province and Machakos, the 1980 Nyanza province annual report strings together a list of problems, some not unlike those commonly cited in Machakos in the mid-1970s, which affected the development of primary education - over - enrolment in many schools, poor administration and control of schools by most head teachers, poor buildings and general lack of furniture in many schools, problems of indiscipline among staff and pupils, untrained teachers in some districts and schools, inability by most divisional field staff to carry out effective inspection and supervision 'due to lack of transport'.⁷⁹

Weaknesses in the Professional Management of Secondary Schools

A comparison between the primary and secondary systems reveals a major contrast. Whereas for primary schools a well established network capable of making a major impact on the output of teachers irrespective of their credentials has been created, in the secondary sector the nexus between the inspectorate, the P.E.O., boards of governors and heads which

76. Republic of Kenya (1981), op. cit. - pp. 84-85.

77. Republic of Kenya (1984), op cit. p 20.

78. Ibid. - p. 1.

79. Republic of Kenya (1980) Nyanza Province Annual Report.

is expected to guide schools and teachers has not developed commensurate to the need. Elsewhere in this paper it has been hinted that student indiscipline and poor academic achievement to a considerable extent stem from poor administration and management by secondary school heads. The heads' failure in this respect is partly explained by inadequate support from the secondary inspectorate, the P.E.O. and the boards of governors.

The Secondary Inspectorate

Up to 1979 the inspectorate, created^a as a division in the department of education in 1955, was headed by the Chief Inspector of Schools (C.I.S.) and covered all sectors of school education. In December 1979 a primary and a secondary inspectorate were created, each with its own C.I.S. In October 1983 three inspectorates (primary, secondary and technical) were established.

The secondary inspectorate (S.I.) is responsible for the establishment and maintenance of educational standards. The S.I.'s modus operandi is participation in curriculum development and examinations, running in-service seminars for heads and teachers, and inspection of schools.

A major handicap in carrying out its duties has been the long standing failure to match the inspectorate's growth with the increase in the number of schools. The 1964 Education Commission noted:

'At present, the establishment of the Inspectorate consists of 17 Inspectors, 12 of whom are stationed in Nairobi and five at various Regional headquarters. We have been forced to conclude that an inspectorial establishment of these dimensions is pitifully inadequate for the adequate discharge of the duties assigned to it'.⁸⁰

The 1974 annual report of the ministry of education indicated that the inspectorate was unable to cope with its work in the secondary sector:

'...because of limited inspection staff and financial resources, many of the one thousand secondary schools were not visited. The numbers of secondary schools have been increasing everywhere without proportionate increase in inspection staff.'⁸¹

80. Republic of Kenya (1964) op. cit. - para. 465.

81. Republic of Kenya (1974) Annual Report of the Ministry of Education - p. 7.

A survey carried out in May 1985 indicated that there were 13 inspectors in the S.I. headquarters (including the C.I.S. and his deputy), four unfilled positions (Mathematics, English Language, History and Christian Religious Education), and 15 inspectors stationed at provincial headquarters (3 each in Central and Coast, 2 each in Eastern, Nyanza and Western, and one each in Rift Valley, Nairobi and North Eastern).

Discussions with inspectors indicate that the problems associated with lack of proportionate growth of the inspectorate have been compounded by a heavy array of duties which include, inter alia, participation and/or organisation of school sporting and cultural activities, attendance at meetings of school boards, selection and practical examination of teacher trainees, office administration, in addition to the attention which inspectors are expected to give to standards in schools. One inspector pointed out that it was impossible for a provincial inspector to inspect more than 3-4 schools in a month.

Tables 18 - 21 have been compiled from the S.I.'s records on 68 schools in the study sample. Table 18 suggests that between 1980 and 1984, 56% of secondary schools in Kenya were either not inspected or were visited only once.⁸² Table 19 suggests that over the same period, 60% of schools did not have the benefit of the more comprehensive panel inspection. Table 20 indicates that non-panel inspections, which in the majority of cases are carried out by single inspectors over a day per school, are unlikely to have more than a cursory impression on a school's overall standards: of the 61 non-panel inspections carried out, 40 (66%) did not report on finance even though it pervades all aspects of a school.

Table 21 sheds light on the S.I.'s inspection thrust. Of the 28 sample schools which were panel-inspected over the five years, 22 (79%) were the more established types with A level classes, including five national schools (there were 27 national schools in 1984). Interviews of inspectors, P.E.O.s and heads, and analysis of inspection reports strongly suggest that

82. The proportion is likely to be higher since the study sample is weighted in favour of government maintained schools which attract more inspectorate attention than non-government schools.

Table 18 - RECORDED INSPECTIONS OF SECONDARY SCHOOLS, 1980 - 1984

N = 68 Schools

	<u>Number of Inspections Per School</u>				
	0	1	2	3	4
Number of Schools (% in brackets)	17 (25)	21 (31)	18 (26)	8 (12)	4 (6)

Source: Ministry of Education, Science and Technology.

Table 19 - FREQUENCY OF PANEL INSPECTIONS⁽¹⁾ OF SECONDARY SCHOOLS, 1980 - 1984

N = 68 Schools

	<u>Number of Inspections Per School</u>			
	0	1	2	3
Number of Schools (% in brackets)	41 (60)	23 (34)	3 (4)	1 (2)

Source: Ministry of Education, Science and Technology

- (1) This type of inspection is carried out by a group of inspectors (as opposed to a visit by only one) working together in a school over a period of up to 3 - 4 days. Its purpose is to investigate and report on all aspects which have a bearing on standards - school administration, finance, curriculum, teaching methodologies and resources etc.

because of the S.I.'s small establishment and constrained financial resources, panel inspections and to an extent visits by single inspectors are not only irregular but also are not systematically beamed on the improvement of standards in as many schools as possible. The tendency is for most inspections to be organised in schools where standards seem to be falling e.g. where performance in examinations has taken a nose-dive or mass indiscipline has occurred or where the community is dissatisfied (as expressed by influential leaders). Three deductions can be made with regard to the above

Table 20 - DISTRIBUTION OF NON-PANEL INSPECTIONS OF SECONDARY SCHOOLS BY TYPE, 1980 - 1984

N = 61 Inspections

<u>Purpose of Inspection</u>	<u>Number</u>	<u>Whether Finance Reported on:</u>	
		<u>Yes</u>	<u>No</u>
Advisory/Routine Visits	26	14	12
Visits by Subject Specialist	17	3	14
Expansion of Enrolment	11		11
Grading and registration	2	2	
Other	5	2	3
TOTAL (% in brackets)	61 (100)	21 (34)	40 (66)

Source: Ministry of Education, Science and Technology.

