

THE UNIVERSITY OF HULL

**AN INVESTIGATION INTO THE EFFECTS OF IN-SERVICE
TRAINING ON (THE KNOWLEDGE, ATTITUDES AND
UNDERSTANDING) OF PRIMARY SCHOOL TEACHERS IN
THE KADUNA STATE OF NIGERIA TOWARDS THE
INTEGRATION OF CHILDREN WITH SPECIAL EDUCATIONAL
NEEDS IN PHYSICAL EDUCATION.**

**being a Thesis submitted for the Degree of
Doctor of Philosophy
in the University of Hull**

by

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CONTAINS

PULLOUTS

TABLE OF CONTENTS

	Page
<u>INTRODUCTION</u>	
Dedication.	(i)
Acknowledgement	(ii)
Operational Definitions	(iii-iv)
List of Figures	(v)
List of Tables	(vi-vii)
Abbreviations	(viii-ix)
Abstract	
<u>CHAPTER ONE</u>	
1.0 Introduction	1
1.1 Background of the Study	1-7
1.2 Statement of the Problem	8- 10
1.3 Purpose of the Study	11-14
1.4 The Objectives of the Study	15-16
1.5 Research Hypotheses	17
1.6 Significance of the Study	18-21
<u>CHAPTER TWO: REVIEW OF LITERATURE</u>	
2. Education for children with special educational needs	
2.1 Introduction	22-26
2.2 Integration of children with special needs in ordinary schools	26-32
2.3 Teacher attitudes to programmes of mainstream education	32-34

- 2.4 The deveiopment of mainstream educational provision for children with special educational needs in the West 35-43
- 2.5 Parental attitudes to special education programmes 43-49
- 2.6 Parents involvement in education of their children 49-59

3 CHAPTER THREE

- 3.1 Physical education for children with special educational needs in a mainstream education setting 60-63
- 3.2 The benefits of participation in physical education for children with special needs 63-73
- 3.3 The Aims and Principles of integrated programme of physical education for children with special educational needs in a mainstream schools 74-81
- 3.4 Level of integration of SEN pupils in physical education programmes 81-84
- 3.5 Strategies for planning a programme of integrated physical education for children with special needs 84-98
- 3.6 Areas Requiring specific provision in physical education for special needs children 97-98
- 3.7 Teaching Approaches recommended for the teaching of Physical education to children with special needs 98-107

4 CHAPTER FOUR

- 4. Educational programmes for children with special needs in Nigeria and in the Kaduna state in particular.
- 4.1 The beginnings of special education programmes in Nigeria 108-117
- 4.2 Catering for children with special needs in physical education in mainstream schools in Nigeria: The need for staff development 117-128

4.3 Funding of special education programmes in Nigeria	128-130
4.4 Administration of primary education in the Northern states of Nigeria	130-131
4.5 Problems of primary schools in Nigeria	131-132
4.6 The situation in education in the Kaduna state	132-137
Summary of Review of Literature	138-142

CHAPTER FIVE : RESEARCH DESIGN AND METHODS

5.1 Introduction	143
5.2 Design of the Study	143-144
5.3 Subjects	144
5.4 Sample size	144-145
5.5 Sampling Technique	145-147
5.6 Control Group	147-148
5.7 Comparison Group	148-150
5.8 Experimental Group	150-153
5.9 Data Collection	154
5.10 The Teacher Questionnaire	154-156
5.11 Administration of Teacher Questionnaire	156-158
5.12 Return of Teacher Questionnaire	158
5.13 Observation	158-159
5.14 Interviews	159-160
5.15 Discussions	160
5.16 Validity of the Questionnaire	161-162
5.17 Reliability of the Questionnaire	162-163
5. 18 Data Analysis	163-164

CHAPTER six: PRESENTATION AND DISCUSSION OF RESULTS

6.1	Introduction	165
6.2	Demographic Information	165-169
6.3	An Overall view of Teachers' responses to Questionnaire before and after Interventions	169-171
6.4	In-service Education and Training	172-185
6.5	The Practice of Integration	186-193
6.6	Attitudes and Skills of teachers	193-202
6.7	Obstacles to Mainstream Education	202-213
6.8	Collaborative Efforts	213-224
6.9	Teachers' Interest in Future Research Activities	225-235
6.10	Analysis of Data obtained through Observation of School Physical Education lessons	235-237
6.11	Reasons Given by Teachers for level of Involvement of SEN pupils in Physical Education lessons	238-239

7 CHAPTER SEVEN : SUMMARY, CONCLUSION AND RECOMMENDATIONS

7.1	Introduction	240
7.2	Summary of Findings	240-246
7.3	Conclusion	247-257
7.4	Recommendations	258-265
7.5	Limitations of the study	265-267
7.6	Further Research	267-268

BIBLIOGRAPHY	269-305
List of Appendices	306

(i)

Dedication

This work is dedicated to the glory of God, my late father Amedu Obawu Akoji, to my wife Margaret Okpanachi, to my children Roberts, Julliet, Emmanuel, Anne Chubioyo'ojo and to all children with special educational needs.

(ii)

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(iii)

OPERATIONAL DEFINITIONS

The following definitions are given to terms used in this study in their real context :

Disability : Any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being (resulting from an impairment). For instance, an amputated leg reduces the person's ability to walk and mental retardation reduces the individual's ability to learn.

Children with special educational needs: A child who differs from the norm in mental characteristics, sensory abilities, communication abilities, social behaviour, or physical characteristics to the extent that special education services are required for the child to develop to maximum capacity.

Handicap: Disadvantage for a given individual, resulting from an impairment or disability, that limits or prevents the fulfilment of a role that is normal (depending upon age, sex , social and cultural factors) of that individual.

Impairment: Any loss or abnormality of psychological, physiological or anatomical structure or function, e.g. an amputated leg, diadetes, mental retardation, near sightedness.

(iv)

Least Restrictive Environment: It is a programme placement concept that means children with special educational needs should be educated in environments that are as 'normal' as possible.

Ordinary schools: These are the public schools built by the government to which every child has the opportunity to attend. There is nothing special about these schools located in various communities.

Special education: Special education means the use of specifically designed teaching and learning procedures that are not typically used with normal children but to meet the unique needs of children with disabilities.

List of Figures

- Figure 1** Cross-curricula Links between P. E. and other curriculum subjects.
- Figure 2** Assessment procedure for performance analysis.
- Figure 3** Games adaptation for Special educational needs children
- Figure 4** Areas of special needs of children with Disabilities in P .E.
- Figure 5** Introducing Balance activities in physical education .
- Figure 6** The pattern and scope of special needs In-service.
- Figure 7** Developing a whole-school approach: Priority for school-focused INSET

List of Tables

- Table 1** Distribution of teachers in the primary schools used in the study.
- Table 2** Summary of activities that took place within the groups.
- Table 3** Gender, Age, Qualification, and Teaching experience of teachers being studied.
- Table 4** Teachers' attitudes to in-service education and training programme.
- Table 5** In-service education & Training: Statistical analysis of group pre and post-test mean scores.
- Table 6** Teachers' response to statements related to their knowledge of practice of integration.
- Table 7** Practice of integration: Statistical analysis of group pre & post-test mean scores.
- Table 8** Teachers' response to statements related to their attitudes and professional skills for working with SEN pupils in P. E. in mainstream settings.

Table 9 Attitudes and professional skills: Statistical analysis of group pre & post-test mean scores.

Table 10 Teachers' response to statements related to problems facing the mainstream education implementation.

Table 11 Problems facing mainstream education : Statistical analysis of group pre & post-test mean scores.

Table 12 Teachers' response to statements related to their attitudes toward collaboration in mainstream education.

Table 13 Collaboration in mainstream education: Statistical analysis of group pre & post-test mean scores.

Table 14 Teachers' response to statements related to their interest in participating in future research activities.

Table 15 Teachers' interest in future research activities: Statistical analysis of group pre & post-test mean scores.

Table 16 Level of involvement of SEN pupils in school physical education lessons.

Table 17 Factors affecting the level of involvement of SEN pupils in school physical education lessons.

ABBREVIATIONS.

AAPHER.	American Alliance of Health, Physical Education and Recreation
BAALPE.	British Association of Advisers and Lecturers in Physical Education
B.Ed.	Bachelor of Education
DES.	Department of Education and Science
EDY.	Education of the Developmentally Young
EMR.	Educable Mentally Retarded
FTP.	The Ford Teaching Project.
GRIDS.	Guide-lines for Review and Internal Development in Schools.
HCP.	Humanities Curriculum Project
INSET.	In-service Education and Training
M.A.	Master of Arts
NCATE.	National Council for Accreditation of Teacher Education
N C E.	Nigeria Certificate of Education

(ix)

NCC.	National Curriculum Council
NCPE.	National Commission for Primary Education
NUT.	Nigerian Union of Teachers.
P.E.	Physical Education
SEN	Special Educational Needs
TISEP	Teacher In-service Training Programme
UPE	Universal Primary Education
UN	United Nations.
UNESCO.	United Nations Educational, Scientific, and Cultural Organisation.
UNICEF.	United Nations International Children Emergency Fund
WAEC.	West African Examinations Council
WASC.	West African School Certificate
WHO.	World Health Organisation

Abstract

The education of children with various disabilities has attracted the attention of educational planners and curriculum developers in many countries of the world especially among the developed countries. Appropriate legislation, provision of facilities, and the training of specialist physical education teachers are some of the measures taken in some countries. In Nigeria as in most developing countries, the physical educational needs of children with disabilities has not received due attention, and the result is that Special Educational Needs children in schools are almost forgotten in the planning and implementation of school physical education programmes. The need to integrate them into school programmes is an important measure that should receive adequate consideration.

The main purpose of this study is to evaluate forms of In-service Education and Training (INSET) programmes for teachers and consider how these programmes can be improved to provide teachers with adequate knowledge and skills for the integration of children with physical disability into primary school physical education lessons.

An experimental design was adopted for this study. In the design a sample of 100 teachers was drawn from the teachers' population in 5 primary schools in the Kaduna state of Nigeria. The sample was divided into three groups of control (40), comparison (40) and experimental (20). All groups received the initial questionnaire, but the comparison and experimental groups received varying degrees of interventions by way of additional information on the practice of educational integration. The intervention for the comparison group was in the form of a booklet which contained an outline of SEN pupils' needs in physical education. Teachers in the experimental group received

an intervention which included teaching demonstrations for children with physical disability in P. E. and the same booklets given to teachers in the comparison group. In addition, interviews and discussions with teachers were carried out as well as observation of physical education lessons in order to supplement data collection strategies. The purpose of these measures was to assess the impact of interventions introduced on attitudes, knowledge and skills of teachers regarding integration and to compare their opinions on these variables before and after the interventions.

The questionnaire used for collecting information from teachers involved in the study was designed using a 5-point Likert type scale.

Teachers' self-ratings on attitude, skills and knowledge of integration have been analysed using mean, standard deviation and student t- distribution test statistics using an SPSS PC computer analysis of data.

Information gathered through observation and interviews have been analysed qualitatively.

The main findings of the study related to the demographic characteristics of teachers working with SEN pupils in physical education who responded to the questionnaires, the attitude of the teachers to in-service training, their knowledge of the practice of integration, possession of relevant skills for working with Special Educational Needs children in a mainstream setting, awareness of the obstacles to mainstream education, and the need for collaborative efforts with parents and other professionals in order to achieve the objectives of programme of integration.

Some of the conclusions reached were that there was an urgent need to recruit more qualified physical education teachers, and prepare them specifically for the role in catering for children with

SEN so that, programmes of integration can be more effectively planned and implemented in Nigerian schools. Those responsible for teachers' education should be made aware of the need to provide further training to develop more knowledge and skills that may help them to cope with the new challenges of programmes of integration. Essentially, there is need to create a general awareness among educational planners, curriculum developers, policy makers, and physical education teachers of the importance of integrating children with physical disability into the mainstream physical education lessons so that educational provision in Nigeria can be seen to be fair and non-discriminatory to both able-bodied and disabled pupils.

The focus of this study is also on providing teachers with the necessary knowledge and skills in order to enable them to cater for a wide range of children with special educational needs who may be attending ordinary schools in Nigeria and in the Kaduna state in particular. The term 'special educational needs' referred to in the thesis covers a wide range of children with disabilities including the amputees, moderate learning difficulties, movement difficulties, those with certain medical conditions(e.g. asthma, diabetes, epilepsy) and those with emotional and behavioural disorders. These are the types of children with special needs whom teachers in ordinary schools in the Kaduna state of Nigeria may have to provide for in their physical education lessons.

Any reference to children with physical disability in particular is in relation to specific programmes of physical education designed specifically for those with physical handicaps or impairment. Reference to physical disability is therefore not used as an alternative term to special educational needs but when in particular referring to this specific form of special needs. Case studies of some of these children were carried out during the

course of this study and reports shown in appendix 5. Also, suggested programmes that would enable SEN children to participate in physical education lessons alongside their able-bodied peers have been provided in appendix 2.

Chapter one

1.0 **INTRODUCTION**

1.1 **Background of the study**

There are various ways through which the government of Nigeria attempts to meet the educational requirements of its' citizens . These include, educational provision within primary, secondary and higher or tertiary education . Nursery or pre-primary education is available privately for children who are less than the school age of 6 years .

Primary education is now free in most states of Nigeria, and it is available for 6 to 12 years. A child is allowed to enter primary school at the age of 6 . The basics of all the subjects in the school curriculum are introduced at this level . The promotion of pupils into the next phase, was once based on academic performance, and is now a question of automatic promotion and no longer related to continuous assessment of the individual rather than a final examination.

Teachers keep continuous assessment records of the children in their classes to enable them to make judgements about their pupils' abilities and for the purpose of promotion to the next class . At the end of primary education, examinations are held for the award of the first school Leaving Certificate .

To qualify to enter secondary school, individuals must have passed the common entrance examinations conducted by the West African Examinations Council (WAEC) . It is important to note that the language of instruction for pupils in classes 1 to 3 is usually the mother tongue while English language is used as a medium for

instruction for those in the upper classes (4 to 6) . The curricula are controlled by the National Commission for Primary Education (NCPE) while the various state Ministries of Education ensure their implementation in schools under their control.

Secondary education starts at the age of 12 and lasts for a maximum of six years . The old system which allowed pupils to spend 5 years in secondary education, has been phased out and a two tier system has been introduced . Under this system, which is popularly known as junior and senior secondary schools, children are allowed 3 years in each section. In the junior secondary school, the pupils are exposed to the basics of all the school subjects, thus preparing them for later specialisation based on their interest and aptitude . From this point , pupils then decide with the assistance of their career officers whether they should go for vocational training, teacher training or to go for 4 years higher education programme if they have the relevant qualifications .

The bulk of primary school teachers are trained at the many Grade Two teachers' colleges . These offer two major types of courses : A five - year post -primary course providing a mixture of academic and professional studies and a two-year post secondary school certificate which is known as a " pivotal " training programme . The "pivotal " training programme is designed to help the secondary school leavers who have no basic professional background and are interested in joining the teaching profession . Apart from these training schemes, in-service training programmes are provided during the school long vacation to refresh teachers' knowledge and skills .

The Government pays considerable attention to education outside the formal school system. The main purpose is to provide opportunities to those who are unable to benefit from formal education to develop their knowledge and skills . The main areas are literacy, remedial education, in-service vocational training, basic skills and cultural activities (Cameron, et al., 1983).

Tertiary education in Nigeria includes any educational programme after secondary education, apart from professional courses such as teacher training, vocational and technical training obtainable after secondary education . Such educational programmes include those offered by universities, polytechnics and colleges of education aimed at providing advanced professional training in all fields . There are both Federal and state institutions of this nature all over the country .

Special education policies are a part of the overall educational policies of Nigeria . These policies are not formulated in isolation of other educational policies because the Federal Government accepts the responsibility of providing equal educational opportunities for all its' citizens . One policy that stands out is section 8 of the National Policy on Education in Nigeria, an equivalent of the Public Law 94-142 (1975) in the United States of America, which was instituted by the Federal Ministry of Education in 1977 . This section of the Education Policy identifies the various types of handicapped conditions describes the policies for special education in Nigeria . It would appear to be a laudable effort by the Government to direct strategies for overcoming

problems facing this group of children in Nigeria (Akutu, 1976, Nwigwe, 1979, Obiakor, 1987, Obiakor , Ihunnah and Jones, 1989). However, handicapped children are generally not well catered for because of cultural, socio-economic and political factors . These include, early marriage for the females; restricting married women from interacting with the outside world by keeping them in 'purdah'; parents' low income to support their SEN children's education and varying political ideologies among the people.

Ogbue's (1975, 1981) study on the training of specialist teachers in special education was supported by the special education unit of the Federal Ministry of Education, Lagos, Nigeria . She noted that about 27 per cent of teachers involved in special education are trained specialists and none of these work in ordinary schools . She also reported that five categories of children with special educational needs were catered for . These included the blind and partially sighted, the deaf and partially hearing, the physically handicapped, the mentally handicapped and the hospitalized children .

It was reported also that the various individuals, local branches of international organizations such as UNICEF, WHO., UNESCO and voluntary agencies such Missionaries, church organizations and Human rights group provided a high percentage of financial support for special education . Ogbue noted that there were no facilities and equipment and a lack of maintenance of the little special education equipment and teaching aids that were available

As part of the Federal Government's commitment to the development of educational programmes for SEN pupils attending ordinary schools in Nigeria, section 8 of the National Policy on Education (National Policy on Education, 1981) stated the following goals:

- 1) To give concrete meaning to the idea of equalising educational opportunities for all children, their physical, emotional disabilities notwithstanding.
- 2.) To provide adequate education for all handicapped children and adults in order that they may fully play their roles in the development of the Nation (National Policy on Education, 1981, p.1).

To be able to achieve these fundamental goals, section 8 of the National education policy suggested that the following measures should be taken : Formation of a joint committee of the Ministries of Health and Education to conduct education activities, a census of all handicapped children and adults should be taken stating age, sex, locality and type; all teacher training institutions to provide basic courses for all prospective teachers of SEN pupils .

This policy lays down the direction of a national policy on special education, but, although a well-intentioned policy it has not been carried out as recommended. The teachers' failure to carry out this policy has been responsible for the poor state of special education in Nigeria today and has left many of the children with special educational needs not benefiting from the specially designed programmes of integration.

The education of children with special educational needs and those with physical disabilities in particular has suffered greatly in the hands of Nigerian educators because it was felt that to educate these children in ordinary schools would amount to some

sort of disruption in the educational programmes offered to their able-bodied peers . This has been the excuse given by teachers for not allowing SEN pupils to participate in physical education lessons.

In general, both teachers and educational administrators have not supported programmes of educational integration for children with special educational needs . Teachers are reluctant to admit these children into their respective classes because they do not consider themselves to be adequately trained to cater for SEN children in mainstream classes .

The lack of collaboration between teachers, parents and other professionals working with SEN pupils has been another problem facing the development of mainstream education in primary schools in Kaduna state of Nigeria . As a result, teachers feel less confident in catering for SEN children . It has been argued that parents do not make a contribution to their children's education as they have long been denied the opportunity to participate in decision-making . It is therefore the purpose of this study to create an awareness among teachers of the need to establish a working relationship between parents and other professionals .

It would appear that the government of Nigeria has made little progress regarding the education of children with special educational needs in spite of the supposed commitment as described in the National Policy on Education published in 1977 and reviewed in 1981. There are a number of reasons for this. These include; lack of adequate training for teachers, the poor attitudes of teachers towards mainstream education, the non-

involvement of parents in the education of their children, the poor funding of special education programmes and the inadequate staffing in schools (Adedoja, 1991; Abang, 1989 ; Akutu,1976).

There is a need for a concerted effort to be made to provide further training for teachers as this seems to be an effective strategy in helping to improve their attitudes, skills and knowledge in order to support mainstream education which the initial training had failed to provide .

Chapters ~~Two~~^{to Four} of this thesis offer a review of the literature in relation to educational provisions for children with special educational needs. This includes, an examination of the historical development of education for SEN children and in particular, the issue of integration of SEN children into physical education programmes, the involvement of parents in the education of their children, and the in-service training needs of teachers .

Chapter ~~Five~~ explains the design of the study, the research methodology used, the methods of data collection and data analysis .

The research findings are outlined and discussed in chapter ~~Six~~ and this is followed by the conclusion and recommendations for further research in chapter ~~Seven~~.

1.2 Statement of the problem

In the broadest sense physical education is believed to be part of the total educational programme that seeks to provide each individual with the opportunity to achieve his or her own potential . The end product of this is the fully functioning healthy individual. Challenging educational experiences coupled with a personal desire for achievement are necessary ingredients for the development of human potential(Edem, 1982; Ozigi & Ocho, 1981; Taiwo, 1980).

Physical education therefore has the responsibility of contributing to the development of the fully functioning healthy individual . As part of the educational programme, physical education is one of the major contributors to the attainment of this wider goal . In meeting this challenge, physical education should provide the opportunity for each child to achieve his or her potential, not only in terms of the physical but also in terms of providing opportunities in which a contribution to the development of the healthy individual is made . Certainly each educational discipline strives to accomplish specific educational objectives, but in addition, each discipline works to develop the totally educated child (Fafunwa, 1974; National Policy on Education,1981, Ogbue,1981; Jenkins, Pious & Jewell, 1990, Nwigwe,1979).

As far as the situation in primary schools in Nigeria is concerned, children with special educational needs are not benefiting from the contributions that physical education can make to human growth and development due to lack of

participation . Teachers exempt SEN pupils from participating in physical education lessons as a demonstration of their sympathy to the conditions .they suffer from.

The teachers are unaware of the implications of their actions on the children's physical and social development . Many factors may contribute to the non participation of SEN children in physical education lessons and this is one of the areas of concern of this study. It is therefore desirable on the part of the researcher to identify what these factors are and to suggest possible solutions to enable the SEN children to participate in P. E. alongside their able-bodied peers. It is difficult to pin down one single remedy as there are several problems related to the integration programme in ordinary schools in Nigeria . These problems range from the type of training offered to teachers, the funding of special education programmes, the attitudes of members of the public to children with special educational needs and most importantly, the attitudes of teachers to SEN pupils' education in primary schools in Nigeria.

A great deal of human and material resources are constantly put into the training of teachers in Nigeria which makes the teacher trainers believe that such resources are enough to provide teachers with adequate knowledge and skills to carry out their teaching responsibilities effectively . However, most teachers go into schools without adequate knowledge and skills to support the programmes of integration in the primary schools . The irrelevance of teachers' initial training in mainstream education has been identified as the major obstacle facing the

implementation of a sound programmes of integration in Nigeria and in the Kaduna state in particular(Danyaro, 1990; Fasuyi, 1973) Teachers are now faced with new challenges in their teaching career as SEN pupils have to be placed in ordinary schools . It is therefore the responsibility of the federal government of Nigeria to ensure that teachers working with the SEN pupils have appropriate knowledge and skills to support programmes of integration.

There are some factors such as a lack of partnership between teachers and parents of SEN children on their education, lack of funding of programmes of integration, lack of facilities and equipment and unfavourable attitudes of teachers to the general programmes of integration in ordinary schools, which may delay the SEN pupils from experiencing the benefits of physical education.

These problems are of great concern to the researcher and indeed to all educators as they may affect the implementation of a national programme of integration. .

This study attempts to focus on the need to develop teachers' effectiveness in terms of their attitudes, skills and knowledge through a programme of in-service education and training. Such a programme of INSET may go some way to minimise the effects of these factors threatening to influence the implementation of programmes of integration in primary schools in Nigeria.

1.3 PURPOSE OF THE STUDY

It is important that the problems of teaching physical education to children with special educational needs attending ordinary schools in Nigeria be carefully identified and appropriate steps taken to provide the necessary solutions . It is interesting to note that both the Federal and state Ministries of Education have recognized the need to provide teachers with the appropriate training that could enable them perform their duties effectively . It is with this purpose in mind that the government has established a number of teacher training institutions in various parts of the country .

The initial training which almost all teachers in primary schools in Nigeria have received, has not provided them with the knowledge and skills needed to support a programme of integration for SEN pupils in physical education . This is due to the fact that no provision has been made in initial training programmes to enable teachers to develop the skills, knowledge, and attitudes required to accommodate the needs of SEN children in integrated settings . It seems that this lack of provision may have occurred because no one has thought that SEN pupils could be educated alongside their able- bodied peers in ordinary schools. It also suggests that the educational planners may have failed to recognise the need for children with special educational needs to attend ordinary schools, hence, the present curriculum is focused on able-bodied children.

But with advancement in knowledge and awareness of the nation's responsibilities to these children among the educationalists, efforts have been made to provide SEN pupils with similar educational opportunities as that provided to able-bodied pupils .

These efforts include the compulsory placement of SEN pupils in ordinary schools and the compulsory teaching of physical education to these children with special educational needs (National policy on Education, 1981) . This reflects a dramatic change in the government's attitude towards the educational programme of children with special needs and demonstrates the government's support for the mainstream education programme in primary schools in Nigeria . It appears that the children with special educational needs attending ordinary schools in Nigeria and in the Kaduna state in particular do not participate in physical education lessons as do their able-bodied peers. The National policy on education (Federal Republic of Nigeria, 1981) emphasizes equal educational opportunities for all its citizens, therefore, provision for all children including those with physical disability in particular may be required. One of the factors which may be responsible for the non participation of children with disabilities may be the lack of skills and knowledge of teachers to be able to teach them within a mainstream programme of integration.

This study therefore, attempts to improve teachers' skills, knowledge and attitudes through the introduction of an intervention in the form of in-service training. This intervention is designed to create greater awareness of need for the integration

of SEN children alongside their able-bodied peers in physical education lessons in ordinary schools in the Kaduna state of Nigeria.

In order to achieve these objectives, the following specific areas of intervention form the basis of this study:

1) To create an awareness of the needs of children with special educational needs in physical education among teachers in primary schools in Nigeria .

2) To provide opportunities for teachers working with children with special educational needs with in-service training to equip them with the knowledge and skills to support necessary programmes of integration in primary schools .

3) To create an awareness among the teacher trainers of the importance of organising in-service training to develop teachers' knowledge and skills in order to meet the new challenges that the placement of SEN pupils in primary schools might create.

4) To stress the importance of collaborative efforts among teachers, parents, and other professionals as an effective means of overcoming difficulties that may arise in the course of implementing the programme of integration in primary schools in Nigeria .

5) To identify some possible obstacles to the implementation of integration programme and suggesting appropriate steps to be taken to eliminate or minimise the effects of such obstacles .

- 14 -

6) To identify specific and appropriate skills for the teaching of activities in physical education for children with special needs in mainstream schools.

1.4 THE OBJECTIVES OF THE STUDY

The objectives of the study are :

1. To investigate the possible ways in which children with special educational needs could be integrated into the physical education lessons in ordinary schools in the Kaduna state of Nigeria.
2. To identify inadequacies in teachers' behaviour and practices that could be improved to increase their efficiency in teaching physical education lessons to children with special needs in mainstream settings.
3. To determine major obstacles to proper implementation of mainstream education programmes in physical education in ordinary schools in the Kaduna state of Nigeria.
4. To identify the In-service training needs of teachers in order to prepare them for effective integration in physical education lessons for children with special needs in ordinary schools in Nigeria.
5. To investigate areas of collaboration that exist between teachers in primary schools, parents and other professionals towards meeting the needs of children with special needs who are attending primary schools in Nigeria.
6. To determine whether the intervention of an in-service education programme designed to help teachers to integrate children with special educational needs into mainstream physical education lessons would be effective in improving the skills, attitudes and knowledge of primary school 'generalist' teachers.

7. To highlight specific areas requiring further research that could support the integration of children with special educational needs into physical education lessons in primary schools in the Kaduna of Nigeria.

1.5

RESEARCH HYPOTHESES

The following null hypotheses will be tested :

Hypothesis 1

There is no significant difference of opinion among teachers on In-service training programmes before and after the treatment variables have been offered .

Hypothesis 2

There is no significant change in the knowledge on integrational practice among teachers after the offer of treatment variables .

Hypothesis 3

Attitudes, skills and knowledge of teachers exposed to treatment variables will not vary significantly towards the integration programmes from those of their counterparts .

Hypothesis 4

The teachers who were provided treatment variables would not differ significantly in their opinion on obstacles to Mainstream Education than those who were not provided any treatment .

Hypothesis 5

Teachers who received no treatment variables would not show favourable attitudes towards maintaining collaboration with parents, and other professionals in Education than those who received the treatments .

Hypothesis 6

The teachers who were not exposed to treatments would not show significant interest in conducting further investigation than their counterparts .

SIGNIFICANCE OF THE STUDY

Several research studies have been conducted in developed countries regarding the possibility of educating the pupils with SEN alongside their able-bodied peers in ordinary schools . For example, Allsop (1980), Pasanella and Volkmer (1981) Gearheart and Weishahn (1980) conducted studies on the integration of SEN pupils into ordinary schools and found that the acceptance of these children by their non-disabled peers depends on their being academically able. Other studies, carried out by Cope and Anderson (1977) and Hegarty (1982), showed that integration of SEN pupils is possible in ordinary schools and their needs could even be met to a far greater extent than is currently the practice . A recent study conducted by Hegarty, et al. (1981) support the views of other authors earlier on the possibility of integrational practice in ordinary schools . As they observed :

special educational needs can be met in ordinary schools, and to a far greater extent than is currently the practice . There are many pupils in special schools at the moment who could be educated satisfactorily in ordinary schools, given the requisite commitment and resources (p.56) .

All the studies cited above help to demonstrate the possibility of introducing programmes of integration into ordinary schools. It is therefore, concluded that the integration of SEN pupils into physical education programmes in these schools in Nigeria could be successful if the requisite commitment and resources are in place.

In Nigeria, and indeed as in many of the developing countries, no formal efforts have been made on teachers' preparation towards the integration of SEN pupils into physical education programmes in primary schools .

What exists on paper is the government's educational policy regarding the SEN pupils but there seems to be no practical step being taken to demonstrate its commitment towards the implementation of this policy.

It is over 17 years since this policy was published by the Federal Government of Nigeria but it seems that the policy of training teachers to enable the practice of mainstream education to take place is yet to materialise. The results of test of opinions of teachers conducted by the researcher showed that a bulk of primary school teachers (87%) in the Kaduna state of Nigeria are yet to receive further in-service training as stated in the National policy on Education(1977). Mba's view (1993) on the government's policy towards the education of children with special needs in ordinary schools in Nigeria supports the point mentioned earlier. He remarks that:

One can say without any fear of contradiction that nearly every primary school in Nigeria has at least a sprinkling of learning disabled children. But practically nothing special is being done to help these youngsters(p.59).

