THE DEVELOPMENT OF TEACHERS' CENTRES:
SOME COMPARISONS OF THE ENGLISH AND KENYAN SITUATIONS.

Dissertation submitted to the University of Birmingham (in part fulfilment of the requirements) for the Master of Education degree.

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University of Birmingham
School of Education
1974/75.
ACKNOWLEDGEMENT

In the process of compiling information and writing this dissertation, I received tremendous co-operation from all the individuals or organisations I approached, and I here express my warmest gratitude to all of them. However, I particularly wish to thank Dr. G. A. Cortis, my supervisor, whose phenomenal guidance was extremely useful all along.
CONTENTS:

ACKNOWLEDGEMENT

SUMMARY

CHAPTER ONE: HISTORICAL FOLLOW-UP AND DEVELOPMENT

Part One: The English Situation.

Historical follow-up,
Definition of centres,
Establishment in England.

Part Two: The Kenyan Situation.

Early subject centres,
Subject study groups,
Introduction at grass-roots level, Kenyan teachers and the rapid expansion of education.

Part Three: Modes of Approach to the Establishment of Centres.

CHAPTER TWO: ACTIVITIES AT A CENTRE.

Which activities and why.

Part One: Curriculum Development

Definition of curriculum,
Definition of curriculum dev.,
Curriculum dev. projects,
Problems affecting projects.
Part Two: In-service Education 49 - 57
Definition of In-service Education, Determinants of in-service courses, Courses offered, Problems affecting in-service education.

Part Three: Resource Centre, Exhibitions and social activities 58 - 64

CHAPTER THREE: ORGANISATION OF A CENTRE.

Part One: Leadership 65 - 71
Appointment and roles of the warden and staff, Role of teachers, Role of schools.

Part Two: Accommodation 72 - 77

Part Three: Communication and General Management 78 - 86

CHAPTER FOUR: CONSTRAINTS AND FEASIBILITY 87 - 103
Teachers' academic and professional qualifications, Increase in population, Free education, Finance, Communication, Evaluation, Conclusion.

REFERENCES: 104 - 111

APPENDIX No. 1, 2 and 3 112 - 114
SUMMARY

No initial teacher training can impart the complete knowledge that a teacher will require in the field. The development of Teachers' Centres is often considered to be one of the outstanding innovations in the post-training education of teachers. Whereas their establishment has been widely implemented in many countries in the world, the mode of approach in their developmental pattern differs considerably in various countries.

Whereas in England the Centres evolved from an established system of education, in Kenya the innovation had to be transplanted, though not without proper modifications to suit the situation. The first chapter of this dissertation will try to show why it was necessary to establish Kenya's Teachers' Advisory Centres with an orientation towards the service of the country's primary school teachers.

The success of a Centre, whether in Kenya or England, depends on the successful achievement of its deliberations. One of the immediate aims of the Centres is to help teachers to keep abreast of the rapid changes which are happening all over the world and which invariably affect their profession. The second and third chapters examine some of the major elements of the activities at a Centre, such as: in-service education, organisation of resources, communication, general management, centre based curriculum.
development projects and the constraints the projects may pose.

While in the present relatively young stage Kenya's Teachers' Advisory Centres may have little to offer in the organisation of the foregoing aspects, there is every reason to believe that their future will be busy and very demanding in the rapidly expanding structure of Kenya's education. Much can be learnt from the experience through which the English Centres have passed in order to avoid a repetition of the same problems they encountered in their earlier stages.

The final chapter looks at many of the constraints which may affect the organisation of Centres; including the level of education at which students start training, the large number of the temporarily indispensable untrained teachers in Kenya, financial constraints, high pupil teacher ratio and over-stretched resources etc. Suggestions, but not easy solutions, are made for the Kenyan situation. Emphasis is put on research into teacher effectiveness that can be imparted by the organisation of such Centres in order to facilitate improvements as befits a predominantly rural society.
CHAPTER ONE
HISTORICAL FOLLOW-UP AND DEVELOPMENT

PART I: THE ENGLISH SITUATION BEFORE 1964

The history of Teachers' Centres is a very recent one. Britain which is the first country to start this innovation in education has organised them for just over ten years. However, it is possible to distinguish educational activities of a much earlier date which had the characteristics of a teachers' centre. Regarding this point, the Schools Council stated that, "As with most important movements the origin can be traced back a long way. Some Teachers' Centres came into existence soon after the passing of the 1944 Education Act. A little research would almost certainly reveal activities as far back as the early nineteen twenties that had some of the characteristics of Teachers' Centres today." 

During the second half of the last century various associations connected with the teaching profession were formed in England. Examples of such associations were: the National Union of (Elementary) Teachers which was established in 1870, the Headmasters' Association which was formed in 1890 and the Assistant Masters' Association which was founded in 1891. These associations played important roles in education by running activities some of which were similar to some of those activities organised by the present day teachers' centres. Brand and Whitbread
writing on these educational associations of the last century noted, "Apart from these, there were numerous professional and semi-professional societies concerned with purely educational matters, or with particular subjects of the curriculum and methods of teaching."

Even the 'pupil-teacher' and 'monitorial' systems of teacher education in the last century had some characteristics of teachers' centres, if we consider Matthews' working definition of a centre being a meeting place for at least two people concerned with learning. Under the pupil-teacher system, pupil-teachers were chosen at the early age of 13 years. They completed an apprenticeship of five years under the supervision of the headmaster before the successful ones could be allowed to sit for an examination which would qualify them as certificated teachers. Later in the same century the monitorial system came into use. In this system older children in a school taught the younger ones.

Many institutionalized and non-institutionalized educational activities in the first part of this century can be cited which had many characteristics of the present day teachers' centres. Good examples are the first Field Study Centres which were started in 1943. As Herliby wrote, these centres conducted educational research in every subject whose essential subject matter was out of doors. Each field centre had laboratory accommodation; was
equipped for biology, geography and other works relevant to field work in its area; each centre was under the leadership of a director. Field study centres still exist in Britain, and I would consider them as special purpose "teachers'" centres.

These activities of the last century and many other educational activities described here of the first half of this century truly played a significant role in educational development but do not deserve to be regarded as the beginning of teachers' centres as we know them today. They were mainly sporadic establishments for bridging a social gap for some teachers or for the professional requirements of a small sector of the teaching profession.

The Martineau Teachers' Centre in Birmingham, established in 1952 and often regarded as the first Teachers' Centre in England falls into this category, even though its original purpose was to offer probationary teachers, employed by the Education Committee, some accommodation for in-service courses, day release needlework courses and recreational facilities.

The main characteristics of the post 1964 centres is that they are an educational innovation which has been accepted as a necessity for the continuing education of teachers and for all people concerned with education. They are an internationally accepted innovation in education and they have been spreading
to many parts of the world, as a general necessity in all educational structures, but modified to suit an individual country's needs. Fortunately Kenya started organising them as early as around 1972.

DEFINITION OF CENTRES:

In order to make general comparisons between the way they were started in England and the way they were established in Kenya, it is necessary initially to look at a few definitions of Teachers' Centres:

"Basically a Teachers' Centre can be thought as a meeting place for teachers." 6

"A Teachers' Centre may be defined as an institution which is geared to respond to and to satisfy the professional needs of teachers in the area in which it is located." 7

"However a Centre was not just a building - it was a hub of a wheel of activities. An analogy used was that the congregation not the building made up the church; so too with Teachers' Centres. Many of the activities stimulated by the developmental groups took place outside the Centre." 8
ESTABLISHMENT OF CENTRES IN ENGLAND

The underlined part of the (third) above-quoted definition of a teachers' centre reveals the true beginning of the centres in England. The papers published under the auspices of the Nuffield Foundation in the early sixties was the direct cause of their development to the extent that we know them today. Much has been written by educationists about this stage of the development of teachers' centres, for example Adams, Thornbury and the Schools Council.

The general dissatisfaction with the Mathematics and Science syllabi following the Russians' first success in a manned space flight started a wave of curriculum revision in the U.S.A. Soon afterwards Britain followed a similar course under the auspices of the Nuffield Foundation. Writing retrospectively Gough says that there is a sense in which one can argue that the person most responsible for the increased momentum in curriculum change in the last decade was Yuri Gagarin. The activities organised for the achievement of the desired curriculum change eventually caused the beginning of teachers' centres as an innovation in education.

In Britain teams of educationists, which included the whole spectrum of the teaching profession: school teachers,
lecturers in colleges of education, universities and other educational institutions, educational administrators etc. devised materials, had them tried out in schools and revised them accordingly after having received the necessary feedback from schools. During the cause of their trial before final publication there arose a need for teaching aids which would accompany the syllabi, to be prepared as well. It became essential, therefore, for all the educationists involved to coordinate their experiences, suggestions and talents and eventually, as Adams describes, "In the process, the teams found it necessary to have somewhere for the teachers from a trial area to meet together to discuss their reactions to the materials. A central meeting place within a trial area meant that displays of the developing materials and apparatus could be provided. Consequently a climate was created for the emergence of the first single subject teachers' centres, which at that time were known as Nuffield Science and Mathematics centres."

Today there are well over 600 centres in England and Wales which try to serve as centres for the professional interchange of information, ideas and innovations, and provide a practical expression of the notion of teacher education not as a terminal process but as a continuum of pre-service and in-service training. Their rapid spread is a credit to the teachers themselves, Local Education Authorities and particularly so to the Schools Council, a quasi-government body which was founded in 1964 by practising teachers to replace the government founded Curriculum Study Group.
Some of the Council's Field Officers were assigned to the task of promoting the establishment of the centres in various places. This was also the time that the problems of the Raising Of the School Leaving Age (ROSLA) needed thorough attention, so the centres and the solving of particular ROSLA problems were closely connected.

Many early centres opened alongside the Schools Council's Curriculum Development Projects assigned to pilot areas as for example in Kent where Bell, notes, "Kent's first teachers' centre opened in 1965, in Folkestone, shortly after the division had been chosen as a pilot area for the Schools Council's Science and Mathematics Project. ... It is also associated with the Schools Council 5-13 project. In a similar way the centre at Turnbridge Wells is involved in a secondary science project, with reference to young school leavers and with the project on resources for learning. A school is linked with the centre for trial materials evolving from this project. Recently the Folkestone Centre cooperated with the county's residential college." A good number of early centres were established at Colleges of Education or schools because of the availability of education facilities.
PART 2: THE KENYAN SITUATION

EARLY SUBJECT CENTRES.

In Kenya the beginning of the hub of institutionalized activities which resembled the work done at some teachers' centres as we know them today, can be traced way back to 1957 when the Ministry of Education established a section which they called 'The English Special Centre'. This section had the duty of advising the Ministry of Education on the new methods of teaching and the development of materials for the use of raising the standard of English in Asian Primary schools. This centre achieved such tremendous success that soon afterwards, after having realised the usefulness of subject centres, the Ministry of Education considered the establishment of centres for other subjects.

In 1961 a second centre, 'The Science Teaching Centre' was established for the purpose of organising curriculum development work for raising the standard of science teaching in the whole country. The Science Teaching Centre did little primary school curriculum development work but it prepared and reproduced schemes of work and Teachers' Handbooks for secondary schools. The subjects covered were Biology, Chemistry and Physics.

* Prior to 1962 there were separate education systems for Europeans, Asians and Africans.
By 1965, New Mathematics was quickly spreading to many parts of the world and Kenya decided to start teaching it in its schools as soon as they had teachers with the required knowledge. Consequently, a 'Mathematics Centre' was established in order to accelerate the introduction of the new mathematics course, to both primary and secondary schools.

Initially these three centres worked independently although they were part of the same Ministry, and were doing curriculum development work. In 1966 they were brought under the umbrella of one body, the Curriculum Development and Research Centre (C.D.R.C.), which was formed specifically for the purpose of coordinating the hub of activities of these three centres. In 1968 it was decided that the C.D.R.C. should be part of the Kenya Institute of Education (K.I.E.), which had been in existence since 1964, in order to create a meaningful and "viable body of curriculum developers and teacher educators." Under the K.I.E. the C.D.R.C. was renamed, as we still call it today, as the Department of Curriculum Development. 15

It can be seen at this juncture that the early centres in Kenya, similar to the ones in England at about the same time, were subject centres. Whereas England's single subject centres were initiated by bodies like the Nuffield Foundation in conjunction with the teachers, the DES and others, the subject

*See Appendix No. 5
centres in Kenya were the brain child of the Ministry of Education itself. Whereas the English centres captured the interest of serving teachers and eventually the teachers organised their own centres all over the country, the Kenyan subject centres remained as they largely do today, as a 'body of curriculum developers and teacher educators' stationed at Nairobi, the national headquarters. Possibly due to a variety of reasons, some of which are discussed in the final chapter, the Kenyan concept could not easily capture the interests of the country's teachers at grass-roots level.

STUDY GROUPS:

Kenyan teachers, like any other body of dedicated teachers, did not keep aloof from educational development work. Around 1968, and very much so in 1969, out of the sheer effort of practising secondary school teachers in the Coast Province of Kenya, various subject study groups were formed under the chairmanship of Mr. A. Mbogho (the Headmaster of Shimo-la-Tewa Secondary School) presently the Principal of the Kenya Science Teachers' College.