Table 21 - DISTRIBUTION OF PANEL INSPECTED SECONDARY SCHOOLS BY PROVINCE AND TYPE, 1980 - 1984

N = 28 Schools

<u>Province</u>	<u>School Type</u>		<u>Total Schools</u>
	<u>O level only</u>	<u>O & A level</u>	
Rift Valley	2	4	6
Eastern	1	3	4
Nyanza		2	2
Central		4	4
Western	1		1
Coast	2	1	3
Nairobi		3	3
North Eastern			
National Schools		5	5
TOTAL (% in brackets)	6 (21)	22 (79)	28 (100)

Source: Ministry of Education, Science and Technology

approach. Firstly, schools whose standards are neither high nor too low and in which there is no glaring trouble are unlikely to attract the S.I.'s attention. As noted above the older schools with a tradition of good performance receive most attention: relatively new schools on the whole must first make a name for themselves before they qualify as subject of serious concern. Secondly, regardless of obvious need for inspection, schools whose communities do not articulate the need and attract attention suffer benign neglect. Thirdly, inspection which originates from the feeling that a school is already in trouble takes on the nature of a judicial inquiry, with the consequence that professional dialogue between the inspector(s) and the professional staff in the school is impaired.

On the basis of the foregoing evidence it can be concluded that the advisory/guidance role of the S.I. has weakened and is not having an effect similar to that observed in the primary sector supervision and inspection system in the well managed districts.

The Role of the Provincial Education Officer in the Administration and Management of Secondary Schools

Traditionally the P.E.O. has been the link between secondary schools and the ministry responsible for education. He is expected to ensure that government education policy is implemented in the schools: he liaises between headquarters and boards of governors and heads over issues such as finance, staffing, student admission, discipline, physical development of schools, and curricula and examinations (the provincial inspectors of schools are attached to the P.E.O.'s office). The P.E.O. is an ex-officio non-voting member of every school board of governors in the province. He also works as a member of the team headed by the Provincial Commissioner, the chief civil administrator in the province.

Like in the case of the secondary inspectorate, the rapid increase in the number of schools has not been accompanied by commensurate growth in the personnel establishment and resources in the P.E.O's offices. Closely related to this has been the fact that in the rural provinces schools have sprung up in areas which are a long way from the provincial headquarters, with the result that it has become difficult (in terms of money

and time) for the P.E.O.'s office to be in close touch with all schools. Since 1990 the government has attempted to improve the situation by decentralising some of the responsibility to the D.E.O., but financial constraints and to an extent lack of suitably qualified personnel have not allowed the move to mature fast enough.

Tables 22 and 23, compiled from the written responses of heads of the 28 secondary schools, give an idea of the P.E.O./D.E.O.s diminished influence in school boards of governors. If, as per Table 22, the P.E.O./D.E.O. is not represented in the great majority of board meetings and where

Table 22 - FREQUENCY AND CONTINUITY OF THE P.E.O./D.E.O. REPRESENTATION IN SCHOOL BOARD MEETINGS IN 1984

N = 28 Schools

	<u>YES</u>	<u>NO</u>	<u>TOTAL</u>
1. The P.E.O./D.E.O. was represented in every board meeting	4 (14%)	24 (86%)	28 (100%)
2. The same officer represented the P.E.O./D.E.O.'s office in every meeting	4 (14%)	24 (86%)	28 (100%)

he is, the representation lacks continuity, it is difficult to see how he could effectively guide/advise the boards. The proper execution of the P.E.O./D.E.O.'s office consists in the effective application of the law and policy to, inter alia, the building programme, financial management, staffing and discipline issues of each school. Table 23, whose data bears out findings from verbal interviews of several board chairman and members, indicates that the P.E.O./D.E.O is not as successful in handling the affairs of individual schools as he is in interpreting policy in general and carrying^{out} public relations with the rest of government departments.

The Board of Governors as the Legal Authority Managing Secondary Schools

The board of governors system reflects the evolution of the Kenya education system. Throughout the colonial period, the government unable or unwilling to take full responsibility for African education,

Table 23 - HEADS' ASSESSMENT OF THE D.E.O./P.E.O.'s ROLE IN SECONDARY SCHOOL BOARDS OF GOVERNORS

N = 28 Heads

<u>Role Played by D.E.O./P.E.O.</u>	<u>Degree of Success (Weighted Indices)⁽¹⁾</u>
1. Useful link between the board and government departments in the district or province	89
2. Gives good advice to board in connection with	
(a) general interpretation of the Education Act and policy	90
(b) application of the law and policy to unique school problems	79
3. Takes prompt action on board's recommendations on improvement of school	
(a) discipline of students	69
(b) staffing	67
(c) recurrent expenditure funds	44
(d) physical facilities	40

(1) Heads responded to each of the assertions in a 'Strongly Agree' to 'Strongly Disagree' continuum of four boxes. The index was constructed by tallying 4 points if a head strongly agreed, 1 point if s(he) strongly disagreed and 3 or 2 points if s(he) took one of the two intermediate positions. If all 28 heads had strongly agreed with any of the seven assertions, its index would have been 112.

worked through a system in which grants-in-aid were extended to agencies (mainly religious bodies and local government authorities) who were expected to raise the balance of revenue and manage the schools. However, because the central government was interested in the type and quality of the education imparted, it sought for avenues through which the department of education could exercise influence and control over the work of the agencies managing schools. One avenue was the legal right of the department to inspect any school. In the secondary sector, the system of boards of governors was introduced as another avenue. An agency managing a school was encouraged to set up a board through which representatives of all bodies with an interest met regularly to discuss the affairs of the school. The

director of education not only exercised influence in the appointment of a board, but also had the right to attend or be represented in its meetings.