This may be because they do not manifest overt physical or sensory disabilities such as blindness, deafness, or orthopaedic defects. It is hoped that before long, our special educators working with teachers in special schools will persuade our educational planners to initiate special arrangements whereby these special needs children are identified early, and subjected to intervention measures made available by special education.

This study emphasizes a practical approach towards meeting the needs of SEN pupils in physical education by introducing an intervention programme to improve the attitudes, skills and

knowledge of teachers toward programmes of integration in primary schools in Nigeria.

Although a lot has been done in the area of integration in many developed countries,(for example, the United Kingdom, Germany, Hungary, the United States of America, Canada) there seems to be little done, or known about integration programmes in primary schools in Nigeria. This study will cut across distinct fields in education (special education & physical education) and attempts to provide a 'bridge' that will link the various programmes in special education with those in physical education lessons. It is hoped that the opportunities created by this study may increase the participation of children with special needs in physical education lessons in ordinary schools in the Kaduna state of Nigeria.

The unique nature of this study may attest to the fact that no such study has been carried out in Nigeria and in the Kaduna state in particular, hence, the researcher's claim of its' originality.

Targetting the in-service training of teachers may create greater opportunities for children with special needs attending ordinary schools as it focuses on improving teachers' skills and knowledge.

The intervention, therefore, may demonstrate how important teachers are in bringing about a desired change in educational systems. The results of the tests conducted and reported in chapter 6 attest to the importance of the interventions employed in this study. Teachers in the comparison and experimental groups showed changes of opinions regarding their skills and knowledge during the post-test which suggests that the intervention may

account for this change. The constant negative response of the non intervention group (control) during both tests further demonstrates the impact of intervention provided.

CHAPTER TWO
REVIEW OF LITERATURE

2. Education for Children with Special Educational Needs

2.1 Introduction

An equal educational opportunity for all children including the SEN pupils has been welcomed by various governments, voluntary organizations and individuals in recent years, although such an attempt has not been without criticism from those who oppose the idea of practice of integration in ordinary schools. The children with special educational needs have been missing out of the regular school programmes as a result of neglect and unfavourable attitudes from members of the public.

Although reference is made to physical disability in particular in this review, the focus of this study is on all children with special needs attending ordinary schools in the Kaduna state of Nigeria. It seems unavoidable to make references to all cases of special needs because they all require special provision in ordinary schools. Secondly, it seems necessary to examine all cases of children requiring special educational needs because it has become compulsory to enrol these children in ordinary schools in Nigeria (National Policy on Education, 1981). Thirdly, every child reserves the right to be taught physical education (National Policy on Education, 1981), hence, the need to examine the literature related to other children.

This chapter is concerned with a general examination of the literature on children with special educational needs, parents'

reactions to programmes of integration and their involvement in the education of their children with special needs.

Chapter 3 provides an examination of the literature on physical education for children with SEN and particularly a discussion of aims, objectives, principles, and strategies for planning and implementing physical education lessons for children with physical disability.

In chapter 4, the roles of government, Missionaries and private individuals in promoting special Education programmes in Nigeria and the situation in the Kaduna state in particular are examined.

Many changes have taken place in special education following the Warnock Report (1978) and the Legislation which brought the 1981 Education Act into force in the United Kingdom. These were pre-empted in the U.S.A by the 1975 Education for Handicapped children Act (Brown & Jones, 1989) as described in the Public Law (P.L. 94-142). The emphasis is now clearly placed on need rather than handicap (Brown and Jones, 1988).

It is now commonly recognized that disability may result from physical, environmental or biological factors which prevent an individual from functioning effectively in physical education unless specialized intervention in the form of a modification of sporting activities, and adaptation of equipment are made.

The world programme for action on disabled persons regards handicap as a function of the relationships between disabled persons and their environment. Handicap occurs when an individual encounters cultural, physical or social barriers thus preventing him or her access to opportunities available to other

citizens (United Nations,1986). Thus modifications to environments of a physical or social nature may reduce the handicap but not the disability. For example, removing curbstones may make it easier for a physically impaired person to cross a road, or a prosthetic device which provides access to a computer terminal may improve the range of communication ability of an individual (Ryba,1989).

As a result of legislation, greater equality of educational opportunity for SEN pupils has been provided. This includes the opportunity to attend mainstream schools for their education rather than special schools. Examples of these are the USA Public Law 94-142 (1975) and the Education Act (1981) in the United Kingdom. Gearheart and Weishahn (1980) who feel that opportunities should be created for the handicapped children to receive their education in the 'Least Restrictive Environment', cited the USA's Public Law (1975) on education for handicapped children to state how this Law was designed to ensure that:

all handicapped children have available to them..... a free appropriate public education which emphasizes special education and related services designed to meet their unique needs, to assure that the rights of handicapped children and their parents or guardians are protected, to assist the states and localities to provide for the education of all handicapped children, and to assess and assure the effectiveness of efforts to educate handicapped children (P.20).

In developing countries such as Nigeria, such opportunities contained in the Public Law Act (1975) in the U.S.A are not available to parents and they are not able to get involved in decision-making process concerning their children's education.

The USA Public Law Act of 1975 (94-142), which emphasizes the provision of education for handicapped children in the least restrictive environment as stated in its' amended Education Law described as the Bill of Right for the Handicapped stressed that physical education must be taught to all children. This bill was designed to correct unfairness on behalf of handicapped children who were denied the opportunity to participate in physical education lessons. To demonstrate the importance of physical education to children with special needs, Goodman (1976) specifically mentions that Physical education must be taught to this group of children as provided for in the amendment bill of 1976, (93-380) . Thus,

Special education is defined to incorporate specially designed instruction to meet the unique needs of handicapped children. Specially designed instruction may include classroom instruction, instruction in physical education, home instruction and instruction for hospital and institutional application (p.12)..

The reference made to physical education is unusual in that, comments about special education appearing in Government legislations and textbooks usually focus on the Education and support services, and physical education is not generally regarded as part of the special education services. The intention of the U.S. congress was that physical education should be provided to all children with disabilities (Irvin, 1976), and the incorporation of physical education as part of the definition of special education was a strategy to ensure its provision for all exceptional children. In this regard, the U.S.A congress took a bold step to ensure the participation of children with disabilities in P.E. Although, no

similar Government effort has been made in this way in Nigeria, provision has been made in other areas to demonstrate the Government's concern for special needs children.

2.4 Integration of children with special Needs

The building of institutions for exceptional children in the mid-nineteenth century was fostered by strong optimism that the judgement and intelligence of mentally subnormal children could be dramatically increased by improving their sensory discrimination processes. This was initiated in France by Jean Itard's work with Victor, "the wild boy of Aveyron", in the early 1800s (Kauffman, 1982).

At this time, the education of severely disabled children was seriously neglected and the mildly disabled were either excluded from public schools or placed in segregated facilities or classes. The Public school system excluded disabled children on the grounds that they were "unteachable" and "harmful to others", or they pleaded lack of finances for special programmes. In the U.S.A, the compulsory school-attendance laws were enacted in many states as early as the twentieth century and it was extended to disabled children.

Special education programmes in the USA multiplied after World War Two. Initially, special education occurred in residential schools serving the blind, deaf, epileptic, crippled, and retarded children. A concern for individual differences in learning has been a relatively recent development, although some form of care for disabled persons existed prior to the new development. It is the

support given to schools and the past concepts of "protecting" exceptional children in sheltered environments that gave an insight into why parents of exceptional children sought special schools and classes for their children in relative isolation from the mainstream education programme. In the latter part of the 1940s and particularly in the 1950s the accepted model of education for the handicapped was in a separate school or class.

The research literature that relates most specifically to the mainstreaming movement deals with the mentally retarded. The 'efficacy' studies, as they were called, of the 1950s to 1970s questioned the academic value of special-class placement for the mildly retarded.

The classic study of Skeels and Dye (1939) had a tremendous impact on the public's attitude toward the retarded. This research showed that environmental stimulation had significant positive effects on the development of the retarded child as he or she has more opportunity of learning through the interactions provided.

Following World War II, democracy came to mean "Freedom from fear and want". Parents formed specific groups to fight for better conditions for their handicapped children. One of the most powerful parents' groups within U.S.A was the National Association for Retarded children (later changed to National Association for Retarded Citizens). They lobbied the United States legislators to make special provisions for their children and this resulted in the reimbursement to local schools districts for the "excess cost" incurred for educating the disabled child. From the end of World War II to the 1980s, this excess-cost provision had

enabled programmes for the handicapped to gain public acceptance because of their awareness of the rights of these children to equality of education

Special classes and special facilities flourished during the 1950s and 1960s particularly in urban areas. With this growth, began the publication of a whole array of educational research on exceptional children and this ranged from child development, applied behaviour analysis, instructional technology, perceptual-motor development, specific educational areas (e.g. vocational education), the research literature of special education, curriculum materials to delivery systems for the handicapped. Studies^{also} conducted on Sociometric and efficacy of the comparative effects of integration/mainstreaming placement of the mildly retarded raised the question of the desirability of the unrestrained growth of separate special education programmes. These two types of studies resulted in contradictory conclusions.

Sociometric studies produced similar results between the 1950s and 1980s. Mildly handicapped children appear to be less accepted, more isolated, and more actively rejected than non-handicapped classmates when educated in mainstream schools (Goodman, Gottlieb, and Harrisonm, 1972; Gottlieb and Budoff, 1973; Scranton and Ryckman, 1979). These studies were reported to show that children in special classes have a lower self-esteem, lower achievement expectancies and restriction of social role models due to the stigma attached to special class placement.

In contrast, efficacy studies showed that some mainstreamed children fared better academically than similar

children in special classes. But these studies were criticized for using poor research methodology (Keogh and Levitt, 1976; MacMillan and Becker, 1977; Robinson and Robinson, 1976). One unfortunate result of the studies was the unwarranted assumption that all handicapped children should be placed in the mainstream (Berry's Call in 1972 for the wholesale return of the handicapped to regular classrooms).

In Germany, the educational policies for all children and for the handicapped children in particular are desirable. The legal basis for special education programmes is similar in all Federal states. The right to education and training is laid down in the individual constitutions of the Federal states and set out in the various educational laws. Compulsory school attendance extends to handicapped children and adolescents. The policy in all Federal states is, wherever possible, for handicapped children to be in the ordinary schools. Special schools, however, are provided when considered to be necessary.

Special schools are designed to provide education and training for children and young people who are capable of attending school, but because of a particular physical, mental or psychological difficulty are not able to take advantage of ordinary school facilities.

As part of their continuous assessment of children in special schools, there is a gradual transfer of many pupils into ordinary schools as part of a process of integration. In the last decade the question of the integration of pupils with special needs in the Federal Republic of Germany has become more important in

ordinary schools(O'Hanlon,1993). In eight Federal states, first steps have been taken to educate handicapped children in ordinary schools. In Four of these states, integration projects have developed to such an extent that parents of handicapped children have the right to decide whether their child should be educated in a special school or an ordinary school. The recognition of rights of parents to make choice is vital to soliciting for their support in integration programmes.

It is important to note as well, that the various groups of children identified as having disabilities(the blind, deaf, mentally handicapped, physically handicapped, learning disabled, impaired hearing, impaired vision, impaired speech, behaviour problem and health problem) have separate schools^{to} attend and are given all possible assistance(O'Hanlon,1993; Pijil & Meijer, 1991).

Recent research studies

The most important research of the last two decades that has productively expedited mainstreaming has been in two areas: differentiated programming and functional non-categorical approaches to educating the exceptional child. The research questions are rightfully being re-phrased to ask, what specific programme delivery systems and methods of instruction will affect the exceptional child's learning satisfactorily?

Differentiated programming has focussed on environmental and child factors. Preparation of the mainstream learning environment has been one effort. Wang and Birch (1984, 1984) describe the development of the Adaptive Learning Environment Model and

Chalfant, Pysh and Moultrie (1979) recommend the building-based- teacher assistance teams that takes the responsibility of planning and and implementing collaborative and team works between general educators and specialists.

Differentiated programming for children has recently focused on learning strategy instruction, an approach which has specifically tried to increase the children's preparation for success in knowledge and information. Alley and Deshler (1979), Flavell (1979), Archer (1979) and Meichenbaum (1980) have provided guidance in identifying skills and strategies that may support children in effective learning in the mainstream settings.

Empirical support for integration has been evident in the results of various efficacy studies which have attempted to compare the academic, behavioural and social performance of children with special educational needs with their performance before being mainstreamed in ordinary schools (Budoff & Gottlieb,1976; Guerin & Szatlocky, 1974;). The results of these studies show that children with disabilities can benefit from mainstream educational programmes.

These results also provided some backings in form of legal, financial and social support to integrated education (especially from U.S.A, U.K. Canada and Germany) where it has been shown that children with disabilities are likely to appear increasingly in ordinary schools. An aspect of mainstream education which has received little attention as compared to administrative, organization and instructional concerns, are teachers' attitudes and competence.

This is one of the areas of mainstreaming practice that needs action in order to assure parents that their children can participate in school activities safely, especially in physical education. This is one of the reasons why this present study is concerned with developing primary school teachers' knowledge, attitudes and skills in order to support integrated education in Nigeria.

2.3 Teacher attitudes to programmes of mainstream education.

Studies carried out in the past have attempted to relate teachers' attitudes towards the practice of mainstreaming to teacher-related variables such as sex, age, level of education, years of teaching and number of courses in special education, with little conclusive results (Harasymiw & Horne, 1975). The results of the studies have shown that teachers' attitudes varied as a function of stereotypic perceptions of specific labels (Foster, Ysseldyke, & Resse, 1975; Shotel, Iano & McGettigan, 1972). But other studies carried out on teachers' attitudes and competences have shown both positive and negative impacts on integration programme (Bradfield et al., 1973; Harasymiw & Horne, 1975; Higgs, 1975; Shotel et al., 1972). Much research evidence is also available to support the fact that while staff who are most distant from children have generally positive attitudes toward integration, those closest to them, have mixed feelings and a higher incidence of negative attitudes (Gickling & Theobald, 1975; Guerin & Szatlocky, 1974; Keogh & Levitt, 1976; Macmillan, Jones, & Meyer, 1976; Meyers, Sundstrum & Yoshida, 1974).

Because of the mixed results in these studies on teachers' attitudes to integrated education, there is need to conduct regular examination of teachers' attitudes in order to provide training that may offer improvement which is essential to achieving success in mainstream education.

It seems quite reasonable to expect that teachers' variables such as age, sex and marital status influence their attitudes toward integrated education but the studies conducted by several authors have shown that these variable have no significant impact on mainstreaming of children with disabilities(Kennon & Sandoval,1978; Ringlaben & Price, 1981;Stephens & Braun,1980). The studies confirmed that demographics do not predict teachers' willingness to integrate children with special needs, but knowledge about SEN pupils and frequent interactions with them could help to develop positive attitudes that may support mainstream education (Mandell & Strain, 1978; Ringlaben & Price,1981; Stephens & Braun, 1980; Williams,1977). The results of these studies also suggest that specific course content offered to teachers may help to improve their attitudes toward integrated education.

In developing attitudes, Mandell and Strain (1978) recommend that courses and workshops which focus on identifying the learning problems of SEN pupils should be provided because they are significantly related to positive attitudes and behaviour management of teachers.

Advanced degrees also seem to be an important factor in determining teachers' willingness to teach children with special

needs (Hudson, Graham & Warner, 1979). Teachers with advanced knowledge about SEN pupils are more positive about adapting and locating materials to the programmes of SEN pupils than others because of their skills in teaching children with special needs (Larrivee & Cook, 1979). On the relationship between teaching experience and attitudes, there has not been enough evidence to support the claim that positive relationship exists between these variables which might support mainstream education programmes (Stephens & Braun, 1980). The only relationship that was found between these variables (attitudes & teaching experience) was an inverse relationship (Mandell & Strain, 1978).

Teachers with more than seven years of teaching experience had lower expectations for children with special needs than those teaching for less than seven years (Gillung & Rucker, 1977).

While one may emphasize the importance for teachers to develop adequate skills, knowledge and positive attitudes toward the implementation of mainstream education, it is necessary also to demand understanding and support from the school administrators (Guerin & Szatlocky, 1974; Moore & Fine, 1978; Mandell & Strain, 1978). This is in recognition of the contribution they may make towards success in mainstream education programmes.

2.4 The Development of Mainstream Educational Provision for children with Special Educational Needs in the West.

For further discussion on the development of educational provision for children with physical disability in ordinary schools, it is considered necessary to examine the various concepts of integration and what it involves to advocate for the placement of children with physical disabilities in ordinary schools.

The Concept of Integration

Booth and Potts (1983) define integration as: the process of increasing the participation of children and young in their communities. Integration is most commonly applied to the bringing up of handicapped children from segregated special schools into the ordinary schools....(P.1).

Booth and Potts (1983) also emphasize that integration does not only mean meeting the needs of those referred to as physically, socially, culturally disadvantaged and mentally retarded but also the needs of anyone whose needs and interests cannot be adequately met in ordinary schools . Furthermore, the Centre for Studies on Integration in Education (CSIE,1990) provides a definition of integration as :

..the process of increasing the participation of children, young people and adults in the educational, social and recreational life of mainstream schools, whether as consumers or providers. This process represents a long-term enrichment of the quality of life for all whatever their abilities or disabilities (P.16).

According to this definition, integration prepares both disabled and non-disabled peers for the quality of life they will be exposed to after leaving school. It is better for these children to understand each other well which would in turn provide them with the opportunity of appreciating individual's problems and may offer help when the need arises.

Integration is not simply a question of placing children with special educational needs in mainstream classes. New roles are required, which are often associated with the extension or improvement of the services offered to SEN pupils while staffing provision must be set at a level to allow for the services to be carried out.

It is important to note that Canada places great emphasises on the concept of equal educational opportunity for all children and attempts to provide for individual differences. Since 1970s, there has been a trend to integrate "special needs children"(between 5 to 10 per cent of all school- age children) into regular classrooms. This often requires considerable adjustments in both curriculum and teacher training because of the diverse groups that fall into the category of children requiring special needs(Husen & Postlethwaite, 1994). It is interesting also to note that these children are directed into enriched or accelerated educational programmes that may meet the needs^{of} physically handicapped, learning disabled and academically gifted children attending ordinary schools.

Integration embraces a wide range of professionals such as educational psychologists, speech therapists and physiotherapists

who have shown some interest in working with SEN pupils. Teachers working with SEN children require the support of these professionals in order to be able to meet the special needs of these children attending ordinary schools.

Integration requires new ways of working on the part of many professionals. There is a need to collaborate with colleagues in sharing information, viewing pupils' problems together, providing skills and generally moving towards an inter-disciplinary mode of working.

These new ways of collaboration have to be developed in the context of staff shortages which may be exacerbated by the demands of integration programmes (Hegarty, Pocklington, & Lucas, 1981).

Integration also involves educating pupils with special needs in buildings that must cater for all pupils. To ensure this, the buildings must be adapted to accommodate the needs of those with disabilities. This means that ramps should be constructed in all the passages, appropriate toilet facilities provided within the buildings while swing doors must also be provided to enable those on wheel chairs to have access to all facilities (Higgins,1987).

Integration involves the development of a comprehensive curriculum that represents the interest of both the disabled and non-disabled children alike (Mba,1991). It is important to distinguish between the entire curriculum of a school and the effective curriculum for pupils with special needs from which their programmes of work are selected.

An integrated curriculum rests on two opposing principles; giving the pupils the same or similar access to the curriculum as their peers and providing appropriate help to meet their needs in the learning environments (Adedoja,1984). It calls for the development of an all purpose curriculum which serves both the disabled and able-bodied children in ordinary schools, and there is a need for staff of both special and normal schools to work together.

An Integration programme involves providing numerous opportunities for interaction between pupils with special needs and their peers at the different stages of the school day which Hegarty, et al., (1981) suggest could be;

before and after school; assembly; registration and form periods; classroom; lunch; and curricula activities (P.516).

These are some of the opportunities that may be made available but it must not be taken for granted that sheer physical proximity automatically leads to meaningful interactions.

Integrated programmes involve partnership work with parents. It is understood from the survey of parents' opinion carried out by Hegarty, Pocklington and Lucas(1981) in the United Kingdom, that many parents wanted their children to be educated in ordinary schools but they expressed concern about the safety of their children. Many parents would want to play an active part in educating their children both at school and at home if only their co-operation was enlisted and they were given meaningful and feasible tasks.

On this note, Marra(1984) stresses the importance of parents' involvement in the education of their children while the Warnock Report re-affirms the need to get the parents involved if integration is to be successful . The report states :

We have insisted through this report that the successful education of children with special needs is dependent on the full involvement of their parents, indeed unless parents are seen as equal partners in the educative process, the purpose of our report will be frustrated (DES, 1978, 9.1).

Equally, much has been written about maintaining close relationship between the home and school in order to enhance children's educational progress(Donachy, 1976; Lynch & Pimlott; 1976; Pugh, 1981). The knowledge of what integration entails, enables the teachers, school administrators and other educational planners to make adequate arrangements regarding the implementation of the programme thereby ensuring its success in ordinary schools.

Successful integration of children with special educational needs in physical education in ordinary schools depends primarily upon adequate planning, efficient resources and teachers' full commitment to the programme. A school in which teachers work in an integrative and co-operative way is more likely to facilitate pupil learning.

A critical factor in the choice of a 'suitable' location is the responsibility of school Head teacher. The place that any new provision will occupy in a school will depend on the Head teacher's understanding of it, and commitment towards it. The Head teacher is in a position to provide new development within

the school, which can be done by negotiating with outside agencies, allocating resources internally, shaping staff attitudes and generally facilitating its' growth in the early days. Apart from this, there is need to consider the issue of placements. Provision should be made for children with special needs to be enrolled into schools near their homes to enable them get to their respective schools without the problem of transport.

Once the issue of location has been adequately resolved, the commitment of the Head teacher towards this programme has to be firmly secured. It is important that the Head teacher should be sympathetic to SEN pupils and committed to integration. He/she must be prepared to provide the resources that would lead to the execution of the programme but this responsibility should not be left entirely to the Head teacher or the specialist teacher, in the school.

The quality and attitudes of school staff should be considered. They must be prepared to accept these children into their classes and be prepared also to work co-operatively with the specialist teacher(s) (The Warnock Report,1978; Mittler & Mittler, 1982; Hegarty, Pocklington & Lucas, 1987). Also, if the children with special needs are fully integrated, the specialist staff should be fully integrated in terms of teaching the non-disabled children as well as their disabled peers. The staff should have a positive approach towards meeting the needs of SEN pupils.

It is important that the specialist teacher should have responsibilities beyond those for the disabled child in order to

prevent any resentment which might cause integration to fail in some schools.

Integration involves working together as a team. The organization of the school needs to be flexible with its programmes in order to accommodate children with special educational needs. Team teaching or co-operative teaching is desirable. Where teachers work co-operatively, sharing ideas, using their strengths to full advantage, and are used to meeting the individual needs of the child in small groups, then the specialist teacher can slot in easily, working alongside other teachers and supporting the children in their care (Wade & Moore, 1987).

Integration involves establishing cordial relationships between the school and home. The first level of this co-operative organization has to do with the liaison between school and other agencies such as educational psychologists, physiotherapists and medical personnel (Wade & Moore, 1987). Other strategies may lead to successful integration of SEN pupils into a Physical education programme and other programmes of the school. For instance, it should be noted that there is a difference between integration which comprises of pupils being transferred from a special school which may be regarded as a means of enhancing their education and where it entails making full-time provision for pupils within an ordinary school, irrespective of how this is actually achieved. The choice of the type of integration plays an important role in the choice of location(Wade & Moore, 1987).

The advantages for all children in a situation where there is co-operation between the two environments are very well documented (Mittler & Mittler, 1982; Hegarty & Pocklington with Lucas, 1981). It is important that appropriate attitudes are cultivated and schools may need to take the initiative in allaying the fears and suspicions of parents about the intentions of the school. Parents should be made to understand that children with special needs are not treated as being different but as children of the same school working together, appreciating and accepting one another in their learning environments (McConachie, 1982; Smith, 1982; Mittler & Mittler, 1982).

It is intriguing to note the good relationships that have been developed between the school organisation and homes in Hungary. As soon as the diagnosis of motor disorders is confirmed it is the duty of the District Physician to notify the child's name to the National Directory of Motor Disorders kept by the Peto Institute in Budapest. The first stage of provision is ^{the choice of} to consider parents' school, ^{where} advice and guidance on how to respond to and play with the motor-disordered child ^{may be provided.} Hari and Tillemans (1989) describe the kind of relationships that exist between parents of disabled children and the school in their remarks:

Conductive Education begins with parents. They usually come to us when the child is young and they are disoriented and don't know what to do. The first thing to do is to work together with the parents and prove to them that they can do something for their child and that their child is the same as other children.....They then begin to stop thinking that it is a shame to have a child with cerebral palsy and they don't close themselves up against the child any more. They become motivated (p.172).

Maintaining partnerships with parents seems to be an effective way of helping both the parents and their disabled children in overcoming problems of educating these children in ordinary schools.

Some parents of children with disabilities showed some concern about their children missing out of activities in ordinary schools and at same time feeling worried about what would happen to them when admitted. Many who decided to enrol their children in mainstream schools have realised that their children have showed some improvements while others were disappointed because their children did not improve as expected. In the following paragraphs, parents' reactions to special education programme are described.

2.5 Parental Attitudes to Special Education Programmes

Parental attitudes could have significant impact on several aspects of a child's life ranging from values, discipline, tolerance, mode of dress, respect for others to accepting responsibilities. How a child copes with frustrations, disappointments, emotions and self concept regarding his disability depends greatly on experiences within the family cycle. All parents want a perfect child, but what happens when our expectations cannot be fulfilled; when our child is born with deformity or got it through accident?

How a child reacts to this situation depends so much on the reactions of the parents (Davies,1983). Howarth (1987) conducted a survey of parents' feelings and reactions to integrated education and found that two out of sixteen interviewed had unfavourable

attitudes toward the programme. This was not because they did not believe in the success of integration but because their children placed in this programme had more severe cases that cannot be handled in the ordinary schools. A Similar survey carried out by Howarth within the same period, showed the positive effect of integration on their children (Howarth,1987). Examples of comments from some parents regarding the success of integration as stated by Howarth (1987) are as follows :

- 1 casual friendship developing between their child and other school children, which they felt signified the acceptance of their child as just another child and not as a handicapped (P.39).
- 2 on transfer from special school to mainstream school, within a term, she noticed her child developing a more helping outgoing personality and a greater spirit of confidence (P.39).
- 3 by the end of his first term at school, we could just not believe he was the same child. His self esteem had grown in "leaps and bounds", and he was much more lovelier (P. 39).

Other parents who earlier expressed some fears about their children being teased and jeered at, now showed some confidence and learn to accept the placement for their children. For example, Wolfendale (1987) cites comments from a parent about the contributions of integration programme to his child's life;

The scheme has helped me as much as my child. I have met several people. My child seems confident about going to school (p.18).

while Hegarty, Pocklington and Lucas (1990) cite similar remarks by some parents regarding the gains of integration;

She stands up for herself more now (p.483)

We don't think it's right to segregate.....they're going to have to get on with the public (p.483)

Not only is Joanna benefiting but the other children are gaining in appreciation(p.483).

These comments though not comprehensive enough to represent the opinion of parents of a larger population, they showed some awareness of the need for the integration programme in ordinary schools.

It is also worth referring to views of individuals, groups and organizations on integration although they have not been identified as parents of SEN pupils in this study. Their views were given on the success and failures of the existing practice of integration which accounted for their approval and disapproval of the programme respectively.

The Vernon committee (1972) on the education of visually handicapped in ordinary schools provides its firm support for the integration of these children in ordinary school.

The report states that :

..if visually handicapped children are to be fitted through their education to live in the world with sighted people, the best way for them to acquire the necessary ability and confidence is to mix as freely as possible with sighted children during their school days.....a visually handicapped child needs to be in the same school as they are (DES, Para. 5.30).

The Organization for Economic Cooperation and Development (OECD) Report (1981) on education of the handicapped adolescent maintains that whilst there are many who agree in principle with the aims of integration, there are divisions of thought in terms of practical objections concerning its implementation to the extent that :

Some of them see the social objectives of integration as incompatible with providing high quality special education for children with disabilities and significant difficulties. Others see the degree of differentiation required of ordinary schools as impossible to achieve.....
(P. 139).

A similar criticism of integration was given by Fitzherbert (1982) in her article on "School health services and their role in the integration of children with physical impairments into the ordinary schools". She remarks that focusing on the needs of children in mainstream setting would be :

Unacceptable to Board of Medical Association (BMA) because it would upset the present balance of Medical Power (p.203).

Bookbinder (1983) argues that both special and ordinary schools are not equipped to meet the needs of children described as having special educational needs . According to him/her;

The concept of special educational needs with its accompanying assumption that such needs can be adequately met in our present education system is thoroughly unrealistic and is likely to lead us astray
(P. 207).

These criticisms reveal that there are still more people who believe that integration of SEN children into ordinary school

remains an illusion and such groups need to be convinced of the practicability of the programme.

Sarason and Doris (1978) point out that special educators at that time viewed any effort to integrate the mentally retarded into mainstream education as unrealistic and probably not in the best interest of the disabled individual. This attitude of parents and special educators which supported the development of segregated facilities and classes changed with time. Mainstreaming and integration of special needs children into the normal school programme was seen to be an alternative approach to the education of children with special needs.

There seems to be some improvement in the attitudes of members of society towards children with disabilities, but as reported by the USA President's Committee on Mental Retardation (1976), the negative attitude of people is still far from being over and consequently,

....the task of public enlightenment
is far from finished (P.635).

The careful inclusion of the "different" child in the ordinary school programmes may provide the exposure and experience that could lead to the development of more realistic positive attitudes by the public. Although empirical support of this position is limited and conflicting, Shearer (1974) conducted an investigation into the effects of integration on educable mentally retarded (EMR) and found that:

...integration of educable mentally retarded students into the regular classes and social recreational activities will, on itself result in more positive rating of EMR children by non retarded children (P.681).

If more positive ratings can be equated with more positive attitudes, then, the integration of children with disabilities into the regular school programmes of the non disabled pupils may have the potential for shifting favourable societal attitudes toward the deviant child.

Hartup (1970) suggests means of developing positive attitude towards children with special educational needs attending ordinary schools which must be based on our knowledge about the effects of peer interactions.