If we take the definition given by the Schools Council for a centre being a 'hub of a wheel of activities', then the practising teachers of the Coast Province who formed the subject study groups, could well be regarded as the ones who started teachers' centres in Kenya at the grassroots level. Initially the
subject study groups operated very successfully. Some of their activities included:-

(a) In-service courses.
(b) Preparation of joint trial Ordinary Level examinations for the Coast Secondary Schools.
(c) Organisation of science exhibitions
(d) Educational visits etc.

Many of these subject study groups could, given the right backing, have developed along the same lines as the Nuffield Maths and Science Developmental groups of England or those of the Schools Council which evolved into Teachers' Centres. That they failed to develop along the same lines is due to a variety of reasons which included finance, communication, instability of staff establishment, demographic distribution, accommodation, lack of evaluation on their effectiveness etc.

The energetic beginning and the 'hub of a wheel of activities' of the study groups organised by Kenya's Coast Provincial Secondary School teachers is noted in the 1970 Annual Report of the Kenya Secondary Schools Heads Association.\(^\text{16}\) It is recorded that, "The various study groups formed in 1969 were very active. The highest achievement of the Study Group Committee was the mammoth science exhibition held at the Sacred Heart High School on the 9th and 10th October 1970. Twenty two schools participated in the exhibition. The total number of visitors was 2,829. The
Inspector of Science came especially from Nairobi to see the exhibition and gave his comments and guidelines. The same report indicated that the study groups carried other activities when it mentioned that, "Apart from this an in-service Swahili course was launched by the Swahili Study Group, while a joint schools paper for the trial East African Certificate of Education (E.A.C.E.) was set by the Mathematics Study Group. The English, Drama, History, Domestic Science and Technical Education Study Groups were all active."

It can be seen that up to this stage there were no subject developmental activities run by Kenya's primary school teachers themselves. It was at this stage (around 1972) when the teachers' centre concept, as an innovation which was spreading to many parts of the world, was introduced to the Kenyan teacher.

INTRODUCTION OF CENTRES
AT GRASS-ROOTS LEVEL:

The original plan was to establish Teachers' Advisory Centres (T.A.S.), at least one in each district, for primary school teachers. Their establishment was not a gradual growth from developmental groups connected with Foundations like Ford's, Kennedy's or Nuffield's; or the subject centres of the K.I.E. or the subject study groups of the secondary school teachers; but grew from suggestions made by the Ministry of Education. Undoubtedly
they had observed the growth of teachers' centres and the important role they played in the continuation of the education of teachers either in Britain or elsewhere.

Indeed they modified the concept relatively to suit the country's predominantly rural society. Thus Kenya's centres today serve the primary school teachers. This might be desirable in view of the quality of and facilities available for Kenya's primary school teachers in their rural schools. It can therefore be correctly argued that they need more 'Advisory' service at a Teachers' Centre than their secondary school colleagues. Furthermore there appears to be no significant coordination between primary and secondary school teachers at the district level, a problem which is enhanced by the fact that District Education Officers mainly deal with the affairs of primary schools.

The introduction of centres into Kenya is aptly shown by the Coast Provincial Education Officer's Annual Report for 1972 when he wrote that, "This is a new feature in the educational development taking place throughout the Republic and the Coast is no exception. Although each district is supposed to have one centre only, three have hitherto been functioning in the proper way simply because they have been supplied with the equipment. It should be noted that the establishment of these centres was greatly encouraged by the Assistant Director of Education (Inspectorate) Mr. G.P. Olouch* and the coordinator of the UNICEF

* Mr G.P. Olouch is now the Head of the K.I.E.
Supervision stationed at the Headquarters, Nairobi, when together they visited the Province early this year.

"At present the centres are manned by teachers on the Teachers' Service Commission pay roll of grades ranging from P3 - P1 some of whom will revert to classroom work after their reports have been thoroughly scrutinised."

KENYA'S TEACHERS AND THE RAPID EXPANSION OF EDUCATION.

An examination of Kenya's teaching force will probably reveal why the centres are 'Advisory' in nature and why they cater for primary schools. Details of their qualifications may even help one to appreciate the difficulties experienced in the general organisation and the activities run at the centres.

Kenya's professionally qualified teachers are graded as P4, P3, P2, P1, S1, Graduates (BEd., BA or BSc with Educ. option etc) and Others who may be holders of the Diploma in Education or a U.K. Teaching Cert., etc. A scrutiny of Kenya's primary school teachers in particular may help one to appreciate the low standard of their qualifications. It should be easy from the English point of view to understand the scantiness of the education of Kenya's primary school teachers since the history of England's teacher education once passed through stages of lowly qualified teachers.

*See Appendix No. 2 for a short description of the role of the Teachers' Service Commission.
(see page 7 for examples) not only in the last century but also earlier in this century.

The majority of Kenya's primary school teachers are of the Primary Teacher Grade 3 (P3). These are teachers who successfully completed a seven year period of primary schooling but did not enter secondary schools mainly due to having scored grades which could not justify their admission into government aided secondary schools in the selection examination. They did two years of teacher training.

The second category, in terms of numbers, are the P2 teachers who constitute people who have had at least two years of secondary schooling but did not successfully complete secondary education. They were also trained for two years.

P1 teachers are those who had two years teacher training after successfully completing four years of secondary schooling. Most of them are comprised of people whose O-level examination results were not good enough to justify their selection for form five education.

A group which is gradually being phased out are those who barely completed primary education. These are graded as P4 and were also trained. No recruitment is made for the training of teachers of this grade.
A few graduates, and non-graduate teachers who were originally trained to teach in lower secondary schools, may be found teaching in primary schools. This group of non-graduates is mainly comprised of the Secondary One (S1) grade. Teachers who are in this group either had good O-level grades and were trained for three years or completed Advanced Level education and were trained for one year.

It can be noticed, therefore, that teacher education courses are offered after each level of formal education. There are many non-citizen teachers employed either as expatriates or on local terms of service (see tables on pages 22, 23 and 24). It can be seen in the same tables that there were in 1973, 12,618 teachers for primary schools and 2,638 for secondary schools who were not professionally-qualified. This serious situation of so many untrained teachers has been there since the colonial days and the situation does not seem to have got any better due to the expansion in Kenya's education, as is analysed in the final chapter.

Nevertheless the Ministry of Education is aware of this grave situation and it is doing its best to overcome the problem as Yuda Komora notes, "Quantitative expansion has made great strides, but we are always conscious of the need to maintain high standards so that expansion does not in any way impair the quality of education imparted to the younger generation."
## PRIMARY SCHOOL TEACHERS (KENYA) BY QUALIFICATION AND CITIZENSHIP (1973)

### A. PROFESSIONALLY QUALIFIED

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>KENYA CITIZENS</th>
<th>NON-CITIZENS</th>
<th>GRAND TOTAL</th>
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<tbody>
<tr>
<td>Graduate</td>
<td>4</td>
<td>47</td>
<td>51</td>
</tr>
<tr>
<td>U.K. Min. of Educ.</td>
<td>9</td>
<td>46</td>
<td>55</td>
</tr>
<tr>
<td>S1</td>
<td>346</td>
<td>110</td>
<td>456</td>
</tr>
<tr>
<td>P1</td>
<td>5,912</td>
<td>379</td>
<td>6,291</td>
</tr>
<tr>
<td>P2</td>
<td>13,786</td>
<td>30</td>
<td>13,816</td>
</tr>
<tr>
<td>P3</td>
<td>20,690</td>
<td>23</td>
<td>20,713</td>
</tr>
<tr>
<td>P4</td>
<td>2,383</td>
<td>4</td>
<td>2,387</td>
</tr>
<tr>
<td>Other</td>
<td>138</td>
<td>17</td>
<td>156</td>
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<tr>
<td><strong>Total Qualified</strong></td>
<td><strong>43,269</strong></td>
<td><strong>656</strong></td>
<td><strong>43,925</strong></td>
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### B. NOT PROFESSIONALLY QUALIFIED

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<tbody>
<tr>
<td>Graduate</td>
<td>27</td>
<td>5</td>
<td>32</td>
</tr>
<tr>
<td>HSC (EAACE)</td>
<td>166</td>
<td>6</td>
<td>172</td>
</tr>
<tr>
<td>CSC (EACE)</td>
<td>5,079</td>
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<td>5,109</td>
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<tr>
<td>KJSE</td>
<td>2,783</td>
<td>3</td>
<td>2,786</td>
</tr>
<tr>
<td>CPE (KPE)</td>
<td>4,135</td>
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<td>4,136</td>
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<tr>
<td>Other</td>
<td>371</td>
<td>12</td>
<td>383</td>
</tr>
<tr>
<td><strong>Total Unqualified</strong></td>
<td><strong>12,561</strong></td>
<td><strong>57</strong></td>
<td><strong>12,618</strong></td>
</tr>
</tbody>
</table>

### GRAND TOTAL

|               | 55,830 | 713 | 56,543 |

Table No. 1
Source: Kenya Min. of Educ. Annual Reports - 1963 to 1973
Table No. 2

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
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<th>NON-CITIZENS</th>
<th>GRAND TOTAL</th>
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</thead>
<tbody>
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<td></td>
<td><strong>PROFESSIONALLY QUALIFIED</strong></td>
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</tr>
<tr>
<td>Graduate</td>
<td>589</td>
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<td>1,519</td>
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<tr>
<td>Sl</td>
<td>1,972</td>
<td>153</td>
<td>2,125</td>
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<tr>
<td>P1</td>
<td>23</td>
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<tr>
<td>Prin./Tech.Master</td>
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<td>9</td>
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<td>Tech,Inst.&amp;STI.</td>
<td>6</td>
<td>8</td>
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<td>10</td>
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<tr>
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<td>41</td>
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<td>2,626</td>
<td>1,148</td>
<td>3,774</td>
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|                          | **NOT PROFESSIONALLY QUALIFIED** |              |             |
| Graduate                 | 67             | 278          | 345         |
| H.S.C.                   | 97             | 9            | 106         |
| C.S.C.                   | 25             | -            | 25          |
| Other                    | 12             | 10           | 22          |
| Total Unqualified        | 201            | 297          | 498         |

**GRAND TOTAL** 2,827 1,445 4,272

**TEACHERS IN MAINTAINED AND AIDED SCHOOLS (KENYA - 1973).**

Source: Ministry of Education - Kenya.
### TEACHERS IN UNAIDED SCHOOLS (KENYA - 1973)

<table>
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<th>KENYA CITIZENS</th>
<th>NON-CITIZENS</th>
<th>GRAND TOTAL</th>
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</thead>
<tbody>
<tr>
<td><strong>A. PROFESSIONALLY QUALIFIED</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>55</td>
<td>411</td>
<td>466</td>
</tr>
<tr>
<td>S1</td>
<td>205</td>
<td>66</td>
<td>271</td>
</tr>
<tr>
<td>P1</td>
<td>150</td>
<td>14</td>
<td>164</td>
</tr>
<tr>
<td>Prin/Tech.Master</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Tech.Inst&amp;STI</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Asst.Tech.Inst.&amp;SATI</td>
<td>-</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>32</td>
<td>33</td>
<td>65</td>
</tr>
<tr>
<td><strong>Total Qualified</strong></td>
<td>444</td>
<td>532</td>
<td>976</td>
</tr>
<tr>
<td><strong>B. NOT PROFESSIONALLY QUALIFIED</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>49</td>
<td>323</td>
<td>372</td>
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<tr>
<td>H.S.C.</td>
<td>819</td>
<td>151</td>
<td>970</td>
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<tr>
<td>C.S.C.</td>
<td>671</td>
<td>52</td>
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<tr>
<td>Other</td>
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<td><strong>Total Qualified</strong></td>
<td>1,596</td>
<td>547</td>
<td>2,143</td>
</tr>
</tbody>
</table>

**GRAND TOTAL**

|              | 2,040 | 1,079 | 3,119 |

Table No. 3
Source: Ministry of Education - Kenya.
The Ministry of Education, in an effort to combat this situation, offers 'crash programme' courses to professionally-unqualified teachers who have taught in that capacity for at least one year in a primary school for the eventual award of P2 and P3 Teachers' Certificates. Crash programmes for the professionally unqualified teachers are at present organised during vacation time for a total of nine weeks annually; to be attended for a period of four years.

At the beginning of 1974 a major step towards universal primary education was taken when fees in the lower primary school classes were abolished. There was a subsequent increase in pupil enrolment which caused a need for more teachers so the number of untrained teachers increased sharply as the graph on page 26 shows.