In the 1940s the government founded its own schools. Following the recommendations of the Beecher Committee (1949)⁸³ the board of governors system was introduced in government maintained schools: by 1959 each missionary and government school had a board (Colony and Protectorate of Kenya, 1959).⁸⁴

The board of governors is the legal authority charged with the management of a Kenyan public school.⁸⁵ Boards are established as per legal notice made under the provisions of the 1968 Education Act. As per Legal Notice No. 34 of 1977 - The Education (Boards of Governors) Order - the membership of a board should be up to 16. The minister responsible for education appoints 11 members (chairman, 3 community representatives and 7 representatives of bodies and organisations with special interests in the school). The board is empowered to co-opt three members; the P.E.O./D.E.O. represents the minister and the head of the school, who normally acts as secretary to the board, is an ex-officio member. Governors hold office for a period of three years, but they are eligible for re-appointment.

In law the board of governors is a body corporate in which all the movable and immovable property of the school rests. Its function is to secure the maximum effectiveness of the school within the government policy on education. Beecher, on whose recommendations the board system has developed, states:

'... the Board is not primarily a body of educational technicians, but should be the directing force which, with a clear concept of what is demanded of the school, insists on the educational technicians producing that result and helps them to do so.

83. Colony and Protectorate of Kenya (1949) African Education - Report of A Committee Appointed to Inquire into the Scope, Content and Methods of African Education, its Administration and Finance and to Make Recommendations (Chairman: L.J. Beecher)

84. Colony and Protectorate of Kenya (1959) Education Department Annual Summary.

85. Harambee schools, which are community institutions and many of who are assisted with T.S.C. teachers, are expected to have governing bodies similar to boards in maintained schools.

A secondary school will need help, guidance and control from its Governors in the following matters:-

- (a) the moral and spiritual welfare of the pupils;
- (b) the professional standards of the teachers;
- (c) the business management of the schools affairs;
- (d) the effectiveness of its work in ensuring proper employment for the pupils when they leave school;...
- (e) the rigorous maintenance of the school's good name and the establishment of traditions;
- (f) the carrying out of agreed educational policy in the manner most suited to the circumstances of the pupils.'⁸⁶

Defined in current operational terms, the function of the board is to work for the proper affective and cognitive growth of learners by ensuring that the school:

- (1) climate is conducive to learning e.g. by maintaining staff and student discipline, and cultivating good school - community relations;
- (2) has adequate financial resources and that they are utilised to enhance learning;
- (3) achieves high academic standards e.g. by ensuring that the right professional staff is available and that public policy on selection of students, which emphasizes merit, is observed.

During the colonial period and in the early years of independence some boards, particularly those in schools founded by missionaries, wielded a great deal of authority including a major say in the appointment of heads and teachers. With the expansion of the secondary sector both the authority and effectiveness of boards has declined. Table 24 summarises the rating of their boards by the heads of 28 schools surveyed in August 1985. The data suggests that heads consider the board system to be only partially successful: when the indices for the nine functions are converted to percentages of the maximum ranking for high degree of success, only in five of them are boards judged to be more than 50% successful. A further significant fact is the number of heads who consider that the board is not involved in particular functions: if the assessment of the 28 heads is representative of the

86. Beecher Report, op. cit. - p. 98.

Table 24 - HEAD'S ASSESSMENT OF SECONDARY SCHOOL BOARDS OF GOVERNORS

N = 28 Heads

<u>Suggested Board Function</u>	<u>Degree of Success</u>		<u>Board not Involved⁽³⁾</u>	
	<u>Weighted Index⁽¹⁾</u>	<u>% of 84⁽²⁾</u>	<u>No. of Heads</u>	<u>% of N</u>
1. Scrutiny of audited accounts	57	68	2	7
2. Creating good relations with community	54	64	3	11
3. Assisting head with financial administration	46	55	3	11
4. Maintaining student discipline	45	53	6	21
5. Fund raising for capital development	45	53	5	18
6. Staffing school with qualified teachers	37	44	9	32
7. Maintaining staff discipline	35	41	10	36
8. Fund raising for learning resources	26	31	13	46
9. Admission of qualified/best students	20	24	12	43

(1) Heads ranked the degree of success in each function as 'High', 'Moderate' or 'Low'. The index was calculated by tallying 3 points for 'High', 2 for 'Moderate' and one for 'Low'.

(2) If all the 28 heads had assessed board success in any function as 'High', its index would have been 84.

(3) Heads were given the option not to assess success if they thought that any of the nine activities was not a function of the board.

reality in the total secondary school population, it follows that a significant number of boards are either ignoring or are being denied functions which are essential for successful board management of schools.

The 28 heads were asked to state problems which they considered affected the board of governors system in the management of secondary education in Kenya. Altogether the heads wrote down 83 problems. After detailed analysis the 83 problems have been grouped into five broad categories (Table 25).

Table 25 ; CAUSES OF WEAKNESS IN BOARDS OF GOVERNORS' MANAGEMENT OF SECONDARY SCHOOLS: A SYNTHESIS OF HEADS' SUGGESTIONS

Cause	Frequency of Mention	
	Number	%
1. Some members use boards for personal gain	4	5
2. Many members are not sufficiently educated and/or lack the necessary experience	13	16
3. Members are discouraged because they are not paid for their services	15	18
4. External influences particularly from politicians have a disruptive effect on boards	19	23
5. Board authority over schools has declined vis-a-vis that of the ministry of education	32	38
TOTAL	83	100

Acquisition of Personal Benefits by Board Members

The four statements made by heads are self-explanatory:

- (1) Board members who expect favours from the head request for unqualified students to be admitted; this lowers the standards of the school. (This statement tallies with the rating given to board's regard for the admission of the best qualified students - Table 24)
- (2) After failing to get access to the school finances, chairmen and members are at loggerheads with the heads.
- (3) Self-seeking motives whereby some members see the role of an office bearer as necessarily being a profit-making opportunity.
- (4) Financial mismanagement through collusion between the executive committee of the board and heads.

Insufficient Education and/or Experience of Members

The following are representative statements from the heads:

- (1) Some members are not knowledgeable of their functions and consequently the secretary to the board can misuse it.
- (2) Many board members are not adequately educated vis-a-vis the head.
- (3) Some members are inexperienced as far as academic, administrative and financial matters are concerned.
- (4) The level of literacy of some members is low.

Data on the formal educational level attained by the governors of the 28 schools surveyed is analysed in Table 26.