Peer interaction according to him is an accepted phenomenon and its importance towards shaping the societal attitude towards children with disabilities cannot be over-emphasized. This was reiterated when he stated that:

...direct reinforcement from peers is a potent form of social influence during childhood. The effects of social influence are evident in very early childhood (P.429).

Apolloni and Cooke (1975) extend this position by arguing that peer play or an interaction may be essential to the growth and development of the young child but emphasized that peer interaction may have such influence only when children are given the opportunity to have contacts with each other. Of equal importance to the peer's view of the disabled child is the child's view of himself as a disabled person. Conflicting evidence exists regarding a child's self image based on placement in a regular or special class (Guskin, Bartel and Macmillan, 1975). A child's attitude about himself might be enhanced by placement with the non- disabled children as long as the developmental level rather than chronological age takes precedence in all considerations.

Having considered the opinions given by individual parents and some organizations regarding the integration programme, it is important to consider the role parents can play in the education of their disabled children in ordinary schools.

2.6 Parents Involvement in Education of their Children.

It is important to note how the research and advocacy of the 1940s through to the 1970s affected upon the next influence on mainstreaming in the USA litigation. By the early 1970s, there was a general dissatisfaction with the special education services provided, or the lack of services available, to the exceptional learner. Advocacy groups like the National Association of Retarded Citizens, the Association for Children with Learning Disabilities, and United Cerebral Palsy group, became more insisted in lobbying, and showing more concern about the effects of labelling on their children.

The stage was then set for parents to advocate for fairer treatment for their children with disabilities and this led to series of court actions. For example, Brown versus the Board of Education (1954), Pennsylvania Association for Retarded Children (PARC) versus Commonwealth of Pennsylvania (1971), Mill versus Board of Education (Washington DC) in 1972, and Rowley versus Board of Education (1982), resulted in a change of attitude towards mainstreaming programme for children with disabilities. Turnbull and Turnbull (1986) point out that the impact of the Rowley case led the American Congress to accept that children with disabilities must be educated alongside their able-bodied peers and this was reflected in the Public Law Education Acts of

(1975) . Parents are considered the biggest single factor that can influence the lives of their children (Daly, et. al., 1989) and therefore, they cannot be neglected in situations where matters relating to their children's education are being discussed. If any success is to be made in the education of children with special educational needs, we must always seek the partnership of parents. The involvement of parents in education of their children is one of the areas of dispute between principle and practice.

In the past it has proved difficult to practice such relationship though it was agreed in principle. But it is widely accepted in most places that parents have significant roles to play in the education of their children with special needs and therefore, should be accorded the position of equal partnership (Hegarty, Pocklington, and Lucas, 1981). Parents could serve in several capacities in the school programmes, for example, serving in the school governing council, members of Teachers/Parents association and could even be invited to school to share their views with both teachers and administrators on school programmes that are of great interest and concern to them.

A lot has been written about the issue of regarding 'parents as partners' in special education programme by professionals in Education. Mittler & Mittler (1983), McConkey(1985) Lunt & Sheppard (1986) all emphasize the need to improve the relationship between the school and the home; and the establishment of such relationships where none exist, in view of its' importance to educational development. The Warnock Report of 1978 shows its' support for positive relationships between the

teachers and parents in order to promote the education of SEN pupils.

The importance of developing professional relationships not only with parents but as well as other professionals who are working with SEN pupils was also stressed as a way forward in the development of education of SEN pupils attending ordinary schools (Mittler & Mittler,1983; Wolfendale, 1986; Thomas, 1986).

Pugh (1987) in her own contribution to the on going argument on whether parents should be involved in education of their children or not, provides a useful breakdown of dimensions and described the different ways parents relate to school services which demonstrate their importance in education. This attempt offers some insight into the notion of partnership within the context of parents/professional relationships. As Pugh (1987) outlines :

Non - participation ____ where parents are unlikely to be involved or do not participate for whatever reason.

External support _____ where parents support from outside' e.g. fund raising activities, attending school social functions.

Participation ____ where parents participate under the supervision of professional staff in any variety of ways e.g. providing extra pair of hands, serving the group by mending toys, decorating buildings, running mother and toddler groups, toy library.

Partnership____sharing of power, resources, knowledge and decision making between parents and professionals.

Control _____ where parents both determine and implement decisions and are ultimately responsible and accountable e.g. in community play groups and nurseries, mother and toddler groups and in some voluntary organizations (P.97).

It is clear that different, sets of partnership may result (as described above) from differing perceptions of roles and underlying assumptions about the rationale and desirability of parental involvement and rights. However, despite several attempts at defining partnership and its importance to educational development of SEN pupils, some teachers have described the efforts as vague and cannot be pursued in any way (Mittler & Mittler, 1983).

But contrary to teachers' feelings about the development of partnership with parents, Moses and Croll (1987) state that the idea is almost gaining acceptance owing to awareness of its importance in education . As they observed;

The idea of 'parents as partners' has come nearest to fruition in the case of children with severe learning difficulties (P.67).

Indeed, the parent/professional relationship in 'portage' is frequently taken as a good example of partnership that is advocated by many authors in education (Philps and Jones, 1985; Pugh,1987; Wolfendale, 1985) while it has been stressed that partnership with parents and other professionals enhances children's educational progress particularly those that have been described as having special needs (DES,1977,1978; Donachy,1976; Lynch & Pimlott,1976; Pugh, 1981; Cohen & Cohen, 1986). Sigston (1985) describes 'portage' as :

a system intended to help parents to teach their handicapped child at home on a daily basis. It involves a trained home visitor calling on the family on a weekly basis and working with parents and child (p.9).

The above definition explains the need for the school and home to work together in order to support the special needs child in mainstream setting.

Mittler and McConachie (1983) produce a comprehensive document supporting the fact that parents have a lot to do at school in assisting SEN pupils and emphasized that parents should be encouraged to take active part in the school programmes that may be of great benefit to their children.

The rationale for "parents as partners" in special education is something worth striving for since it has always been primarily concerned with maximizing the child's potential and compensating for his or her difficulties (Mittler & Mittler, 1983; Wolfendale,1986; Ainscow,1989;). The model presented by the medical group emphasized that if the logical and moral development are of basic necessity, then, there is need to enlist the parents co-operation with the professionals to improve the child's educational development.

When demand for partnership with parents received great support in 1978, Mittler (1978) made the following comments to support the idea of establishing collaboration with parents :

No matter how successfully a child is taught in school the effort is largely wasted unless systematic steps are taken to help the child's use and apply his learning in his own home and in all other real life settings in which he moves. The collaboration with parents is indispensable for this purpose (P.10).

Parents should be treated as partners in educational matters particularly in the areas of assessment and decision-making. The school does not depend only on teachers' assessment to make valid decisions about the child but would also need some information from the parents of the child so that a comprehensive plan which focuses on meeting his needs may be drawn. Parents could be taught how to assess their children through the existing cooperation between the school and home.

Parents should be given the opportunity to learn and understand the day to day management of their children and should also be given specific support, for example in the area of therapeutic procedures (e.g. physiotherapy, speech therapy, behaviour therapy) in order to give the same treatment at home and to allow continuity. Tomlinson (1981) stresses the importance of involving parents in the assessment of their children when he stated that :

successful care within the family would be much easier if the potential contribution of parents to assessment and therapy were more widely recognized and welcomed (P.286).

The Education Act of 1981 (U.K.) formalizes the rights of parents to be involved in decision making about their children's education. However, the Education Act emphasized that as soon as a child is enrolled in the school, the question of collaboration between the parents and teachers would be a matter of good practice rather than legislation.

A model for parent involvement adapted by Hornby (1989) from Kroth(1985) and Lombana (1983) shows what the parents

can contribute towards their children's education and what they need from professionals. Parents can provide information, resources and leadership in certain areas but they need to be given the opportunity.

It is interesting to note that teachers in the United Kingdom over the last 20 years have become aware of the need to work more closely with parents of children with special educational needs (Hornby, 1989). Parents have been identified as playing significant role in the school by assisting their SEN children in reading (Topping & Wolfendale, 1985) and behavioural training (Topping, 1986). Hornby (1989) suggests a comprehensive theoretical model that may guide teachers in setting up successful parent participation programmes. This model consists of two pyramids which represent hierarchy of parents' needs and strengths. These pyramids demonstrate different levels of needs and strengths of parents. It is therefore, the responsibility of the professionals to use their time and expertise to identify what parents actually need in order to make their contributions to the educational programmes of their children.

Parents' strengths are shown in the information they hold about their children which are vital to educational planning and development for their children. The information includes, child's strengths, difficulties, likes and dislikes, and case history of the child's health (Hornby, 1989; Seligman, 1979). Hornby also pointed out that although a number of parents are willing to provide support to the teachers in an effort to educate their children, some remained uncommitted to this excellent idea.

Teachers require the skills of working with parents in a flexible parent-professional partnership (McConkey, 1985; Mittler & McConachie, 1983) if SEN pupils are to benefit from the integration programme.

Apart from providing information about their children, parents may as well have the time and ability to act as voluntary teacher aides, assisting in the learning environments and preparing teaching aids or providing resource materials. Some parents can also provide good leadership in in-service training for professionals through writing about their experiences (Featherstone,1981, Michaelis, 1980, Seligman, 1979) which may subsequently lead to improving the training programmes for teachers who are preparing to work with SEN pupils (Hornby, 1989).

In order to gain from parents' participation in the theoretical model as suggested by Hornby (1989), the needs of these parents need to be considered. These needs include, maintaining regular communication, informing them on regular basis about their children's performances, providing guidance to enable them to deal with their children's learning difficulties or behaviour problems at home (Hornby & Murray, 1983) and providing counselling services to enable parents to cope with their children's disabilities (Seligman, 1979; Harris,1983; Hornby & Singh, 1983; Luterman,1979; McConkey,1985; Seligman,1983; Simpson, 1982; Topping, 1986).

While contrasting styles of parental involvement have been reported by several professionals working with children with

special educational needs, there is little reported on the actual practices based on national surveys (Barnes,1979; Robinson,1979; Ward,1979) to show how successful the practice has been. More recent writers (Smith,1980; Tomlinson,1981) have shown that teachers could be blamed for lack of parents' participation in their children's education because they do not take parental involvement seriously.

Given this backgrounds, relationships between teachers and parents are bound to be strained, thus making it more difficult for parents to make any meaningful contribution towards the education of their children. In a situation where the interest of the pupils is not given serious consideration, the children can not be expected to gain much from their placement in ordinary schools .

A collaborating effort is needed to achieve the goals of mainstreaming in physical education in ordinary schools. The collaboration could be possible between the school and home, while consultations are made with other professionals (physiotherapists, medical personnel, speech therapists) who are within and outside the school environment. The purpose of this, as outlined by Brown and Prideaux (1988) is to:

- a) show that an initiative such as this, is possible, if the Head teacher and other staff consider P.E. in the development of the child as being of equal value and importance with other areas of the curriculum.
- b) show that the permutations relating to professionals involved can and should be flexible depending on the confidence and capacities of the teachers and parents; as well as the extent and nature of the movement learning difficulty in the context of the home and school environments;

- c) show the potential of this form of educational practice as being of long term benefit to the children (P.188).

To achieve these stated objectives, efforts are required to be directed towards a discovery approach. Children with special educational needs should be exposed to various forms of activities through which they discover which of the activities they are likely to participate in and enjoy themselves. The importance of parents working with the teachers to support these children's participation in physical education cannot be over-estimated (Brown & Prideaux, 1988).

A good example of practice of partnership between parents and professionals exist in ordinary schools in Canada. Here, parent-to-parent schemes are support services for parents of children with special needs. Support is provided by a team of volunteer parents who themselves have children with similar needs. Enlightened professionals have long been aware of the value of putting parents in touch with one another. A parent-to-parent scheme simply develops this form of contact in a more organised way, and provides a form of support which is complementary to that offered by professionals.

Typically, parent-to-parent services operate as a telephone contact helpline. Schemes are advertised by means of leaflets, or posters put on notice -boards in places where parents are likely to see them, such as libraries, hospitals, post offices and schools. Parents seeking contact ring the helpline telephone number and are put in touch with a support parent who has a child with similar disability (Hornby, 1988; McConkey, 1985). Parents have

important roles to play in the education of their children if only such opportunities are offered.

CHAPTER THREE

3.1 Physical Education for Children with Special Educational Needs in a Mainstream Education setting.

The implication of the 1981 Education Act in the United Kingdom means that more pupils are entering mainstream education who may, to a greater or lesser extent, be impaired in their movement capacity in relation to their peer group. The new challenge facing the physical education profession is to integrate the a typical children into physical education lessons and ensure that they are not only successful but feel that they are being successful. These children have a right to receive physical education appropriate to their unique disabilities and in the 'least restrictive environment.' If ever there was a case for a child-centred education it is now, and the teaching of physical education must become even more oriented towards individualised instruction.

We cannot expect children with movement problems to achieve the same levels of performance as their able-bodied peers, but they must have the same opportunity to learn and improve their movement skills (Brown, 1987).

Children with special educational needs must be encouraged to participate in physical education lessons like their able-bodied peers and to be able to do this, special consideration must be given to their programmes whether in special or mainstream schools. It is therefore important to describe what special educational needs exactly mean in physical education. According

to the description given by the National Curriculum Council (NCC,1991), it shows that:

Special educational needs children in physical education include almost all children with movement difficulties, many of whom will have formal statements of their special educational needs (p.35).

The physical education working group (1991) points out that although it is not possible to exemplify every aspect of physical education programmes for the full range of disabilities that children may have, efforts are made to interpret, modify or substitute activities for children with special educational needs. Despite the problems facing the implementation of mainstream education, the idea that children with physical disabilities may have equal opportunity in education with their able-bodied peers in regular classroom is becoming more widely acknowledged (Fish,1985). Similarly, Gearheart and Weishahn(1980) cite the Public Law 94-142 (U.S.A)(P.L. 1975 which stresses that:

Handicapped children and youth should be served in the regular classroom whenever possible (P.4).

It is on this basis that mainstream education is offered to children with special educational needs which may also serve as a means of encouraging them to participate in physical education lessons. Having considered the opinions given by various authors regarding the integrated education programme for children with physical disabilities, it is important therefore, to consider the implications such participation may have for physical education lessons. An important issue which draws the attention of the researcher to carry out this study is to find out the extent to which teachers have been trained and involved in the integration

of children with physical disabilities in P. E. lessons in primary schools in the Kaduna state. Brown and Jones (1989) demonstrate their concern for the non inclusion of children with physical disability in school physical education lessons by offering a piece of advice on the need for teachers to be given adequate training. They also emphasise that teachers should be made aware of the implications of their practices and behaviour when working with these children in physical education lessons. Their suggestion would help them in managing effectively the learning environments for children with physical disability.

It is also necessary for teachers who are working with physically disabled children to have background information about these children and understanding regarding perception, cognition and task analysis in order to assist them while learning alongside their able-bodied peers. Cruickshank (1976) also states that general teacher education must include basic understanding of the essential elements related to the needs of children with disabilities to enable teachers to deal effectively with these children in the mainstream settings.

Brown (1987) also suggests that the integration of physically disabled pupils in activities such as dance, gymnastics, athletics and swimming could be straight forward because the children can perform these activities in their own way. The most difficult area is the teaching of team games where a pupil depends on his/her class-mates to perform successfully and safely. He emphasises that the integration in games lessons could take place at different levels as their disabilities and needs may not be the same.

Gallaghue (1985) expresses concern about the movement difficulties suffered by physically disabled pupils and suggests that efforts should be made by teachers particularly in physical education to improve their learning experiences by first of all identifying the nature of their movement difficulties. He opines that;

One of the greatest needs of children is the opportunity to practice at a time when they are developmentally ready to benefit the most from such skills (P.92).

Having stressed the need to integrate physically disabled pupils into a mainstream educational setting in physical education, it is important to examine the benefits of participating in physical education lessons by these children.

3.2 The benefit of participation in physical education for children with special needs.

The need for the development and implementation of adapted physical education programmes for children with all kinds of handicapped conditions has been identified by many physical educators (Arnheim, Auxter & Pyfer, 1981; Fait, 1978; Masters, Mori & Lange, 1983). However, little effort has been made to consciously include organised physical education and sports into the curriculum for children with special needs in ordinary schools in Nigeria. This has resulted in either an unguided recess period for these children or an excuse from participation in any organised physical education or recreational activity.

A lack of purposeful movement has a detrimental effect on children's self esteem, physical development and socialisation.

Apart from marked physical and social developmental deficiencies resulting from inadequate organised play and sports, special needs children may exhibit certain personality problems as a result of long term neglect and isolation (Oduyale, 1983).

Realising the importance of physical education to children with special educational needs, Ndama (1980) expresses grave concern about the lack of availability of P. E. lessons for physically disabled pupils attending ordinary schools in Nigeria, while Nwaogu (1979) also expresses similar concern on the need for special provision in ordinary schools to enable these children to participate and enjoy physical education lessons.

Researchers have found that not only do children with disabilities lag behind their able-bodied peers in almost all aspects of development, but that without intervention, the child's abilities may deteriorate further with increasing age (Adelson and Fraiberb, 1974; Dicks-Mireaux, 1977). Children with special educational needs may derive considerable benefits from taking part in physical education programmes. There is therefore, a need to provide resource material to assist educators in the development and implementation of physical education programmes for children with special educational needs in Nigeria.

The philosophy of an adapted physical education programme is the same as that of a regular physical education programme- to help children achieve optimum, physical, mental and social growth (Sherrill,1981). The P.E programme, according to Powers (1982), should also endeavour to develop self- supporting law abiding individuals by striving towards the basic goals of self-

responsibility. He also emphasized that equality of opportunity with non-disabled peers should be stressed along with preparations for a healthy and productive life and worthy use of leisure time.

Geddes (1978) also suggests certain specific areas of cognitive, affective and psychomotor behaviour that can be developed through participation of SEN pupils in physical education. In the area of cognitive behaviour, individuals may show improvements in communication skills, attention span and ability to concentrate, ability to follow directions and ability to understand rules and regulations of games and sports. In the psychomotor area SEN pupils may benefit from an improved general physical health appearance, growth and development and also certain physical skills related to the specific disabled condition and enhancement of posture and body mechanics. According to Geddes, participation of these children in P. E. may also help to develop the affective domain in the following specific areas: enhancement of social skills and abilities, improved self image, self-concept and self-actualisation, greater levels of courage, self confidence and poise

Physical education may benefit the children with special educational needs by developing their self discipline, self respect and comradeship-attitudes that are considered essential for the individual's successful integration into the community (Geddes, 1978). Participation in a physical education programme by SEN pupils may not only help to develop social skills but may also benefit the quality of their other work in school. Quality of life is also enhanced as a higher fitness level is achieved, and emotional and psychological growth experienced. Also, recreational activities

may bring to children with special needs from birth the experiences of perseverance and success through the learning skills(Adedoja,1991).

A personal health-focused physical education programme creates the opportunity for children with special educational needs to be aware of their own strength, suppleness and stamina while participating in athletics, dance, games, gymnastics and swimming; and a pupil-centred approach would allow all pupils to be more easily integrated into the class, as well as enabling them to monitor their achievement and progress (BAALPE,1986). BAALPE also emphasises the importance of allowing the SEN pupils to play more positive roles in the physical education curriculum thus enabling them to develop critical thinking about the nature of physical activity. Practical involvement such as refereeing, scoring, time keeping and judging performance can provide excellent opportunities for enriching the pupils' ability to interpret and respond to what is observed.

Physical fitness is just as important to SEN pupils as it is to non-disabled children. Although the fitness level that is possible for children with special needs may be lower, body efficiency can be improved by a programme of regulated activities within the tolerance level of the children. Strength, endurance, agility, power, speed and recovery from exercises are all important factors of fitness that may be developed in children with physical disability through their regular participation in Physical education.

It is as a result of the positive effects of exercise on the health of an individual that physical education should be provided to all children There is evidence to indicate that coronary diseases,

diabetes, and duodenal ulcer are more frequent in those who are sedentary than those who are regularly taking exercises(Armstrong & Davies, 1980,1984). Therefore the children with special educational needs who have not been guided into a programme of vigorous physical activities in which they can participate with success may be more prone to developing coronary diseases, diabetes and other related diseases (Fait, 1978).

The development of all basic motor movements such as running, jumping, climbing, throwing, rolling and falling correctly, are all tremendously important to children with special needs and the means of developing these is through a well structured P. E. programme. These skills are fundamental to everyday activities and an improvement in them enables children to work and play more efficiently with greater success.

As children with special needs become more proficient in the whole range of psycho-motor skills, they may begin to develop additional sports skills that offer the SEN pupils increased recreational opportunities, which may in turn, lead to further physical development and social integration (Fait,1978).

The findings from Hegarty's study(1982) suggested that children with special needs made considerable personal and social gains from participating in physical education in integrated settings. He summarises the perceived advantages as follows:

...the school can develop and grow richer as a social institution from having a wider range of social behaviours enacted in it and a broader spectrum of relationships available to its' pupils and staff. There is a symbolic component as well; the presence of pupils with special needs in a school can imply important statements about the

nature of the school, its tolerance for diversity and its regards for individuals (P.104).

The notion of friendships within schools is one that has hitherto received scant attention with regards to teachers facilitating personal and the social skills. The idea of encouraging friendship between the SEN children and their able-bodied peers is welcomed by several authors (Rubin,1980; Hartup,1978; Asher & Gottman,1981) and this can be developed through participation in physical education.

Williamson (1979) states that children with physical disability may benefit from integration programmes in physical education in the ordinary schools. She remarks thus:

mutually shared activity leads to interaction and common understanding. Both handicapped and non-handicapped pupils then may be able to forget differences and interact on a personal level. As a consequence less adult support is needed and integration becomes less self conscious (P.138).

Physical education therefore, may make considerable contributions toward human growth and development and therefore, should be provided to all. (Allonby,1985; Brown & Groves,1989).

However, some people like Barton (1993) opposed the idea of integrating physically disabled young people into the regular school programmes because expectations of them would be as those able-bodied children. He states that such an idea is unthinkable when he remarks:

What is offensive is the uncritical emulation of non-disabled standards, the patronising mentalities surrounding much of disabled people's involvement in these activities and the tendency to direct attention from, and the struggle for, changes in the social relations and environment conditions of the society (p.51)

Barton feels that the struggle to overcome these powerful pressures involves disabled people getting to the stage in which their sense of equality and difference go beyond a sense of guilt, loss and inferiority. He also feels that merely adapting a curriculum in physical education for able bodied people without some critical dialogue with the disabled people on their needs may not result in the programme benefiting them.

Physical education activities can provide a foundation for facilitating positive peer relationships between the children with physical disability and their able-bodied peers. The nature of activities often involves groups, working together as in basketball and volleyball teams and social interactions can be a natural by-product.

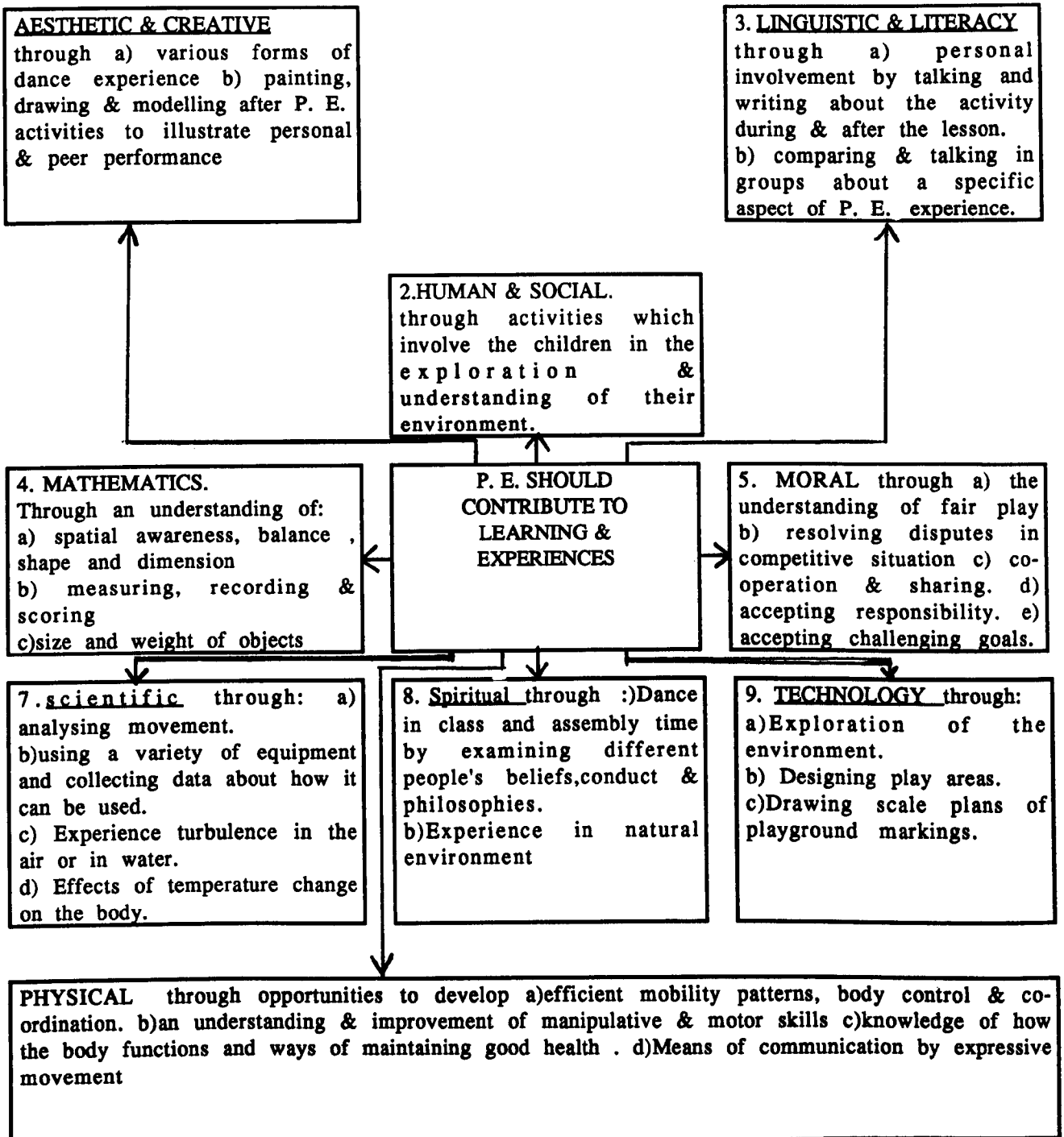
It is interesting to note that Physical education is one of the school subjects that is capable of offering an all-round education to all children and therefore the opportunities available in physical education ought to be available to all children. According to the National Curriculum Council (NCC)(1991) proposal in physical education for ages 5 to 16 regarding cross-curricular themes, the learning experiences offered by physical education are clearly of high quality and valuable to all children participating in the programmes. However, it offers great opportunities for teachers to organise appropriate programmes that may promote better integrated learning experiences. There are several long established areas of interactions between physical education and other school subjects which might prove beneficial to children with special educational needs.

The areas of interface between physical education programmes and other school subjects would be examined in the subsequent section in order to create an awareness among teachers on the need to support the idea of working together to achieve the aim of integrated education for physically disabled pupils in ordinary schools. Towards establishing such working relationships Allonby (1987) suggests several areas of co-operation between physical education and other subjects in the school curriculum in figure One.

The areas of co-operation could be in communication, numeracy, study skills, information etc. In communication, physical education creates a situation whereby the SEN children can express their feelings of participation, success and joy in movement activities which they have long been deprived of. For example, language 'codes' associated with particular activities might serve in a situation where group communication is required e.g. refereeing and umpiring, rock climbing, or dance. Similarly, the use and reinforcement of such terms as 'high', 'low', 'symmetrical' and 'balance' in physical actions provide support for concept formation in young children particularly where abstract concepts are to be appreciated. P. E. provides some learning experiences for children to analyse and record information accordingly. For example, the teaching of numeracy as in the measurement of distances, times and weights reinforce learning in classroom and in the development of technology skills. Examples of cross-curricular links between P. E. and other curriculum subjects are shown in figure One.

Figure One

Cross-curricular links between P. E. & other curriculum subjects



Source: Allonby, J. (1987, p.202).

For example, number 3 in the diagram (Linguistic & Literacy) describes how languages can be taught through the physical education programme. Physical education, unlike most of the

other areas of the primary school curriculum, does not appear to lend itself readily to language learning. However, Daley (1988) suggests that a careful consideration of the nature of physical education, that is, the lesson content and the teaching methods employed shows that there is a potential for language learning as yet untapped by teachers. He suggests a number of language learning opportunities which present themselves in the P. E. lesson:

- 1) P. E. is a practical area of the curriculum presenting an ideal opportunity for **learning new language** as words or concepts can actually be performed as well as heard or spoken.
- 2) Opportunities exist in the P. E. lesson for **communication** where language can be based in a context and for a purpose (i.e task specific).
- 3) P. E. provides many opportunities for the repetition and reinforcement of language as physical skills are repeated as they are practised and developed.
- 4) The elements of fun and enjoyment inherent in P. E. can serve to minimise any focus on language thus providing a most **suitable climate** for language learning to take place.
- 5) There are opportunities in P. E. to exploit cross-curricular links and so provide a useful approach to language development (p.132)

For example, Some teachers have tried this by offering opportunities for children to produce their own reading book about physical education which was done through the use of tape recording of their sentences. As was reported by Allonby (1987), the results were excellent as children were involved in drawing their own pictures and commenting on their lessons and equipment used.

Another example of the value of cross-curricular links and P. E. is in the development of spatial awareness for children with

language difficulties. Children are given the opportunity to express themselves through drawing, writing about themselves, and having their photographs taken while performing activities in P. E.. Their work can later be displayed so that they have the opportunity to see and appreciate each other's work, which serves as an encouragement to those with learning difficulties. It is in recognition of the importance of such cross-curricular links to all children that led the British Association of Advisers and Lecturers in Physical Education (BAALPE) (1974) to emphasise that physical education should not be taught in isolation but be closely linked to other subjects in the school curriculum.

It is vital that the work of physical education is not isolated from the total education of the student but closely allied to other disciplines (P.41).

Cross-curricular links between the school subjects may therefore help to contribute to children's knowledge and skills irrespective of their conditions (BAALPE, 1974; The Warnock Report, 1978; Allonby, 1987; Dickenson & Almond, 1990).

3.3 The aims and principles of integrated programme of physical education for children with special educational needs in mainstream schools.