The secondary situation is only bad when we consider unaided schools alongside government-aided schools. The government ones have professionally-qualified teachers save for a small percentage of university graduates who have a salary disadvantage against other graduates who are professionally-qualified. The tables below show the rapid rise of trained and untrained teachers since Kenya became independent in 1963 up to 1973.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>63/64</th>
<th>65</th>
<th>66</th>
<th>67</th>
<th>68</th>
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<th>70</th>
<th>71</th>
<th>72</th>
<th>73</th>
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</thead>
<tbody>
<tr>
<td>TRAINED</td>
<td>17,179</td>
<td>20,112</td>
<td>23,505</td>
<td>25,050</td>
<td>27,485</td>
<td>30,001</td>
<td>32,929</td>
<td>37,617</td>
<td>41,599</td>
<td>43,625</td>
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<tr>
<td>UNTRAINED</td>
<td>8,649</td>
<td>10,400</td>
<td>10,621</td>
<td>10,438</td>
<td>8,311</td>
<td>8,650</td>
<td>11,779</td>
<td>11,917</td>
<td>12,618</td>
<td></td>
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<tr>
<td>TOTAL</td>
<td>25,828</td>
<td>30,512</td>
<td>34,126</td>
<td>35,488</td>
<td>38,396</td>
<td>38,651</td>
<td>49,396</td>
<td>53,516</td>
<td>56,543</td>
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</tbody>
</table>


<table>
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<th>'67</th>
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<th>'70</th>
<th>'71</th>
<th>'72</th>
<th>'73</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAINED</td>
<td>1,490</td>
<td>1,866</td>
<td>2,160</td>
<td>2,742</td>
<td>3,271</td>
<td>3,681</td>
<td>3,907</td>
<td>4,469</td>
<td>4,750</td>
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<tr>
<td>UNTRAINED</td>
<td>510</td>
<td>628</td>
<td>844</td>
<td>1,585</td>
<td>1,902</td>
<td>1,996</td>
<td>2,200</td>
<td>2,644</td>
<td>2,638</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,000</td>
<td>2,494</td>
<td>3,004</td>
<td>4,053</td>
<td>4,644</td>
<td>5,881</td>
<td>6,371</td>
<td>7,106</td>
<td>7,388</td>
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</tr>
</tbody>
</table>

**Rise of Untrained Teachers - Kenya.**

![Graph showing the rise of untrained teachers in Kenya from 1964 to 1975.](image)

**Figure No. 1**

PART 3: MODES OF APPROACH TO THE

ESTABLISHMENT OF CENTRES

It was against such a background in Kenya's teaching profession that Teachers' Advisory Centres were organised to cater for primary school teachers. The marginal academic qualifications of most Kenyan teachers in the primary schools and the heavy dilution of the profession by the unavoidable presence of the untrained should be good enough reasons to explain why the Centres are considered 'Advisory' in nature. Some centres were also established at Primary Teachers' Colleges.

The approach used to establish teachers' centres in England and Wales, as has been shown, differs considerably from the Kenyan situation. It is interesting to note that while Kenya's strictly centralized system of education enables the centres to have generally common objectives and are somewhat closely related, the English situation offers the opportunity for organisers to plan the way they like, and the needs of the teachers in the area determine the pattern of in-service education. This is a good approach because it encourages grassroot creativity. We need to have well qualified teachers in Kenya before we can attempt to follow the English approach.

Havelock's three models of innovation namely, the Social
Interaction Model, the Problem Solving Model and the Research Development Model, may help to emphasize the approach used in both situations. Indeed unlike the English centres whose growth was gradual and through the efforts of practising teachers, in Kenya the Ministry of Education introduced them as a strategy to help teachers overcome many professional difficulties. This sudden introduction with confidence that the innovation will certainly succeed is partly an application of Havelock's third model: Research Development Diffusion. This works on the notion that an innovation is most effective if 'experts' conduct research and deliver it as a developed package for teachers' implementation, occasionally without the teachers' criticism. In a developing world this approach is fairly appropriate if constraints such as those shown in the conclusion of this dissertation are to be overcome.

Both situations apply the problem Solving Model which, as Batten elaborates, "assumes that what teachers need or think they need is of primary concern, that they can be helped to articulate needs if they are given relevant information and time for systematic discussion and can solve most problems for themselves if encouraged to use their own expertise and experience." English teachers used this model extensively as Arnold wrote, "Teachers everywhere help each other to bring new ideas into their work and to tackle their job with greater confidence. This they have always done. Recently some more organised ways of facilitating
the process have developed. One of the most striking is the concept of teachers' centres. This has been given realisation in many places and in a number of different forms." In the setting up of Kenya's centres the Problem Solving Model was used in the sense that a careful examination of the current situation was made and an attempt to provide a 'cure all' remedy was taken - after the diagnosis. To wait until all teachers are well qualified and have enough facilities to start any innovation on their own would certainly retard educational progress in a country which is obviously in a hurry.

Havelock's Social Interaction Model assumes formal contacts, distance from source of innovation and a colleague's sense of value of his profession as determinants of how rapidly an innovation is accepted. This model is largely true in both cases.

In both situations the centres are established in order to help in solving the professional problems of teachers. The variables which could be considered as the determinants of the degree of success of the centres include: Activities at the centres, organisation of the centres, the country's system of education, teachers' educational background, economy, communication, etc. The next two chapters will examine two of these variables; Activities and Organisation, in considerable detail.
CHAPTER TWO

ACTIVITIES

Which Activities and Why?

The activities carried out at a teachers' centre in England depend on various factors which may include the educational policies adopted by the Local Education Authority, the location of the centre and even interests expressed by the teachers and the head of the centre. I observed that many centres in England and Wales devoted their work to specially defined functions such as secondary mathematics, the teaching of English as a second language, curriculum development in sciences, the teaching of reading and many others.

Most centres, however, serve many purposes. These multi-purpose centres reveal a uniqueness in policy, plans and fields of work as dictated by the requirements of the teachers in the locality and, to a significant extent, the vocational influence of the head of the centre.

Probably more than anything else the pace which education is expected to keep with contemporary changes in society is at the centre of the many factors affecting the choice of activities which may be organised at a centre. Today the whole world is in a state of rapid change which often bears little or no similarity to the well established sequences of the past. In all spheres of knowledge, innovations have reached almost explosive proportions and predictions, even for the coming decade, seem to be surrounded with uncertainty. Under
these circumstances the activities of good centres, be they in England, Kenya or elsewhere, should be sensitive to these dramatic changes by trying to respond to, and keep pace with, the variations. The rapid unprecedented changes call for teachers, at all levels, since they are important agents of change in a society, to keep abreast of the changes in knowledge. It was this need which in the beginning stimulated the formation of teachers' centres and it is such a need which makes them active in their various functions.

This problem of keeping abreast with educational changes is often said to have seriously started in the years after the Second World War when education was perceived to have entered a period of revolution to an extent which the teaching profession had never experienced before. Many groups of enthusiasts and individuals like Piaget and Bruner made significant contributions. As has been seen in the first chapter, organisations like the Nuffield Foundation and later the Schools Council in England, speeded up the pace of change in schools by institutionalizing such activities as curriculum development.

Technological advancement created new teaching approaches in view of the availability of closed circuit television, overhead projectors, language laboratories and many other technical teaching aids. These changes coupled with changes in social patterns, economy, politics etc., brought about as Curry notes, "the need to rethink the context of the school curriculum and to reappraise teaching procedures."
The rapid changes described could be taken as the chief determinant of the activities in a Teachers' Centre.
Following the same argument, Curry adds that the function of the Teachers' Centre is obvious because it is essential that experimental work be carried out in the schools and all teachers in service be given opportunities to learn from such projects. He emphasizes that it is vital that teachers should have the opportunity to meet together to discuss developments in all aspects of teaching, and adds "It is important that they should be familiar with the new learning aids with which schools are becoming equipped, and that they should have opportunity to see what is new in apparatus, films, books etc. It is essential that every teacher should be aware that a centre exists to help them to carry out their work with maximum efficiency: through officially organised courses and discussion meetings, through the exchange of ideas with other colleagues and through the loan of aids."

Various forms of breakdown of the activities at a centre can be made, but the ones which I am going to explore are:

(a) Curriculum Development.
(b) In-service Education.
(c) Resources and Exhibition Centre.
(d) Social Activities.

Under each of the above sub-headings the role of Teachers' Centres will of course be emphasized. General comparisons between the English and Kenyan situations on the
running of these activities will be made all along.

CURRICULUM DEVELOPMENT:

It is necessary before discussing curriculum development work at a Teachers' Centre, to define the main terminologies in this sub-section. The term 'curriculum' has been defined by various educational writers in many ways. The main determinants of such definitions being the system of education followed by a country, changes in a society, political ideology, economy, technology, and so on.

Definition of Curriculum.

In England there are many meanings attached to the term, where each definition portrays some important aspect of the country's strategies of education. Some are outlined as follows:

"All the learning which is planned or guided by a school, whether it is carried on in groups or individually, inside or outside the school." (Kerr J.F. 1966)

"That the curriculum consists of content, teaching methods and purpose may in its rough and ready way be a sufficient definition with which to start. These three dimensions interacting are the operational curriculum." (Taylor P.H. 1966)

"The contrived activity and experience - organised, focused, systematic - that life, unaided, would not provide. ...It is properly artificial, selecting, organising, elaborating and speeding up the process of real life." (Musgrove F. 1968)
In Kenya the syllabuses prepared by the Ministry of Education often serve as the curriculum for schools. Possibly a definition of curriculum as stated by Hirst (1968) will aptly describe the Kenyan situation, "A programme of activities designed so that pupils will attain, as far as possible, certain educational ends or objectives." Thus the Ministry of Education supplies guidelines as far as the content, organisation and the load is concerned, for all schools on curriculum matters.

The interpretation of the term in all contexts was aptly dichotomised by Taylor and Johnson when they wrote that, "curriculum is viewed by some as plan and others, as actual occurrence of effects." It is important to note that Kenya's restricted flexibility of the curriculum is determined by its centralised system of education.

**Definition of Curriculum Development.**

The interpretation of curriculum development, therefore, varies accordingly. Taylor and Johnson again showed that the general dichotomy of interpreting curriculum as either a 'plan' or 'occurrence of effects' determines the perceptions attached to curriculum development when they wrote that, "As a plan a curriculum development document would be prescriptive and serve as a guide to action, under the second interpretation it would be descriptive and serve as a report or record."

A lot of literature already exists on the elaboration of the term curriculum development; for instance
Richmond\textsuperscript{8} shows that curriculum development exemplifies radical beliefs in corporate planning and that it implies a fundamental recasting of educational process as a whole not just a spring cleaning of existing school syllabuses and a revamping of school methods of teaching. Kerr\textsuperscript{9} adds that curriculum development is a pervasive activity which should be sensitive to the time and place and that the curriculum should be continually developing to keep in harmony with changes in pupils' knowledge and society.

**Definition of a curriculum Development Project**

Much curriculum development work is done in the form of projects. These projects serve as the main approaches to curriculum change. On attempting to define a curriculum development project, Hawson\textsuperscript{10} wrote, "Indeed if asked to define a curriculum development project one could well take as its characteristics and essential features the cooperative production and testing of materials and the associated provision of in-service training and where necessary, examinations."

**Pattern of a Project.**

By and large curriculum development projects carried out by teams of teachers at a teachers' centre tend to follow a pattern like this one suggested by Kerr\textsuperscript{11} and consists of:

(a) A survey of a chosen curriculum area by a panel of teachers and others, drawing on all available resources leading to the precise statement of objectives.
(b) Creation of draft materials appropriate to stated objectives.
(c) Brief sessions and 'workshops' with volunteer teachers from few schools where materials are to be tried out.
(d) Trial schools.
(e) Modification of materials in the light of effectiveness (assessment).
(f) Perhaps a second more extensive trial and further revision.
(g) Publication and diffusion of new materials together with intensive and wide-spread programmes of retraining.
(h) Continuous evaluation and modification as objectives change.

Problems affecting Projects.

At every stage of the approach there are numerous constraints which have to be encountered - from the initial stage right through to its stages of total implementation by schools.

1. Objectives:

At the outset there is the problem of defining objectives, although Blyth\textsuperscript{12} shows that objectives can be left to a much later stage of a project. In Kenya the society has left the task of determining the aims of schools to curriculum planners, resulting in a lack of foundations upon which the
validity of projects can be checked. Consequently curriculum organisers are known to have turned to school subjects for the determination of their ends and means. Most curriculum development work is carried out at the Kenya Institute of Education by permanent subject panels who select pilot schools.

In view of the infant stages of Kenya’s Teachers’ Advisory Centres, curriculum development work at that level is negligible and there is no immediate evidence to show that the K.I.E., unlike the Schools Council, is making use of the teachers at a centre for curriculum development projects which provide a feedback of educational achievements to the K.I.E. Consequently in such a situation, curriculum development becomes a ‘spring cleaning’ of existing school syllabuses and a ‘revamping of school methods of teaching’, an approach which Richmond (op cit) deplores. Goolad13, commenting on a situation such as this wrote, "Curriculum planners, in general, have been delinquent in stating objectives with precision. What are intended to be ... objectives more often than not turn out to be general statements of intent, propositions about learning rather than achievements expected of learners or even description of courses."

Objectives have to be agreed upon in order to facilitate proper evaluative criteria. Diffusion may not be successful if there is no valid evaluation of a project. The procedure of evaluation needs to both ‘hard’ and ‘soft’ at the ‘formative’ and ‘summative’ levels. According to Frazer17, hard data is objective data, consisting of measurements of desirable
educational goals such as measurement of pupils' achievement. Soft data, on the other hand, is subjective data consisting of opinions, impressions, comments, etc. of people, for example teachers, lay citizens and others. Soft data incorporates judgement which is not supported by numerical values such as the statistical value of significance. Formative curriculum evaluation is the evaluation of materials during the trial stage in order to facilitate necessary alterations. Summative curriculum evaluation relates to the total effects of a curriculum as it affects the groups for whom the curriculum is to be adopted.