Table 26 - FORMAL EDUCATION OF MEMBERS OF SECONDARY SCHOOL BOARDS OF GOVERNORS IN KENYA, 1985 (%s in brackets)

N = 28 Schools (248 governors)

<u>Educational Level Attained</u>	<u>Governors</u>	<u>Chairmen</u>
University degree	52 (21.0)	9 (32.1)
Upper Secondary (forms 5 & 6)	28 (11.3)	1 (3.6)
Middle secondary (forms 3 & 4)	71 (28.6)	6 (21.4)
Lower secondary (forms 1 & 2)	26 (10.5)	3 (10.7)
Full primary	44 (17.7)	3 (10.7)
Partial primary	26 (10.5)	1 (3.6)
No information given	1 (0.4)	5 (17.9)
TOTAL	248 (100.0)	28 (100.0)

The data in Table 26 to some extent bears out the heads' assertions, in particular with regard to the governors' education vis-a-vis that of heads, the majority of whom are university graduates. However, formal educational qualifications are not a perfect indication of governors' effectiveness : it is possible that the 50% of governors who have received some secondary education, together with a number of those with only primary school qualifications, have other training and experiences which enable them to be effective in a board. Moreover, although ideally it would be desirable for the governor's educational level to be the same or higher than that of heads and teachers, this may not be a practical recommendation as far as some rural areas are concerned.

Non-Payment of Governors

The following are representative statements from the heads:

- (1) Absenteeism in meetings is common probably because there is no sitting allowance.
- (2) The money earmarked for travel and subsistence expenses of board members is very little and once it is exhausted, some feel that it is too much of a sacrifice to attend board meetings at their personal expense.
- (3) Most people today think of how and where to make money: very few people will be ready to give free service or leave their businesses or jobs to attend to public affairs.

Data on board meetings in the 28 schools shows that 25 (89%) boards held at least two ⁸⁷ meetings in 1984, with 19 (68%) holding three or more. Asked to indicate whether or not one planned meeting in 1984 failed because of lack of quorum 18 (64%) of the heads replied in the negative. The payment of a sitting allowance, although desirable if it would help revitalise boards, has to be weighed together with other financial needs and constraints in the education system. Circumstantial evidence seems to indicate that some heads are overstating the case for sitting allowances. A governor, who is free to decline appointment at the outset or resign any time during his tenure of office, takes up his position on the understanding that he will receive no sitting allowance. Verbal interviews with several chairmen and governors, most of whom claim to have motives other than personal fiscal interests in the schools they are serving, indicate that non-attendance at meetings and resignations (in some cases of the whole board) more than anything else reflect the fact that the board is no longer treated as the central organ in the management of the school.

External/Political Influence in Boards

Claims, of political interference are not peculiar to the education scene. With only a change of the object, the following representative statements from the heads could easily fit any other sphere of development in Kenya:

- (1) At times the community around the school is unhappy about the way the board handles the school's affairs.

87. A board is required to hold at least two meetings in a calendar year.

- (2) Politicians use boards as their political bases and interfere with the smooth running of schools.
- (3) Conflicting interests among members play a decisive role. These conflicts occur in the form of diverse religious backgrounds or political alliances with reference to the area's politicians.
- (4) Political differences divide members of boards: may be some members do not support the local M.P.; this affects members' effectiveness and the school at large.

Table 27 shows the occupations of the governors in the 28 schools surveyed.

Table 27 - MAIN OCCUPATIONS OF MEMBERS OF SECONDARY SCHOOL BOARDS OF GOVERNORS IN KENYA, 1985 (%s in brackets)

N = 28 Schools (248 governors)

<u>Occupation</u>	<u>Governors</u>	<u>Chairmen</u>
1. Public servants	99 (40)	5 (18)
2. Religious leaders	38 (15)	3 (11)
3. Businessmen	34 (14)	6 (21)
4. Practising politicians	25 (10)	4 (14)
5. Farmers	25 (10)	3 (11)
6. Private sector employees	21 (9)	5 (18)
7. Other	6 (2)	2 (7)
TOTAL	248 (100)	28 (100)

Although practising politicians constitute only a small proportion of board membership, their influence on schools is much more widespread. In the literature on the link between the Kenyan political and education systems (see for example, Bienen 1974, Godfrey and Mutiso 1979, Barkan 1979),⁸⁸ there is plenty of evidence to the effect that politicians regard

88. Bienen H. (1974) Kenya - The Politics of Participation and Control, Princeton University Press; Godfrey E.M. & Mutiso G.C.M. (1979) Politics, Economics and Technical Training, Kenya Literature Bureau; Barkan J.D. (1979) Legislators, Elections and Political Linkage, in Barkan J.D. with Okumu J.J. (eds.) Politics and Public Policy in Kenya and Tanzania, Heinemann.

education as an important arena in which to cultivate a following. In many areas schools are a focus of political rivalries: individuals competing for leadership will do their uttermost to influence boards, heads, teachers, parents and students. As Bienen points out the competition, which though not confined to it is most intense in the Harambee secondary sector, can be disruptive and a hinderance to orderly development:

'Different factions will support or oppose schools depending on what positions their opponents take. Or even more common, if one prominent leader is supporting a Harambee school, others will feel compelled to do the same for a new school.'⁸⁹

Through the machinations of political activists, governors or heads and teachers who find themselves on the losing side are sometimes subjected to harassment, including unexplained retirement of governors and transfers of heads or teachers. One of the most serious aspects of political interference with teacher effectiveness has been in the sphere of poorly planned growth in enrolments. In almost all parts of the country leaders have discerned the community's overriding desire for rapid increase in educational opportunities irrespective of the scarcity of the resources needed to make expansion qualitative. Boards have been pressurised to sanction expansion of enrolments without much thought being given to its effects on the quality of education. In many government maintained schools, Harambee streams have been added as a result of boards being goaded into such action by politicians. The 1982 secondary enrolment is revealing : there were 157,450 (34%) students in maintained classes, 72,363 (16%) in Harambee classes attached to maintained schools, 97,127 (21%) in schools assisted by the government and 134,005 (29%) in unaided schools.⁹⁰ In addition to stretched physical facilities and learning resources, Harambee classes in maintained schools lower quality because the students in them are often recruited on 'constituency' considerations rather than academic merit and in many cases no arrangements are made for the necessary additional qualified teachers. The irony is that the people responsible for the establishment of a Harambee stream in a maintained school are the loudest in criticising the head and teachers when the school's performance in examinations nose-dives.