Teachers need to maintain a clear idea of the concepts and values which underpin their work. It is the broad aim of physical education to contribute to overall development of children participating in the physical education lessons, and to transform and expand children's understanding and of leisure opportunities which will enable them to be active in their leisure time. This view was reiterated by the National Curriculum Council for physical education in the United Kingdom (NCC, 1992). It stated that physical education should aim to contribute to overall development of physical competence; skilful and recreative performances; problem-solving skills; establishment of self-esteem through the development of physical confidence and the development of personal qualities such as commitment, fairness and enthusiasm. The development in the areas create a new lease of life for all children including the physically disabled pupils.

However, Jowsey (1993) suggests that while it is important to consider the general aims earlier mentioned, more emphasis need to be placed on specific aim of physical education lessons for physically disabled children. He offers the following specific aims:

- a) to develop particular skills as the individual begin to show readiness to do so, e.g. walking, or because they are needed to improve daily functioning (e.g. arm or grip strength).
- b) to help individual to make the most of their abilities, whilst learning to compensate for their limitations and to gain a realistic perspective of their ability.
- c) to develop self-help skills, e.g. dressing and wheelchair transfers, so increasing competence in the daily situations and improving independence.
- d) to develop personal responsibility for physical control and management.

- e) to ensure that adequate and appropriate language stimulation and sensori-motor experiences are provided according to individual needs and to use the practical opportunities created to teach or reinforce language and concept development.
- f) to extend mobility, dexterity and independence in all children through tasks which have functional bases and mastery of which meaningful and worthwhile goals, with some purpose (p.4).

Jowsey emphasises that although considerable attention is usually given to the teaching of specific skills, safety procedures and self-care activities must not be taught in isolation. Rather, attention should be focused on the existing problem as it arises during the lesson so that their relevance and importance can be appreciated.

Crowe, et al. (1981) also suggest certain specific objectives that might help pupils with SEN accomplish the goals of the P. E. programme. These include: to correct conditions that can be improved., to protect themselves from any condition that may aggravate their conditions, to provide opportunities to individuals to learn and participate in a number of activities , to create an awareness of their limitations, to make social adjustment and to develop an appreciation for many sports as non participants.

Douthwaite (1990) also stresses the need to have functional objectives that may guide teachers' actions in implementing the programme contents for children with special education needs in Physical education. He suggests that the objectives of physical education lessons for physically disabled children should be such that may make contributions to their fundamental movement ability as well as their cognitive and affective abilities. According to Douthwaite, teachers need to be adequately trained to be able

to employ the following strategies in accomplishing such objectives. These strategies include, development of positive attitudes, provision of safe and secured environments, provision of developmental programmes suitable for individual needs, knowledgeable in various teaching methods, regular monitoring and evaluating of learning experiences of children requiring special needs. These strategies are intended to encourage all pupils to participate in integrated programme of Physical education lessons.

The vast number of children with special educational needs in ordinary schools, colleges and universities in Nigeria, which has been estimated to be over two million (National Policy on Education, 1981) continues to impose a significant responsibility as well as a challenge to teachers and schools administrators. The general programme of physical education is designed for children who do not have restrictions placed upon their activity. Many children with special needs, however, may neither safely nor successfully take part in the school physical education lessons due to teachers' lack of knowledge and skills of integration practice.

The position taken in this regard is one of the vigorous disagreements with the Nigerian National Policy on Education (1981) which emphasises that children with physical disability need to participate in P. E. alongside their able-bodied peers in a mainstream setting. The practice of excusing these children with special educational needs from participating in physical education lessons by teachers is regarded as a demonstration of their sympathy for the children's disabilities. It is not sympathy that these children really need but proper understanding of their

needs and what steps to take to ensure their regular participation in P. E. lessons a possibility.

The National Curriculum Council in the United Kingdom (NCC,1992) also puts forward a set of four principles that a school physical education Department should consider when catering for special needs children in the mainstream setting:

- 1 All children including those with special educational needs, are entitled to the physical education programme of the National Curriculum. The nature of their impairments may only mean that they are disabled in relation to the activities proposed, and may further indicate that activities need modifying to make them accessible but in no way lessen their entitlement.
- 2 The physical education programme under the National Curriculum should be accessible to children with special educational needs. That is, the programme of study, end of the key stage statements and non-statutory levels of attainment should be so stated that specific interpretation or modification is required for as few children as possible. For example, 'sending', 'running' and 'catching' are specific versions (P.56).
- 3 Children with disabilities should participate in National Curriculum physical education alongside their able-bodied peers, without alteration of the activity, wherever the nature of the activity proposed makes this a possibility. The alternative of modifying either the rules or equipment, or both should be explored where it is not possible for SEN pupils to participate alongside their able-bodied peers. This is to facilitate integrated participation. For example, children with visual impairment may enjoy the provision of modified equipment such as brightly coloured shuttle or balls and auditory while those with physical impairments may be given incontinence appliances. Teachers need to be aware of such circumstances and be sensitive to the feelings of such children about changing for physical education in communal areas. In athletic activities, crutches, walking frames and wheelchairs may be used in a variety of ways to reflect different aspects of locomotion (for example, a single push of wheelchair can be measured and interpreted as a jump (P. E4).

- 4 Where activities are modified or substituted for children with special educational needs, irrespective of educational setting, activity which results should have integrity. Activities which are trivial, which have no educational content, which are demeaning to participants or which require too little a contribution from pupils in relation to that from others, are not appropriate for inclusion in the National curriculum. One way of ascertaining the appropriateness of possible modifications is to identify the intention (s) of the modified activity, in order to ensure that the modified version retains the intention (s) and hence the integrity of the original (pp. 56-57)

Jowsey (1993) also offers a set of principles that may lead to more successful participation of SEN pupils in physical education programmes. These are as follows:

- i) Focusing on ability not disability- identify the individual child's strength and abilities and aim to develop them, thus emphasising areas where he or she is likely to succeed.
- ii) Encouraging independence- check that the environment is organised to enhance this and that physically it does not hinder independence. Ensure that opportunities are always available to her to take initiative and for increasing independence in mobility and self-care areas.
- iii) Encouraging the child to be responsible for his or her own management and learning. A child needs to be able to sort out his or her own wheelchair, walking aids kit or other equipment. If she or she needs help, they must be encouraged to ask for it appropriately, explaining what is needed, rather than waiting passively for assistance.
- iv) Remembering safety- Ensure that the equipment/facilities and the environment are absolutely free and safe before attempting any activity. Make sure that jewellery, watches and safety pins which might cause bodily harm are kept away.
- v) Allowing sufficient time- Remember to spend reasonable time to prepare the lesson, to understand and plan for the task and complete it successfully.
- vi) Be aware of specific 'watch points' for each child. Be thoroughly conversant with aspects of any task or features in the environment which should be avoided, for example, epileptic children should not use high climbing apparatus (pp. 38-39).

- vii) Check understanding- Take time to ensure that a child knows exactly what he or she is asked to do or perform. You may need to simplify instructions or demonstrations of the desired activity given.
- viii) Appreciating the child's energy expenditure. Always show your appreciation for any considerable effort made by children. Many of children make efforts just to stay upright on their feet or to manoeuvre themselves around school whether on wheelchair or not.
- ix) Using a variety of teaching styles- It is important for teachers to be aware of various teaching strategies to enable them to cope with the various disabilities of SEN pupils as each demands different approach to learning. Child and teacher demonstrations provide good visual images of what is wanted, and give examples of one way in which a task might be completed.
- x) Allowing tasks to be met at the child's own level. Movement tasks need to be clearly and suitably set and not too specifically defined in order to allow all children in the group to meet them appropriately, but each at his or her own rate (pp. 39-42).

As far as the principles of modification is concerned, schools need to modify such facilities as pools, locker rooms, racquets, courts' sizes, net heights, and gymnasium so that children with special needs may have easy access to them (Aufesser,1981).

Also, equipment can be altered in terms of size, shape, colour and weight in order to increase the opportunity for SEN pupils to more easily participate in lessons.

The provision of adaptive devices and equipment makes it possible for some special needs' children to participate in regular physical education programmes. These include, ambulatory devices, such as crutches, walkers, wheelchairs and scooter boards; leg and arm prostheses; and back braces (Fait, 1978). In addition to these, Stein (1979) suggests that other devices that could be adapted include pushers, bowling rails and special handle balls; beeper calls and other sound devices that would enable

visually impaired children to participate in many activities; special wheel chairs for physically impaired children to participate in basketball, track events, and marathons.

In order to make other activities in Physical education more accessible to children with special needs, it may be necessary to adapt methods, approaches, and/or content. Physical education content can be adapted for special needs children by using differentiated objectives. The decision as to which objective constitute an appropriate curriculum for a particular person should be based on an evaluation of the child's skills in physical development and motor performance (Hunsicker & Reiff, 1976).

Spencer (1980) also emphasises that unnecessary hardships can be caused by lack of adequate transport or unsuitability of the school building. Other factors which may lead to an unsuccessful integrated education may include, incontinence, where effective toileting assistance is not given, social immaturity and interrupted attendance due to repeated hospitalisation (Bigge & Sirvis, 1978; Gearheart & Weishahn 1976; Cope & Anderson, 1977; Hegarty, 1982).

In planning for satisfactory integration in the school, Hodgson (1984) suggests a number of measures that are required on school organisation, the pupil, and the classroom. He states that teachers should have a fore knowledge of the child to be integrated, level of verbal and written communication ability of the child, provision of in-service training to teachers to acquaint them with questions related to disabilities and making sure that issues related to physical adaptation (toilet facilities, ramps, lifts) are fully discussed and actions taken. He also suggests that in a situation

where physically disabled children are to integrate into mainstream schooling, teachers must assess them fully in order to know when and what helps are needed and to be able to cope with specialised equipment and ancillary staff (Allsop, 1980; Gearheart & Weishahn, 1976; Johnson & Johnson, 1980; Schultz, 1982).

Finally, Hodgson (1984) suggests that the classroom environment should be properly organised as what happens in it affects pupils' learning. Greer & Allsop (1978) also support the provision of good classroom management where pupils with physical disability could learn alongside their able-bodied peers.

3.4 Level of Integration of SEN pupils in physical education programmes

With more parents, teachers and other professionals becoming more aware of the need to integrate physically disabled pupils into ordinary school programmes, as earlier mentioned, the mainstream schools will therefore increase their intake of children with special needs. This may increase the range of needs of SEN pupils as many with varying degrees of disabilities may be admitted into the ordinary schools (Brown & Jones, 1989). Therefore, it is necessary to determine the extent of integration that may be appropriate for individual cases.

Some disabled pupils, because of the nature of their disabilities, cannot be provided with the best environment for educational achievement in integrated classes. It is therefore advisable that such children may still need to receive part or all of their instruction in special classes (Fait, 1978). The integration of

SEN pupils must be considered on its' individual merits as, for example, children suffering from cerebral palsy will each bring their own unique problems to any learning situation (Brown & Jones, 1989). Integration may be appropriate for some but not for all and the degree of integration may therefore vary considerably.

The scale of each problem will be dictated by the degree of disability. According to Brown (1989), the specific nature of a child's physical disability, learning problems, and intellectual capacity may lead to them being placed somewhere on an educational continuum from segregation within a special unit to total integration within the mainstream schools. Groves (1987) suggests a range of such provision for special needs within physical education curriculum: These include total integration of a group, total integration of individual , integration in special unit, and part integration. The placement of children with physical disability in any of these categories of integration depends on individual needs in physical education lessons(Brown & Jones,1989; Groves,1987; The Warnock Report, 1978). It is also important to note the contributions of Jowsey(1993) towards the placement of children with physical disability in various types of integration. In addition to what has been suggested by Brown and Jones, he recommends that integration with helper, integration with modified curriculum and parallel integration need to be considered depending on individual needs.

It is important to note that flexibility is the golden rule for physically disabled children's participation in physical education lessons. It must be accepted that the more severe the disability the greater the need for individualised programme and individual

instruction. The most crucial factor that must be borne in mind is that participation should always be in the least restrictive, segregated environment and as practical as possible.

Williamson (1979) states that integration can be considered as a three-stage process:

Contact	Involvement	Interaction
coming together	a formal game or activity	spontaneous, or shared recreational activity (P.137)

The **contact** stage is the initial move to seek an appropriate group with which a common experience may be shared which automatically leads to the second phase (involvement). When the third stage- **interaction** phase is reached, differences are shelved and the disabled and non disabled children become directly involved with each other.

The question is can teachers use physical education to promote integration in mainstream settings?

First, physical education and recreation can provide the opportunity for the contact phase Physical activities always require direct involvement as certain games and some form of dance provide ready made situations for such contact in their format or specific rules. Swimming, creative dancing and gymnastics provide equal opportunities, though less formally. The activity initiates the contact, and once under-way can lead to dynamic involvement in which there is more than just togetherness. In this second phase, involvement is likely to be increased, tolerance and acceptance of differences predominate because attention is directed to the activity. Teachers, therefore,

need to ensure that all the children are as equally involved as far as possible.

Thirdly, sport is of utmost universal interest and there is great value attached to pupils taking part. Therefore, a mutually shared activity leads to interaction and a common understanding. Both disabled and non-disabled children may then be able to forget differences between them and start to interact on a personal level which subsequently could result in less adult support and pupils become less self-conscious in the integrated setting (Williamson,1979). Examples of how special needs children could be integrated into physical education lessons suggested by BAALPE (1989;1986) and NCC (1991) are described in the case studies in Appendices 5 (a) to (d).

Having described the aims of P. E. and principles to bear in mind when planning programmes of integration in physical education, it is important therefore, to explore appropriate steps toward the implementation of these programmes.

3.5 Strategies for planning a programme of integrated physical education for children with special needs

The development of effective strategies for mainstreaming is another way of overcoming the problems of children with special educational needs in physical education. The application of special treatment to individual problems must be based on some general strategies as suggested by Brown and Jones (1989). They state that the strategies of identification, assessment, intervention and evaluation should be applied mostly during planning^{Stage} of integration programme.

Identification

Brown and Jones(1989) state that activities such as testing, discussing and interviewing may serve well in an attempt to find what and nature of individual's problems are in physical education.

Carroll(1990) also states what an assessment is all about and its' role in educational development. She remarks thus:

assessment is an essential part of effective teaching and learning. It is about interpreting pupils' actions and passing valid judgements(P. 8).

Teachers are constantly involved in assessing their pupils as this is regarded as part of the teaching/learning process. Assessment is used formatively and diagnostically by teachers when working between the key stages and leading to the summative statements at the end of key stages (NCC, 1992). It is therefore, essential for teachers to collect evidences to enable them to make valid judgements about children's performances and the problems facing them in the learning environments. Carroll (1990) also suggests a number of classifications involved in assessment:

- a) Setting the task- this involves the processes of planning presentation and teaching (PPT).
- b) Collecting the evidence- this involves the processes of perception, interpretations and judgement that is free from bias, must be reliable (consistent) and valid.
- c) Recording the evidence- this involves the processes of planning the format and recording.
- d) Discussing with pupils- this involves the processes of communication (2 way) and pupils self assessment (p.9).

The outcomes of this process should lead to better teaching, thus, creating more opportunities for effective learning. In order

to guide teachers in conducting assessment that is fair, reliable and valid, McConachie (1990) suggests that:

- a) Children should be observed over several performances and not just on one occasion.
- b) Assessment can be made effectively through observing the pupil engaged in meaningful and comprehensive tasks and that it is not necessary to structure separate observation of all the components involved (p.32)

Assessments are conducted for different purposes, each designed to provide information which can serve as the basis for making an educational decision. Assessment in physical education is also concerned primarily with the observation and recording of achievement in the practical context (DES, 1991).

The Warnock Report (1978) which emphasises early identification of children's problem (s) also describes five requirements for effective assessment:

Parents should be closely involved; the child's learning and response should be assessed over a period, not only on a single occasion; a wide range of specialist investigation should be available so that no source of concern is neglected; the family circumstances must be taken into account, drawing where desirable upon health visitors' or social workers' consultations; assessment in some cases, especially behaviour disorder, may involve the school and the classroom setting as well as the child(DES, 4. par. 29-33).

Sugden (1984) states that although assessment procedures such as careful observation, keeping of accurate records and consistency in testing, demand a lot on the part of teachers, the outcomes can be helpful to both teachers and children. Results of such assessment may be used in planning appropriate programmes in P. E. for children with special needs. He states that when a child shows some movement difficulties, they could be as a result of a breakdown in one or more of the following areas: a)

cognitive, b) perceptual-motor and c) motor areas. The ability of children with special needs to co-ordinate activities in P. E. may be assessed within both a changing and a stable environment. Asking a child to perform an activity like shooting in a netball when her body and environment are stable, provides a clue to the teachers regarding some background information about the child's problems and type of intervention needed to help him overcome the difficulty.

Brown and Jones(1987) suggest one of the means of assessing the movement difficulties facing the children with physical disability in physical education lessons and how best to overcome such difficulties. For example, Figure Two illustrates how teachers may assess the child's stability in performing a given task when the body and environment are in a stable or changing situation. Example 'A' illustrates when a child cannot shoot a ball in netball and perform a lay-up shot in basketball when the body and the environment remain stable, it may suggest that the child lacks the basics involved in performing the skill. The teacher, having made a correct assessment of the child's needs, would then make arrangements to provide the appropriate sequences. The problems of such children might be in areas of perceptual-motor and motor activities which have been described in figure two. It is important for teachers to be able to identify the specific movement difficulty a child suffers from in order to make the necessary arrangements for overcoming this difficulty, hence, emphasis is placed on the accurate assessment of SEN children's needs.

Figure Two: Assessment procedure for performance analysis

		BODY	MOVING
ENVIRONMENT	STABLE	A	B
	CHANGING	C	D

Source: Brown & Jones, (1989, p. 20).

The following examples illustrate how the individual's problem can be identified.

- A: Body and Environment in stable position e.g. shooting in netball.
- B: Body and Environment in stable position e.g. lay-up shot in basketball.
- C: Body stable and Environment changing e.g. passing a ball to a running player.
- D: Body and Environment changing e.g. dribble and pass to moving player(Brown and Jones, 1989, PP. 19-20).

As children with special educational needs in P. E.. participate in both individual and group activities, they are bound to experience some movement difficulties but this does not mean that they do not experience some success as well. Teachers are expected to observe the children and offer them the kind of assistance required. For example, Brown (1987) suggests that:

- a) where the body and the environment are stable and constant and the child experiences difficulty in performance of that task then his movement problem is likely to be **MOTOR** in origin.
- b) Where the child experiences difficulty in performance of tasks involving a changing environment then the problems are likely to be **PERCEPTUAL** in nature(e.g. spatial problems).
- c) At any stage in a movement context a child may have a **COGNITIVE** problem. He may well be able to perform a range of basketball skills but be unable to correctly apply them in a game situation because he does not understand when to make the appropriate response (p.20).

The issue of assessment in physical education has also been widely discussed by various authors (Andrews, 1979; Booton,1986; Marsh, 1978; McNamee,1990; Reeves,1986; Skelthorne, 1986) which shows its importance to planning and implementing of physical education lessons for physically disabled pupils. Assessment are conducted for different purposes, each designed to provide information which can serve as the basis for making an educational decision. Sometimes, assessment takes the form of screening to identify pupils' problems (physical, learning, behaviour problems). At other times, assessments are conducted to diagnose the type (s) of handicap conditions in order to enable teachers and other educational planners make appropriate educational placement that might be considered.

Booton (1986) also emphasises the areas of assessment that could be helpful to physically disabled pupils in physical education as well as other subject areas. It is also worthwhile noting the various forms of assessment suggested by Reeves (1986) which may assist teachers working with children with physical disability in physical education lessons. These include, observation, criterion-referenced tests, standardised test of performance and pencil and paper test. The importance of these various forms of assessment to the development of physical education lessons for disabled children cannot be over-emphasised. There is a great danger that any member of society who deviates from the norm in physical appearance or who shows an unusual behaviour pattern may become isolated and segregated. Perhaps the most important concern for teachers working with these pupils is to offer to them the chance to live as

normal a life as possible as full members of the community which integration in P. E.. may be capable of achieving.

Another approach towards encouraging these pupils to participate in physical education activities is the introduction of a student profile through which the children's problems are discussed in a realistic perspective. The approach enables a pupil to sit down with his teacher to discuss 'total' integration as his interest in physical education activities grow. In this way, the teacher provides a counselling service to enable the pupil to accept the reality of the situation based on medical consideration, disposition and 'relative impairment' to his adaptability to physical activities (Williamson,1984).

As the pupils' interest in physical education activities develop, the child in a wheelchair, for example, may want to participate in the game of basketball in order to share the same joy as others in his class but this ambition may be limited to some passing skills. Where it becomes obviously difficult and dangerous to integrate a child, an agreement should be reached on alternative provision which will allow him to participate in the activity with others.

Teachers may require careful observation of children's participation in physical education, for example, in a case of wheel chair racket game, where one arm is required for 'locomotion' and 'orientation' and the other for the simultaneous skill technique. The level of ability demonstrated and difficulty experienced by a child would determine whether the teacher should go back to the bases of the skill before any form of integration is realistically possible. In catering for special needs children in the mainstream setting physical education Departments may need to design a

carefully thought out programme of integration that is appropriate for each individual.

Smith (1990) suggests that the teaching approaches aimed at integrating physically disabled children in P. E. lessons should focus on such areas as movement education, swimming, ball skills, small sided games, athletics, cricket, striking skills- short tennis, badminton, and weight training.

Intervention

Intervention becomes possible only after an accurate assessment of a child's problem has been conducted. Teachers are required to intervene by taking appropriate steps to help such a child to overcome his or her learning difficulties. The intervention may take various forms. (e.g. games may be broken down into their component parts and put back together again) into a logical sequence to enable the child to achieve success at each stage. The concept or skill to be learnt should be organised in progression from simple to more difficult tasks or from known to unknown. While doing this, the teacher must consider the child's specific area of difficulty and his development level. It is important to note that while learning experiences are simplified, it must not result in a situation where the child will fail to recognise the relationship between the task and the whole target skill (Brown & Jones, 1989). Brown and Prideaux (1987) also state that an appropriate intervention programme which is aimed at building upon the children's strengths through a breadth of movement experiences should be at the centre of teachers' educational activities for SEN pupils.

An intervention approach could only be considered appropriate when the task in hand is properly analysed and areas of difficulties identified. This approach also has been used successfully to facilitate learning among children with special educational needs in physical education. Examples of such an approach employed by various authors has been described in the subsequent paragraphs. A series of studies have been carried out in which some positive results of the use of intervention have been shown although sometime results have been inconclusive. For example, Bunduschuh(1972) conducted a study on forty severely and moderately retarded children to determine their improvement level in swimming. They were provided twenty swimming lessons daily with selected drills taught on one-to-one basis with some free plays. After eight weeks of training, they were all tested and the results showed that 90 per cent of the class could swim at least sixty feet, compared to only 3 per cent who could swim this far before the intervention was provided. Similarly, Friedman-withower(1971) conducted a study on two groups of 9 and 10 year old from culturally deprived homes to show the effect of an experimental treatment on their IQ, body and space awareness and their relationships with others. The two groups were carefully matched to produce an experimental group which were given four lessons of "movement" and dance a week for 2 years and a control group that had no special dance programme. The post-test result showed that those in the experimental group recorded a marked rise in IQ, in body and space awareness and in their relationships with others.

The effect of intervention programmes on individuals or groups has been examined by Davis and Byrd (1975) in a test of fitness on a group of educationally retarded boys who were provided instructions in Judo for 12 weeks. The use of California Test of Personality, the Wide Range Achievement Test and the American Association of Health Physical Education and Recreation(AAPHER) special fitness test, showed that there were significant changes in the total adjustment and some measures of fitness among the children. Also, Watson (1982) has improved the communication skills of mildly retarded children through game-like activities.

The results of the various studies discussed help to demonstrate how intervention programmes introduced in different forms have helped to improve the skills and knowledge of children with special educational needs. In this study, intervention programme has been used with the hope that it may improve the teachers' attitude, knowledge and skills toward providing effective programmes of physical education for SEN children in primary schools in Nigeria.

In order to plan programmes of integration that would be of benefit to SEN pupils, it is important for teachers to understand what physical education intends to achieve and principles that would be supporting the planning process. In the next section, the aims and principles of integrated education programmes suggested by several authors would be examined. The main purpose for this is that teachers must be aware of these key areas of the programme before attempting to anything in the area.

Evaluation

Evaluation is a process of ascertaining how much learning and improvement have taken place over a given block of teaching. Through such evaluation, the strengths and weakness of a programme can be determined and if it is discovered that the expected improvement has not occurred, a more detailed analysis of teaching method and the specific nature of the problem need to be examined (Brown & Jones,1989). The two major forms of evaluation that are particularly helpful to physical education teachers are formative and summative. The formative evaluation is an examination of the existing situation before an intervention and during the on going implementation process, while the summative evaluation as it implies, is carried out at the end of the programme, thus, creating opportunities for identifying what needs to be done in preparation for the next programme (Willgoose, 1979). Jones et al., (1978) state that evaluation systems, processes and considerations should be an integral part of all adapted physical education programmes for the disabled.

Observation as one of the means of evaluating children's plays a key role in the successful handling of disabled pupils in physical education lessons. This is because it affords the teachers the opportunity of identifying the child's immediate problems while solutions to such problems are tracked down.

Evaluation which is designed to determine the strengths and weakness of an existing programme, learning experiences and methods of teaching must be regularly conducted to enable any reasonable adjustment to take place. There must be a complete record kept for an evaluation to be most effective (Brown & Jones,

1989). Brown (1987) suggests a number of details that ought to be kept within individual records and upon which present and future programmes which aimed at meeting the pupils' needs can be developed. However, he emphasises that before any child with special educational needs is transferred from one teacher to another, or between schools, detailed reports must be available in advance of such transfer.

The child's profile should include:

- a) Description of the disability
- b) Description of the precise motor problems
- c) Description of any "hidden disabilities"-learning difficulties, perceptual problem.
- d) A list of basic skills and games where the child has already achieved competence together with suggested environmental adaptations
- e) Advice on teaching methods and recommended future programmes
- f) Medical approval for physical education with evidence of any restrictive measures (p.231).

The importance of these records in the development of future physical education programmes for SEN children cannot be over-emphasised.

Brown and Jones (1989) also offer some suggestions on how games rules and equipment may be adapted to encourage the participation of physically disabled pupils. They provide examples of how these children can be catered for in modified version of volleyball, tennis and other games. The adaptation and modification of games rules and equipment, for example, in Tennis and Volleyball are shown in Figure 3. The purpose of modification/adaptation of games rules and equipment is to encourage those with physical disabilities to participate in P. E. lessons as much as possible.

**TEXT
CUT OFF IN THE
ORIGINAL**

Figure Three Games adaptation for SEN pupils

Tennis

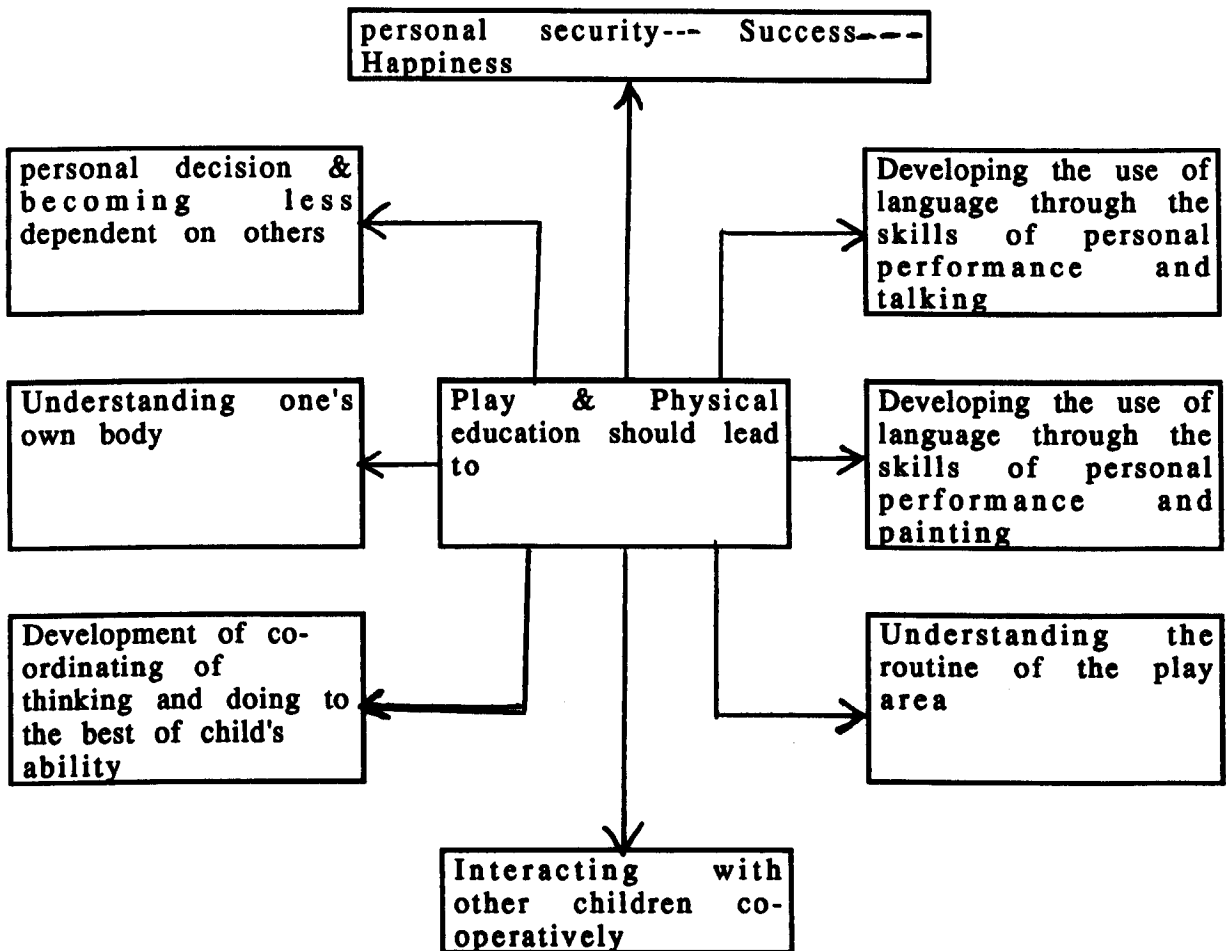
characteristics	equipment	Adaptation of activity	Ability requirements	Adaptation equipment.
Manoeuvre opponent round court to create space and opportunity to play a winning shot	racquet, ball, net	1. reduce court's size; 2. lower the net; 3. play in sitting /kneeling position; 4. allow two or more hits or bounce ball; 5. play against wall.	run and change direction quickly. Balance	smaller/lighter racquet shorter handle Bigger head Bigger/lighter balls plastic racquet
After 3 passes, move opponents to create space, play the ball over the net and down into the opponent's court	Volleyball net, ball racquet	reduce the court's size lower the net, involve more players at a time, allow the ball to bounce and be played. allow the ball to be caught and thrown.	run and change direction, balancing quick movement, introduce exercises involving hands.	smaller/ bigger balls multi-coloured balls inflated ball bladders

Source: Brown & Jones, (1989). 'Games Adaptation for SEN pupils', In A. Brown & B.A. Jones(Eds.), Mainstreaming Special Educational Needs in physical education, pp.31-32.