There is often the lack of external criteria against which to judge the effectiveness of the new and the old. Because the new purports to do something different, it might be wrong to presume that it is better. Without stipulating the objectives of a project, teachers may not only find it difficult to teach but also to make the required assessments of it. It is necessary to have some idea of the expected terminal behaviour of the pupils when they acquire the gist of the subject matter.

2. Feasibility Study.

Possibly the first stage of a project at a centre is the formation of an organising committee which would undertake a 'feasibility study', plan project materials and resources etc. The selection of the team may not be an easy job as Banks notes, "Much time and energy may have to be spent on trying to find the right person to direct a feasibility study."
"One of the difficulties of those engaged in organizing curriculum development ... is the lack of an adequate information network about good potential directors." The selection might be reduced to selecting an old acquaintance who might be a supporter of the project but not creative enough for such a responsibility. Even if a suitable director is found but if, as I mentioned earlier, the objectives are not clearly stated, the director may spend many months before he can formulate some hypotheses and as Banks added, "Or it may be that they (objectives) will never be hammered out at all, and the whole exercise will be incomprehensible and fruitless - if not positively harmful by virtue of the disrepute it will bring upon the curriculum development process in general." In such a situation Blyth's (op cit) approach could be considered. The feasibility study stage could be considered as the Reflective Evaluation stage of curriculum development. Reflective evaluation takes place when the feasibility study committee screens the project's content before it goes into the trial stage.

3. Subject Matter.

Assuming that objectives have been formulated, there also arises the issue of the gist of the subject matter of the project. For example in the Nuffield A-level Physics, many questions concerning the subject matter had to be asked, such as: Can it be taught? Is the hierarchy of topics reasonable? Does it stand a chance of being relevant in the coming 10 years? Is it important to teach it? Do we have the right people and

(* my insertion)
resources? Such questions and many others have to be supplied with reasonable answers otherwise more problems will hit the project in its trial stage in schools. It will also be necessary to organise courses for teachers.

4. Trial Schools.

Selection of trial schools is often plagued with problems like the type of school, the abilities of pupils, the willing participation of schools with the approval of their board of governors etc. Sometimes the nature of projects may make schools feel that they are asked to participate in a project that is designed to prove what is already assumed, that is, like research that sets out to support a point of view rather than find the truth. Schools basically belong to the people, possibly under local control, so community relations are important in anything undertaken by the school. Some parents may wonder why a new project which sounds like an improvement should be conducted only in a few schools. If no satisfactory answers are supplied, there is a danger of friction in community relations which may result in the failure of the project. School staff are the main avenue of public relations so it is important that they have a general understanding of the project.


There is of course the problem of maintaining a balance within the school system. Some imbalances, though only just initially in some cases, have been observed in many projects. Shipman\textsuperscript{15}, writing on the Keele based Integrated Studies Project,
observed that "most teachers were concerned in cases where there had been a drop in standards. There were still subject specialists who feared the children would not learn the essential skills of the subject discipline. There seemed to be an agreement that there had been a drop in standards..." The problem of balance in the school curriculum is not just limited within subjects but also between disciplines. Eisner\textsuperscript{16} noted that, "in some ways the recently emerging interests in arts and humanities is evidence of the recognition that the school curriculum has been skewed to the sciences and mathematics and needs therefore to be brought back into balance." Thus it is important to reassure the headmaster, the board of governors (as representatives of the school) and the community at large, that a well proportioned programme is being maintained.

6. Vested Interests and Preconceived Ideas.

Probably the main barrier affecting projects in centres and schools are vested interests, preconceived ideas and the established ways of doing things. For example in the Integrated Studies Project, Shipman\textsuperscript{20} noted that "The teachers were faced with the organisation of inquiry based integrated studies using team teaching in schools where work remained traditional." On the other hand if one attempts to change the curriculum by revising content, subject by subject, one creates anxiety in the people who oppose this approach to curriculum change. Again in the same project Shipman\textsuperscript{18} observed, "teachers of religious education were particularly uneasy ... they withdrew
because they felt that it was impossible to ensure that basic values were transmitted in a team context and with curriculum materials that stressed the relativity of human values." Even teachers of English, in the same project, complained that pupils did not get enough formal written work. All this might have been due to the difficulty of adjusting to new systems.

7. Coordinating Talents.

Another problem is that of coordinating talent, particularly when coordinators have to be used. They often run into the difficulty of getting teachers to work effectively together. Coordinators need time to adjust to a school system and this may take a long time. Initially coordinators may feel that their first task is to teach teachers the subject matter. Later they may discover how complex the whole project is and be surprised on how well teachers are doing the job. Continued contact results in better understanding for both. Batten, 19 commenting on members of a project team and teachers in general noted that, "Whereas members of a project team tend to be chosen for their expertise and commitment to rational systematic planning, many effective teachers work largely intuitively, are familiar with ratiocinative techniques and tend to oppose the views of 'experts' with demand for what is practical."

8. Teacher Availability.

Some projects inevitably put a heavy burden on some members of staff. Conducting a project may mean that some people will do a great deal of extra work. In the Integrated
Studies Project, Shipman observed that, "the most pressing source of stress on the teachers was found in the time and energy expended ... the consequence was that this group of teachers were having to stay after school beyond the time when their colleagues had departed and were having to return to school in vacation time to prepare more work..." Again Rudd writing on teachers as curriculum developers said, "Among the constraints listed, teacher anxiety refers to both the stresses experienced by individuals as new schemes are being worked out in school, and the interpersonal tension which may arise between innovators and other members of the school staff."

2. Project Duration.

The problem of the duration of a project until it reaches its stage of diffusion leads to the question of value as regards all the effort put into the project. This question of time is important because development should lead to diffusion and if a project takes too long before it is made available for schools, the whole process might be a waste of time. Banks stressed the importance of this when he wrote, "There is no need here to go into details about the functions of the project team in the years of the project... But something must be said about the development of a strategy of diffusion - the step that must be taken to ensure that the stream of innovation does not disappear into the sand when the team's products are published and made available to teachers at large."
10. Communication.

Teachers' Centres minimize communication problems particularly in cases where curriculum innovators do not plan for it in advance and if there is little cooperation between project team members and schools. The seriousness of poor communication is apparent in many projects, as Owen notes, "An emphasis on good communication is not shared by all the national projects of the Schools Council. Indeed anyone who looks in detail at the Council index of projects must be surprised by the large number of obscure projects which even at a date which was later than their official ending had still published no report, conclusion or even interim findings."

There needs to be proper communication between trial schools and project teams possibly through Teachers' Centres wherever they exist. Without proper communication it is virtually impossible to carry projects to a successful conclusion.

11. Return of Information.

One problem which is partly enhanced by poor communication is the failure by trial schools to give 'feedback' information. At the trial stage it is essential to carry formative evaluation to facilitate a continuous process of reconstruction and preparation for publication in light of the 'feedback'. This problem jeopardised several projects as Shipman observed on the Keele Integrated Studies Project, "The provision of feedback was a condition of joining the trial. Forms were prepared to help teachers report on their experience. In
practice schools rarely cooperated. In only two of the thirty eight schools was feedback judged by the project team to have been sent regularly and promptly. In another eleven schools total amount received was judged negligible. This failure was even more disappointing given the presence of coordinators in the schools asking for information."

The foregoing problems do not, by all means, exhaust the list. For example I did not mention the problem of finance and delay by publishers etc. In view of these problems, what role can teachers play as innovators at grass-roots level?

Teachers and their Centres.

It is often said that the failure of many projects is probably due to the inability of teachers to learn new tricks. This may be true but I think the main problem is the lack of interest for a total commitment to a curriculum innovation exercise. When teachers initiate a project themselves most of the foregoing problems can be minimized, as opposed to externally organised projects which they may not take seriously. Gray\textsuperscript{26} has shown from experience that "groups of teachers, assembled not because they were experts, but because they were interested in the work and meeting within the framework of their everyday teaching can develop courses which are more firmly based, broader and more effectual." Any training in the role of a teacher should stress the importance of practising teachers in curriculum development projects as Owen\textsuperscript{27} notes, "Curriculum
development will not work if teachers are not trained to expect that their role will change, that their task will need overhauling every five years or so or that their outlook on what is meant by professionalism will be subject to both informed and unenlightened influences during their entire period of working life.

A good example of a project initiated by practising teachers and which succeeded is the one explained by Evans and Groarke when teachers in a primary school re-formulated an aspect of their school curriculum. They worked out their project by answering such questions as "Who participates, ... What kind of decisions does it entail ... How are decisions implemented ... What forces initiate and inhibit the process of curriculum development and influence the results?" They later worked on questions like, "What are the intended learning outcomes ... why the children had to learn what was intended ... when the innovation was institutionalized, that is when the teachers were aware of the what, why and how elements and it was demonstrated to their satisfaction that the new approach was superior to that which existed before...."

In Kenya it is hard to find any published work on the involvement of teachers in self-initiated curriculum development projects. Even in England cases of enthusiasts like this one of Evans et al is not common, particularly at the primary school level as Colins notes, "The majority of teachers have not been involved at all in the discussion of new objectives..."
and methods, except in so far as they are discussed over coffee at break time—not the most effective time for curriculum development. To the interested but overpressed primary school teacher, curriculum development work at a local centre is another burden to bear and he can scarcely be blamed for considering it of secondary importance when balancing the competing interests of home school and class." He adds, "In general teachers have not got far with defining new objectives of their own, devising their own experimental procedures or developing their own mini-curricula."

A good example of successful curriculum development projects at a centre are the ones I observed at the Educational Development Centre at Birmingham U.K. Similar questions like the ones I mentioned earlier were asked and the Centre played a very important role with its location, facilities, etc., for the teachers working on the projects. My particular reference is on their Project Three: 'Progression in Primary Mathematics.' Sub-topics of the projects were under Panels of teachers: Panel A for organisation of Maths Teaching, Panel B for Content Method and Assessment, Panel C for Published Schemes and Apparatus.

Teachers' Centres could be a very useful venue for the coordination of curriculum development projects. They can provide a forum for teachers to share criticisms and questions about projects. The Warden has to keep himself informed, through the centre, about local developments, either in person or through teacher contacts in initial planning schools, in order to
coordinate effectively with schools which have similar aims.

**Research in Curriculum Development.**

While the importance of research by institutions like universities or even individuals is not minimized, care must be exercised in case projects fail as a result of personal ambition. A good example was in Germany \(^{31}\) where it was reported that, "the staff members were seeking to qualify themselves scientifically through research work in projects," was one of the causes for the failure of their projects. Much research work in the activities in Kenya's Teachers' Advisory Centres needs to be done. I believe the future success of most curriculum development work will depend on the active involvement of teachers, their centres and schools. It is through such willing participation that most of the problems I have mentioned can be minimized.
PART 2: IN-SERVICE COURSES.

Initial teacher training of two or three years does not answer all the questions regarding the teaching profession. Teachers who have been in service for many years and their newly qualified colleagues as well need to be given in-service courses in order to keep pace with changes affecting the profession for the former group, and as an initiation into the profession for the latter group.

Definition of In-service Education.

In-service education as Stephens defines it is the "development of the individual which arises from the whole range of events and activities by which serving teachers can extend their personal academic or practical education, their professional competence and their understanding of educational principles and methods." Wiseman emphasized the aspect of 'training' when he defined in-service education as being "any training which teachers undertake after they have begun to teach, which is concerned with their professional skill."

Determinants of In-service Courses.

Whatever the definition, it is evident that the contemporary rapid changes which are the main determinants of curriculum development are also the determinants of in-service education. For, whenever there is a change in school curriculum
methods, there must be in-service courses to ensure proper
diffusion of the curriculum changes. On this respect a British
Council Education Pamphlet notes, "Although it may be said
that in-service education is in general passive and requires
inputs while curriculum development is dynamic and creates
outputs, in practice the two are often closely related."

The James Committee, more than any other education
report in the history of English Education, emphasized the
importance of in-service education for teachers, which they
considered as the 'Third Cycle' in the profession. They stressed
that knowledge of teaching methods and educational theory
"cannot be fully acquired without prolonged experience, suitable
in-service training rooted in the experience teachers have
already had." Hence they attached great importance in professional
centres and in-service courses on which they remark, "Of all
our recommendations this deserves the highest priority."

Indeed the first teachers' centres in England were
established just before the James Report, so the importance it
attached to them regarding in-service courses was not unexpected.
The idea of setting up teachers' centres for in-service
education was, therefore, not new since Lady Plowden, in her
report said that, "Local Centres are also invaluable in
supporting the innovations introduced by individual teachers,
the source of most educational progress."