89. Bienen H., op. cit. - pp. 54-55.

90. Republic of Kenya : Report of the Working Party on Financing of Higher Education (1982); 1983 Economic Survey, Ministry of Economic Planning and Development.

Board v. Ministry Control of the Management of Secondary Education

As per Table 25, increased central control of the management of secondary education is considered by heads to be the most important cause of weakness in the board of governors system. The heads argue that the government has centralised in the ministry of education all real responsibility:

- (1) boards have no control over the appointment and deployment of heads and teachers, and the selection of students in government maintained schools;
- (2) in addition to being slow in acting on board recommendations on finance and discipline, the ministry of education often unilaterally over-rules/reverses well-considered advice by boards;
- (3) boards have very weak powers over investment opportunities, in particular they are not free to borrow money so as to make investments which would assist in the development of the schools;
- (4) the ministry does not attach much importance to boards : this largely explains why there are delays in the appointment and renewal of membership.

As far as government maintained schools are concerned, it is true that real management authority resides in the ministry of education rather than in the boards of governors. More than anything else the boards' lack of real authority stems from the fact that the appointment and deployment of teachers is centrally administered by the T.S.C. Boards are not routinely involved in the recruitment and transfer processes and as a consequence governors have little influence over the professional standards of teachers. Because heads and teachers know that they are government rather than board employees, they pay little attention to boards' decisions or advice : explanations of board weakness given by two heads of schools in the study sample are illustrative -

'Governors should be to appoint the head. Since, in Kenya, the power is not given, and since the heads are appointed without even consultation with boards, it seems to me that the latter are easily manipulated and have little positive input'.

'The head may be unwilling to allow the board to "interfere" in the running of the school'.

The fact that the head is in a position to influence the appointment or renewal of his board is revealing : the Manual for Heads of Secondary schools lays down that :

'Nominations for membership of a Board of Governors are made by the Head, as Secretary to the Board, to the Minister of Education through the Provincial Education Officer'.⁹¹

Thus a head can not only work for the appointment of governors of his liking, but also could delay appointments under the guise of searching for suitable nominees. In several sample schools, it has been observed that the heads are in no hurry to have boards renewed and are running schools with the backing of the P.E.O. or D.E.O. The thrust in current management instructions is to encourage heads to look up to the P.E.O./D.E.O. and the ministry's headquarters, rather than to the board, for support (Republic of Kenya 1979).⁹²

The weakness of the board system is also associated with the fact that under the law boards are advisory to the ministry of education. Boards are expected to deliberate on issues related to non-teaching staff appointments and discipline, student discipline and school finances (including the budget, management and accounting system) but they have no power to make final decisions : the boards' deliberations are forwarded as recommendations to the ministry.

The tendency, reported by heads, for the ministry to over rule and/or reverse boards' recommendations is to some extent explained by the fact that increasingly board meetings take place in the absence of the P.E.O./D.E.O. and consequently governors do not have the benefit of the latest government thinking on an issue before they make a recommendation. One head who still receives some support from her school's governors describes the weakness of the board system as follows:

91. Republic of Kenya (1979) A Manual for Heads of Secondary Schools in Kenya, Ministry of Education - p. 38.

92. Ibid. - The manual makes it clear that the head is held responsible (not the board) for whatever goes on in the school and that in matters requiring attention by a higher authority, the ministry's officers should be contacted, for example:

(a) 'The Head should inform the P.E.O. of any intended overnight absence from the school' (p.3) rather than the chairman of the board.

(b) In case of student mass indiscipline, the head's sequence of action should be '(i) decide whether or not to close the school (ii) inform the nearest Ministry of Education Official and the Provincial Education Officer immediately (iii) inform the Chairman of the Board of Governors and call a meeting of the Board without delay' (p.36).

'Mainly lack of co-ordination of board of governors' functions and ministry of education action. We rarely have a representative of the ministry at board meetings. Consequently the board feel that they have really no authority and were it not for the fact that they know I benefit greatly from their support and wise direction, they would see no point in their meeting'.

It is obvious that the board system needs to be reviewed. A fundamental questioning of the appropriateness of the system would seem to be necessary. At its inception, the system served a need in that an organ representing two partners - the government and religious bodies - who were financing and managing secondary education was necessary. As the government became the main source of funds and took over the management of the schools, boards of governors became anachronistic. Developments since 1963 have put this fundamental weakness in the board system into sharp focus:

(1) The government has been concerned that, given constraints in finance and professional personnel for education, certain issues are tackled at the national rather than the local level. For example, the creation of the T.S.C. in 1967, which is in conflict with the notion of a teaching force controlled by school boards, was aimed at both the establishment of a secure and uniform scheme of service for teachers, as well as the letter's equitable deployment in all areas.

(2) The political energy released by the attainment of independence, though an essential factor in the evolution of a democratic state, has subjected other aspects of development to considerable pressure. The government has been concerned that the adverse effects on schools, associated with competition for political leadership, are kept to a minimum: where there has been reason to suspect uncalled for influence on a board from without, the ministry has not hesitated from overruling the board. Moreover, as pointed out by several officers in the ministry, to some extent delays in renewing or appointing some boards are explainable in terms of the necessity to ascertain that those appointed are unlikely to be disruptive: this is understandable if it is borne in mind that in many areas there are forces which aim at controlling school boards for reasons other than the desire to advance the cause of education.

(3) In some areas, the rapid increase in the number of schools has put pressure on the pool of people who can effectively serve in boards: cases of board failure associated with unqualified and/or inexperienced membership

have made the ministry unwilling to wholly base management decisions on boards' recommendations.

CONCLUSIONS AND POLICY RECOMMENDATIONS

This paper suggests that teacher effectiveness should be measured in terms of the quality of the outcomes of learning. Learning outcomes, some of which are influenced by factors external to teaching,

repetition, are visualised as consisting in pupils affective and cognitive growth, and changes in the educational institutions and the community. Data has been discussed to explore factors within the system which influence the Kenyan school teaching force with regard to the affective and cognitive development of pupils. Factors which have been identified as important are the structure and organisation of teacher training, the managerial infra-structure, the provision of physical facilities and resources for learning and material incentives for teachers.