Allonby(1985) also suggests areas that require teachers' attention when planning physical education lessons for the physically disabled children attending ordinary schools. This is shown in Figure Four.

3.6 Areas Requiring Specific Provision in P. E. lessons for Special Needs Children

Figure Four



Source : Allonby, (1985,p. 48)

Teachers are therefore, encouraged to develop a proper understanding of these areas of need for children particularly those with physical disability attending ordinary schools in order to develop P. E.lessons that may lead to the realisation of these goals.

Children with special needs require a feeling of security, and the need to experience success in their learning environments and become happy among their able-bodied peers.

Apart from these, the pupils need to understand their conditions, accept themselves and others and be able to assess their ability in order to avoid being frustrated due to their inability to perform a given task. They also need to develop good behaviour and personality through their regular interactions with their able-bodied peers, thus giving them the feeling that they are accepted by others.

In order to draw attention to specific needs of each child, the developmental framework and other motor impairment assessment tests could be used (Arnheim & Sinclair, 1975; Henderson, 1977; Gubbay, 1975; Gresham, 1986; Cooke, 1979; Price, 1979). The importance of accurate identification of SEN needs, towards realising success in integrated settings in physical education can not be over-emphasised.

Having examined the strategies required for developing physical education lessons that create opportunities for physically disabled children, it is therefore, necessary to discuss various approaches recommended for teachers to use as means of encouraging their participation in the physical education lessons.

3.7 Teaching Approaches recommended for the teaching of physical education to children with Special Needs.

Teachers may employ a variety of teaching in the teaching of physical education for children with SEN yet the choice of a particular approach or strategy depends on the nature of the

learner, the content and the ability of the teacher to use the approach effectively.

Teaching approaches for children with special needs have been evolving over the past decade and are continually being evaluated and reviewed both in schools and in the more theoretical context of higher education and research. The strategies employed by teachers have been influenced by trends in the application of learning theory (Davison, 1984; NCC, 1992).

After objectives have been stated and clarified, the teacher may have to consider how particular variables (time schedule, group arrangement, physical setting, mode of presentation and reinforcement) in the environment can influence the performance of the desired tasks. A successful teaching environment is one in which obstacles to learning are minimised and all conditions are set to encourage mastery of the target skill. Although it is rare to expect an ideal situation for every child teachers should attempt to influence as many factors as possible to the learners' advantage. Brown and Jones (1989) and Laycock (1980) suggest the following strategies as being appropriate for the teaching of physical education to physically disabled children.

Individual instruction

Teachers in the regular classroom can seldom afford the luxury of extensive one-to one teaching. Even though the disabled child has special needs, there are always many others demanding teacher's support and assistance. Laycock (1980) states that the little time that a teacher can devote exclusively to the mainstreamed child is precious and should always be reserved for those kinds of instructional interactions that cannot be

accomplished in any other mode. Brown and Jones (1989) also state that where a pupil has difficulty in acquiring games skills it is essential that he or she should receive attention to help him or her to overcome the problems he or she is facing. Both authors have emphasised also that individual teaching approach does not mean a one-to-one relationship all the time but it is considered a necessity that this will occur for at least part of the time spent over the learning period.

Peer tutoring

Although an individualised form of teaching may be desirable it is not always possible and peer tutoring may offer a valuable alternative as it offers a practical and efficient means of individualising instruction (Laycock, 1980). Brown and Jones (1989) suggest that the peer tutoring approach may be adopted using non-disabled classmates in situations where no additional ancillary help is available within a games lesson. There is a wealth of experimental evidence to support the view that both cognitive and effective gains can be achieved by children who are tutored by their peers(Bloom;1976; Devin-sheehan, Feldman & Allen, 1976; Stainbach & Stainbach & Lichtward,1975). Peer tutoring can be used for children of all ages, and most aspects of physical education. Peer teaching can help the physical education teacher increase the amount of individual attention the children with special needs receive. Peer teaching can be used for demonstrating skills, assisting with the use of equipment, keeping records, and working individually with children who have adapted programmes (Folio & Norman, 1981; Spackman, 1986).

Grouping is another effective way of teaching in the mainstream setting and it is particularly useful in teaching skills in physical education lessons. Some children learn well when in smaller groups where they may have access to using equipment more often than when in the larger group.

Those who are shy have the opportunity to express their ideas when in the smaller group and also working in smaller group creates an opportunity for developing friendship among the children. With careful grouping, other children can actually contribute to, rather than detract from, the effectiveness of the programme. Grouping could be in small or large size as many mainstreamed pupils appear to function satisfactorily within the customary organisational patterns of their classrooms (Laycock, 1980).

Manipulating the **Physical setting** is another approach to teaching which involves the management of the physical space used for learning. This method encourages the removal of all physical barriers to ensure accessibility to the physically and sensory disabled. Certain adaptive equipment may also be necessary to provide for these children in regular classrooms. Mainstreamed children do display unique learning styles that often require the modification of the physical environment. Laycock (1980) also states that in making planning decisions, a teacher must attempt to provide for special learning needs. This may include the availability of crutches and wheelchairs, but in ways which do not physically isolate the mainstreamed child to any greater extent than is absolutely necessary.

Cawley, et al. (1978) suggest a **Direct** approach as one of the most effective modes for communicating instructional information to the child. In teaching a particular content, a teacher has the choice of constructing it, presenting, stating it, or graphically symbolising it. It is possible to employ these input options singly or in combination as Cawley et al (1978) suggest:

The **construct** mode involves the use of concrete demonstrations. The teacher actively manipulative materials to model the desired response. In the **present** mode, fixed visual aids or pictorial representations are displayed to illustrate the concept under study. Use of **state** mode requires a verbal explanation from the teacher. Finally, a teacher may communicate instructions through printed words and symbols in the **graphic -symbolic** (p.299).

This method suggested by Cawley et al (1978) has been useful in teaching developmental or remedial curriculum through a multiple option method. It provides greater flexibility in providing an individual learning needs. The four input options suggest a hierarchy progression of strategies from concrete aids, to pictorial representations to oral symbols and to graphic symbols (Cawley, et al. 1978).

Dunston (1988) suggests an approach to planning the teaching of a specific activity (e.g. movement, gymnastics) and this is shown in Figure five.

Figure Five Introducing balance activities in physical education

	ACTIVITY	TEACHING POINTS	VARIATIONS
Introducing activity	1. Person at side of the gym with hoop in hand. others jog round and on whistle must all lie down. person then rolls hoop try and touch someone. When touched, pupils join in rolling hoop.	spatial awareness- on whistle must lie in a position of stillness	i) size of hoop may be changed according to ability. ii) More able pupils when rolling must aim for specific body part e.g. legs.
Introducing balance	2. Hoops and cones spread round gym. Group jogs anywhere, on command "hop" (must stand in hoop) "cones" (must stand by cone) "hoops & cones" (must have part of body in hoop and another touching a cone	spatial awareness- reaction time to command . stable bases in order to remain stable -explore different ways to join hoop and cone using body as link.	i) More able to have link their bodies to specific coloured cones and hoops. (this will require pre-planned arrangement of equipment ii) More able pupils to use specific body parts to link (toes)
	3. Individually - --using benches, have to walk across: forwards, sideways, backwards, then crouch across forwards, sideways, and backwards.	Quality slow movements . use of arms to counter balance weight- what happens if you fold your arms?	i) reverse the bench for able pupils- have tennis balls or bean bags at side of bench, for them to pick up, when travelling across.
Main Theme	4. In pairs must use their bodies to form shape of a letter of the alphabet. Can be done vertically or horizontally.	use demonstration to highlight interesting shapes, levels and balances- pupils decide themselves what letter they wish to make.	i) In mixing the abilities able pupils can direct less co-ordinated youngsters giving them the opportunity to create their own learning situation.
	5. Divide class into four groups. Each group must devise a word, again using their bodies to form the shape of it.	co-operation among each group-giving guidelines if needed-look for imaginative and balanced positions.	As pupils working collectively, each dependent on each other, variations are minimal as all should achieve success.
Closing activities	6. Remaining in their groups, each group must carry a light weight mat with a ball placed on it, from one end of gym., to the other without dropping the ball.	Again co-operation and communication within the groups-slow and steady pace.	i) Have lighter or heavier weighted balls according to ability ii) Vary the size of balls or mats and distance to travel.
	7. Individually lying on the floor, have to stand up without using hands.	-bring knees up to chest., make yourself like a ball and rotate by rocking.-let pupils explore different methods.	i) Less able youngsters can use one hand. ii) place different challenges on pupils depending on ability.

The plan shown in figure 5 suggests a series of activities that are accessible to all, with specific modifications in the form of challenges made to more able youngsters and certain adaptations to the less co-ordinated. The teacher, by careful observation and assessment, will need to either break down or strengthen the structure of the learning situation so that success at individual rates of progress is possible. This plan of introducing balance activities in P. E., encompasses individual, pair and group experiences and also opportunities for youngsters to create their own learning (Moston, 1981).

Teachers have to plan activities and learning experiences that are relevant to the learner and will be faced with particular difficulties, especially when dealing with pupils with severe learning problems. If however, P. E. is seen as a multi-disciplinary, liaising with teachers in other curriculum areas who use a variety of teaching approaches, provides the opportunity for a richer and more varied set of learning experiences for all pupils in ordinary schools, will potentially be available (Dunston, 1988).

One other appropriate teaching method for all children, regardless of their ability levels, is a movement exploration. Sherrill (1976) suggests that this approach could be useful for instruction in physical education, particularly, for pupils with physical handicaps, low fitness and poor co-ordination. This approach capitalises on a process of discovery and inquiry in encouraging pupils to assume responsibility for identifying problems and developing a plan to solve them. In testing out the instructional strategies, children can learn their own strengths and weakness and perhaps discover appropriate adaptations that

never occurred to the teacher. This type of instruction can help teach the child a problem-solving process that can be used throughout life when physical or motor adaptations are provided. Movement education is based on a foundation of fundamental patterns and skills and a system of abstract symbols can be used to enable the hearing-impaired child follow directions given in physical education lessons (Schmidt & Dunn, 1980).

Good class organisation and management are crucial to the successful integration of children with special needs in physical education classes (Howarth,1987). Consideration should be given to one- to-one instruction with a peer tutor or volunteer, small group instruction, large group instruction, learning centres and independent work. To prevent the exclusion of children with special needs, teams should be chosen by the teacher rather than by "other persons". As part of a contribution to developing better teaching approaches, Folio and Norman(1981) suggest a model known as RAID and the following principles must be employed for its use:

R= Rules) in Physical education classroom are established with the help from pupils, thus allowing them to know and to help formulate clear statements of expected behaviour. Rules are stated in positive terms (e.g. 'put equipment away' instead of 'don't leave equipment out

A = Approval) Approve or reward those pupils who follow the rules. Approval may be signalled by non verbal gestures, verbal praise or special treats such as free time or individual choice of activities.

I = Ignore) pupils who do not follow the rules are ignored. This technique, in order to be most successful, must be paired with the preceding principle of rewarding those who do follow the rules.

D = Disapprove) Disapproval is shown when pupil's behaviour disrupts the learning process of the group. Disapproval is shown by removing rewards or by temporarily removing the child from the activity (P.114).

When the teacher and pupils are concerned with involving everyone in the activity, the class emphasis is on playing rather than on winning.

Mobility training is important for many children with special needs and essential for visually impaired children and those with restrictive orthopaedic handicaps. Mobility evaluation must consider the locus of involvement(e.g. legs, arms),the nature of involvement (e.g. paralysis, lack of co-ordination, loss of limbs), and the rate and stability of motion (e.g., agility, endurance) (Schulz & Turnbull, 1984). After evaluating the child's skill level and specifying appropriate objective, the teacher, with the help of special education resource teachers and a physical therapist, should proceed to adapt or develop physical education activities for the child (Cratty, 1980).

A rule of thumb is that games and sports should be changed to meet the individual's needs and ensure the SEN child's success and safety.

Some learning-disabled children exhibit inadequate or inappropriate motor behaviour and are often referred to as uncoordinated, awkward, or clumsy (Haubenstricker,1982). Many children with such problems benefit from basic movement experiences involving activities with the balance beam, trampoline, dance and rhythm.

High activity levels sometimes interfere with success in physical education programmes. To assist children to control their

level of activity, teachers might provide a quiet period after, periods of intensive stimulation; restrict boundary areas limiting the space in which activity takes place; and reduce choices in activities and schedules. A well structured lesson can contribute to a successful experience for these children.

Many children with special needs experiencing academic difficulty can improve their academic, as well as motor skills in a well-balanced physical education programme. Mathematical skills related to counting, number facts, and processes can be taught by having children learn to keep scores in various games and sports. Laying out a basketball court , for example, offers an excellent opportunity to teach and reinforce measurement skills.

Many opportunities exist to work on time concepts, for example, keeping up with the regulation time of a football game and clocking the time for track events. Some children who do not respond to more traditional approaches might benefit from learning mathematics skills in the meaningful context of physical activities (Schulz & Turnbull, 1984).

CHAPTER FOUR

4 Educational programmes for children with special needs in Nigeria with reference to the Kaduna state

4.1 The beginnings of special education in Nigeria

In Nigeria (as in many developing countries of Africa), special education began informally with the care of physically disabled children by Christian Missionaries. This early effort was prompted by the need to provide some form of training for children and adults who had been disabled by leprosy(Mba, 1991). Thus, although the first educational programme for the physically disabled, the 'Iberekodo' leprosy settlement, Abeokuta, was founded in 1914 by Rev. Brown of the Baptist Mission and Rev. Olubi of the CMS church, the first school for the blind started in 1940 in Kano state, as "experimental work in social welfare and education"(Abosi & Ozoji, 1985). The Wesley school at Surulere, Lagos, the first institution for the deaf, began in 1956 as an effort to help the deaf, by the society for the care of the Deaf.

As noted, most of these early endeavours were by voluntary organisations, Missionaries, philanthropists and private individuals. In terms of Government involvement in special education, the earliest recorded mention was in the then Lagos Education Act of 1957, Article 61 g; which called for organisation of special education in that state. Other laws were the Northern Nigeria Education Law of 1964(section 3 par. 3) and the Western Region Law(88/1) which stipulated that the Ministry of Education might issue regulations defining the various categories of pupils of primary school age who required special education. Admittedly, some regional governments(West, East) in this period made

occasional grants-in-aid to voluntary organisations that requested help in connection with their various projects for the disabled.

However, direct Federal government involvement came only after the historic broadcast on October 1, 1974, by the then Military Head of state, General Yakubu Gowon, who stated that henceforth the government would make provisions for the education and care of the disabled children and adults (Adedoja, 1993, Mba, 1991).

Following this proclamation, the Federal Government College for Special Education, Oyo, was established, and the Federal Ministry of Education, special education unit, came into being and encouraged state Ministries of Education to set up special education units. Liberal scholarships were awarded to prospective teachers of the disabled to study special education at the universities of Ibadan, Jos, and a broad. The number of schools for the disabled and their enrolments increased by leaps and bounds, thus special education as a discipline, gradually found its feet in educational programmes in Nigeria (Mba, 1991; Maltby & Ihunnah, 1990)

Like the establishment of formal education in Nigeria, the introduction of special education programmes was not formally planned. Early provision for children with special educational was concentrated mainly on helping the blind and the deaf (Amadi, 1976). A report from the special education centre at 'Oji River' (1976) states that the centre was opened in 1958 by the church Missionary society. It started as a vocational centre for some blind adult ex-leprosy patients. The school itself officially started in 1960 as evening classes under a part-time teacher with five blind pupils and by 1964 the school had grown to become a

full-fledged primary (elementary) school with a population of over 300 children.

The programme for the deaf at the special education centre, Oji River, started as a practising school in 1962 with thirteen deaf pupils. In 1963, the commonwealth society for the deaf through its technical assistance programme, trained three teachers for the deaf which gave an impetus to the centre (Amadi,1976). Government involvement came later and there was a gradual development of provision for children with special educational needs. Government take over of the special education centre was gradual, beginning in 1970, with the administration of the programme for the blind, and management of the whole centre in 1974. The centre is now a well known establishment for special educational needs' children in Nigeria.

In Aduwo's Report (1980), it was stated that the earlier provision for children with disabilities in Nigeria resulted from the efforts of voluntary or religious bodies who accepted the responsibility for the education of SEN pupils on purely humanitarian and/or missionary grounds.

In discussing the early lack of concern for children with disabilities by Nigerians, the commonwealth secretariat (1972), reports that :

Some would doubt the advisability of promoting the cause of the handicapped in developing countries, pointing to the great problems facing governments in their attempts to provide educational facilities for normal children. Faced by serious and growing problems of unemployed school learners, government may easily consider that development in special education must be delayed until a more appropriate time.....(P.2).

The establishment of special education in many parts of Nigeria followed the pattern of the special education centre at Oji River. That is, the initiative of establishing a special education programme for children with special needs was either taken by missionary bodies, other private agencies or through an individual effort (Amadi,1976).

A comprehensive report of the Ibadan school for the deaf shows that the school was founded by Oyesola, in 1963. It was known as " Home for the Young deaf". The school was started with four children in a rented building and by 1968 it was sponsored by the Anglican Mission.

In 1970, the school was moved to its' present site with forty children. In January 1974, the Ibadan Mission school for the deaf, headed by Andrew Foster, was merged with the school and was renamed " Ibadan school for the Deaf". One hundred and thirty-eight children were enrolled under the proprietorship of the Anglican Mission.

Another report from Edo state (formerly known as Bendel state), titled "Open Education Scheme in Bendel state, Nigeria" (1976), stated that the idea of training the blind first came to the state in 1972, when Andrew Foster, an American, based at Ibadan visited the state. The purpose of his visit was to hold a conference on the founding of a school for the deaf in the state. The Ministry of Education in the state took action on Foster's state survey of children with special educational needs which revealed that there were about 1,027 deaf and 373 blind children in a state with a population of 3 million people. The state integrated system,

known as the "Open Education Scheme" was later introduced in Ishan Division of Bendel state in 1976 .

The Torrey home for the handicapped (the deaf & blind) in Kano was started in 1970 by Beth Torrey, a volunteer worker who was concerned with offering services specifically for the mentally retarded children with the support of Kano state Ministry of Social Development, Youth and Sports (Danyaro,1990). Rehabilitation of children with physical needs might be considered to be the beginning of an organised involvement of the government in the education of these children. The rehabilitation of these children began with the resettlement efforts after the second world war (Nwaogu, 1979).

With the growing interest in special education services for children with special needs, the Federal Government of Nigeria in 1977 incorporated a programme of special education into its' National Policy on Education which specifically stressed that physical education must be taught to all children (National Policy on Education, 1981). In another effort to make special education an integral part of the national education programme, the Federal government incorporated special education into the syllabus of all Teacher Training colleges and established special education units in all states owned Ministries of Education in Nigeria. This was a demonstration on the part of the government of its commitment to the education of SEN pupils but soon most of these institutions ran into some difficulties probably because of lack of qualified personnel, adequate funding and proper consultation between the Federal Ministry of Education and their state counterparts.

The universities of Ibadan and Jos, Kaduna polytechnic and Federal College of Special Education Oyo have introduced special education courses in their curricula, and students with the necessary academic qualifications have access to higher education in various fields in Nigeria and Physical education is one of the subjects taught to them.

However, not much has been done to cater for these children at the primary school level. Several researchers and educators (such as Fafunwa,1980; Nwaogu,1979; Ndama,1980; Mba,1978; Rocher,1970; and Olayiwola,1983) have expressed their concern about the lack of adequate implementation of a special education policy in Nigeria. For example, Fafunwa (1980) specifically asked when the government of Nigeria was going to improve the equality of educational opportunities for all our children, regardless of their disabilities? He pointed out that Nigeria is not short of policies on special education but lacked the Will to implement them.

Formal special education is a relatively new aspect of the educational system in Nigeria. There has been considerable improvements in the last few years despite cultural, socio-economic and political constraints that seem to have delayed the full implementation of a special needs programme (Abang, 1988, Obiakor, Maltby & Ihunnah, 1990, Oluigbo,1986). The improvements stem from the introduction of section 8 of the National Policy on Education which has made several attempts to support an educational strategy for exceptional individuals at both secondary and higher education levels(Obiakor, et al., 1991). The impact of this section of the national policy on education is yet to

be felt by SEN children attending ordinary schools in Nigeria due to the unfavourable attitudes of teachers working with them (Ogbue,1975, Oluigbo,1986).

The Federal Government of Nigeria launched a universal primary education (UPE) scheme in 1976 and this was followed soon afterwards with the introduction of the National Policy on Education(1977 & 1981) which spelt out that the children with special needs may receive their education alongside their able-bodied peers. However, little progress has been made in this area. Although some states(e.g. Oyo) have made considerable progress in the provision of education for SEN children at primary and secondary schools, there are other states (e.g. Kaduna) that have not made any noticeable move to assist these children despite the high population of SEN children in the state .

Whatever may be the reasons for this neglect, the plight of these children with disabilities is a matter of concern, and it is expected that the latest effort by the Federal Government to implement the policy guide-lines on integration of special education courses into Teacher training programmes may spur these states into action in the direction of providing appropriate educational programmes for children with disabilities.

It is interesting to observe that Nigeria does not have a specific definition of special educational needs of its own but employs the definition used in the West. It is not that the researcher advocates another special definition for Nigeria since the concept is a universal one but expresses concern about the misconceptions of this definition which may be responsible for incorrect assessment of these children. The acceptable definition

used by many educationalists in Nigeria has been that given by the Warnock committee Report (1978) and was described in the Education Act 1981 in the United Kingdom. The Warnock Report states that a child has a special educational need if:

he has a learning difficulty which calls for special educational provision to be made for him (section 1).

while the same Committee described a child with learning difficulty to be when :

- a) he has a significantly greater difficulty in learning than the majority of children of his age; or
- b) he has disability which either prevents or hinders him from making use of educational facilities of a kind generally provided in schools, within the area of the local authority concerned, for children of his age; or
- c) he is under the age of five years and is, or would be if special education provision were not made for him, likely to fall within (a) or (b) when over that age (section 1. 4. 29).

It is important to note the difference between the two definitions of a child having special educational needs and another having learning difficulty. These terms tend to confuse the educationalists in Nigeria.

Observing the definitions given on both categories of children, it suggests that a difference exists between the two, although, both definitions emphasise the need to make provision for the child in the learning environment. While the definition of special educational needs does not emphasise age or attempt to make any comparison regarding the needs of children, the definition of 'learning difficulty' included age as one of the factors that determine the child's needs. The misconceptions about these two categories of children among educational planners and policy

makers in Nigeria may also account for inappropriate planning and delivery of services for these children (Mba, 1991).

It is also important to note a definition of children requiring special needs in Physical Education given by the Physical Education Association (PEA)(1978) of Great Britain and Northern Ireland to the House of Commons Education, Arts and Science Committee :

Special educational needs might be brought about by a single or combination of factors including difficulties of body management, lack of manual dexterity, lack of muscle tone, extremes of normal growth distribution, sensory impairment, obesity and emotional problems arising from any of these but also from an inability to cope with operation/competition and from a range of learning difficulties (p.197).

This definition helps to create greater awareness among the primary school teachers in Nigeria and in the Kaduna state in particular about the type of provision that may be required for these children in the ordinary schools.

The Nigerian national policy on education (National Policy on Education, 1981) also identifies children described as gifted or talented but attempts to assist them to cope with their rate of learning have not^{been} quite successful due to some financial, cultural and social factors. Those with severe physical disabilities are often easily identified and placements provided in the special schools. Ironically, those with mild physical disabilities which this focuses its attention on, are always excluded from most of the school programmes and in physical education lessons in particular. There seems to be a general consensus among the teachers, that those with mild cases of physical disabilities can cope with the designed P. E. lessons for their able-bodied peers. This assumption seems to

suggest why the physically disabled children may have been missing out of the physical education lessons (Ogbue, 1981). Such neglect gives the impression that the whole idea of special education in Nigeria is non-existent (Onwuegbu,1977).

4.2 Catering for children with special needs in physical education in mainstream schools in Nigeria: The need for staff development

Although courses of special education has been offered to teachers working with children with special educational needs, there has not been any attempt made to train all teachers to cater for special needs children in a mainstream setting. Therefore the majority of teachers appear to allow SEN children with disabilities to participate in the regular P. E. programmes designed for able-bodied children without any modification of the programme or equipment. In some cases, teachers exclude them from participating in P. E. because they feel they are unable to provide for the needs of this group of children in the normal learning environment.

The exclusion of these children from participating in some form of appropriate integrated physical education is the main concern of this research study. An observation carried out by the researcher on teachers' practices with SEN pupils in P. E. in primary schools in the Kaduna state, Nigeria, shows that the SEN children are not benefiting from the mainstream education programme in P. E. due to the teachers' lack of skills and knowledge of the process of integration. The lack of specific courses within initial teacher training in Nigerian colleges of Education, Teachers' colleges and in the faculty of Education in

most of the Universities may be one of the reasons for this situation. Another reason may be the general lack of priority being placed on the education of children with special needs.

Nigerian teachers therefore, require some form of in-service support in order to improve their attitudes, skills and knowledge of the integration of SEN pupils into mainstream P. E. programmes.

This study is therefore, an attempt to examine the effectiveness of different approaches of in-service training in developing the attitude, skills and knowledge of class teachers in primary schools in Nigeria to enable them to more effectively integrate SEN pupils into the P. E.. lessons. Therefore, it is important to first of all examine the different approaches that may be used for in-service education and training.

Teacher Training and the Place of Special Needs

It is not a surprise to note that before the concept of special educational needs was introduced in the educational systems in both developed and developing countries, earlier textbooks written on the topic of initial training of teachers mentioned only briefly about this new term. The post-second world war teacher training programme mentioned the 'slower learner' which only referred to mental and physical handicaps and was acknowledged by the Warnock Report of (1978) when it stated that hardly any training courses dealt with 'special needs' issue.

But recommendations in the Warnock Report on teacher training for special needs have motivated various Local Education Authorities in the UK. to develop initiatives in the education of SEN pupils. However, by the late 1980s, there was still no unified

or generally acceptable model of good practice of in-service education and training for practising teachers.

It is interesting to note that many initiatives of the last few years have developed as a result of these recommendations (Croll and Moses, 1985). What is important about the Warnock Report is that it emphasised the indivisibility between 'special' and 'ordinary' and the development of a central concept of special needs that could benefit SEN children. Teachers are therefore, charged with the responsibility of identifying these special needs, which they cannot do without further training. Teachers dealing with children with special educational needs require continuous training in order to improve their identification and assessment abilities to perform their daily school activities.

Gulliford (1985) states that there are encouraging signs that consideration of special needs is being incorporated into initial training programme for teachers. However, Sewell (1986) Cohen & Cohen(1986) still maintain that it is quite rare to see textbooks on special needs programmes written explicitly for teachers and that this still means that there is less of an opportunity for them to develop their knowledge and skills in the area of special needs education.

While it is important to place a priority on children's needs in our educational programmes, it is necessary to recognise teachers' 'rights' and 'needs' since they are directly responsible for implementing all educational programmes. This is why the Warnock Report recommended an expansion of in-service education and training opportunities in special needs. The argument put forward by Pugh and De'Ath

(1984) perceive that the needs of children may best be met if only teachers' rights to further training are recognised and other writers like Gipps & Gross(1985) state specifically that teachers' rights referred to by Pugh and De'Ath (1984), means providing opportunities for teachers to go for further training in special needs for children with such needs.

It is therefore, necessary to acknowledge the fact that teachers require initial and in-service training in the education of special needs children in view of their new and challenging roles within a mainstream education programme and their rights to professional development.

Training of special education teachers in Nigeria

UNESCO Report (1972) states that about one-tenth of children in Nigeria suffer from various form of disabilities and about 25% of this population are of school age and require special educational provision to be made for them to receive their education alongside their able-bodied peers in ordinary schools. Thus, Nigeria with an estimated population of 80 million should have an average population of 2 million children with disabilities. About 20,000 of these children are from Kaduna state(Federal government gazette,1990; 206).

The Federal Ministry of Education survey(1984) shows that there were 260 Teacher Training colleges throughout the country and none was charged with the responsibility of training teachers for children with disabilities except the University of Ibadan. Admittedly, prior to the training of special education personnel in Nigeria, the Federal Government, along with some states in the southern part of the country, undertook the training of teachers in

the United Kingdom and United States of America, but this idea was later dropped because of the cost of such training programmes.

While the Southern states of Nigeria were developing an interest in the training of teachers for children with disabilities, there has not been a similar effort made by their counterparts in the Northern states, to improve the personal skills and knowledge of teachers toward integration programmes for SEN pupils (Mba,1991). In the Southern part of the country, special colleges of Education have been established to train teachers of special needs children and special schools have also been built for children with severe disabilities (Mba, 1991). The establishment of special schools for these children was the basis for organising training for teachers to enable them cater for them(Mba, 1991).

Following this concern for the education of SEN pupils by the southern states in Nigeria, the University of Ibadan was granted funding in 1974 to train teachers to teach these children with disabilities and this led to the development of two programmes in the Faculty of Education in the Universities. These included:

- 1) A 3- year Bachelor of Education course culminating in the B. Ed degree in special education.
- 2) A 1- year special education certificate course.

In 1980, a one- year course leading to Master of Education(M. Ed.) degree was introduced for teachers with Bachelor of Education degree while a two- year course leading to award of a diploma certificate in special education was introduced for experienced teachers.

The first attempt to train teachers to teach children with special educational needs in the Northern states began in 1976 at the University of Jos. Teachers were trained in specialised areas such as hearing impairment, physical handicap, visual handicap and learning disability. Other institutions involved in a similar training of teachers for SEN children included, Federal Advanced Teachers' College, Oyo and Federal polytechnic, Kaduna. But the most striking aspect of this training was that teachers were trained to work with children in special schools and not in the mainstream ordinary schools where SEN pupils were learning alongside their able-bodied peers. Consequently, many of these children in mainstream school were not able to benefit from the special education teacher training programmes in Nigeria and in particular, Kaduna state (Abosi & Ozoji, 1985; Mba, 1991).