The James Report recommended that teachers should
be entitled to release for in-service training for periods of
about three months in every seven years. In-service training in England is perceived to have gained prominence from the 1940's in the form of refresher courses. The McNair Report\textsuperscript{37} (1944) although from a different point of view, recommended that, "the Board of Education should offer a small number of valuable 'Educational Fellowships' to enable highly qualified practising teachers to give up teaching for a period of one or two years in order that they may study education, its principles and practice, in this country and, where desirable, abroad."

The breakdown for the purpose of organising in-service courses is centred around the word 'change' as Watkins\textsuperscript{38} (Ed.) shows:

(a) **Knowledge Changes.** eg. teachers who were trained to teach traditional mathematics need to be retrained to be able to teach modern maths.

(b) **Techniques of Teaching Change.** Techniques which were hardly used a few years ago are now being rapidly employed and serving teachers should be aware of such changes, eg. the use of language laboratories, team teaching, close-circuit T.V. etc.

(c) **Society Changes.** eg. The rapid social mobility within and between countries, changes of the aims and objectives in education of newly independent nation and their technological growth.
(d) **Teachers Themselves Change.** eg. In emergent countries many competent teachers leave the profession to fill many other vacant post with better fringe benefits. In Kenya there are occasional but significant teacher transfers made, not just within provinces but also between provinces. Teachers' postings to schools are done centrally by the Teachers' Service Commission (see appendix 2), who choose when and where to post a teacher.

(e) **Schools also Change.** eg. move towards comprehensive schools in England, larger classes, mixed ability classes, numerous ill equipt schools in Kenya, etc.

**Problems.**

Most dilemmas on in-service education are universal as Lord James\(^39\) notes, "... for surprisingly little hard information exists as to what effect various kinds of post-experience training actually have on teaching and the teacher: how long these effects last, what are the most appropriate kinds of education to accomplish ends which may be quite different for different individuals and what effect on schools themselves the in-service education of their staff has." Some of the problems which affect the organisation as stipulated in the White Paper\(^40\) include the strains arising from the high expenditure on staff (eg due to ROSLA in England and inadequate qualified teachers in Kenya) and the difficulty in striking a balance between what
a teacher is interested in and what is the employer's need for development in the particular institutions. In the case of England there is the problem of getting teachers interested and there was even the thought of giving financial inducement to course participants.

Another problem is associated with the annual percentage of teachers who attend in-service courses. In England the James Report's proposal for the release of teachers for in-service courses would result in 3% of the teaching force being absent on secondment at any time, and by 1981 it would be an increase of about 400% on the 1972 availability. In reply and stressing a further more viable rethinking of in-service provision for England and Wales, Edward Britton said, "A little arithmetic will indicate that if every existing teacher were to have the present opportunity for in-service training of the Lord James type, we would give the existing teaching force one course in about 250 years. Those who were at the end of the queue and had to wait well into the twenty third century for their turn might by that time not be particularly interested in the information that was being put to them."

Courses.

The role of teachers' centres in in-service education is very important. Teachers in a locality may even choose the type of course they wish to see organised at a centre. They would inform the warden and organise a committee for making a programme of the activities. Such activities could
(a) Learning difficulties.
(b) New methods of school and class organisation.
(c) New apparatus.
(d) Planning and developing syllabuses.
(e) Courses on recent educational research relevant to their work.
(f) Teaching of academic subjects to non-academic children.
(g) Teaching large mixed ability classes with little equipment or space.
(h) Demonstration of new skills of work and discussion of their results.
(i) The marking and interpretation of examinations and other forms of assessment.
(j) Others (could be derived from the causes of organising in-service courses as shown on page 51).

Richmond shows that a more definition of objectives for in-service courses may not be enough since he sees problems of course evaluation when he writes, "The teacher's role is changing which means that it is increasingly difficult to agree about the objectives of a course. What precisely do we want the ... teacher to be able to do at the end of the course? What special professional skills are involved? The biggest illusion of all is to suppose that the requisite skills can be picked up
incidentally under an 'informal apprenticeship' system."

**In-service Education in Kenya.**

Most in-service work in Kenya used to be organised in big towns like Nairobi, Mombasa, Kisumu, etc., because of the facilities they offered and their being centrally situated within the main catchment areas. The Kenya National Union of Teachers (KNUT) in collaboration with the KIE and sometimes foreign agencies were the major organisers of in-service courses for primary school teachers. Most teachers in rural areas hardly had access to such courses since travelling and residential expenses put a strain on the finance of course organisers.

The annual percentage of teachers attending in-service courses is increasing gradually yet hardly 3% of them get the opportunity. An example to illustrate this appears in the 1973 Annual Education Report (op cit) that out of 63,931 teachers (from all types of schools) only 1896 were engaged in in-service courses. These were made-up as follows:

(a) 360 Primary School Headteachers attended a course.
(b) 1,473 Unqualified teachers attended vocational teacher training courses.
(3) 63 Received Commonwealth Education Fellowships and other awards.
It can be seen that in the Kenyan context, in-service education is not only a post-training affair but an on-the-job necessity for the unqualified.

The Teachers' Advisory Centres in Kenya offer short courses most of which are done by day release and sometimes in vacation time depending on factors like nearness of a centre, staff availability, etc. Most of the courses are arranged of the school syllabuses particularly in Science, Mathematics and English areas. The use of schools broadcast, tape recorders, projectors and other teaching aids is gaining prominence as part of the in-service courses at these centres. Even at the time of the initial establishment of these centres, the significance of learning how to use various teaching aids at a centre was emphasized. As the Coast Provincial Report (1972) noted, "Up to date materials and equipment have been given to Lamu, Kilifi and Shanzu Centres. Up to now equipment which has been effectively used are tape recorders and stationary. The stationary has been used by teachers during service courses, whereas the tape recorders have been chiefly to promote the teaching of music and languages. It is hoped that in the future the school's broadcasting service will use recorded tapes to be used with the recorders."

Many situations show that Teachers' Centres, whether in England or Kenya, could be regarded collectively as the largest agency of in-service education. Townsend states
that, "Teachers' Centres might well provide opportunity for exchange of ideas and information which teachers in the immediate locality ... could find just as valuable as attendance at a short course outside their own areas and yet much more economical in time and money." Hollins writing in 1973 also emphasized the observed importance of Teachers' Centres in in-service education when he wrote, "A quite remarkable increase in the number of Teachers' Centres ... indicate that Local Authorities convinced themselves of a particular need which practising teachers confirmed. ... Teachers' Centres have helped many teachers to engage in what might almost be regarded as a continuing process of self education ... they are highly sensitive to teachers' needs."

The sheer existence of Teachers' Centres is enough to play an in-service role without, in some cases, setting out to achieve the immediate objective of in-service education. Whenever teachers meet, there is bound to be an exchange of knowledge, ideas and innovations. However small a scale this may be, it has professional significance and contributes to the notion that the education of teachers is a continuum of pre-pre-service and in-service training and not a terminal process.
PART 3: RESOURCES, EXHIBITIONS
AND SOCIAL ACTIVITIES

1. RESOURCES:

Resource centres have of late become educational necessities. In many situations the traditional method of 'talk and chalk' has been proved to be inadequate for both the teacher and the learner. Better learning situations are created when suitable aids are employed to illustrate a point. Writing on a British Centre, Arnold emphasises the use of teaching resources when he notes, "All this teacher activity needs resources, and the centre tries not only to meet, but to anticipate demand. It is common for a study group to ask for the extensive reproduction of material it has produced for use in schools. It is also common for a teacher to ask for anything up to 200 copies for classroom use."

The Schools Council defines a resource as anything which may be an object of study or stimulus for the pupil, including books, periodicals, newspapers, press cuttings, pictures, diagrams, maps, charts, photocopies and microfilms, worksheets, slides, film strips, film loops, films, records, audio-tapes, radio and television programmes, videotapes, slide-tapes and film-record combinations, multi-media kits, programmed materials, model specimens and relia, as well as individuals and objects in the community.
The list is endless. However when such items are
situated in any large combination then a Resource Collection
is formed. A Resource Library or Resource Bank, is formed when
a resource collection is indexed for the purpose of quick
access to storage and lending in nearly the same way as an
ordinary book library is organised.

The Schools Council\(^3\) considers a resource centre as
an agency for stimulating the active creation and use of a
resource collection. From the definition, therefore, museums,
public libraries, zoos, botanical gardens, etc., could be
regarded as specialised types of resource centres.

Teachers' Centres, whether they are single purpose
or multi-purpose, automatically qualify as resource centres. All
the centres I visited in England had resource libraries which
could be used by teachers. The collection and organisation of
resources was one of the main activities at most of these
centres. Apart from being lent to teachers and schools, the
resources were used extensively at the centres for the organisation
of curriculum development work and during in-service courses.

Care was taken at each centre to avoid over accumulation of
teaching aids. Regarding the organisation of a resource collection,
Swarth\(^4\) mentions that 'a resource centre' must provide
efficient managerial service and that it should not try to do
do all its own research and development nor demand staff with that
end in view, and warns, "Not only would such a trend be
unnecessarily expensive in centralised personnel, but it would lay
the centre open to suspicion from the very teachers it was trying to help. The place would quickly become monumental in size, unwielding in organisation and out of touch to a greater or lesser extent."

Most centres in England are reasonably and suitably located, staffed and equipped and serve the schools around them as the focal points for the preparation and collection of teaching aids. This is particularly so in the case of single subject centres. Facilities such as work benches, paper, paste, tools, paint, clay, card boards etc. which would enable teachers to produce teaching aids are usually available for teachers in the centres.

In order to stimulate teachers to be actively involved in the creation and use of a resource bank, there should be a systematic organisation of the resources section of a centre. The elements included in the organisation paradigm are:-

(a) Facilities for production of local resources ie. as a resource factory.
(b) Possibility of selecting and obtaining other resources ie. speciality workshop.
(c) Classification and indexing.
(d) Storage and retrieval.
(e) Evaluation and replacement.
(f) Training teachers on how to use and even make some equipment.

Schools in England (and in Kenya as well) gradually
build their own resource libraries per subject or department. Since core materials produced by publishers, which very often accompany syllabuses, are not 'teacher proof' it is essential for schools and teachers' centres to produce support materials to meet their own local needs. Materials produced by teachers in England for environmental studies serve as a good example in this matter.

Centralisation of resource materials at a centre becomes a very useful idea when schools cannot, individually, afford to buy certain equipment. Such expensive equipment in some English towns tends to be allocated to a consortium of schools. The City of Birmingham situation is a good example in this respect.

Teachers are shown how to make use of reprographic equipment which may include spirit and ink duplicators, photocopiers, etc. At a centre where there is a full-time or part-time technician, most of the reprographic work is done by him.

In Kenya a lot of emphasis is put on the necessity of improvising teaching aids. Some centres, particularly those attached to teacher training colleges have technicians who prepare local teaching aids. Occasionally courses are held where teachers are taught how to make some simple equipment which could be useful in their teaching. This is a good idea since it does not only reduce the expenses of buying teaching aids which can be improvised locally, but it also helps the
teachers who are in relatively remote areas, with few teaching facilities, to avoid the 'talk and chalk' method of teaching. The Kenya Science Teachers' College prepares some science kits for secondary schools (rather similar to the Nuffield science kits in England), which they sell at very reasonable prices to schools. The new centres in Kenya could, as far as possible, adopt the strategies used at the English centres in the organisation of their resources.

2. EXHIBITIONS:

All the centres I visited in England had rooms for exhibitions. The displays included children's creative writings and art, curriculum project work and some objects of educational interest. In general the exhibitions, as Thornbury notes, "put on display work of particular interest done by pupils in one school, or work resulting from a workshop course at the centre. In bringing work to the attention of a wide cross-section of teachers, such exhibitions have helped in the process of the cross-fertilization of ideas. Exhibitions of furniture, books and equipment have also been mounted periodically."

In Kenya some exhibitions are organised at venues where teachers attend in-service courses so that they may see what new teaching aids there are in the market and also observe how teachers from other districts improvise teaching aids.
SOCIAL ACTIVITIES:

No organised social functions happen at the Teachers' Advisory Centres of Kenya. The teachers concerned who are, in the Kenyan situation, the primary school ones, attend for professional advice and retire to their schools or homes. One reason is that the centres are situated at such places (remote or government owned premises) that it would be inconvenient to organise social functions.

Nevertheless, one of the most striking functions that teachers' centres have brought is their social role in breaking the barrier between grades of teachers. This is particularly so in England where distinct teachers' grades are few. Culling noted that the teachers' centre is a place where teachers from primary and secondary schools as well as from teacher training colleges and other institutions, advisers, inspectors and other education officials may meet. The centre could serve as a place where barriers between teachers and between teachers and administrators could be eliminated.

The Kenyan centres are such that there is hardly any contact between secondary and primary school teachers, since they were introduced with the purpose of meeting the professional interests of primary school teachers.

English centres which have facilities for social functions achieve the breaking of such barriers not only through informal recreational activities but also through carefully planned formal programmes. Writing on the Enfield Teachers' Centre, Kahn notes that planned programmes can help
"to encourage cross-fertilization for all categories of teachers - primary and secondary; headteachers and assistant teachers; the local college of education, both students and lecturers; are welcome to take part in many aspects of the centre's activities."