The study of which this paper is part is being carried out against a back-drop of severe constraints in the financing of education, associated with rapid quantitative growth of enrolments and seemingly resulting in low pupil achievement levels particularly in secondary schools. Data on the financing of education points to the fact that in the short run massive infusion of additional resources is unlikely; this underscores the need for planning approaches which would raise quality without requiring heavy outlays in funds. Teacher training and the development of the managerial infra-structure are regarded as avenues with scope for improvement without the need for heavy expenditures.

Teacher Training

Commenting on research in teacher education in developing countries, Psacharopoulos and Woodhall (1985) point out that the great majority of scholars are in agreement that 'teacher qualifications, experience, and knowledge are positively related to student achievement',⁹³ but at the same

93. Psacharopoulos G. & Woodhall M. (1985) Education for Development - An Analysis of Investment Choices, Published for the World Bank by Oxford University Press - p. 220.

time they make an important caveat with regard to training as an aid to higher educational quality:

'The question remains, of course, whether improvements in teacher training are more cost-effective than other improvements in inputs, and what form they should take - an upgrading of existing teachers, in-service training for poorly trained teachers, retraining for new curricula, or improvement in initial training'.⁹⁴

Teacher education can be conceptualised as having two sides to it, the impartation of adequate academic content and preparation in the methodology of teaching. The data in Table 10a shows that 70% of the untrained teachers in primary schools possess O and A level certificates, an academic standard considered adequate for the job. What these teachers need is professional training which, as has been shown in discussing the managerial infra-structure at the district level, can be successfully undertaken through far less costly in-servicing, largely non-residential. Professionally unqualified graduate teachers in secondary schools could also be trained through a similar scheme if, as recommended below, an appropriate infra-structure was created. Thus the only groups of untrained teachers for whom lengthy residential training, geared mainly to the advancement of academic knowledge, is needed are those with two years of secondary education and below, and A level leavers preparing for secondary teaching. However, even with these groups the current period of residential training could be reduced and confined to the acquisition of the necessary content, with the professional aspects being undertaken through in-servicing.

The advantages of in-service training along the lines suggested include:

- (1) Many more trainees are able to undergo training than the number that is accommodated in colleges at the moment; the main constraint in replacing untrained teachers would shift from the unavailability of places in colleges to the ability of the country to meet the salaries of more trained teachers.
- (2) The in-service trainees would not have to forego earnings as is the case with pre-service training; moreover, they would be available to serve the school system as they train.

94. Ibid. - p. 220.

- (3) In-service trainees would be able to apply newly learned professional skills instantly. This is important in view of the finding, reported by Avalos and Haddad,⁹⁵ that trainees with previous teaching experience benefit more from training.
- (4) Savings accruing from reduced development and recurrent expenditures could be utilised to make improvements in other spheres, in particular expansion of the secondary inspectorate, in-servicing of heads and improving teacher remuneration.
- (5) The non-financial resources - personnel and institutional space-- released could be used to enhance the in-servicing schemes and the development of training at the managerial level.

Improving the Managerial Infra-Structure in the Primary Sector.

As indicated by the data, two developments have taken place in the primary sector. First the government has created a commendable system for professional management at the district level. Second, in some districts the infra-structure has been mobilised to raise academic achievement considerably. An obvious improvement is the need to make the system effective in all districts. Since the personnel establishment already exists, approaches to improvement should not involve heavy additional expenditure. Planning and implementation could take the following lines:

- (1) a much more detailed documentation (than has been made in this paper) of the factors that are contributing to success in the better managed districts, including identification of modifications which may be necessary in different environments;
- (2) planned in-servicing of officers already in the system;
- (3) development and application of objective criteria for the evaluation of personnel in relation to recruitment, deployment and promotion: this is an excellent way of maximising the performance of field officers.

Development of the Infra-Structure in the Secondary Sector

In the secondary sector, where heavier expenditure is likely to be incurred in relation to improvements, planning should aim at providing more support for the ordinary teacher through the expansion of the administrative and inspection services, and the training of heads.

95. Avalos & Haddad, op. cit.

The devolution of responsibility for secondary schools from the P.E.O. to the D.E.O., which has been initiated, should be accelerated, so that within a district a number of schools (as is the case in the primary sector) are placed ^{under} an administrative officer working under the D.E.O. The analysis of data on the secondary inspectorate has indicated the need for quantitative growth in the number inspectors and change towards formative inspections which help and guide the teacher rather than judge him. District deployment of inspectors should be on the basis of a specified number of schools per officer. One way of tackling constraints in inspectoral personnel establishment, but at the same time maximise the effectiveness of teacher guidance, is to appoint experienced practising teachers in neighbouring schools. The helping teachers, who should be appointed to assist in their particular subjects, should work under the general guidance of the district/divisional inspector. Describing the role of such teachers in the Australian system, Ball (1961) states:

'These teachers are given a restricted district within which to operate, they are itinerant, and it is their responsibility to advise the younger teacher to the point where he has mastered the complexities of organization and the most effective use of his time. The organizing teacher has none of the powers of the inspector, and one consequence is that his guidance is freely accepted by teachers'⁹⁶

An important conclusion from the data in this paper is that headship of secondary schools, for which currently no systematic training system exists, is crucial for the maximisation of teacher effectiveness and consequently the quality of learning outcomes. The systematic training of heads should be given serious attention in planning educational improvement. Training should aim at imparting to heads skills of personnel management for better production, organising the learning programme, managing school resources for more effective learning, creating a school climate in which pupils feel at home, and establishing good relations with parents and the community. In line with the thrust of this paper that expensive programmes are not feasible in the foreseeable future, training should be organised through existing institutions. The K.S.S.H.A. is already undertaking some training; its efforts should be strengthened and expanded, with the ministry providing funds for organisation and the Kenya Education Staff Institute, the K.I.E., the secondary inspectorate collaborating with Kenyatta University

96. Ball et. al., op. cit. - p. 183.

to prepare and help deliver training materials. This is an area in which a well planned programme could receive donor assistance. The initial target groups in order of importance should be new heads, heads of unaided schools and heads of schools in remote and difficult areas.