The In-service training for teachers takes place mainly during the summer vacation but for those on distance learning programme, they maintain regular contacts with their lecturers in the various institutions. This is due to the fact that they take home assignments which must be returned on completion. On many occasions, study materials were sent by post to the students and the summer vacation period was always a time fixed for the formal teaching because schools are normally closed for over 3 months. The Institute of Education, Colleges of Education, Polytechnics and Universities in Nigeria are involved in organising the In-service programme.

They co-ordinate three different programmes of In-service training, for different categories of teachers which include those that are teaching in primary schools and would like to qualify as

Grade Two teachers. Others are those who would like to qualify as N.C.E teachers to enable them teach in secondary schools and those with N.C.E qualifications and would like to obtain their first degree certificates(B. Ed; B. A; B. Sc.).

Initially, the in-service training programme concentrates on providing teachers with cognitive and affective skills but with the recent development in mainstream education in ordinary schools, efforts are being made to emphasise the development of teachers' skills and positive attitudes to support the integration programme. During the course of training, teachers in various subject areas were provided with information to create a greater awareness of the needs of SEN pupils while a greater part of the time was devoted to improving their skills in order for them to work effectively with SEN pupils.

In Nigeria, the duration of in-service training courses for teachers varies according to the qualifications of a ward being taken. For those with primary school certificates wishing to qualify to be Grade Two teachers, five years is required to complete the training. This period is divided into contact sessions and each contact session lasts for 3 months. Those who are already qualified as Grade Two teachers and have been teaching in the primary schools but want a higher qualification (e.g. Nigeria Certificate in Education (N.C.E) to enable them teach in secondary schools) will need to spend a further 3 years in training. These years will also be divided into contact sessions with study materials indicated against each contact. Those with the N.C.E qualification and have been teaching in secondary schools and

Teachers' colleges enrolled in the in-service education and training programme for various degree certificates (B. A ; B. Ed; B. Sc.). They spent three years on this training which is divided into contact sessions as well.

To be enrolled in any of these programmes, teachers must meet the following requirements as outlined by Mba, (1991):

i) be a practising school teacher ii) possess primary school certificate

iii) obtain post-grade Two Teachers' certificate iv) have at least 5 years of teaching experience.

Other qualifications required include:

1. N.C.E ; 3 A/L in relevant subjects: for enrolment in B.A; B. Ed; B.Sc. programmes
2. 5 Credits O/L in relevant subjects: for enrolment in N.C.E programme.

Therefore, a teacher's initial qualification determines the duration and type of In-service Education and Training that he or she can attend. Teachers with these qualifications are admitted into the various programmes as stated but the focus of this study is mainly on those working with special needs children in ordinary schools in Nigeria.

A number of decisions need to be made when organising a course of in-service training. For example, where the programme should take place (location) and when it should take place (timing). Making the right decisions on these issues can influence the success of an in-service training programme. Adams (1990) has criticised the existing practice for not making these decisions in advance and the result is often an unsuccessful course. This is

particularly the case with courses in the teaching of special educational needs children as Adams points out:

Many teachers are ill-equipped to ensure that such needs are met. Some may have teaching qualification but no specialist training for special needs; others may have specialist training but have not worked with pupils across the full ability range. The patterns of training must now be organised so as to prepare teachers more fully for their roles in respect of pupils with special educational needs (P.124).

It is important therefore, for those planning In-service Education and Training courses to plan courses to enable teachers to improve their own personal skills and knowledge and cater for their pupils' individual needs. Adams suggests a number of ways in which an in-service education and training programme might be organised to benefit these children described as being 'special'. The summary of his suggestion is shown in figure 6.

Figure 6 The pattern and scope of In-service Education for Special Needs

CONTENT	1. Introduction to special needs for class teachers and /or newly appointed special needs posts covering : i) Awareness raising ii) developing knowledge base.
	2. Specific focus- finding out more about e.g. curriculum planning, school-based provision, language programmes, handicapping conditions and teaching implications.
	3. ' How to' e. g. design and implement curricular in Physical education, develop referral services to special school, and carry out classroom observation.
	4. Conceptual and legislative issues, concept of special needs, integration education Act, its' procedures and ramifications.
	5. Skills training in techniques directed towards competence in e.g. assessment, behaviourally-based programmes & counselling.
	6. Refresher programme to update knowledge on any of the issues.
Mode and Timing	Full-time attendance e.g. one year, one term; Part-time attendance e.g. day release, a week release, evening (after school hours) ; series of workshop e.g. weekly, one -day course/ conference; one session.

Location University. Polytechnic. College. LEA centre. Individual school
source , Adams, F.(1986 ,P.107).

The advantages and disadvantages of different forms of In-service programme

There are three types of in-service education and training for teachers in Nigeria. In-service training programme for the holders of primary education certificate who want to qualify and obtain the Grade Two Teachers' certificate; holders of the Grade Two Teachers' certificate who are aspiring to become holders of the Nigeria Certificate in Education (N. C. E); and those with Nigeria certificate in Education (N. C. E) who want to be trained to qualify for the award of Bachelor of Education (B. Ed) degree certificate.

The primary aim of in-service education and training is to build upon the existing knowledge and skills of teachers to enable them to perform the job of teaching and to cope with the challenging situations that a programme of integration produces. In-service training has become essential for teachers in primary schools in Nigeria because their initial training had failed to provide them with the knowledge and skills to support SEN pupils in a mainstream setting.

In-service education and training helps teachers to be constantly aware of current practices in teaching, and provides them with new approaches to teaching different concepts or skills, and how to relate them to different situations. This affords them the opportunity of not tackling academic problems of the child but as well as his or her social and behavioural problems.

The in-service education and training programme is an opportunity to improve teachers' attitude towards educating SEN pupils in ordinary schools. Most of the teachers in primary schools in Nigeria have never welcomed the idea of integration and this

attitude has been one of the factors responsible for SEN pupils not having the full benefits of mainstream education. Teachers could become more aware of the need to make provision for SEN children attending ordinary schools as a result of the in-service training.

Another advantage of in-service education and training for teachers is that their jobs are protected since they are not asked to resign before taking up the course and it allows them to be constantly in touch with what is going on in their respective schools.

Teachers involved in In-service training programme return to their respective school with a lot of resource materials which can be beneficial to all children. It is an opportunity for any school that has many teachers in the programme to have many teaching/learning aids as each of them participating in the training programme would bring some materials to their respective schools.

However, Nigeria In-service Education and Training (INSET) courses do not seem to provide the in depth knowledge required due to lack of time. The programmes are always short of time because they are always organised between school holidays which are not always long (except the summer holidays) . Teachers are only examined at the end of the contact session on materials covered during the short period of the programme and this practice seems to be responsible for why a lot of people criticise Nigerian In-service training programmes. They are popularly known as ' crash' programme in Nigeria.

Apart from this, the financial implications for the individual teacher are enormous. All teachers have to pay fees for INSET courses. Thus, it is even more difficult for married teachers who have to make special arrangements for their families while away.

4.3 Funding of Special Education programmes in Nigeria

Traditionally, special education is hardly cost-effective especially in the short run. This is due to the facts that, (a) it employs expensive equipment for assessment, teaching and therapy (b) it stresses individualisation of instruction (c) it involves a much higher teacher-pupil ratio than the general education and (d) it frequently requires the services of some specially trained professionals (e.g. psychologists, audiologists, physiotherapists). These personnel may be employed on regular basis or on short term consultancy basis. According to Rossmiller(1970), the cost of special education programmes for handicapped children ranges from 1.8 times the cost of education of a normal child and to 3.64 times for the education of a physically handicapped child.

There have been conflicting claims about financing special education in Nigeria, although the national policy on Education(1981) states unequivocally, that the Federal Government shall be responsible for the education of disabled children. However, it seems nothing is said about what proportion of the total cost in each state or Local Government Area will be borne by each of the three levels of government. The Federal Government (Federal Ministry of Education, 1981) claims that grants are being made annually to states for special education. But

states' Education Ministries' officials in charge of special education, counter that no direct grants are made specifically for special education, a part from the consolidated fund paid to the states, which most of them disburse according to the priority they attach to specific projects in the state(Mba, 1991, Adedoja,1976;Amanchi, 1978, Ozigi & Ocho,1981).

Rather, the states assume responsibility for special schools and programmes in each Local Government Area, just as they do for ordinary schools under their jurisdiction(Hassan, 1978). In many cases, however, special programmes in the Local Government Area attracts additional resources from philanthropists and voluntary organisations.

The major problem that seems to delay the proper implementation of special education programmes with the grants from the Federal Government is the method of disbursement. A bulk of money may be sent to each state thus, leaving it to decide how to spend it, hence, the diversion of this allocation into other projects (Hassan, 1978).

The present system of financing special education programmes in Nigeria seems to account for the existing problems teachers are facing in ordinary schools in Nigeria, and in the Kaduna state in particular(e.g. inadequate provision of facilities & equipment). This is evident in the fact that while some states(Oyo, Kwara, Ondo) have as many as twenty programmes for the handicapped, others(Kano, Kaduna, Borno) can hardly boast of one single educational programme , apart from one or two craft centres for the blind. Obviously, special education in Nigeria has many "unmet needs and goals(e.g. the goals of mainstream education & training

of specialist teachers) cluttering the special education scene"(Deno,1970).

4.4 Administration of Primary Education in the Northern states of Nigeria.

Another milestone in the development of primary education was reached in 1962 when the Northern government (now 19 states) accepted the Oldman Report on the reorganisation and administration of primary education in Northern Nigeria. Before 1964, the system of administration and supervision of primary education had been organised separately and independently by the native administration and voluntary agencies, resulting at times in confusion and conflict in the methods and policies, as well as in duplication of efforts. Although this system of dual control and authority had been shown not to be in the best of education, it was not until 1961 that the government, decided to subject it to critical review, especially in view of the rapid rise which may take place in the primary school population envisaged in the next two decades(Ozigi & Ocho, 1981; Oldman Report, 1961). The Oldman Report(1961) recommends that there is need for:

- 1) the formation of Local Education Authorities, each with an Education Committee comprising important, experienced and knowledgeable people in the Local Administrative Area.
 - 2) the training of educational administrators to man the new education authorities; and
 - 3) the separation of inspectors and administrators.
- (p.36)

The acceptance of this report and its recommendations meant that henceforth each Local Authority would be responsible for primary education administration and development in its' area of jurisdiction. Education Law was passed in 1962 following this

report, establishing a partnership between the government and voluntary agencies to provide and develop a public system of primary education.

Between 1964 and 1969 fifty-eight Local Education Authorities were set up, and the government now concentrated its development efforts on other levels of education. The creation of states brought about changes in the administration of primary education in most places. For example, the composition, authority and functions of education committees were reviewed in the light of experience gained since the formation. In some states, Local School Boards (LSB) with different administrative organisation, powers and functions were set up to replace Local Education Authorities (LEA) (Ozigi & Ocho, 1981).

4.5 Problems of Primary Education

There main problem of primary education in the Northern states of Nigeria and in the Kaduna state in particular can be classified as follows:

Low Enrolment and Attendance.

Until the introduction of the universal primary education scheme in 1976, the average percentage of enrolment of primary-school-age pupils attending schools in the Northern part of Nigeria was 15 per cent, even though, as earlier stated, there were wide variations between and within states. In the 1950s the average percentage was less than 8 per cent, and it was very low during the colonial administration (Ozigi & Ocho, 1981).

The primary causes of this problem has been summarised thus:

- 1) General lack of enthusiasm for the Western type of education in many Muslim areas, compared to the Islamic type of education to which Muslims are deeply attached.
- 2) Insufficient appreciation of benefits of Western education.
- 3) Financial difficulty in implementing large-scale but expensive primary education programmes.
- 4) Shortage of trained primary school teachers.

(Ozigi & Ocho, 1981).

The above factors, which seem to be interrelated, may account for the poor attendance rate in many schools. Although there seems to be less opposition to Western type of education as shown in the population increase(122,100(1952) to 555,718(1968) in the recent years, however, there are still many states in the North and in the Kaduna state in particular where pockets of resistance to a Western type of education have yet to be overcome.

4.6 The situation in the Kaduna state of Nigeria

The Kaduna Polytechnic was established in 1968 as a pioneer college of technology. Its foundation courses included: Commerce, humanities and sciences. Around 1973, the Polytechnic initiated a three- month course in Blind Welfare Administration because there was an urgent need for trained social workers with the blind. This course was suggested by the National Advisory Council for the Blind, and in 1979, it was merged with another course in the Department of Social Science and renamed Social policies and Administration/Rehabilitation(Mba,1991; Hassan, 1978).

The institution conducted a study in 1975 and the results pointed to an urgent need for trained staff to provide services for the large number of handicapped people that roamed the Northern cities begging for alms. Around this time, the Federal Ministry of Social Development, Youth and Sports came to the rescue and offered help which enabled the Interim Common Services Agency(ICSA) of the institution to establish the Department of Special and Rehabilitative Education before the end of that year(Federal Ministry of Social Development, 1979).

The Universal Primary Education(UPE) initiated in 1976 made educational services available to a large number of handicapped children and this, in turn, highlighted the need for more qualified staff in the area of Special Education and Rehabilitation. But the Universal Primary Education failed may be due to the lack of consultation between the Federal and state governments and inadequate funding which may be disappointing to many parents of children with disabilities attending ordinary schools in the state.

The Kaduna state Polytechnic took a number of steps to train staff for special education programmes by introducing a number of courses in the Department of Special Education and Rehabilitative Education. At the beginning, the Department provided three courses:

a) **The Certificate in Administration of Special Education and Rehabilitation:** This course was designed to provide a detailed survey of special education and rehabilitation services for government officials needing some basic training on how to provide for the disabled. It is a year course.

b) The Postgraduate Diploma in Special Education and Rehabilitation is a two- year course designed for teachers and social workers who are involved in implementing projects or directing some special schemes under the government. Directors or staff of rehabilitation centres are eligible for this course.

c) The Diploma for instructors in Special Education and Rehabilitation is also a two-year course for training instructors to work with handicapped persons in workshops, rehabilitation centres and home-based industries. Every trainee must specialise in four occupational areas connected with the employment needs of handicapped people within a community. Bicycle repairing, craft work, vehicle servicing are examples of some of the occupational areas(Mba, 1991;1976).

The special services unit of the institution provides temporary accommodation for the Department although it was intended that the unit should provide facilities for short courses for a few residential handicapped persons who could live with their families.

It was envisaged that between 1980 and 1985 an NCE course in special education would be introduced, giving rise to increased staff and enrolment. A curriculum with emphasis on the care of the mentally ill would also be introduced in a planned joint programme with Ahmadu Bello University, Zaria for training staff in the field of rehabilitation.

The Department of Special and Rehabilitation Education of the Kaduna Polytechnic has been involved in broadcasting information by radio, giving lectures on television as a form of public service to the community.

The staff of the Department operates a few public services for the handicapped, including the Kaduna club for the Deaf and Kaduna volunteer Braille club(Ogunsola, 1976; Mba, 1991; Abosi & Ozoji, 1985).

It is interesting to observe that all efforts in the Kaduna Polytechnic, Ahmadu Bello University, Zaria and the state Ministry of Education were not directed towards introducing mainstream education in ordinary schools. This suggests why the children with physical disabilities attending ordinary schools seem not to participate in the physical education lessons.

Establishment of Primary Schools in Kaduna state.

The government of Kaduna state of Nigeria in collaboration with the various Local Government Areas established schools in various communities as an attempt to provide education to its citizens. Also, few special schools have been established but located mostly in the Kaduna township. For example, 6 out of 7 such special schools are located within Kaduna township while the remaining one is in Zaria Local Government Area(Adamu, 1973; Ozigi, 1977, Ozigi & Ocho,1981). These few schools are meant to serve children with severe disabilities(the Deaf & Blind) and even some of the parents cannot afford to take their children to these schools because of exorbitant fees as compared to ordinary schools where the non disabled children receive their education virtually free. This situation seems to suggest why parents who cannot afford to pay the fees in special schools and failure of schools to make provision for their children tend to encourage them to take

to begging for alms in the streets (Rambo, 1969; Adedoja, 1993; Ozigi & Ocho, 1981; Hassan, 1978)).

It is interesting to note that some private individuals also established some special schools in the state but quite expensive and only few parents can afford to benefit from them. Apart from the fact that the Muslim parents oppose the Western type of education, there seems not much done to encourage the children with disabilities to attend schools for reasons earlier mentioned.

Funding of primary schools

The funding of primary schools and the special education programmes in Nigeria seems to be inadequate and in the Kaduna state in particular. Although, the Federal Government provides some grants to states, there seems to be not much done in the area of special education programmes possibly because such funds are diverted into other projects the state officials consider as more important. There seems to be no accountability on the use of such funds which may support the claim that such grants for special education programmes are diverted(Ozigi & Ocho,1981; Cameron, et al. ,1983, Adedoja, 1993).

In-service Training Programmes in Kaduna state

The in-service training programme for teachers, popularly known in Nigeria as Teacher In-service Training(TISEP), is organised by the Institute of Education, Ahmadu Bello University, Zaria in conjunction with the state Ministry of Education. The in-service training programmes are organised during the schools' long summer vacation(July-September) to give teachers enough

time to learn more skills and knowledge in their professional career.

During this period(July-September) teachers are withdrawn from their respective schools throughout the state to participate in the training programmes. The curriculum designed for this programmes seems not to contain enough on special education programmes to help to improve teachers' skills and knowledge towards the mainstream education programmes. Emphasises on this programme are on providing teachers with broad knowledge in the profession rather than to specific area(special education) which their initial training may have failed to provide.

Teachers bear the financial responsibility of the training and this may suggest why there is a lack of enthusiasm on their part as shown in the results of their opinions on in-service training gathered during the field work(report shown in chapter 6).

Summary

The negative attitudes of Nigerian primary school teachers has been identified as one of the major obstacles to the implementation of an integrated education programme for SEN children attending ordinary schools in Nigeria and in Kaduna state in particular. Apart from this, there are other cultural, socio-economic and political constraints which may affect the development of educational programmes for these children in the Northern part of the country. But in the southern states, there is some improvement in provision for SEN children.

As part of the Federal Government's effort to improve the educational programmes for children with disabilities, attempts have been made to include special education courses in Teacher Training programmes, although this has not yet been fully implemented.

Another crucial issue that seems to affect the educational programmes for SEN pupils is the lack of a clear definition of what special educational needs actually means to many educationalists in Nigeria. They have no definition of special educational needs apart from that provided by the Warnock Report (UK) and there seems to be confusion in its' interpretation due to the poor categorisation of children belonging to this group. The poor categorisation of these children in Nigeria has led to an incorrect assessment of the needs of these children in physical education and which subsequently results in their needs not being met.

While Nigeria is currently facing problems in the implementation of programmes of integration for SEN children who have been offered places in ordinary schools, it is interesting to note that a considerable development has taken place in the West. The development of programmes of integration in the west may be due to improved liaison and communication between the government, parents and other professionals. Parents were seen to have played an important role in the overall positive change of attitude towards the education of these children. Parents protested to the government

on non provision for their SEN children in the ordinary schools on realising that their children were neglected and discriminated against. This protest led to several court actions which paid off by the change of attitude on the part of the government and members of the public towards SEN pupils' education in ordinary schools. In spite of some difficulties, the programmes of integration in the West can be described as having been successful because of the support it received from individuals, organizations, professional bodies and parents alike. Notable among these achievements are the improvement in the standards of teaching for children with disabilities, provision of facilities and equipment; development of partnerships with parents and other professionals which allows parents to participate in the decision-making concerning their children's education; and the development of sound educational policies that may benefit the SEN children.

Although there have been some empirical studies which support the idea of SEN pupils benefiting from programmes of integration, there are a lot of concerns being expressed in the West about the need to improve teachers' competence and attitude toward teaching SEN programmes. According to the studies reviewed earlier in this study (Glicking & Theobald, 1975; Macmillan, Jones & Meyer, 1976; Gillung & Rucker, 1977), there appears to be little evidence to support that teachers are positive in their attitudes toward the education of these children in the ordinary schools. This has led to suggestions concerning strategies to improve teachers' attitudes through in-service training and pre-service programmes.

It is also important to note that while further training for teachers is advocated, we must not lose sight of the role of the school administrators who deal directly with teachers in meeting the needs of children with disabilities. It is therefore necessary to emphasize the need for an effective working relationship between administrators and teachers in order to promote the educational programmes for SEN children .

It is also important to point out here that although a significant number of parents of SEN children welcomed the idea of integration in ordinary school, there are some

who are relentlessly opposing the idea, particularly, parents of the able-bodied children. There are also parents of SEN children who would not like their children to attend ordinary schools because they feel that their children are not safe, would be ridiculed, and neglected . While some parents can cope with their children's disabilities, others find it distressing and would like a school to provide the assistance. It is at this point that help from the school is welcomed as parents who have lost hope about their children's education can be encouraged, those who are doubtful about the success of integration can be re-assured, while those with able-bodied children can be helped to understand the value of a programme of integration.

It is interesting to note that various organizations such as WHO, UNESCO, UNICEF and missionaries have attempted in their own ways to make provision for a few identified categories of children with disabilities in Nigeria . Their contributions were in the areas of setting up vocational centres and schools in order to cater for the immediate needs of these children. It has been observed that not much has been done in the area of providing opportunity to SEN children to attend ordinary schools, let alone helping them to integrate into school physical education programmes which is why this study is considered necessary .

Physical education makes considerable contributions to human growth and development and in view of this, children with disabilities need not be denied these benefits. The specific benefits derived from participating in a well planned programme of integration in physical education lessons include, promoting of growth and development, creating of awareness of values of participating in physical activity, developing confidence, interpersonal skills and personal qualities such as fair play, acceptance of responsibilities, respect for others and enthusiasm in working with others.

It must be borne in mind that the philosophy of an adapted physical education programme is designed to encourage the participation of these children is not really different from that of a regular physical education programme. The most important

responsibility for teachers working with these children in physical education is to employ strategies that may help SEN pupils to realise the basic objectives of physical education. While we consider the attainment of these objectives as of great importance to these children, teachers need to ensure their safety while participating in various activities. But in situations where they cannot participate safely, they may be assigned certain roles such as refereeing, scoring, time keeping and judging during games providing such a role has 'integrity'.

In order to help children with special educational needs to participate safely and benefit from the same programme as their able-bodied peers, certain principles must be observed. These principles include, the recognition that these children deserve the right to participate in activities of their choice; in a broad and balanced curriculum that is accessible to them.

Where it becomes necessary to arrange an alternative programme for them, it should not be, or considered trivial or meaningless and should contribute towards their needs.

Another way in which the needs of SEN pupils may be met is to introduce cross-curricular links between Physical education and other school subjects.

To enable teachers to increase the areas of participation in physical education for SEN children, it is important that other measures such as selection of appropriate activities, provision of a variety of activities, modifications of games rules and adaptations of equipment are essential. It may include the use of pair or group teaching and the use of a profiling system which allows the individuals the opportunity to discuss with the class teachers what they would like to do. Above all, it is necessary for teachers involved in programmes of integration to understand that the extent of integration for an individual must be based on a proper assessment of needs and the degree of handicap he or she suffers from. The needs of children described as having special educational needs can only be met if these needs can be identified through proper assessment.

The ability of teachers to perform their job of teaching depends on the quality of training provided and the support given by the government, school administrators, parents and other professionals, hence, the emphasis on providing further in-service training.

Teachers in Nigeria have the right to demand further training since their initial training may have failed to meet their needs in terms of teaching children with special educational needs. It is therefore important to introduce special education courses in in-service and pre service training programmes for teachers, thus enabling them to cope with the challenges of programmes of integration.

Following various opinions expressed on issues related to programmes of integration for children with special educational needs who are attending ordinary schools, the researcher feels that if SEN children are to gain from such programmes more attention should be paid to a number of key areas. These include, raising the standard of training for teachers, encouraging partnerships with parents and other professionals, providing facilities and equipment to support teachers, and developing sound educational policies that may benefit all children. To demonstrate that Nigeria is committed to providing SEN pupils with their educational needs in ordinary schools, efforts need to be made to accomplish the goal of integration and a desire to provide equal educational opportunities for all. Attention given to suggestions and opinions raised by several authors earlier described in this study may lead to an improvement in educational programmes for children with special educational needs attending ordinary schools in Nigeria.

CHAPTER FIVE

5. RESEARCH DESIGN AND METHODS

5.1 Introduction

This chapter focuses on a description of the design of the study and the research instruments used for collecting the data that form the basis of the substantive report of the study. The aim of the study is to identify means of integrating SEN pupils in P. E., the teachers' behaviour and practices that need to be improved, obstacles to the mainstream education, and teachers' needs for further training. Others include creating an awareness of need for partnership with parents and to highlight specific areas of programmes of integration which may require further research to be carried out. It is towards the achievement of these objectives that an intervention approach in form of in-service education and training was introduced to teachers.. ..

5.2 Design of the Study

The experimental design which was employed in this study involved a representative sample of teachers from Kaduna state of Nigeria which were put into three groups (Control, Comparison and Experimental). A form of intervention was introduced to teachers in the Comparison and Experimental groups. The aim of the intervention was to improve the teachers' skills, attitudes and knowledge towards the integration of children with special educational needs into physical education programmes in primary schools in Nigeria . To do this, questionnaires were used as the main research instrument for gathering data but other techniques were also used such as informal observation, interviews and discussions. The teachers had the opportunity to rate their skills, knowledge and attitudes on various statements related to programmes of integration.

As suggested by Best (1981) and Dyer (1979) a study of this nature which seeks to identify levels of interest, skills, attitudes and knowledge of a group of people, could be regarded as a descriptive study.

5.3 SUBJECTS

The subjects for this study were drawn from a random sample of the population of teachers who are working with the children with special needs in primary schools in the Kaduna state of Nigeria.

The sample consists of 100 teachers from all the five primary schools in Zaria and Soba Local Government Areas of Kaduna state. Table one on page 135 shows that the largest group of the entire sample (representing 40 per cent) was drawn from Ahmadu Bello University(A.B.U) staff school Zaria while 20 per cent each was drawn from Saidu Local Education primary and Therbow primary schools respectively. Ten per cent came from the Lemu and Army children primary schools respectively.

Essentially, the sample size represents 20 per cent of the total population of teachers in Kaduna state. It is important to note that teacher population in Nigeria is quite homogeneous in many respects. For example, their duration of training' conditions of service, and the affiliation to the professional body known as the Nigerian Union of Teachers(N.U.T) were common factors that suggest homogeneity . As a result of this, the proportion of the sample drawn from each school in Kaduna state would be representative of the general characteristics of the teachers in primary schools in Nigeria.

5.4 SAMPLE SIZE

Kaduna state is one of thirty states in Nigeria excluding the new Federal Capital Territory, Abuja. The state is divided into thirty-two Local Government Areas (LGAs) and the two randomly

selected were Soba and Zaria Local Government Areas as shown on map in Appendices 7 and 8 respectively. There are forty-five primary schools in the state that have children with special educational needs on enrolment and twelve of these schools are located in Zaria and Soba Local Government Areas which were selected through random sampling for this study. It was out of this number that the five schools shown in Table 1 were finally selected through the same process.

Table One: Distribution of Teachers in primary schools used in the study

Schools	Location	No. of males	No. of females
A.B.U staff school	Soba L.G.A	39	1
Saidu LEA school	Soba L.G.A	20	-
Lemu LEA school	Soba L.G.A	9	1
Army children school	Zaria L.G.A	10	-
Therbow school	Zaria L.G.A	20	-
Total		98	2

Table 1 shows the population distribution of teachers indicating the number of male and female teachers that participated in this study from the selected schools. Out of the total population of 100 teachers that took part only two females were involved.

5.5 SAMPLING TECHNIQUE

The selection of teachers who constituted the sample for this study was carried out at the various schools during their school sessions. Initially, the investigator obtained a list of schools that had children with special educational needs on their enrolment from the National Commission for primary schools (NCPE) at its' headquarters in Kaduna, Nigeria. From this list a total of 210 teachers were identified as working with the children

with special needs from the five schools already selected for this study. It was out of this number (210) that 100 teachers were selected.

The number of teachers to participate in this study from each school was determined by the investigator in order to ensure that the sample size of 100 was drawn from all the five primary schools. To do this, the investigator had to visit all the participating schools. As the investigator visited each of the schools, he had cards with the specified number of teachers needed from each school written on them.

On reaching each school, the teachers who were earlier identified as working with the SEN pupils were invited to the classrooms for the final selection of those to be involved from that school. The selection was based on "lucky dips". This was done in order to give an equal opportunity for being included in the sample to be studied. After a brief explanation of what to do, they were asked to dip their hands into a bag that contained both cards with specified numbers and other plain ones. It is important to note that after each lucky dip, the cards were re-shuffled before the next teacher took his/her turn in the exercise.

At the end of the exercise, those teachers with cards with certain numbers written on them, were included in the sample size that was studied. A similar exercise was carried out in all the five participating schools in this study.

The 100 teachers selected were assigned to three groups{ control (40), comparison (40), experimental (20) } and the groups were randomly assigned to the participating schools. The subjects who belonged to a particular group must come from the same school because of the nature of the experimental design chosen for this study .

The investigator employed random assignment at this stage in order to avoid a situation where teachers belonging to different groups and receiving different treatment are put together in the same school. This approach was adopted in order to ensure that teachers' opinion were not influenced during the post-test. For example, if teachers in the control group were by chance found in the same school with the comparison group, which the random sampling procedure would have done, they would have gained access to the booklets offered as intervention to the comparison group which may influence their opinion during the post-test

To avoid creating such opportunities, the investigator made sure that teachers in the same school were only assigned to a particular group.

It is important to note that teachers who participated in this study from various schools were unaware of the groups they belonged to throughout the period of the investigation . In order to achieve this purpose, the groups were assigned to schools in such a way that interactions between the teachers in the various groups were minimised.

5.6. Control group

The sample size for this group was forty . The teachers in this group were not given any experimental treatment as was done with the teachers in the comparison and experimental groups. The teachers were only offered the opportunity to participate in the tests designed to ascertain their opinions on their skills, attitudes and knowledge toward the programmes of integration planned for SEN pupils in primary schools in Nigeria. For this group the investigation consisted of two stages:

Stage 1

This stage was regarded as the pre-treatment period. During this period, a set of questionnaires were administered among the teachers for self assessment of their skills, attitudes and knowledge in mainstream education. Teachers rated their opinion on all the statements related to attitudes, skills and knowledge and the results were recorded as a pre-test with the identification number (011) where (01) represents the group number and (1) represents the first test administered.