There is a varying degree of priority attached to social functions. Whereas in many situations the preference is for occasional social or cheese and wine parties, some centres have their own licensed premises. Indeed all English centres try to provide facilities for coffee and tea, a lounge of varying sizes depending on the purpose and size of the centre. It is generally accepted that social functions at a centre form a relatively important part of the centre's functions and should not be overlooked, as Culling notes, "If teachers are required to give up some of their own time for professional pursuits, then their motivation must be considered. They should feel attracted to their centre where as well as taking part in a professional activity, they can meet their colleagues in reasonably comfortable and attractive surroundings where light refreshments are available."

Having looked at one of the variables - Activities - with its many components which can determine the success or failure of a centre, it is now necessary to discuss another element of a centre - the organisation. The success or failure of a centre can also be determined by the way it is organised.
CHAPTER THREE

ORGANISATION OF A CENTRE

Three factors need thorough attention if the organisation of a centre is to be successful:

1. Leadership (a) The appointment and role of the Warden.
   (b) The role of schools, teachers, colleges etc.
   (c) The organisation of committees.

2. Accommodation: Centre location and space utilization.

3. Communication.

PART 1: LEADERSHIP:

The appointment of the Warden and Staff.

In Kenya the centres are manned by teachers of the grades ranging from P3 to P1 (see chapter one for details regarding these grades) whose salary is paid by the Teachers' Service Commission. The criteria for the selection of the heads of the centres is difficult to analyse since the establishment of the Teachers' Advisory Centres is a very new venture. The selection could, in fact, be regarded as having been a 'trial and error' exercise since it is made clear to the centre leaders that those with unsatisfactory reports would revert to classroom teaching. The definition of their role is determined by the type of schools they deal with (urban or rural) and the facilities available.

It is very common in such a situation to observe that interview panels often appear to face problems of determining the appropriate questions and answers which are likely to identify the potential centre leader. This is particularly so when it is taken
into account that a wide range of factors can influence the nature of the role which the leader is expected to play. However, anyone who plans a nationwide organisation of a major innovation knows how difficult it is to foresee accurately all the major problems involved. A look at the English experience might, with modifications to suit the Kenyan situation, be a tremendous help in making the organisation of the Kenyan centres more meaningful. It should be noted at the outset that there are no straightforward formulas to apply, particularly when those who are responsible for making the appointments also exhibit various limitations in their knowledge of the subject of centres.

In England and Wales the titles given to the heads of their centres vary considerably. However the commonest titles used are Warden, Leader or Director. A scrutiny of the title is a common affair among teachers because they try to avoid the notion of being 'lead' or 'directed'. I shall generally refer to a centre leader in England and Wales simply as a Warden since the majority are called so.

The appointment of the warden is an important exercise since he should be someone who "possesses the personal and professional attributes needed for revitalizing the teaching in surrounding educational institutions". The selection made is geared towards a teacher of extensive experience and success and one who has "insight into the problems and difficulties which arise in a variety of learning and teaching situations so that the teachers who attend the centre can hold discussions with him on a professional level". An extensive knowledge of:

organising curriculum development work,
in-service courses,
learning and teaching resources,
general management,
expertise in discussion work etc.,
is desirable since these aspects form the backbone of his responsibilities.

It is common practice in England for newly appointed wardens to contact other wardens who have been longer in that capacity than themselves. This may be done within the same Local Authority or in a different one. Such contacts help the newly appointed centre wardens to gain from the knowledge of their colleagues in both professional and managerial strategies.

Wardens in England have an incredible task of being at the centre of professional activities regarding primary education, secondary education and the continuing education of probationary and long serving teachers. They co-ordinate and co-operate not only with teachers in schools but also with heads of schools, staff of higher education institutions, H.M. Inspectors, Advisers, Education Officers and the Local Education Authority in general. Such cooperation enhances the smooth running of the centre since each of the above categories of educationists has a significant part to play at a centre. Staff of universities, colleges of education, teachers etc., run courses, give lectures and even organise workshops at the centre.

As I mentioned earlier, there are many types of centres in England and Wales. The approach used in the selection process is obviously dictated by the way the Local Education Authority perceives the job. Although it is generally known that wardens are chosen on grounds of professional success, organisational
ability, working knowledge of running projects etc., no difference has been observed in their organisational competence whether they are introverts or extroverts. On such personalities, which may be exhibited by a warden, Adams notes, "He may be an introvert or an extrovert: there is no evidence to suggest that either type of personality possesses advantages in a centre leadership situation." However, a little knowledge of sociology, behavioral psychology, philosophy of education, would be an advantage.

The wide range of activities which a warden in England is expected to be involved in, makes it almost impossible for him to work single handed. Most of the centre wardens have permanent secretarial and clerical assistance. Some have such assistance available only on a part-time basis. A technician whose duties include organising teaching resources, in view of today's rapid technological advancements, is normally attached to a centre on a full-time basis.

Additional staff at a centre depend on the size and purpose of the centre as the British Council (op cit) Educational Pamphlet No. 1 notes "A large teachers' centre will need other staff such as deputy warden and catering staff. It may be possible to second teachers from schools to serve at the centre for a limited period. Local school staff should
certainly be used as much as possible to lead curriculum groups, to meet lecturers and to run courses."

The emergence of Teachers' Centres and the appointmentment of most of the wardens from among serving teachers is in itself a recognition that the focal point of most educational innovation is the classroom teacher. It is now necessary to see the general role of a centre warden in the overall organisation of a centre.

**Role of the Warden.**

Although centre wardens in England are employed by the Local Education Authorities, care is seriously taken to ensure that their position does not become like that of Advisers. As a warning on the role of the warden, Adams (op cit) says that the centre warden has to look at his own position with a frank and critical eye and that he should avoid making commitments to the teachers' centre, an end in itself for the teachers. She adds, "Unless he holds fast to the avowed purpose of the centre and ensures the involvement of an ever-increasing number of teachers and groups, he may find that an inner circle of the elite has grown up which soon has the effect of hampering the more general influence of the centre."

In Kenya the head of a Teachers' Advisory Centre works directly under the District Education Officer. His role is close to that of an Assistant Primary Schools Supervisor.
By and large, a warden's duties in a single-purpose or multi-purpose centre in England, incorporates all of the following components, though not all will be pursued in each case:

(a) Administration: Internal eg. staff, buildings, committees.
External eg. for seminars, conferences, teachers serving on committees.

(b) Organisation of: Curriculum development projects, In-service courses.

(c) Cooperation and liaison with: Teachers, L.E.A., Heads of schools, Higher Education Institutions etc.

(d) Coordination and arrangement of: Resources for learning, Exhibitions etc.

(e) Arrangement of social services: Catering staff, Tea/bar, Sports facilities, Occasional cheese and wine party etc.

Role of Teachers and Schools.

In Kenya, just as in England and Wales, the success of a Teachers' Centre depends on how actively involved the teachers themselves are. One major difference found between the two systems is the degree of freedom experienced by English
teachers in matters connected with such activities as curriculum development. Kenya's centralised system of education calls for a more controlled line of action. This may indeed be necessary if rapid educational developments are to be achieved. We can, as it were, make use of the experience of other countries who are ahead of us, so long as we make the necessary modifications.

The history of English teachers being the nerve points of curriculum change goes back a long way. However, whereas in the past only outstanding classroom practitioners have been responsible for curriculum innovation, now numbers of practising teachers are actively involved in the making of curriculum decisions, and the teachers' centre can be viewed as the appropriate agency for the promotion of this process.

In England the teachers' centre is considered as being almost the 'property' of serving teachers and they have the right of being on various committees. This democratic approach strengthens the centre as a focus of professional activities. Consequently the classroom teacher has the opportunity of playing major roles not only in curriculum development projects and in-service activities but also in the policy making and administration of the centre. In committees they make their views and professional requirements known to the warden. There are many methods used in the selection of 'teachers' representatives, eg. by general election by the members, by consortium of schools etc.

One important barometer for measuring the success
is the degree of involvement by the schools it is supposed to serve. In view of the many obstacles faced by the emergent centres in Kenya, it may not be said with confidence that there is satisfactory participation by the schools. Distance between schools and the centre tends to be the immediate snag. More details in this respect are discussed in the final chapter.

The paramount importance regarding the relationship between schools and centres was strongly emphasized by Brand when he wrote, "If there were one ultimate aim for the centre, it would be to promote the growth and sharing of local curriculum innovations; and this could be achieved only with enthusiastic cooperation and participation from as many schools as possible within the area in question."

PART 2: ACCOMMODATION

The complex role of a warden coupled with the general activities at a centre and its relationship with the schools makes it desirable for the Teachers' Centre to have an ideal location. Kenya's centres are usually located at a small town where the central administration of a district is done. The buildings used are not purpose built but organisers try to make-do with any available space for both storage of equipment and for the office of the leader. In the case of centres situated at Teacher Training Colleges, problems occur in securing appropriate accommodation because the colleges themselves were purpose-built and no consideration for the accommodation of a
Teachers' Advisory Centre had been made. By and large their setting is a difficult one and there should be a re-thinking on the accommodation used.

A look at the English situation will show that most centres had difficult beginnings. The Schools Council Pamphlet No. 6 shows that very few centres were purpose-built but that initially the majority of the centres tried to make-do with any available room. On this matter Thornbury notes that practically any building — youth club, aerodrome, civil defence post, family house, evening institute, former sports pavilion or even an old town hall — proved suitable for teachers' centre activities.

Many situations can be cited where the accommodation of a centre is in disused or renovated premises. For instance, writing on 'A centre in Britain' Arnold noted, "In Newham, the Centre's layout and resources were determined by what it inherited, the top floor of a three decker school, built in 1897. The hall became a concourse and display area and the classrooms the centre of activity." Other authorities, it is recorded, even made use of spacious and comfortable houses.

One interesting feature is that of sharing accommodation with educational institutions ranging from kindergartens to primary and secondary schools, colleges, universities and other higher education institutions. A good example of a situation where centres shared accommodation with schools was in Surrey. Centres were transferred from one school to another depending on whether the head of the school where the
centre can to be accommodated had time to do the administrative work of the centre.

Various educators tend to support, to a certain extent, the idea of a centre sharing accommodation with a school, as Thornbury (op cit.) wrote on the Surrey situation, "the important advantage was that children were available to separate with lecture rooms. Having personal experience of such centres --- any teachers' centre situated in a school, where footballs bounce against the window, where the warden turns out with children for fire drill, has lunch with them and shares a staffroom with their teachers --- must be a place where realism prevails." Nevertheless, Adams (op cit.) feels that in situations where accommodation is shared with a school, college of education or even college of further education, "it is more than likely that the situation will provide more problems than benefits the long run."

The major problem experienced in shared accommodation is lack of space. If a centre starts as a small one, its scope for expansion is limited; if it starts as a large one, there would be the difficulty of getting ample space for each things as exhibitions, resource collections etc. The magnitude of the problem of sharing accommodation can nevertheless be reduced if there is a clear understanding between the school and the centre organisers.

Accommodation offered in rural centres naturally differs from that offered in cities. This is because the long
distance between schools often prevents the utilization of a day centre. The authorities are bound to organise residential centres. Good examples are in Shropshire, the largest inland county in England and relatively sparcely populated. The Shropshire situation is considered in the final chapter of this dissertation as having some considerable relevance and similarity to some Kenyan rural districts.

Generally the nature of the accommodation offered depends on the type of activities a centre plans to undertake. Those which start on a small scale tend to expand as the scope of activities increases. Many centres tend to have the following:

(a) A large room ... often comfortably and attractively furnished, used for talks, films, discussions, exhibitions of books and equipment etc.

(b) A preparation room ... for practical work furnished with benches, tools, reprographic equipment etc.

(c) A small general room ... for small group discussions, workshops etc.

(d) Additional (but important) rooms ... Warden's office, toilet facilities, refreshment facilities, a store etc.

It is important to note that the size of a centre has nothing to do with its success. The hub of activities in some small centres often tend to make them the nerve centres of
educational development work in the areas they serve. Indeed some of the large multi-purpose centres I visited had more room than I thought they needed. An application of both the Accommodation Occupancy Factor (AOF) and the Accommodation Utilization Factor (AUF) would prove my point. The AOF can reveal, as a percentage, how often a room is used in a specified period of time (e.g. evenings per week). The AUF, on the other hand, will show the percentage of the overall space which is being utilized. A combination of these factors could facilitate a logical re-organisation of the accommodation, where:

\[
AOF = \frac{\text{No. of times Room Utilized}}{\text{No. of times Room Available}} \times \frac{100}{1}
\]

and

\[
AUF = \frac{\text{Space Utilized}}{\text{Space Available}} \times \frac{100}{1}
\]

(The lower the AOF or the AUF the more rooms/space available)

A multi-purpose centre has a varying complexity of components many of which are in separate rooms. The British Council (op cit) lists the following components:

1. Space for lectures, discussions and seminars.

2. A resource centre where teachers may borrow books, pictures, slides, tapes, cassettes etc.
3. A reprographic unit where teachers may duplicate textual and visual materials that they need for teaching purposes.