The Role of the Community in the Management of Secondary Schools

The data discussed suggests that the board of governors system is not working satisfactorily. Expansion in the field management personnel in the secondary sector would improve the system by making the P.E.O./D.E.O representation in boards regular, but it would not solve the fundamental problem associated with the historical dimension of the board system. Currently the partners of the government in the financing of secondary education are parents and the community: a new organ reflecting this reality and with definite managerial responsibility needs to be created to replace boards of governors as currently constituted (see Makau 1985a).⁹⁷

Teacher Material Incentives

If teacher remuneration is to be used as an aid to raising teacher effectiveness and therefore the quality of learning, an element of healthy competition in the teaching service should be introduced. Competition is based on the assumptions that its object is worthwhile and that the most successful will receive the highest reward. The analysis of data on salaries in the secondary sector reveals that the majority of ordinary classroom teachers are lumped together in limited scales: there is no material incentive for individuals to excel. At the headship level the salary ceiling, in relation to other public sector jobs, is low. It is recommended that:

- (1) The improvement of basic teacher needs, such as housing, should be accelerated.
- (2) Salary scales which are sufficiently attractive to keep the ablest in the service are worked out.
- (3) Objective criteria for the promotion of the most able teachers to higher salaries are developed.
- (4) While teachers are encouraged by the elevation of some through the criteria in (3) above, promotion of increased numbers ^{should} be dependent on the

97. Makau B.M. 1985a, op. cit., detailed recommendations are made.

ability of the country to pay. It should be possible to project how many teachers should be promoted to higher scales annually.

The thrust of the foregoing recommendations is a two-pronged approach : while taking cognizance of the need to keep the costs of education down, the measures recommended should lead to higher quality learning. It is beyond the scope of this paper to spell out all the details of the necessary planning and implementation, however, that exercise is a sphere in which the official planners and educational researchers could collaborate for the benefit of the nation.

BIBLIOGRAPHY

- Aanes A. (1977) Education and Its Role in Rural Development: Geographical Aspects of Kenya's Harambee Secondary Schools, University of Bergen.
- Alexander L. & Simmons J. (1975) The Determinants of School Achievement in Developing Countries: The Education Production Function, World Bank Staff Working Paper No. 201, March.
- Anderson J. (1970) The Struggle for the School - The Interaction of Missionary, Colonial Government and Nationalist Enterprise in the Development of Formal Education in Kenya, Longman.
- Avalos B. & Haddad W. (1981) A Review of Teacher Effectiveness Research in Africa, India, Latin America, Middle East, Malaysia, Philippines, and Thailand: Synthesis of Results, International Development Research Centre, Ottawa.
- Ball D.G. et al. (1961) Supervision and Inspection of Primary Schools, Australian Council for Educational Research, Melbourne.
- Barkan J.D. with Okumu J.J. (1979) (eds.) Politics and Public Policy in Kenya and Tanzania, Heinemann.
- Bertrand T.J. & Griffin R. (1983) The Economics of Financing Education: A Case Study of Kenya, Country Policy Department, The World Bank.
- Bienen H. (1974) Kenya - The Politics of Participation and Control, Princeton University Press.
- Bloom B.S. et al. (1971) Handbook of Formative and Summative Evaluation of Student Learning, New York McGraw-Hill.
- _____ (1976) Human Characteristics and School Learning, New York McGraw-Hill.
- Cammaerts F.C.A. (1969) Priorities for the Preparation of Secondary Teachers in Kenya, East African Journal, November.
- Colony and Protectorate of Kenya (1949) African Education - Report of a Committee Appointed to Inquire into the Scope, Content, and Methods of African Education, Its Administration and Finance and to Make Recommendations.
- Colony and Protectorate of Kenya (1959): Department of Education Annual Summary.
- Court D. & Kinyanjui K. (1985) Education and Development in Sub-Saharan Africa: The Operation and Impact of Education Systems, University of Nairobi, Institute for Development Studies (IDS) Working Paper No. 421.
- Dore R.P. (1976) The Diploma Disease, London, Allen and Unwin.
- Gachui J.M. (1970) The Role and Impact of Self-help Schools on a Kenyan Community of Chinga, Ph.D. Thesis, State University of New York at Buffalo.

- Godfrey E.M. & Mutiso G.C.M. (1979) Politics, Economics and Technical Training, Kenya Literature Bureau.
- Goodwin F.J. (1963) The Art of the Headmaster, With Suggestions on School Administration, Ward Lock Educational.
- Greaves L.B. (1969) Carey Francis of Kenya, Rex Collings London.
- Hughes R. (1985) Human Capital : The Wealth of Nations or Drain on Resources, University of Nairobi I.D.S. Working Paper No. 428, July.
- Husen T. et al. (1973) Teacher Training and Student Achievement in Less Developed Countries, World Bank Staff Working Paper No. 310.
- International Labour Organization (1981) The Paper Qualifications Syndrome and the Unemployment of School Leavers - I.L.O. Jobs and Skills Programme for Africa, Addis Ababa - 2 volumes.
- The Indonesian Times (1993) Editorial : The Burden and Pressure of Education, Jakarta June 28.
- Iyengar S. (1980) Socialization Towards Democratic Norms in a Developing Nation : Approval of Dissent Among Indian Youth, in The Journal of Developing Areas Vol.14 No.4, July
- Kagia R.W., Kinyanjui K. & Makau B.M. (1985) Educational Research in Kenya with Particular Emphasis on Secondary Education, I.D.S. University of Nairobi - Paper presented at a Workshop on the Promotion of Collaboration and Sharing of Information on Educational Research in Eastern and Southern Africa, Nairobi 3-6 October.
- Keller Jr. E.J. (1930) Education, Manpower and Development - The Impact of Educational Policy in Kenya, Kenya Literature Bureau.
- Kenya Secondary School Heads' Association (KSSHA) (1978) Minutes of the K.S.S.H.A. Executive Committee Meeting, 14 July.
- _____ (1978) Minutes of the Meeting Held between the Teachers Service Commission Secretary and the National Executive Committee of the K.S.S.H.A., 13 October.
- _____ (1978) A Recommended Scheme of Service for the Heads of Secondary Schools - Kenya, 22 November.
- _____ (1984) Issues Requiring Attention and Action - A memorandum addressed to the Permanent Secretary for Education, Science and Technology
- Kinyanjui K. (1976) Secondary School Strikes : The Art of Blaming the Victim, University of Nairobi I.D.S. Discussion Paper No. 243.
- Kipkorir B.E. (1970) The Alliance High School and the Origins of the Kenya Elite, 1926 - 1962, Ph.D. thesis, Cambridge University.
- Loubser J.J. (1983) Human Resource Development in Kenya : An Overview, a consultant's report prepared for the Canadian International Development Agency, November.