Stage 2

This stage involved the administration of the second set of questionnaires which was done at the end of the investigation . It was conducted at the same time with those in the comparison and experimental groups . The results were recorded in a similar way but identified as (012) where (2) represents the second test for the group.

As part of the objectives of the experimental design for this study, the investigator omitted this group from all the experimental treatments offered to other groups in order to compare its' results to results obtained from other groups . This was meant to determine the impact of intervention on teachers in the comparison and experimental groups with regard to their attitudes, skills and knowledge toward the programmes of integration.

5.7 Comparison group

The sample size of this group was the same as that of the control group.

This group was only provided minimal intervention in the form of booklets which contained adequate information about the needs of children with special educational needs in physical education and

examples of the good practice by teachers working with such children. For this group the investigation consisted of three stages:

Stage 1

Before any form of intervention was introduced to teachers in this group, the investigator administered a set of questionnaires among the teachers in order to assess their competency in working with SEN pupils in physical education. They were asked to rate their opinion on a number of statements related to attitudes, skills and knowledge in mainstream education. Their scores were recorded as pre-test results with the identification number of 021 where (02) represents the group number while 1 represents the first test for the group .

Stage 2

The researcher introduced the intervention programme in the form of booklets . The teachers were instructed to read these booklets diligently in order that the information provided would assist them in preparing

their lessons in physical education that could benefit children with special educational needs attending ordinary schools alongside their non-disabled peers . A copy of the booklet is presented in Appendix 2.

Stage 3

At the end of the eleventh week of this study, the researcher provided another opportunity to the teachers in this group to rate their opinions on the same statements that were provided to them during the pre-test . The responses made by these teachers were recorded as post-test scores and identified as 022 where (02) represents group number while 2 represents second test for the group .

A minimal intervention was provided to this group mainly to afford the investigator the opportunity to compare the level of impacts that the intervention had made to teachers' attitudes, skills and knowledge of both the comparison and experimental groups .

5.8 Experimental group

A total of twenty teachers participated in this group . The sample size was half of the other groups (control and comparison) and deliberately chosen because the researcher had to carry out several activities with this group . These included teaching demonstrations, informal discussions, interviews and observation of teachers' practices with SEN pupils in physical education lessons . It was mainly because of the teaching demonstrations that fewer teachers were selected for this group .

The teaching demonstrations were provided to this group specifically to increase awareness of the needs of SEN pupils among teachers working with these children in physical education programmes . The ultimate objective was to improve the attitudes, skills and knowledge of teachers that could support the mainstream education programme in primary schools in Nigeria . The teachers in this group were provided with booklets that outlined the need of SEN pupil and described examples of good practices for teachers working with SEN pupils to use. In addition to this, informal interviews lessons observations, and discussions were conducted with the teachers. These were the additional interventions used with the teachers in this group. There were six stages of investigations conducted with this group.

Stage 1

The investigator administered questionnaires among the teachers in order to ascertain their level of preparation for the integration

of children with special educational needs in physical education . This was the first Teachers' rated opinion on knowledge, attitudes and skills before any of the interventions were introduced. The scores were recorded as a pre-test with the identification number of 013 where (01) represents the first test for the group while(3) represents the group number.

Stage 2

In the second week of this study, the researcher informally observed the teachers working with the classes. The observations were made during the normal physical education lessons organised by all the teachers in the group. The observations made have been incorporated in the discussions of the findings of the study in chapter four.

Stage 3

The teachers were introduced to the various forms of intervention in the second week of the investigation as indicated below.

i) Distribution of booklets that contained an outline of the needs of SEN pupils and examples of good practices. This was specifically done to develop their awareness of the needs of these children.

The teachers were instructed to read the booklets and utilise the information provided to organise their lessons for integrated settings.

ii) The researcher took over the teaching of physical education lessons from the teachers. Before any lesson took place, the teacher in charge of the class was given a prepared list of good practices in physical education with the SEN pupils as shown in Appendix 4 . The teacher was instructed to carefully observe the lesson taught by the researcher in order to identify any examples of good practice shown and as soon as he/she noticed any, a tick

should be put against such practice . At the end of the lesson, the researcher held discussions with the class teacher on the observations that he/she made during the lesson. This was done for about 5 weeks for all the classes where the SEN pupils were on enrolment. The informal discussions and interviews were centred on some specific issues that could help the teachers to organise successful lessons within a mainstream education programme. The information gathered from the discussions were used to supplement the information gathered earlier by the use of questionnaires and this has been included in the discussions of results.

Stage 4

After five weeks of teaching, the researcher involved the class teachers in the teaching. They taught their lessons while the researcher observed and after each lesson, discussions followed as a form of appraisal of the teachers' teaching. In the subsequent week, the researcher took the lessons in order to provide alternative approaches to that displayed by the teacher. This continued up to the end of the tenth week of the study.

Stage 5

The investigator administered the questionnaires the second time in order to determine the impact the intervention had made on teachers' attitudes, skills and knowledge toward the integration of SEN pupils into the school physical education programme . The results were recorded as a post-test with the identified number of 023 where (02) represents the second test for the group while (3) represents the group number .

Stage 6

At the end of the twelfth week, the researcher conducted an informal observation of teachers' practices with SEN pupils in physical education. This was done to determine the extent of

which the teachers had applied the knowledge they had been offered through direct teaching, booklets, and discussions of good practice in physical education with SEN pupils. The observations made after the intervention was recorded and later used to generate further discussions of the data in chapter 4.. The summary of activities that took place in the various groups has been presented in Table two.

Table Two: Summary of treatments within groups

Groups	No of Teachers N=100	Treatments offered
Control	40	1 Administration of pre-test 2 Administration of post-test
Comparison	40	Administration of pre-test 1. Distribution of booklets on teachers' awareness of needs of SEN pupils in P.E. Administration of post-test
Experimental	20	1 Administration of pre-test 2 Observation of teachers' practices with SEN pupils in physical education 3 Distribution of booklets on teachers' awareness of needs of SEN pupils in P.E 4 Teaching demonstrations organised by the researcher 5 Teachers' observation of demonstration lessons with prepared list of good practices in P.E 6 The teaching demonstrations provided by the researcher continued. 7 Administration of post-test 8 Final observation of teachers' practices in P.E with SEN pupils.

Note: The treatments provided to teachers in the comparison and experimental groups as interventions lasted for 11 weeks of the school term.

5.9 DATA COLLECTION

The researcher employed several methods of collecting data for this study. These techniques include, the use of questionnaires, informal interviews, observation and discussions . All these approaches complemented each other.

The questionnaire was used specifically to collect data about the teachers' skills, attitudes and knowledge regarding approaches to integration; their understanding of obstacles to mainstream education implementation, understanding of collaborating efforts between the schools and home and finally, the teachers' interest in conducting future investigation on integration. The details of each of the measures employed are shown below.

5.10 THE TEACHER QUESTIONNAIRE

The teacher questionnaire was the major instrument used to collect most of the data in this study. The forty items in the questionnaire were devised on the basis of information obtained from the review of pertinent literature, personal experience gained from working with the children with special needs and the discussions with some experts. A scale based on the type suggested by Likert (1967) was devised to solicit the response of the subjects . The scale ranges from rating 5 (" Strongly Agree") to 1 ("Strongly Disagree"). A copy of the teacher questionnaire is provided in Appendix 1.

Section A comprises a set of four open ended questions on the personal details of the teachers. It specifically touches on issues such as age, gender, qualifications, and teaching experiences of the teachers.

Section B consists of four statements seeking information on the way teachers perceive in-service training. The statements

were framed to obtain the opinion of the respondents on adequate training, additional training, duration of training and preference for full-time or part-time training and whether the views they hold has in any way affected their perception of the purpose of training.

Section C of the teacher questionnaire deals with the practice of integration in primary schools. It consists of various statements about the teachers' knowledge of approaches to integration, ability to devise and implement programmes for integration, implementation of plans for mainstreaming, knowledge of a variety of activities in physical education for SEN pupils, ability to develop and use adapted programmes to benefit SEN mainstream education.

Section D of the questionnaire is made of up of nine statements which sought information about a teacher's readiness to develop an open mind to new ideas on integration, ability to identify their own strengths and weaknesses in dealing with SEN pupils, competence in making objective assessment of the needs of SEN pupils, ability to motivate SEN pupils to participate in P. E. using all forms of reinforcements, capacity to organise appropriate learning activities, ability to ensure the freedom and safety required by SEN pupils, capacity to provide clear and concise instructions during physical education lessons and ability to provide appropriately sensitive and caring support which is essential for SEN pupils' participation in physical education.

Section E of the teacher questionnaire consists of six statements related to obstacles to the implementation of in mainstream education. The opinions of teachers were sought on the funding of mainstream education, staffing in schools, their level of competence in coping with SEN pupils in the programmes of integration, the support they get from parents and non-

teaching staff regarding mainstream education and the relationships that exists between the SEN pupils and their non-disabled peers. Their opinions were measured on a 5- point Likert scale.

Section F of the questionnaire consists of six statements which seek information on the existence of any collaboration between teachers, parents and other professionals working with special needs children . These statements were framed in order to obtain information about the teachers' interest in maintaining partnership with parents and other related issues such as parents' attitudes to the integration programme, interest in working with other professionals, the opinions on parents' participation in decision-making on their children's education and the release of information on SEN pupils' performance records to their parents .

Section G of the teacher questionnaire consists of five statements designed to seek information about teachers' interests in participating in future relevant-based research that could lead to the discovery of new approaches of dealing with the needs of children with special needs. They were requested to rate their opinions on the suggested members of a research team, the appointment of a specialist physical education teacher to be the chair-person of such a team, the support the investigation could lend to teachers' actions, their willingness to offer support to such a team willing to undertake such a study and how such investigations could provide increased opportunities to both teachers and children with special educational needs .

5.11 ADMINISTRATION OF TEACHER QUESTIONNAIRE

Prior to visiting these schools, the headmasters/mistresses in charge were contacted a head of schedule about the use of their schools for the study after the permission was first granted by the

Zaria and Soba Local Education Authorities. The approval followed Evans' (1978) suggestion that permission to carry out a research must always be obtained in advance of starting it and nothing should be done without the knowledge and consent of the head or any other member of staff who might be affected. The administration of this instrument took place in early April, 1992, which was the beginning of the second term of the school calendar

Some precautionary measures were taken to ensure the co-operation and participation of the teachers in the study, and for them to give honest responses as much as possible. Anonymity was maintained by teachers as they were duly instructed not to write names on the questionnaires. This gave the teachers the confidence to give their opinions freely since nobody was going to be identified with particular opinions.

Teachers selected for this study were given group numbers in the researcher's record (but unknown to them) so that the researcher could have a record of how individual teachers responded to various statements during the pre-test and post-test periods, although the focus of the tests was on group responses rather than the individual's response. In general, the following precautions were observed:

1. The questionnaires were administered under carefully controlled conditions .
 - a) Administration was carried out during the school break periods; therefore normal classes were not disrupted.
 - b) Selected teachers within the school were assembled in one of the rooms where the questionnaires were administered in order to avoid interactions between them that might influence their decisions/opinions.
 - c) Instructions to teachers on how to complete the questionnaires were clear and straight forward. However, they were advised to ask questions where necessary .

The researcher ensured that all the teachers were given the questionnaires on both occasions which served as the pre-test and post-test and their scores were used during the analysis of the data .

5.12 RETURN RATE OF TEACHER QUESTIONNAIRES

The return rate of the questionnaires was 100 per cent . This success was because of the personal contact and close supervision provided by the researcher.

The responses given were also good as no ambiguous answers were recorded. As soon as the questionnaires were collected, they were put into their respective group (experimental, comparison, control) and identified with letters A, B, and C so that the subsequent set of the questionnaires would be correctly placed . The first set of the questionnaires administered seeking the opinions of teachers on the various statements were recorded as the pre-test while the second set was recorded as the post-test .

5.13 OBSERVATION

The use of observation as a technique for data collection has been justified as a good instrument for gathering a wide range of information about human behaviour and practices (Best, 1981; Borg & Gall, 1989). The appropriateness of this technique to any research is determined by the nature of the study and the environment where the study is being conducted.

Physical education activities can take place either in the gymnasium or outside on the field and to obtain first hand and reliable information about teachers' practices with special needs children, visits were made to the participating Schools during their P.E. Practical lessons. Though the Schools involved were under

different Local Government Areas, the visits were possible due to the availability of personal transport.

The time and purpose of visits were only disclosed to the headmasters/mistress of the schools assigned to the experimental group. These visits afforded the researcher the opportunity of gathering information related to the teachers interactions with the special needs children which may not be revealed in their responses to statements in the questionnaire.

For every school visited, the physical education lessons taken by individual teachers in the experimental group were observed for at least twenty to twenty-five minutes and repeated observations were made on each teacher during the week. The information gathered from these observations is referred to in the discussions of the findings of this study.

5.14 **INTERVIEWS**

The observation of teachers' practices with children with special educational needs in physical education lessons raised several questions that needed explanations. Informal interviews were employed to enable the researcher to focus the questions on specific areas that needed clarification. This was done with the individual teachers after their practical lessons. The researcher also used this technique to gain insight into some misconceptions they may have about the various practices in programmes of integration for children with special educational needs attending ordinary schools, such as the assumption that SEN pupils cannot participate and enjoy P.E lessons and therefore must always be exempted and the feeling that SEN pupils are not accepted by others, and have a lack of opportunity to assume leadership roles during Physical Education lessons. Above all, interviews were used as a supplementary technique in gathering information on

good aspects of practice that are usually ignored by teachers who are found working with SEN pupils in integrated settings. The application of this technique is considered appropriate to this study as many people are usually more willing to talk than to write .

5.15 DISCUSSIONS

The researcher also employed the use of discussion as one of the techniques for gathering more information about the issues raised during the informal interviews. Though the discussions with the teachers were informal, teachers had the opportunity to express their opinions on many issues surrounding the programme of integration in primary schools in Nigeria. The discussions were occasionally held with these teachers at their own convenience. The teachers who did not have the opportunity for such discussions at school, were later visited at their homes.

The use of discussion was of particular value to both the teachers and the researcher as both of them gain new knowledge regarding the programmes of integration and information on teachers' practices with SEN pupils respectively. Most of the issues discussed were problems that could pose threats to the implementation of a programme of integration. These included home/school relationships, teachers/other professionals' relationships, government efforts toward the implementation of integration in primary schools which specifically focused on funding, provision of facilities and equipment, training of teachers and the support teachers receive from parents of SEN children regarding the programme of integration. The information gathered from these discussions was used in the discussions of the major findings of this study .

5.16 VALIDITY OF THE QUESTIONNAIRE

To make a reasonable contribution to the development of knowledge, an experiment ought to have a high level of internal and external validity. For this reason, there is a need to look at the appropriateness of the test items to ensure that they measure what they are supposed to measure.

The aim of this study is to find out how adequately the teachers have been prepared for the programme of integration in physical education for children with special needs in primary schools in Nigeria.

It was pertinent to validate the appropriateness of the items used in measuring the teachers' rating of their attitudes, skills and knowledge toward mainstream education.

The major instrument used for data collection for this study was the questionnaire prepared for teachers working with the SEN pupils.

A research instrument is valid to the extent that it measures what it purports to measure, and specifically, content validity deals with the degree to which the sample of items represents the content that the test is designed to measure. Content validity is particularly important in the selection of tests to use in experiments involving the effect of teaching methods on achievement (Borg & Gall,1989). Also, predictive validity deals with the degree to which the predictions made by a test are confirmed by the later behaviour of the subjects.

Instruments are validated either by correlating their scores against some outside criteria such as tests of accepted validity, or as is generally the practice, by relying on the expert judgement of recognized authorities (Best,1981; Dyer,1979). In keeping with the second procedure, the questionnaire used for this study was read and approved by experts in research methods and the

special educational needs programmes both at the University of Hull, England, and also at the Ahmadu Bello university Zaria, Nigeria.

As part of the validation procedure, a group of students of Physical Education at the University of Hull were asked to make their observation regarding the instruments. They were constructive in their criticisms which generated some suggestions that led to modifications of the questionnaires and the inclusion of some background information to the study.

5.17 RELIABILITY OF THE QUESTIONNAIRE

An instrument is reliable only if it consistently yields the same results when repeated measurements are taken of the same subjects under the same conditions. This means then that for a research instrument to have a high coefficient of reliability there must exist minimal errors of measurement (Best, 1981; Dyer,1979).

The procedure adopted in the reliability assessment of the instruments used in this study was to obtain an estimate of the consistency among the items. Using the SPSS-PC statistical package, the reliability of the questionnaire used for gathering information about teachers' ratings of their skills, attitudes and knowledge towards a programme of integration was calculated to produce coefficient reliability (r) value of .8033 using alpha coefficient. The instrument was thought to be of acceptable reliability.

The reliability of the data collected during the study was ensured at various stages. First, the completion of the questionnaires by the teachers in the various schools was closely supervised by the researcher . No questionnaire was mailed to any of the respondents. Although the questionnaire contained

several items, the teachers carefully completed them in good time and this reduced the chances of error that could occur due to boredom and mental fatigue. The instructions on how to complete the questionnaire were quite simple, short and comprehensible . These instructions were adequately explained to the subjects before their responses to the questionnaires.

5.18 DATA ANALYSIS

The questionnaire was designed to collect two types of data that provided a base for performing both descriptive and inferential statistics that were employed in this study. Information on the variables of qualifications, age, gender and teaching experience were collected. Data such as those dealing with teachers' characteristics have been analysed using descriptive statistics of proportions, percentages, means and standard deviations. The primary purpose is to describe the relationships that exist between these variables and their teaching roles.

The second type of data was teachers ratings using the Likert scale and inferential statistics have been employed to interpret the data. Data obtained was presented using descriptive tables related to each of the six components (in-service training, integration practice, attitudes & skills, obstacles to mainstream education, collaboration and future research) indicating the mean score of total score categories and their corresponding standard deviations. The mean scores for each group's responses to various items in the questionnaire were obtained by adding all the categories of self-ratings by teachers and then dividing the total by the number of teachers in that group. For example, where 20 teachers responded to a given item using their self-ratings on a 5-

point scale, all the categories between 0 and 5 were added up and divided by 20 to give the mean score for that group.

The corresponding standard deviations obtained on each item and on the group mean score indicated how the opinions of teachers varied on each of the statement contained in the questionnaire. The opinions could be close to their mean score.

For the purpose of the discussions of the findings from this study, the investigator used the following codes for the groups' mean scores on each statement regarding the six components mentioned earlier.

1- 1.5	Strongly Disagree
1.51-2.5	Disagree
2.51-3.5	Undecided
3.51-4.5	Agree
4.51-5	Strongly Agree

Thus, when the teachers' responses showed a high mean score it indicated that they "agreed" with the statements while a low mean score showed that they "disagreed" with the statements . The use of the term "mean of total score categories" refers to the mean of scores obtained after adding all scores on the Likert scales for every statement, and this has been employed extensively throughout the analysis of data and its interpretations.

Finally, hypotheses were tested using student t- tests (Best,1981).

The purpose of testing hypotheses was to establish any statistically significant differences in the mean scores of the respondents in the various groups which described their opinions about the various statements relating to the implementation of the mainstream education programme in primary schools in Nigeria and in the Kaduna state in particular.

CHAPTER SIX

PRESENTATION AND DISCUSSION OF RESULTS

6.1 INTRODUCTION

In this chapter, the results of the data collected have been presented and discussed, and their implications for the preparation of primary school teachers to work with children with special educational needs in physical education in Nigeria outlined.

6.2 DEMOGRAPHIC INFORMATION

GENDER

Teaching seems to attract more males than females in Kaduna state as shown in the data provided in Table Three. The finding of this study reveals that out of a total sample of 100 teachers recruited for the study only two per cent were females while the remaining 98 per cent were males.

The low percentage of female teachers in primary schools in Kaduna state may be attributed to the opposition of Muslim parents to western education (Fafunwa,1974). The Muslims, who are the dominant population in the areas covered by this study, have developed strong reservations about embracing western education because it has been regarded as a tool for propagating Christianity.

TABLE 3 Gender, Age, Qualification and Teaching experience of Teachers.

A	Gender	male	98%
		female	2%
B	Age	< 30 years	39%
		30-34 years	33%
		35-39 years	24%
		>39 years	4%
C	Qualifications	postgraduates	-
		first degree	9%
		certificates & diplomas	4%
		Grade Two Trs., certificates	87%
D	Teaching Experience	<4 years	51%
		4-9 years	37%
		10-14 years	11%
		15-19 years	1%
		> 19 years	-

As a result of this, many children, particularly the females, are denied the opportunity of receiving a formal education but offered Islamic education instead. This prevents them from taking up any occupation let alone teaching appointments. Females are influenced by their parents' fears because it is believed that girls could easily be converted into Christianity. Therefore, females are not encouraged to receive formal education, hence, few of them enter the teaching profession or other professional occupations. Islam is the main religion of the population of parents who oppose the idea of women taking up responsibilities outside their homes. Parents are opposed to their daughters taking up such teaching jobs and particularly dislike the idea of allowing women to teach physical education which they consider as being too rigorous for women and also that it requires a change of attire for practical lessons. These beliefs and practices of parents are considered to account for the small number of women in the teaching profession in Kaduna state (Fafunwa,1974).

AGE

Apart from the teaching profession being dominated by men, it has been associated in the past with people who tend to be advanced in age, and not until recently has the profession witnessed young people developing an interest in the teaching.

The finding of this study suggests that the teaching profession is no longer an exclusive occupation for older men and women. It has become a profession that embraces both young and old people. It is evident from the results of this

study that about 72 per cent of the entire sample of teachers in this study were between 30 and 34 years of age.

QUALIFICATION

The quality of teachers in terms of their skills, knowledge and attitudes may determine the quality of education being offered to children in schools. To ensure the delivery of a good quality education which the Federal Government of Nigeria aspires to provide for its' children, the holders of the Nigerian Certificate in Education (N.C.E) has been accepted as the minimum qualification required to teach in primary schools. This policy was stated in the National policy on Education of 1977 and was cited by Fapohunda (1980)

All teachers in our educational institutions, from primary to university, will be professionally trained.....It will be the ultimate policy than only candidates whose minimum qualification is West African School Certificate (WASC) or its equivalent will be admitted to our teacher training colleges. Since, the six-year secondary system has been started, it will mean that the N.C.E will ultimately become the minimum basic qualification for entry into the teaching profession (pp.148-149).

But this study reveals that 87 per cent of teachers in the schools being studied were holders of the Grade Two Teachers' Certificate. This result suggests that the government's target of using the Nigerian Certificate in Education (N.C.E) as the minimum qualification is far from being met. It is also observed that only 9 per cent of the total sample population of teachers were holders of First degrees while 4 per cent were those without a teaching qualification but holders of Diplomas and certificates in other areas such

as Library science and journalism which do not qualify them to teach in primary schools in Nigeria.

It is interesting to note that holders of first degrees who were the most qualified teachers, were mostly involved in performing administrative duties rather than actually being involved in teaching which they were employed to do. This suggests therefore, that the majority of teaching responsibilities were carried out by the holders of Grade Two Teachers' Certificates and holders of Diploma Certificates.

EXPERIENCE

In terms of teaching experience, this study reveals that the majority of the teachers (88%) have 9 years of teaching experience or less. Only 1 per cent of this sample of teachers had between 15 and 19 years of teaching experience.

In the final analysis, the result of this study would suggest that more males are attracted to the teaching profession than their female counterparts and that the profession is no longer an exclusive area for older people as many young people are in the profession today. The interest of the young people in the teaching profession may be due to the improved conditions of service and the present practice of automatic employment for all graduates of teachers' colleges(Nwagu,1981).

6.3 An overall view of the teachers responses to the questionnaires before and after interventions

An overall view of the responses made by teachers before and after interventions were introduced are shown Appendix (3). It shows the pattern of responses of teachers before and after the interventions were introduced to the comparison and experimental groups. The pre-test

responses reveal the negative attitudes of teachers toward the programmes of integration in ordinary schools in Nigeria. The negative attitude is shown by the fact that not a single teacher from the one hundred teachers questioned strongly agreed (response 5) with any of the 35 items and only eleven responses showing 'agreement' were recorded.

The post-test result of the non intervention Control group manifested the same negative attitude although the teachers in this group showed certain shift in their opinion from 'strongly Disagree' to 'Disagree' and 'Undecided' on some of the items. For example, on item number 7, 21 responses of 'Strongly Disagree' were obtained on the pre-test but only 3 on the post-test. This could be due to factors such as social interaction in which they reconsidered their earlier decisions and the implications of the earlier responses to the various items.

The post-test results for the intervention groups (comparison and experimental) showed a significant shift in their opinion towards embracing the new idea of introducing and supporting the mainstream programme of integration. The justification for putting these groups together is that both received intervention before the post-test was conducted.

It is important to note that the items marked with asterisks(*) on the questionnaire were considered by the researcher as being ambiguous and probably should be dropped if further studies are to be conducted in the same area. The ambiguity was noticed even though the questionnaire was subjected to criticisms from colleagues. The ambiguity of these statements may have been responsible for the large number of teachers giving their responses as 'Undecided' during the pre-test. For example, on item number 15, about 38 responses of 'undecided' were obtained in the post-test for the intervention groups while 35 responses were obtained on the same item for the non intervention group. The teachers' responses may

be due to lack of understanding of the statements or they may have been genuinely undecided about these items.

In order to compare the responses of the three groups, t-tests for the pre-test and post-test results of the groups(control, comparison and experimental) were carried out.

6.4 IN-SERVICE EDUCATION AND TRAINING

The results of the teachers' responses to the items in the questionnaire regarding in-service education and training programmes used to support the programme of integration of SEN pupils in ordinary schools in Nigeria are presented in Table 4. Teachers responded to the various statements in the questionnaire on a scale from one to five where one was ' Strongly Disagree' and five ' Strongly Agree'

TABLE 4 TEACHERS' ATTITUDES TO IN-SERVICE TRAINING

statements	pre-test results			post-test results		
	control	comp.	exp.	control	comp.	exp.
	group N=40	group N=40	group N=20	group N=40	group N=40	group N=20
I have adequate knowledge in integration	1.702* (.656)	1.900* (.496)	1.750* (.550)	2.050* (.450)	3.925* (.616)	4.500* (.607)
I need additional training in integration	2.275* (.816)	2.525* (.554)	1.700* (.571)	2.275* (.554)	4.100* (.632)	4.550* (.605)
Training to be short and regular	2.300* (.700)	2.375* (.774)	1.650* (.671)	2.475* (.640)	3.625* (.740)	4.650* (.489)
I prefer part-time to full-time in-service training	2.323* (.687)	2.375* (.774)	2.475* (.640)	3.750* (.707)	4.700* (.470)	4.700* (.470)

* = Mean score, while those in brackets indicate standard Deviation.

Whole sample

Teachers' pre-test responses to all the statements regarding in-service education and training (INSET) could be described as generally very low. This could be because the teachers have formed negative attitudes toward children with disabilities and would like to avoid having any form of contact with them. These teachers therefore, reject the idea of receiving further education and training that may enable them to work with SEN pupils, hence, their poor responses to all items regarding in-service education and training as shown in their mean scores in Table 4. These responses suggest that these teachers were not in favour of the general idea of further training to support mainstream education. In spite of the fact that they strongly disagreed with the statement that they had adequate initial training in catering for SEN children (as revealed by the mean scores of 1.702, 1.900 and 1.750) they showed little interest in in-service training as shown by the results of the questionnaire administered. In general, the teachers also disagreed with statements about the offer of short but regular training and part-time or full-time in-service training, as shown by the low mean scores of the pre-test results.

Control group

The responses of teachers in the Control group during the post-test of their opinion was similarly very low probably because no form of intervention was introduced to teachers in this group and if any was introduced, it may have influenced their opinions. Although the various mean scores showed a little improvement

above their pre-test scores, it did not alter their unfavourable attitudes towards in-service training. Their continuous opposition to further training as shown by the result of post-test of this group might suggest that the teachers were unaware of the contributions it can make to their professional development.

Comparison group

Teachers in the Comparison group showed some improvements in their post-test scores on all the statements which suggests that the treatment provided in the form of information booklets may have made some impact on their attitudes and knowledge of mainstream education. Their mean post test of scores for example, 4.100 and 3.750 for statements on additional training and preference for part-time in-service training demonstrated that their attitudes had possibly changed on in-service education and training compared with the control group.

This suggests that the teachers in the comparison group are probably more aware of the need for in-service training to improve their knowledge and skills. Their post-test response to the statement on having experienced adequate initial training, was scored with a mean of 3.925 and is statistical significant, thus, pointing to the fact that the intervention had probably helped to create a greater awareness of the need for such additional training. The teachers' scores on other statements such as the choice of training and how long they would like the training to be, also, showed improvements over their pre-test scores.

Experimental group

Interestingly, teachers in the experimental group showed significantly improved post-test scores on all the statements related to the in-service education and training programmes. The mean scores were not only high but consistent, thus suggesting their support for the idea for in-service training. This may be due to the provision of the intervention programme which involved information booklets, teaching demonstrations, discussions and informal interviews which focused on specific knowledge about the needs of SEN pupils.

As a result of this awareness of the needs of SEN pupils, the teachers probably realized that they needed additional training which could prepare them adequately for the implementation of a mainstream programmes of integration. In the final analysis, these findings would suggest that an overall planned programme of INSET might help teachers become more aware of the need to cater for children with SEN.

At the beginning of the study, a number of hypotheses were stated as verifiable assumptions related to teachers' skills, attitudes and knowledge toward programmes of integration for children with special educational needs in physical education in primary schools in Nigeria. In the subsequent analysis of data, each hypothesis will be tested. In all cases, the tests were conducted at 0.05 level of significance required for two-tailed tests.

The mean scores as shown in all the statistical analysis shown in the subsequent Tables were obtained from the total self-ratings scores made by teachers in each group on the following variables:

In-service education and training, integration practice, attitudes and skills of teachers, collaboration with parents and other professionals, obstacles to mainstream education and teachers' interest in participating in future research activities. The standard deviations for each mean score are shown in parenthesis for the mean scores of the two tests in each group.

TABLE 5 In-service education & Training:Statistical Analysis of Group Pre and Post-test Mean scores on In-service Training

Group	pre-test mean & standard Deviation	post-test mean & standard Deviation	t-value	df
Control	2.1500 (.536)	2.3188 (.420)	0.1726*	78
Comparison	2.2938 (.320)	3.8500 (.285)	2.0007	78
Experimental	1.7625 (.559)	4.6000 (.357)	2.9648	38

*T-value not statistically significant at 0.05 level of significance. Figures in brackets indicate standard deviation.