4. A practical workshop with benches and tools where teachers may make simple visual aids and equipment.

5. An exhibition space where the latest books and equipment may be examined.

6. Rooms for every kind of teachers' meetings (curriculum study groups, meetings of professional associations etc.)

7. A comfortable lounge where teachers may relax.

8. Facilities for the showing of films, slides etc.

9. A cafeteria service where light meals are available.

The times when a centre remains open depend on the activities done at the centre and on the nature of the premises. A centre which shares accommodation tends to have limitations on opening hours. Large multi-purpose centres which do not share accommodation tend to remain open between 9 am and 11 am.
The smooth running of a centre depends, among other factors, on the communication network that is organised. Communication can be defined as the flow of feelings and ideas between and among people in an organisation. Essential elements of communication comprise of: the Communicator, Content, Purpose, Medium, Channel, Receiver and Response.

Usually teachers' centres form special sub-committees for the sole purpose of establishing an effective communication network. It may be remembered (in chapter two) that bad communication was one of the problems affecting the proper organisation of curriculum development projects at a centre.

Centres in England usually have prepared programmes for a whole month or for a whole term. Usually a centre produces Newsletters, Reviews etc. which are distributed to all teachers connected with the centre. Notices to schools on in-service courses, seminars, workshops etc. are sent by the warden for teachers' general information. Some centres tend to have a coordinating teacher who liaises between the school and the centre. He is supposed to contact teachers personally to inform them about forthcoming activities at the centre.

In addition to written communication with the schools, the warden makes frequent visits to the schools to discuss centre matters with the Headmasters and their staff.

The communication must be a two-way system. (see the diagrams on pages 79, 81 and 82)
Some of the communication paradigms suggested by McLachlan could be observed as links between schools, LEAs, other educational institutions etc. with the centre. The illustrations are as follows:

(a) Idealized Military Network:

- Personal visits
- Circulars
- Meetings

WARDEN

Newsletters
Reviews
Reports

Staff centre correspondent.

General Communication Model at a Centre.

Diag. No. 2

School

Head of Dept.

Teachers

Higher Educ. Institutions etc.

L.E.A. & Others.

Diag. No. 3
The idealized military network is perhaps more relevant in a centralized system of communication like that of Kenya. "A military organisation has an objective chosen by the higher command. This objective is adhered to throughout the duration of the action. The connecting system or network is tailored to meet the requirements of the objective." \(^{10}\) In this system many people can act as one body at the same time. The assumptions made include:-

1. One man can direct many subordinates.
2. The possibility of the message being distorted because of being relayed many times.
3. Only one man makes the final decision.
4. The 'donkey work' is done by people lower down the network.

The total number of people \((N)\) who act as one body is usually large. If each person has \(x\) people under him then:

\[
N = 1 + x + x^2 + x^3 + x^4 + \ldots
\]

If, to be more practical, there are three people under each person, in four stages then:

\[
N = 1 + 3 + 3^2 + 3^3 + 3^4 = 121 \text{ people.}
\]

Similarly the diagram No. 3 could be taken as representing a teachers' centre and its connections with schools through the Heads or departmental representatives regarding the centre's activities. The heads of department, in turn convey information to the teachers in their sections at school.
(b) The Cocktail Party System of Communication.

As diagram No. 4 illustrates, for any N people there are:

\[ \frac{N(N - 1)}{2} \] lines of communication.

This is regarded as the most complete and also the most chaotic system. In a discussion, there are \((N - 1)\) incoming messages to the leader from the participants. The receiving system gets rapidly overloaded as the number of participants increases. If there are 40 project members, all taking full participation in the project's deliberations, there would be:

\[ \frac{N(N - 1)}{2} = \frac{40(40 - 1)}{2} = 780 \] in coming messages.

It is best in a cocktail party system of communication for the groups to break into smaller discussion
groups (say of 5 people each) and then come together to represent collective views. At a centre, this paradigm would represent the flow of ideas among and between members through committees and sub-committees. It also emphasizes the importance of having a reasonably small number of participants in each committee or sub-committee.

The Telephone System:

Diag. No. 5

This is like a large scale cocktail party where all the flow of ideas is channelled through one point. In diagram No. 5 for $x_1$ to communicate with $x_2$ the message must pass through $P$, $O$ and $Q$. At the end point ($R$) the communication network can take
another form, such as the nearest neighbour system (in which information is relayed to the nearest colleague), or the cocktail party system.

A similar communication interpretation could be made on the organisation of a centre, regarding its connections with schools and other educational institutions. The notations P, Q and R could represent schools, O could represent the centre, \( x_1 \) and \( x_2 \) could represent teachers, and S could represent other educational institutions.

(d) The Teaching Network.

Just as in teaching, where the teacher must have a connecting line to each student through which he communicates, the students must have a connecting line to the teacher as well so that he may ask questions and get feedback information, or be asked questions by the students and give them more information. Similarly, if a centre warden communicates with schools, there must be a two way flow of ideas.
As McLachlan (op cit) illustrated, if diagram No. 6 shows four students in a class \( n \), under a Professor \( P_n \), four two-way lines should run from the Professor to the students. When the group moves from class \( n \) to class \( n+1 \) the lines of communication are temporarily broken with Professor \( P_n \) and connected to Professor \( P_{n+1} \) etc.

A similar communication interpretation could be made in a teachers' centre when there are, for example, projects organised at the centre and schools participate. The various projects could be \( P_n, P_{n+1}, P_{n+2} \) etc. and the participating schools in relation to the projects, could be \( n \).

Whatever the communication set-up, the role of the warden in the process is very important, as the British Council (op cit) notes, "Thus apart from being a curriculum consultant, a centre organiser, an experienced teacher and a resources officer, a Teachers' Centre Warden must be a first class communicator. The success of a centre depends to a considerable degree on its system of communication."

GENERAL MANAGEMENT:

The general management of Kenya's Teachers' Advisory Centres falls under the auspices of the District Education Officer, his Schools Supervisors and the Leader of the centre. A brief look at the effective organisation of committees and sub-committees at England's centres could help in the reorganisation of Kenya's relatively new centres. Much of the following description
is taken from Adams (op cit) and Thornbury (op cit).

The policies of a centre are made by a cooperative process. Apart from the warden and the teachers' representatives, the Local Authority is also represented on the management committee. The direct representation of the Local Authority is important for many reasons. One of the important ones is that it helps the warden not to be seen exclusively as a Local Authority person. Representatives from Colleges of Education are included, though their voting powers are occasionally limited.

Major decisions on financial matters plus virements between headings of expenditure are the concern of the management committee, though in some situations the responsibility is delegated to the warden.

Sub-committees are expected to canvas local teacher opinion before they forward their recommendations to the warden. Active involvement in such sub-committees by teachers help to stop the emergence of 'rubber stamp' and 'Laissez Faire' committees. A look at the management of the successful Educational Development Centre at Birmingham may help to illustrate the point diagrammatically (see page 86, diagram No. 7).

The importance of the active involvement of teachers in running a centre is stressed by Brand when he says that the elected representatives serving in a centre committee should feel a clearcut responsibility to put forward for consideration the aspirations and views of the teachers whom they represent. He adds, "On the other hand, recognising the often conflicting
responsibilities of such committee members, constituent members should go out of their way to make their wishes and criticisms known to their representatives.

MANAGEMENT COMMITTEE
Director and Staff

COMMUNICATION SYSTEM.
Newsletters, Reviews - published periodically & distributed to schools, colleges, etc.

BUILDING
Base for meetings
Courses
Exhibitions
Conferences

RESOURCE CENTRE
Reprographic system, Education library, Audio-visual and technological section.

PROJECTS
Panels - with working parties
Publication of reports etc.

Diag. No. 7.
CHAPTER FOUR

CONSTRAINTS AND FEASIBILITY.

"The myriad disadvantages that afflict education in developing countries include lack of resources, dysfunctional provision, ethnic problems, high birth rates, to name a few. Too many projects are handicapped from their inception by trying to provide the answer before the relevant questions have been asked and to provide a cure-all without any sort of diagnosis."¹ This quotation summarises to a great extent, the problems faced in Kenya's educational development. Many obstacles have to be overcome in the organisation of Kenya's Teachers' Advisory Centres before they can function at the standard which most educationist would like to see them do. The problems are very complex and sometimes it may be difficult to see the direct impact which these constraints exert on the centres. The constraints, some of which are familiar in the English situation, include:

- Rapid increases in population and schools
- Large classes
- Increasing number of untrained teachers
- Communication problems
- Financial constraints
- Other, eg. political, social, etc.

I shall examine these constraints and the impact they have on the general educational situation since their effect
is not on the centres alone but on the country's educational development as a whole. Indeed some of the constraints have a positive effect on the country's educational development. Many of the problems were completely unprecedented and no prior plans to overcome them could have been made. As Cyril Bibby² wrote, "The fact is on the rapid changing world of today. Nobody can ever be quite certain of what lies ahead, and only the most arrogant of administrators could feel confident that they can."

TEACHERS' ACADEMIC AND PROFESSIONAL QUALIFICATIONS:

Due to the rapid expansion in all spheres of education in Kenya, educational planners have so far failed to supply the best teachers for schools, yet the teacher is the most important agent of national development. The low academic qualifications of the vast majority are an immediate problem because getting them interested in the activities of a centre is difficult.

In England, ever since the Cross Commission of 1888, every subsequent inquiry into the training and supply of teachers has put great emphasis on the need for more and better qualified teachers. In Kenya we also strongly believe that competent teaching can only be achieved through proper training and not by 'sitting next to Nellie'. We are however faced with the unavoidable presence of both the untrained and the many lowly qualified teachers. In England the long term objective is to make teaching an all-graduate profession. The untrained teachers have virtually been phased out.
The Kenyan teachers are not to blame for their poor qualifications because most of them were more or less driven into teaching since few alternatives were open to them. As I mentioned in the first chapter, most, if not all, of the non-graduate teachers took teacher training after having failed to be selected to join form one or form five or the university. They are, as it were, 'educational mercenaries', only serving as teachers so that they may get their daily bread and keep out of the unemployment queue.

In Kenya our teacher education students are not interviewed but are usually selected from computerised examination results. Even if we consider colleges of education as higher education institutions, it must be realized that they are "a special kind of higher education institutions. They are primarily not just concerned with teaching, but with the analysis of teaching." The students select themselves into colleges, so to speak. It is like conducting an ex-post facto research - there is no direct control of selection variables.

It is difficult to get thorough devotion towards the objectives and activities of a centre from teachers of such a calibre. The system has to change first before we can get the cream of every generation into this important profession. I believe researches like the ones done by Burroughs or Cortis can eventually help Kenya's college organisers to improve their
criteria for selection.

The first major proposals on the structure of teachers' courses in England are found in the 1944 McNair Report which came at a time when it was felt that both the training and supply of teachers were ill adjusted. Kenya may be viewed as having reached the same stage and we need to reappraise our teacher education and supply without delay. For instance, a former Director of Education wrote that, if the schools of Kenya are to foster a sense of nationhood and serve as one of the major agents for the development of the required society, it will be necessary for teachers at all levels not only to subscribe to the stated educational objectives but also to possess the skills to make them a reality. He added that whether teachers succeed in translating the objectives into day-to-day classroom teaching will depend very largely on the nature and quality of their training. He emphasized that it is with the training period that teachers can develop the attitudes and skills that will enable them in turn to develop in children a sense of national unity and identity and acceptance of necessary change.

The Ominde Commission also emphasized the need and importance of trained teachers to staff all Kenya's schools, and placed high priority on in-service education.
INCREASES IN POPULATION AND ENROLMENT:

In the last twelve years we have observed in Kenya astonishing changes rarely paralleled in developing countries. The number of schools increased nearly ten times and the number of pupils in schools rose from less than one million to well over two million. This rapid increase was caused by various factors. First, Kenya's population is increasing at a relatively unchecked rate of 3.5 per cent per annum - one of the highest in the world. Moreover parents have increasingly been aware of the advantages of school education and they are sending their children to schools in thousands. Primary schools which had accommodated 40 pupils per class ended up with more than 60 pupils per class. Parents too actually built schools (both primary and secondary) on a voluntary basis and this caused a phenomenal rise in the number of schools as the table shows below. (Situation for secondary schools only).

<table>
<thead>
<tr>
<th>YEAR</th>
<th>AIDED SCHOOLS</th>
<th>UNAIDED SCHOOLS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967</td>
<td>206</td>
<td>336</td>
<td>542</td>
</tr>
<tr>
<td>1973</td>
<td>380</td>
<td>522</td>
<td>902</td>
</tr>
</tbody>
</table>

Table No. 7.

Consequently the output of trained teachers could not meet the demand from the schools. It became necessary to employ,
temporarily, school leavers ranging from those with just 7 years of schooling to those with A-level or O-level education as untrained teachers. This caused a drastic dilution of the teaching profession and a fall in educational standards.

FREE EDUCATION:

We are aware of the numerous problems which we have to overcome as we make changes in our educational set-up, as Indire writes, "We do really need a change - an educational change that will serve the needs of our societies. Educational reform is a long, difficult and painful process. Whatever type of reform we embark upon, we have to realise that there will be painful and disappointing moments."