- Makau B.M. (1985) Equity and Efficiency in Financing Secondary Education in Kenya : Key Issues in State - Community Partnership, University of Nairobi I.D.S. Working Paper No. 429, September.
- (1985) Educational Planning and Development in Kenya : The 8-4-4 School Curriculum and its Implications for Self-Employment, University of Nairobi I.D.S. Working Paper No. 433, November.
- & Somerset H.C.A. (1980) Primary School Leaving Examination, Basic Intellectual Skills and Equity : Some Evidence from Kenya, University of Nairobi I.D.S. Discussion Paper No. 271.
- Maleche A.J. (1974) Why Join Teaching?, East African Journal.
- May B. (1978) The Indonesian Tragedy, Graham Brash (P.T.E.) Ltd. Singapore.
- May - Parker J. & Ozumba K. (1981) Teacher Effectiveness : Research in West Africa, International Development Research Centre, Ottawa.
- Ng'ang'a J.M. (1985) Directory of Research - Fifth Supplement, Kenyatta University College, May.
- Njoroge R.W. (1977) Some Factors Influencing Performance in Harambee Secondary Schools, B.A. dissertation, University of Nairobi.
- Nkinyangi J.A. (1981) The Origins of Student Disturbances: The Kenyan Case, University of Nairobi I.D.S. Working Paper No. 378.
- Osogo J.N.B. (1970) The History of Kabaa - Man'u High School and the Contribution of the Holy Ghost Fathers Upon Education in Kenya, M.A. thesis, University of Nairobi.
- Ottobre F.M. (ed.) (1980) Assessing Teacher Effectiveness - Proceedings of the 1978 Conference of the International Association for Educational Assessment, I.A.E.A. Princeton New Jersey 08541.
- Oxlade D. (1973) A Study of the English Public School Tradition in the Former Government European Secondary Boarding Schools in Kenya and Its Influence on Other Secondary Schools, Ph.D. thesis, University of Nairobi.
- Prewitt K. (ed.) (1971) Education and Political Values : An East African Case Study, East African Publishing House.
- Psacharopoulos G. & Woodhall M. (1985) Education for Development - An Analysis of Investment Choices, published for the World Bank by Oxford University Press.
- Republic of Botswana (1977) Kagisano Ka Thuto - Report of the National Commission on Education.
- Republic of Kenya (1963, 1974-1978) Annual Reports of the Ministry of Education.
- (1975) Accounting Instructions for Maintained and Assisted Institutions, Ministry of Education.

Republic of Kenya (1981) Central Province Annual Report.

_____ (1980-1983) C.P.E. Newsletters, Kenya National Examinations Council.

_____ (1985) Civil Service Review Committee 1985: New Conditions of Service for the Kenya Civil Service, Office of the President Personnel Circular No. 2 September 25.

_____ (1973) Curriculum Guide for Secondary Schools Vol.1, Jomo Kenyatta Foundation.

_____ : Development Plan, 1984 - 1989, Government Printer Nairobi.

_____ (1984) District Education Office Machakos, Annual Report.

_____ : 1983 Economic Survey, Ministry of Economic Planning and Development.

_____ : 1984 Economic Survey, Ministry of Finance and Planning.

_____ : Estimates of Recurrent and Development Expenditure for 1974/75, 1980/81 and 1985/86.

_____ (1979) A Manual for Heads of Secondary Schools in Kenya, Ministry of Education.

_____ (1980) Nyanza Province Annual Report.

_____ : Teachers' Payrolls for December 1984 and September 1985, Teachers Service Commission.

_____ (1980) Report of the Civil Service Review Committee 1979-80, Government Printer Nairobi.

_____ (1971) Report of the Commission of Inquiry (Public Service Structure and Remuneration Commission) 1970-71, Government Printer Nairobi.

_____ (1971) Report of the Education Administration Conference Held at the Kenya Science Teachers' College, 19-22 April, Ministry of Education.

_____ (1973) Report of the Education Administration Conference Held at the Kenya Polytechnic, 28-31 August, Ministry of Education.

_____ (1964) Report of the Kenya Education Commission, The English Press Nairobi.

_____ (1982) Report of the Working Party on Financing of Higher Education.

_____ (1985) Secondary School Syllabuses for the 8-4-4 System of Education, Ministry of Education, Science and Technology, July.

_____ (1975) Sessional Paper No.4 - Economic Prospects and Policies.

- Republic of Kenya (1986) Syllabuses for Kenya Primary Schools Volume II - Upper Primary, Ministry of Education, Science and Technology.
- Saha L.J. (1983) Social Structure and Teacher Effects on Academic Achievement : A Comparative Analysis, in Comparative Educational Review Vol. 27 No.1, February.
- Sarason S.B. (1982) The Culture of the School and the Problem of Change, Allyn and Bacon Inc.
- Sifuna D.N. (1975) Factors Determining Teaching Success Among Primary School Teachers in Kenya, Ph.D. thesis, University of Nairobi.
- Smith J.S. (1973) The History of the Alliance High School, Heinemann Educational Books.
- Somerset H.C.A. (1982) Examinations Reform : The Kenya Experience - A Report prepared for the World Bank.
- The Standard Newspaper (1984) Editorial : The Writing is on the Wall, Nairobi, January 6.
- (1985) Pregnancies Among School Girls Have Reached Alarming State, Nairobi, June 29.
- (1985) School Strikes - The Inside Story, Nairobi September 6.
- Thompson J. & Cooley van E. (1984) Improvement in Leadership, Curriculum, Staff Development Can Lead to Long Term Gains, in the Journal for Middle Level and High School Administrators, December.
- Umbina W.E. (1974) Librarians and Education in Kenya: Problems and Prospects, with Particular Reference to the British Influence, M.A. thesis, University College London School of Library, Archives and Information Studies.
- Walker W.G. (1965) The Principal at Work - Case Studies in School Administration, University of Queensland Press, Brisbane.