African states pledged themselves to achieve universal free education by 1980 at the 1961 conference on the development of education in Africa held at Addis Ababa - Ethiopia. After becoming independent in 1963, Kenya joined the Organisation for African Unity and KANU (Kenya's political party) pledged to provide free education. This promise became a reality in 1974 and now the first 4 grades of primary education are free for all children in the country. This important move increased the number of pupils still more and today 80% (5) of Kenyan children are in school. Universal primary education, a means of eradicating illiteracy, is not so far away.
Whereas the government of Kenya deserves to be congratulated on this bold and very important move at these difficult times, it is worth emphasizing that the importance of well trained teachers should be given more attention than it has received before, otherwise we shall be faced with an acute fall in educational standards. Today over 40% of the teachers in Kenya are untrained.

PUPIL-TEACHER RATIO:

Kenyan teachers, particularly in the primary schools, are overworked persons in comparison with their English colleagues. The Times Educational Supplement reported, "The pupil-teacher ratio in state schools improved in 1973, according to the latest volume of Educational Statistics for the United Kingdom. There were 21.1 pupils for each teacher in 1973. The year before there were 21.8. In each aided school the ratio is 15.7 to one. In 1972 it was 15.9 to one."

These are reasonable ratios and it should be possible for a teacher to take an active part in the activities at a teachers' centre, if he wished to.

In Kenya the national ratio was 32.02 pupils for each teacher, in 1973. Today, just two years later, the ratio has risen to well over 40 pupils per teacher in most districts. This rise is due to the rapid increase in school enrolment.
Apart from teaching the Kenyan teacher is expected to supervise games after working hours sometimes until late in the evening. The time needed for the inescapable job of lesson preparation and marking homework is extra. Nevertheless the effort expended by these lowly qualified teachers in their difficult circumstances is often admirable. In such a busy situation it is unlikely that many teachers would bother to take an active part in the activities of a Teachers' Advisory Centre.

FINANCIAL PROBLEMS:

Financial constraints imposed by current hyper-inflation are universal. But to a developing country where financial problems are not only caused by inflation, but also by the many urgent developmental projects, the financial situation can be very disturbing.

In the first five years after independence (1963-1968), Kenya's expenditure on education increased by 40% to a total of £6.7 million. By 1973 it had increased to a net figure of £32.4 million. In fact in international terms Kenya can be considered as one of the highest spending nations in education, when these figures are calculated as a percentage of the Gross National Product.

Unlike England with a developed system where expenditure on education can in the last analysis be reduced, in Kenya's
developmental stage, expenses have to keep on rising each year whether there is inflation or not. The main causes of this are:-

(a) The inevitable increase of the teaching force due to the annual increase in pupil enrolment.

(b) A gradual annual increase of better qualified teachers whose salaries are higher.

(c) Over 95% of the teaching force comprises of young teachers whose salaries are far from their maximum points and have to rise every year.

The teachers' grades (see chapter one) are such that they dictate how much a teacher can earn. In this situation, teachers of low grades tend to look for ways of improving their grades and eventually improve their salaries and social status. Many teachers, therefore, give the Teachers' Advisory Centres little attention since they do not see the centres as channels through which they can up-grade their professional grades and hence improve their salaries. This is not the case in England since the two grades (Graduates and Non-graduates) have many other avenues through which they can better their qualifications. The English Centres therefore receive teachers' attention largely on the grounds of the activities mentioned in the second chapter and not as a means of improving one's salary.

A research done on the cost-benefit analysis in education
for Kenya showed that teachers' salaries seemed to affect the examination scores of pupils in primary schools, while in secondary schools, it showed that examination performance was, among other variables, positively related to teacher expenditure per student.

The overall financial constraints restrict the purchase of many vital teaching aids not only for every school but also for the Teachers' Advisory Centres. Financial problems regarding teachers' salaries hamper teachers' devotion towards the activities of a centre since many teachers would rather run a small business where they can make more money, or cultivate a small plot of ground at week-ends or after working hours, rather than go for activities at an Advisory Centre.

COMMUNICATION:

Many Teachers' Advisory Centres are situated at the district headquarters where the District Education Officer resides. Over 80% of Kenya's population lives in the rural areas and most of their schools are rather far from each other. Sometimes it is difficult for a supervisor to visit a school as many times as possible due to the long distances and unsuitable means of travel.

In England, the situation in Shropshire could be an example of what could be done in Kenya concerning the organisation
of the centres, although the distances between schools in Kenya are greater and the means of communication not as efficient. In Shropshire, as Henry noted, most schools are small and situated in small towns. However, many teachers particularly the ones in more remote schools do their best to meet teachers from other schools. In view of the distances and teachers' enthusiasm, the Local Education Authority gives residential courses for those teachers who have to travel long distances. Day release courses are run for the majority of the teachers who do not have to travel far.

Although effort to organise day-release and residential courses in a similar way as they do in Shropshire is done in Kenya, the whole exercise is often doomed by financial limitations, lack of interest and failure to accommodate all applicants for such courses. Even day-release courses at a centre tend to be a problem for teachers to attend due to the long time spent in travelling.

After attending a course at a centre, many teachers return to their comparatively isolated rural schools which have very few facilities for teaching. In suggesting a solution to a similar problem in Shropshire, in order to maintain continuity in the education of teachers, Henry wrote that effort is made "to ensure that teachers who are encouraged and stimulated by group activity or by attendance at conferences are given the
necessary help when they return to the comparative isolation of their schools to enable them to break new ground and develop new apparatus."

In Kenya there are supervisors who offer professional help to teachers attending courses. The supervisors visit teachers in their schools occasionally. This exercise of visiting schools is not easy since the schools are widely scattered and the cost incurred in transport could be phenomenal. This problem of contact with schools, particularly in the rural areas, could be solved in a similar way as in Shropshire where a pilot scheme was once launched in which teachers could "call on assistance of a number of experienced practising teachers who are being released on a part time basis to act as consultants in this way." This approach would be of great benefit to the many untrained teachers of Kenya.

In well over 60 per cent of Kenya's land area, the population is extremely sparcely distributed, which is sometimes due to the nomadic ways of life practised by part of the population. In such areas it can be difficult to get even 10% of the children to attend a school so the schools become small and scattered, causing the problem of effectively locating a place for a centre.

In view of the adverse communication problems, it would be useful to have 'mobile' Teachers' Advisory Centres in Kenya.
These would be in the form of vans, omni-buses etc., in which various resources for teaching could be carried to schools for demonstrations. They would save teachers from travelling long distances in extremely difficult conditions.

EVALUATION:

Innovation in teacher education as Klanssen emphasized, is no longer a luxury to be indulged in if time and resources permit. Today research and development form an important part of every human activity, so more research has to be done on teacher education in order to facilitate a wide spectrum of alternatives, particularly in emergent countries like Kenya.

In an innovation like the Teachers' Advisory Centres of Kenya, research has to be done right away in order to facilitate suitable changes as we go along in the process of developing them. The evaluation carried should be a combination of both 'hard' and 'soft' data (see chapter two page37) compiled from Field Studies, Field Experiments, Surveys (interviews and schedules, questionnaires, opinionnaires, etc.) and analysed statistically in order to offer relevant feedback on the Teachers' Advisory Centres' effectiveness on the continuing education of the teachers. This could incorporate their attitudes, knowledge, observable changes in teaching approach, etc. If the problem in this respect is non-availability of knowledgeable
educational researchers in Kenya, then the government should take appropriate action to overcome the problem.

CONCLUSION:

The first chapter has shown how Teachers' Centres in England grew out of the teachers' own efforts and interest. It also showed how this innovation was introduced into Kenya by experts on the subject who similarly introduced it as a package for the teachers' implementation. The Kenyan organisers etc., can learn a lot from the experience through which English centres have passed, so long as the necessary modifications are made by them. These modifications could be in the nature of the activities discussed in chapter two and the organisation of centres discussed in chapter three. Many of the constraints affecting the organisation of education in Kenya cannot indeed be overcome overnight. Much depends on the people and the government to make more sacrifices on such aspects as finance.

Teachers' Advisory Centres in Kenya can be of great service to the teachers if they can receive adequate finance, materials, personnel and be situated within the reach of many if not all the schools. Kenya's Teachers' Advisory Centres are meant to be places where teachers can receive some professional advice and necessary equipment which can make them do their teaching more effectively. Hence they should not be very far from the
District Education Office in general and the teachers themselves in particular. In this respect, every district should have its Teachers' Advisory Centre with some sub-centres in all the divisions of the district.\textsuperscript{13}

In order to facilitate efficient management, there needs to be an experienced teacher as the leader with at least two assistants and a clerical assistant. Transport for the organisers has to be readily available. The idea of a Mobile Teachers' Advisory Centre could be an answer to the many problems of communication with teachers in schools and make the organisation of residential courses virtually unnecessary.

Every centre should be adequately and suitably equipped with appropriate teaching aids which teachers can borrow if necessary, after they have assessed their suitability. A display of books and materials should be organised so that teachers calling at these centres can easily find out what equipment they could order for their schools.

More than anything else, Kenya's Teachers' Advisory Centres should be able to organise in-service courses of all kinds for all grades of teachers, particularly for the professionally-unqualified teachers who constitute 40\% of the teaching force. The untrained teacher has a lot to learn on the essentials of the profession otherwise, as R.S. Peters writes, "he would be like
an actor who was exquisitely sensitive to the reactions of an audience, a master of gesture and subtle inflections of voice, but who omitted to do one thing - to learn his words." Hence the officer in-charge of a Teachers' Advisory Centre should be a successful teacher and trained in management. He might have to give lectures himself and should not hesitate in calling for the help of other experienced teachers in conducting courses.

Kenyan teachers should be made to understand that the Teachers' Advisory Centres are actually for their own professional good. The world is changing so fast that teachers must find a way of keeping themselves up to date with the new ideas in education which are constantly emerging. Without keeping abreast with these changes the standard of education in Kenya is bound to deteriorate in the long run.

In order to facilitate better attendance at courses held at the centres, long courses should be well planned and organised during the school vacations. Those held during term time could be organised in the afternoons (say from 2 pm. to 5 pm), while others could be held on Fridays and Saturdays inclusively, depending on the availability of teachers.

A well organised Teachers' Advisory Centre, particularly in the rural areas, could be the best way of improving teachers' knowledge. The Ministry of Education should, therefore, direct
more teaching resources towards these areas.

Finally, in order to make the centres not only as places where teachers are taught something new, they should be places where teachers can be encouraged to organise curriculum development projects and run their own courses. In order to motivate teachers to organise educational projects independently, they should be people who are well qualified academically and professionally. This is an important task for the government of Kenya to accomplish. The provision of proper training for all the professionally-unqualified teachers who are staffing Kenya's schools is an immediate necessity if the role of the Centres is to be more meaningful.
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THE KENYA INSTITUTE OF EDUCATION (K.I.E.).

This Institute was established in 1964 as a result of a conference on educational institutes held under the aegis of the University of East Africa and the Ministers of Education in Kenya Uganda and Tanzania. The establishment of the K.I.E. was followed in 1965 by the setting up of a department of Education at the University College, Nairobi, under a United Nations Educational Scientific and Cultural Organisation team.

The Institute is a centre of professional activity for teachers, government officers and others in educational work. It provides and promotes conferences and in-service courses for teachers and others engaged in educational work and administers a system of examinations on behalf of the Ministry of Education.

Its most important feature, however, is curriculum research and development carried out through the Curriculum Development and Research Centre situated at the University of Nairobi. To facilitate this activity, there are panels of experts who review curriculum content and materials in their respective subjects. It is here that curriculum development and reconstruction to suit the needs of Kenya takes place.

The Teachers' Service Commission was established in 1967 to provide the teachers with one employer irrespective of their level of teaching (primary, secondary or teacher training).

The Commission is empowered to recruit and employ registered teachers, assign teachers to any school maintained or assisted by the government, promote, transfer, discipline or dismiss teachers. The Commission is semi-autonomous but works in close collaboration with the Ministry of Education which lays down the qualifications, and rules and regulations under which the teachers work. Money for teachers' salaries comes from the Ministry of Education.

*Extracted from: Educational Structure in Kenya, (ibid Appendix I) pp 37 - 38*
EDUCATIONAL CHART (KENYA)*

Professional, Medicine, Vet. Medicine, Engineering etc.

Social Sciences, Physical Sciences, Teacher Education
BED., BA. or BSc. with education.

Teacher Training Sl.

Forms

East African Advanced Cert. of Education.

Teacher Training P2, P1, Sl.

Technical Training

Forms

East African Certificate of Education.

Secondary Education

Technical & General

Certificate of Primary Education (C.P.E.)

Teacher Training P3

Standards

Note:

(a) The chart does not take account of the annual wastage and stagnation.

(b) Classification of Teachers:

P3 Primary school teacher grade 3; two years teacher training after seven years of general education.

P2 Primary school teacher grade 2; two years teacher training after nine years of general education or depending on performance after 11 years of schooling.

P1 Primary school teacher grade 1; two years teacher training after eleven years of general education.

Sl Lower secondary teacher; either three years teacher training after 11 years of general education or one year teacher training after 13 years of general education.

The university trains teachers for upper secondary schools.

*From: Educational Structure in Kenya pp 37 - 38 (ibid Appendix / )