Table 5 provides pre-test and post-test mean scores of all group of teachers for in-service training and calculated t-values. In order to ascertain whether any change has occurred in terms of the teachers' attitudes towards In-Service training after the intervention was provided (in the form of booklets, teaching demonstrations, informal discussions and interviews) the following null hypothesis has been stated.

There was no significant difference of opinion among teachers on in-service training after the interventions have been given.

Control Group

To test the null hypothesis, the mean scores of teachers' in the control group for the pre and post-tests were compared on their attitudes towards in-service training. The test of difference in their mean scores was calculated using the students' 't' distributions. The result of this test shows that there is no statistical significant difference ($t=0.1726$, $P<0.05$) between the opinions of these teachers. The opinions given by the teachers in this group in-service training remained consistently low as there was no intervention provided to the group.

Comparison Group

For the comparison group, an improvement was recorded in their opinion towards in-service training as shown in the post-test mean score of 3.8500. The post-test result showed an increase in the value of the mean score, which the test of difference showed that it is statistically significant ($t=2.0007$, $P>0.05$) to lead to the rejection of the null hypothesis. This result may suggest that the intervention given in the form of booklets alone was enough to cause a substantial change in their opinion on in-service training.

Experimental Group

A substantial improvement was also recorded in the opinions of teachers in the experimental group when the post-test was carried out. The increase in the mean score of 1.7625 (Pre-test) to 4.600 (post-test) would suggest a substantial shift in the attitudes of these teachers towards the in-service training programme. When the test of difference was performed, it showed that the

calculated t-value of 2.9648 was greater than the table value (2.000), which confirms that there is a statistically significant difference ($t=2.9648$, $P>0.05$) in the opinions of the experimental group. This result led to the rejection of the null hypothesis for this group.

It could be concluded that the treatment provided to teachers in this group may account for the large difference in their attitudes towards in-service training. The limited treatment given to the comparison group made substantial change in their attitude to in-service training. The response of the teachers in the experimental group to various items on this variable showed that in order to raise sufficient awareness on the importance of in-service training, a more detailed and integrative form of treatment may be required. When the attitudes of these teachers was compared to their counterparts in comparison group, there was a significant difference which probably occurred because of the more in depth treatment provided.

As pointed out by the Warnock Report (1978) in the United Kingdom, it is important for ordinary teachers to receive further training if they are to provide an adequate education for pupils with special needs in mainstream education settings. It is in this respect that the opinions of teachers were sought on the nature of training that might be appropriate to meet their needs.

Awareness of the special educational needs of SEN pupils led the Federal Ministry of Education in Nigeria to examine the roles of teachers who were working with them. Their concern was to

determine the nature of the support SEN pupils were presently receiving from their teachers.

This awareness of educational needs of SEN pupils has turned the attention of teacher trainers to the existing In-service education and training currently being offered . The In-service education and training currently practised in Nigeria focuses more attention on teachers' needs than on the pupils' needs, hence, it is popularly referred to in Nigeria as a Teacher-Centred --Curriculum. In this type of curriculum, teachers decide what to teach, how to teach it, and when to teach it without consideration being given to the needs of the children. In this situation, pupils with SEN who are attending ordinary schools may not benefit from such teacher-centred programme.

It is towards meeting the educational needs of SEN children that Dyson (1991) and Thomas (1991) suggest that children's needs should be the focal point of any In-service education and training programmes for teachers. Teachers awareness of needs of SEN pupils' may generate more interest in them to support the mainstream programmes of integration in ordinary schools in Nigeria.

In-service training for teachers in primary schools in Nigeria typically lasts between three and four months and it is organised during the school long vacation period.

The teachers in this study seem to prefer part-time in-service training courses that are of short duration and more regular. Short in-service training programmes such as seminars, conferences and workshops are rarely organized for teachers in primary schools in Nigeria. Although teachers in Nigeria seem to prefer short in-

service training courses to long type, both of them have their advantages and disadvantages which would be discussed later.

Hegarty and Moses (1985) emphasize the need to focus in-service training programmes on specific areas might benefit children with special educational needs who are attending ordinary schools. They admitted that the initial training offered to teachers in the United Kingdom are not adequate enough to support teachers in meeting the needs of SEN pupils in integrated settings:

The traditions of staff training which we have inherited have served us badly and are largely irrelevant for the future
(p.3).

The findings of this study tend to support the point raised by Hegarty and Moses mentioned earlier in that they tend to show that the initial training provided to primary school teachers, may not provide them with the knowledge, skills and attitude to adequately teach SEN pupils in the mainstream education programmes in Nigeria.

The programmes of initial training offered to teachers in primary schools in Nigeria tend to show that most of the institutions (universities, colleges of education, institute of education) involved in such training, place greater emphasis on teachers' needs rather than considering what will benefit both the teachers and the children (Fapohunda, 1980; Fafunwa, 1976). These institutions have failed to expand their curriculum to include courses in the teaching of SEN children in the mainstream programme. This might be one of the reasons why teachers in

primary schools find it difficult to develop favourable attitudes toward mainstream education in primary schools in Nigeria.

The efficiency of any school may be measured by the quality and quantity of the teaching staff, which, in turn may determine the quality of education given to its pupils (National policy on Education,1981). Therefore, it is important that priority should be given to teacher education in order to enable teachers to cope with the demands of children in their care. The National Policy on Education(1981) stresses how important teacher education is to the nation's educational planning and these points are reflected in their aims of Teacher education in Nigeria:

- (1) To produce highly motivated, conscientious and efficient class room teachers for all levels of our educational system.
- (2) To encourage further the spirit of enquiry and creativity in teachers.
- (3) To help teachers fit into the social life of the community and society at large and enhance their commitment to national objectives.
- (4) To provide teachers with the intellectual and professional background adequate for their assignment and to make them adaptable to any changing situation not only in the life of their country but in the wider world.
- (5) To enhance teachers' commitment to the teaching profession (p.38).

Teachers need to have knowledge of the individual differences that may exist among their pupils in order to teach all children effectively. But unfortunately, the situation in primary schools in Kaduna state, Nigeria is such that teachers can only cater for able-bodied children.

Ohuche(1982) points out how teachers at primary schools are poorly trained in Nigeria when he remarks that:

In the case of primary teacher training, it is suggested specifically that if it is intended to produce teachers who must inspire confidence in children, student teachers have to specialize in blocks of subjects such as mathematics and primary science, social studies and languages. At present, the primary school teacher is the least educated of teachers at all levels, yet he is the one who is made to teach all subjects in the curriculum. Quality is bound to suffer (p.15).

It is therefore, important that teachers should be provided with adequate training in the teaching of SEN children in order for them to be able to assess the needs of children with disabilities in the regular classroom and which also might require experience of using adapted materials and equipment.

The implementation of the federal government policy on special education makes it compulsory for those concerned with teacher education to provide such courses as laid down in the policy guide-lines and objectives:

- i) To identify and treat children with special educational needs.
- ii) to prepare and assess curriculum for special instruction.
- iii) to identify programmes and methods that could best suit the needs of children with special needs.
- iv) to implement effectively special education programmes in the community(Nwachukwu,1985).

The importance of in-service education and training for teachers working with special educational needs children in primary schools in Nigeria cannot be over-emphasized. The need for teachers to undergo further training in order to be able to cater for pupils in their teaching has also been stressed by the Warnock Report 1978:

In-service training will be vital if teachers are to help effectively in recognising the children who have special educational needs and in making suitable provision for them (para. 12.4).

This statement points to the fact that special education programmes should be incorporated into initial training programmes while those who have received initial training without courses in SEN, should be provided with further training.

As part of the consideration for offering further training to teachers in the area of special education, Ainscow and Tweddle(1979) identify two main sources from which teachers' in-service needs for working with SEN pupils can be determined. These include: teachers' own observation of their expertise and the observations of other professionals who may pay visits to schools regularly. In order to be sure of satisfying the teachers' needs, the assessment of needs must be based on the two sources. Information about teachers' needs can also be gathered through the use of questionnaire, thus offering teachers the opportunity to identify areas of personal need most. The information gathered from this source could be supplemented by the views of others (head teacher, psychologists, inspectors, visiting remedial teachers) concerning the teachers' weaknesses and needs. With such information, the objectives of an in-service education and training programme for individual teachers can be successfully formulated.

Another important aspect of in-service education and training that be of particular interest to various agencies responsible for training teachers is the question of transfer of skills acquired during the training and its relationship with later classroom

practice. There is need for immediate return of teachers to their classrooms to put into practice the skills already acquired, hence, the emphasis on organising short but regular in-service courses such as workshops, seminars and conferences that would last for a day or two, a week or two. This would be contrary to the current practice in Nigeria where in-service courses last for three months. It is also important to focus some in-service courses on individual school's needs rather than on teachers' needs in order to provide opportunities for extension of the classroom work.

The result of the test scores show that teachers seem to realise that in-service education and training are the most crucial aspects of improving the education of children with physical disabilities who are attending ordinary schools. These children may be integrated effectively in ordinary schools if teachers are encouraged to develop positive attitudes, acquire adequate skills needed for modifying their lessons to meet the needs of SEN children and to work collaboratively with parents and other professionals .

While in-service education and training for teachers can be considered as a crucial factor that might support the implementation of a programme of integration, it is also important to educate the school administrators about the value of in-service education and training. When the administrators become more aware of teachers' need for further training, they may appreciate the need to support their need. The school administrators need to be aware of the implications for the placement of SEN pupils in ordinary schools and hence, the need to support the in-service training provision for teachers is being advocated.

During the discussions with the teachers involved in this study, the investigator gathered information that suggests that the school administrators may partially be responsible for the unfavourable attitudes of teachers toward in-service training. This claim was based on the teachers' reactions to questions put to them by the investigator. Among the remarks made about the school administrators were that most of them were not interested in in-service training and this appeared to have accounted for their withholding information about the in-service training schedules.

The attitudes of school administrators toward in-service training could be due to the lack of knowledge of importance of in-service training to teachers as well as to the pupils they work with, particularly SEN. In recognition of the importance of school administrators to the mainstream integration programmes, Crisci (1980) states that:

...the school administrator is the key to success in mainstreaming (p.180).

This statement supports the point made earlier concerning the greater participation of school administrators in the organization of the in-service training programmes. Their participation could be a great source of support in developing teachers' interest in the in-service training programmes.

6.5 THE PRACTICE OF INTEGRATION

In Table 6 teachers' self-ratings on items in the questionnaire related to their knowledge of the practice of integration which were gathered before and after the interventions had been introduced. T-tests were carried out using the difference between the various group mean scores of the post-test results to determine the statistical significance.

TABLE 6 Teachers' response to statements related to their knowledge of practice of integration

STATEMENTS	PRE- TEST RESULTS			POST-TEST RESULTS		
	Control group N=40	Comp. Group N=40	Expt. Group N=20	Control Group	Comp. Group	Expt. Group
I have knowledge of integration practices	1.525* (.599)	1.950* (.389)	1.800* (.523)	1.975* (.221)	3.725* (.554)	4.350* (.489)
I have the ability to devise and implement strategies in integration	1.450* (.597)	1.900* (.441)	1.850* (.489)	1.895* (.158)	3.200* (.564)	4.550* (.510)
I have the ability to devise and implement plans for mainstream education	1.500* (.641)	1.925* (.526)	1.600* (.598)	1.875* (.483)	3.425* (.501)	4.650* (.587)
I have a thorough knowledge of integration practices in P.E.	1.375* (.586)	1.900* (.672)	1.400* (.503)	1.950* (.533)	2.950* (.221)	4.510* (.513)
I have knowledge to develop adapted P.E. programmes	1.625* (.705)	1.875* (.723)	1.300* (.470)	1.900* (.709)	3.675* (.474)	4.450* (.605)
I am aware of the benefits of mainstream education	2.150* (.622)	2.075* (.797)	2.000* (.725)	2.405* (.791)	3.150* (.362)	4.750* (.444)

* = Mean scores. Figures in brackets indicate Standard Deviation.

Table 6 provides the details of the pre and post test results of the self-ratings given by teachers concerning their knowledge about the practice of integration. The pre-test scores of these teachers were very low, thus suggesting that they appeared to lack the positive attitudes, skills and depth of knowledge to provide the support that may be needed in the mainstream integration programme. It could also mean that the teachers were not trained in catering for SEN children within initial training and would not therefore have the knowledge and skills to work effectively in a mainstream P.E. programme designed to provide for the needs of SEN children

Control group

The post-test scores of teachers in the control group showed no improvement on pre-test scores. Although it is observed from the scores that there were improvements on all the statements related to teachers' knowledge of integration, the mean scores for these statements showed that the teachers still considered themselves as lacking the skills and knowledge to cater for SEN pupils in ordinary schools as indicated by the low mean scores for these items.

Comparison group

However, there were improvements in the post-test scores of teachers in the comparison group particularly on approaches to integration, development of adapted P.E programmes and the ability to devise and implement effective teaching approaches in mainstream education. These items achieved mean scores of 3.725; 3.675 and 3.425 respectively, therefore these results showed a significant increase over the mean scores for the pre-test. The improvement in their scores which suggests that they may have

acquired more knowledge and skills in the practice of integration which may be beneficial to children with special educational needs.

The comparison group also showed improved scores on the statements related to their ability to implement strategies for integrating SEN children and an increased awareness of the benefits of mainstream integration. These statements produced scores with means of 3.200 and 3.150 respectively, which were statistically significant to justify the introduction of the intervention probably because the form of intervention was enough to cause the necessary change in teachers' opinions. For these teachers to work successfully with SEN pupils in physical education, they need skills and knowledge to work effectively with the children who often come into mainstream education with differing problems demanding different approaches. As teachers become more aware of the benefits of a mainstream integrated approach they may be more inclined to provide more effective teaching strategies for SEN children in the class.

The comparison group results suggest that the intervention programme in the form of booklets possibly had an impact on the teachers' attitudes and knowledge.

Experimental group

The responses of teachers in the experimental group after the intervention was given were favourable on all the statements regarding the practice of integration. The consistently high score on each statement suggested that their self-ratings had improved as far as the knowledge, attitudes and skills toward mainstream integration was concerned. The results of both the comparison and experimental groups suggest that in-service education and training

could be used as a means of developing positive attitudes, adequate skills and knowledge of teachers who are working with SEN pupils. The more positive results from the teachers teachers in the experimental group in answer to the statements related to the practice of integration may have been due to the series of experimental treatments provided.

An analysis of the statistical significant difference between the mean scores for each group on these items of the questionnaire are shown in Table 7

TABLE 7 Practice of integration:Statistical analysis of group Pre and Post-test Mean Scores

Group	pre-test mean scores & standard Deviation	post-test mean scores & standard Deviation	t-value	df
Control	1.6042 (.426)	1.9792 (.307)	0.4380*	78
Comparison	1.9375 (.250)	3.3542 (.197)	2.1190	78
Experimental	1.7625 (.559)	4.5417 (.319)	2.9660	38

*T-value not statistically significant at 0.05 level of significance. Figures in brackets indicate Standard deviation.

On table 7, are the pre-test and post-test mean scores and the corresponding t-value for all groups of teachers on their response to the statements on the practice of integration. To assess the statistical significant difference between the mean scores of teachers' ratings on their knowledge of the integration the following null hypothesis was stated.

There will be no significant difference in opinion on integration practice between teachers in the control, comparison and experimental groups following interventions.

Control Group

To test this hypothesis, a test of difference in mean scores for the two tests was conducted. The result that the calculated t-valued of 0.4380 which was smaller than the critical value of 2.000 would suggest that there is no statistical significant difference ($t=0.4380$, $P<0.05$) between the pre-test and post-test scores as far as the teachers' knowledge of the practice of integration is concerned. This result may be due to the absence of any treatment for this group of teachers.

Comparison Group

Observing the results of both tests conducted for teachers in this group, there was a positive change of opinion between the pre and post-tests which resulted in larger mean score of 3.3542 and a statistically significant difference ($t=2.1190$, $P>0.05$) between their opinions on this variable which might be attributed to the intervention given in the form of booklets. This result suggest that the teachers may have gained some knowledge of practice of integration by reading the booklets and this may have influenced their opinion during the post-test. The null hypothesis has therefore been rejected for this group.

Experimental Group

The results of the pre and post-tests with the experimental group has showed that there was a large difference between the mean scores of teachers' self-ratings on the knowledge of the practice of integration. A calculated t-value of 2.9680 has shown

to be greater than the critical value. These results may be explained by the substantial intervention provided to teachers in this group, which has resulted in the statistical significant difference ($t=2.9680$, $P>0.05$) between the mean scores of the tests and has led to the rejection of the null hypothesis for this group.

Recently, the government has made some provision for SEN pupils attending primary schools in Nigeria which include; compulsory placement of SEN pupils in ordinary schools, teaching of P.E. to all children (including SEN pupils) in primary and junior secondary schools and annual grants to special education programmes from the state Ministries of Education (National Policy on Education, section 8, 1981; Obiakor, et al., 1991). It is hoped that these provisions would help to improve teachers' attitudes toward physical education and the entire programme of integration for SEN pupils in ordinary schools in the state.

Ironically, the Federal government of Nigeria, after showing some concern for the education of SEN pupils in ordinary schools as mentioned earlier, vested the power to implement the programmes of special education to individual states and most of them do not consider it as their priority area.

This is why it is difficult at present to implement the policy of mainstream integration as contained in the National Policy on Education of 1981.

Implementing a programme of integration may only be successful if the teachers involved are provided with the knowledge and skills necessary for teaching within an integrated settings.

While the government and its policies emphasize the need to encourage SEN pupils to attend ordinary schools (National Policy on Education, 1977; 1981), the lack of priority being given to further

training for these teachers seems to account for the delay in the implementation of a programme of integration in the Kaduna state of Nigeria.

This study reveals that most of the teachers involved in the study lack the basic knowledge of the practice of integration and if children with disabilities are therefore offered places in ordinary schools, then the teachers should be equipped with the necessary 'tools' that could make the teaching of both able-bodied and SEN pupils in the same learning environment a possibility.

Teachers are therefore, expected to develop their knowledge in the following areas: Selection of appropriate activities, adaptation of equipment, modification of games rules, organization of learning experiences, provision of reinforcement and strategies for keeping pupils' interest maintained throughout the period of learning. Knowledge acquired in these areas may help teachers to effectively teach SEN pupils in integrated physical education settings.

At Present, the situation in the schools involved in this study does not seem to provide the knowledge that can lead to achieving the objective set by the Federal Government of Nigeria for encouraging integration because the pre-requisites needed for meeting this objective are conspicuously lacking among the teachers.

In the final analysis, this study seems to suggest that adequate in-service education and training might help to improve teachers' attitudes, skills and knowledge and would enable them to support the practice of integration in primary schools.

The effect of the intervention programme was probably most apparent in the post-test results of teachers in the comparison and experimental groups.

The results from these groups demonstrated that in-service training, if properly organized and delivered, might instil positive attitudes, skills and knowledge required for the implementation of a mainstream programme of integration.

6.6 ATTITUDES AND SKILLS

The results of the test of teachers' opinion regarding the attitudes and professional skills required of them to work with children with special educational needs in physical education are shown in Table 8. In order to test the null hypothesis stated, a t-test was carried out on the data and the results are shown in Table 9.

TABLE 8 Teachers' response to statements related to their Attitudes and Professional Skills

STATEMENTS	PRE-TEST RESULTS			POST-TEST RESULTS		
	Control group N=40	Comp. group N=40	Expt. group N=20	Control group	Comp. group	Expt. group
Openness of teachers to new ideas in integration	2.500 * (.641)	2.600* (.591)	2.650* (.587)	2.825* (.501)	4.350* (.483)	4.400* (.503)
I am aware of my weaknesses and strengths in working with SEN pupils in P.E	1.925 * (.694)	2.225* (.530)	2.150* (.587)	2.425* (.501)	3.950* (.389)	4.500* (.513)
I can accommodate behaviour of SEN pupils	2.225* (.577)	1.950* (.597)	1.950* (.605)	2.200* (.516)	3.200* (.405)	4.500* (.513)
I am capable of making objective assessment of SEN needs in P.E.	1.850* (.700)	1.875* (.607)	1.900 * (.641)	2.050* (.552)	3.200* (.496)	4.600* (.503)
I can provide reinforcement to SEN pupils in P.E	1.625* (.705)	2.000* (.679)	1.950* (.759)	2.025* (.530)	3.825* (.496)	4.500* (.607)
I have the ability to select & organise P.E activities for SEN pupils	1.700* (.723)	1.850* (.700)	1.950* (.745)	2.025* (.672)	3.825* (.496)	4.500* (.510)
I can ensure SEN pupils safety & freedom in P.E	1.925* (.730)	2.000* (.716)	2.050* (.686)	2.100* (.744)	3.400* (.496)	4.250* (.639)
I can give clear & definite instructions to SEN in P.E	2.050* (.749)	2.300* (.723)	2.500* (.607)	2.250* (.742)	3.500* (.555)	4.450* (.686)
I can provide gentle approach in skill learning for SEN pupils in P.E	2.850* (.580)	2.275* (.847)	2.700* (.470)	1.925* (.656)	3.500* (.639)	4.250* (.716)

* = Mean scores, while figures in brackets indicate Standard Deviation.

The teachers' pre-test scores on all the statements concerning their attitudes and skills for working in a mainstream programmes of integration was remarkably low. The lowest scores were recorded on the statements concerning their professional skills rather than those dealing with their general attitudes toward a mainstream programme of integration.

The statements related to their ability to make an objective assessment of SEN pupils' needs; ability to motivate SEN pupils to participate in physical education lessons and their ability to select appropriate learning experiences were scored with the lowest means of between 1.650 and 2.000; while those related to attitudes received mean scores between 1.950 and 2.650.

Th teachers' responses to the statement concerned with their ability to accommodate the behaviour of SEN pupils also produced low scores.

These results suggest that the teachers being studied did not feel confident in terms of their skills and attitudes to deal with the essential aspects of a mainstream programme of integration in primary schools in Nigeria. This also suggests that the placement of SEN pupils in ordinary schools in Nigeria at present may not be beneficial to these children since the teachers' self assessment indicates that they do not feel adequately trained to cope with the challenges of teaching children in a mainstream setting.

Control group

Although the post-test scores of teachers in the control group revealed some improvements over their pre-test scores, the increase was not statistically significant. The increase was not

enough to suggest that they had improved in terms of their skills and attitudes towards the integration.

The involvement of SEN children in mainstream physical education programmes demands careful planning. Teachers who work with them require specific knowledge and skills that could help them to organise the physical education lessons to accommodate the needs of these children.

The teachers recorded their lowest post-test score of 1.925 on the statement related to the provision of a gentle approach towards encouraging SEN pupils to participate in physical education. This low mean score suggests that these teachers lack the skills that may be used to develop the confidence of SEN children and enable them to participate fully in school physical education lessons.

Comparison group

The post test scores of teachers in the comparison group indicated a considerable improvement on all the statements regarding their attitudes and skills to mainstream education. The mean score of 4.350 on the statement concerning their openness to new ideas on integration suggests that the teachers were willing to support mainstream integration in school physical education programmes.

Also, the teachers made some improvements in their self-ratings on other statements such as their ability to identify their strengths and weaknesses in working with SEN pupils in P.E. and their ability to provide motivation for SEN pupils during lessons. These statements were scored with means of 3.950, and 3.825,

respectively, which suggests that the intervention provided in the form of information booklets may have made an impact on the teachers' knowledge and attitude toward successfully implementing a mainstream programme of integration.

Similar improvements were made on statements related to their ability to objectively assess SEN pupils' needs ; ability to tolerate behaviours of SEN pupils' behaviour and ability to select appropriate activities in P. E. for SEN pupils. The mean scores of between 3.400 and 3.200 which were recorded on these statements suggest that the teachers had little confidence in their ability to carry out their professional duties aimed at providing support to a mainstream programme of integration.

Experimental group

There were greater improvements in the scores of teachers in the experimental group concerning their skills and attitudes toward mainstream programmes of integration after the intervention. The teachers' high mean scores on all the statements suggest that they had a positive attitudes toward mainstream integration and were prepared to support its implementation. It is intriguing to note that the teachers in this group recorded a mean score of 4.600 on one statement related to their ability to make an objective assessment of SEN pupils' needs. The improvement in their self-ratings in this specific area may be of particular significance to the future development of mainstream programmes of integration in P. E. as they indicated that their teacher might be able to provide appropriate activities which may

in turn may be a source of motivation to SEN pupils to enjoy P. E. activities alongside their able-bodied peers. The overall post-test result of the teachers' self-ratings in this group suggests that the interventions given may have resulted in the improvements in attitudes and skills of these teachers.

The results of a statistical analysis of the difference between the mean scores of both tests for the group are shown in Table 9.

TABLE 9 Attitudes & Professional skills: Statistical analysis of group pre and post-test mean scores

Group	pre-test mean scores & standard Deviation	post-test mean scores & standard Deviation	t-value	df
Control	2.0722 (.397)	2.2111 (.293)	0.1672*	78
Comparison	2.1194 (.370)	3.5972 (.144)	2.0613	78
Experimental	2.1667 (.246)	4.4444 (.302)	3.0768	38

*T-value not statistically significant at 0.05 level of significance. Figures in brackets indicate standard deviation.

The null hypothesis in relation to this issue was stated as follows:

Attitudes and skills of teachers exposed to treatment variables will not vary significantly on integration programmes than those of their counterparts who received no treatment.

Control Group

The result of the statistical analysis shows that the calculated t-value, (0.1672) of the control results was smaller than the critical value (2.000) and regardless of the better results, the difference in the scores was not statistically significant which led to the rejection of the null hypothesis stated for this group. This statement was supported by the result of test of difference performed which also showed no significant difference ($t=0.1672$, $P<0.05$) in the opinions given by these teachers on attitudes and skills toward a programme of integration for SEN pupils in P. E.

Comparison Group

The scores of this group on the issue of attitudes and skills showed an improvement in the post-test. The mean score of 3.5972 suggests a change in their response to this variable. This improvement was reflected in the result of the test of difference carried out between the mean scores. The calculated t-value of 2.0613 is greater than the table value of 2.000 at 78 degrees of freedom suggesting that there is a statistical significant difference ($t=2.0613$, $P>0.05$) between the teachers' ratings for pre and post-tests which led to the rejection of null hypothesis stated.

In conclusion, it is believed that the improved scores of these teachers between the pre and post test may be attributed to the booklets they were asked to read containing information about needs of SEN pupils in physical education.

Experimental Group

There was a change in the mean scores of the teachers in this group concerning their attitudes, knowledge and skills in relation to the teaching of children with SEN in mainstream settings.

The test of difference between the mean scores shows that the critical value of 2.021 is smaller than the calculated t-value of 3.0768. This result shows that there is a statistical significant difference ($t=3.0768$, $P>0.05$) between the teachers' self-ratings on this item and therefore a rejection of the null hypothesis for this group.

It can be concluded therefore, that the various treatments introduced to the teachers in the experimental group may account for the significant shift in their attitudes toward mainstream programmes of integration. This result suggests the view that an INSET programme if primary school teachers are to be effective in their teaching of SEN children in a mainstream setting in Nigerian schools.

The results of this study also show that about 90 per cent of the total number of teachers sampled for this study indicated that they were not prepared to accept SEN pupils in their classes because they could not accommodate their behaviour. For teachers to tolerate the behaviour of these children, they require a greater understanding of their behaviour. This knowledge and appreciation could be provided through an in-service education and training programme.

Most of the research study carried out into the attitudes of ordinary teachers toward the teaching of SEN children has been

done in the United states of America. In the USA there is a legal requirement to educate pupils in the least restrictive environment and this means that many more teachers are faced with teaching SEN pupils. Several studies have investigated teachers' attitudes toward mainstream education and reports have shown that their attitudes were generally unfavourable (e.g. Alexander & Strain, 1978; Horne,1979; Baker & Gottlieb,1980). Another study conducted by Shotel, et al., (1972) on teachers' attitudes toward handicapped children showed that the majority of teachers involved were against the idea of SEN pupils being placed in ordinary schools. The result of a comparative study carried out by Tobin (1972) on the attitudes of experienced and trainee teachers toward SEN pupils also showed that both groups did not want to have them in their classes. These studies tend to suggest the negative attitudes of teachers toward teaching SEN children is common in many countries of the world. The results of this study also showed that the teachers being studied were opposed to the idea of mainstream education. This is probably because their initial training had failed to provide them with a positive attitude and an adequate knowledge base to enable them to teach SEN pupils in a mainstream setting.

Finally, it is important to emphasize the role of the intervention which was given in the form of information booklets, teaching demonstrations, discussions and informal interviews in improving teachers' attitudes and skills toward mainstream education. Before the intervention was introduced, teachers' attitudes toward mainstream education was poor after the

intervention, their attitudes had improved significantly. It is therefore, concluded that an awareness of the needs of SEN pupils in physical education and teachers' responsibilities to these children could help teachers to develop a more positive professional approach to teaching SEN children in a mainstream integrated setting in ordinary schools in the Kaduna state of Nigeria.

6.7 OBSTACLES TO MAINSTREAM EDUCATION

Mainstream education has been introduced in the educational programmes of the ordinary schools in Nigeria as an indication of the government's commitment to providing equality of educational opportunity to its' citizens. The mainstream education programme is intended to allow SEN pupils to receive their education alongside their able-bodied peers in ordinary schools.

This policy is likely to be welcomed by many parents who have been unable to send their SEN children to special schools because of the high school fees in these institutions. The introduction of mainstream education in ordinary schools may also lead to an improvement in educational provision for these children.

In addition to the educational benefits of mainstream education for the lives of SEN pupils, it offers them the opportunity of having social mixing with their able-bodied peers, which may subsequently lead to a better understanding of each other.

The compulsory placement policy of SEN pupils in primary schools is an encouragement for parents to enrol their children in the nearest schools to their homes, thereby reducing the cost of transport.

Although the compulsory placement of SEN pupils is being established, it seems that those SEN pupils placed in mainstream schools are not benefiting from the programme of integration because of a lack of provision made for the children in these schools. This is because of a number of problems facing the implementation of the mainstreaming policy in schools in the Kaduna state of Nigeria.

Teachers who are actually teaching SEN pupils in their physical education lessons may be the best source of information regarding any difficulties with the government mainstream education policy. Therefore certain items were included in the questionnaire related to the issue of obstacles to the implementation of the government policy on mainstream education. The teachers' responses to these items in the questionnaire were calculated to show the group mean scores on each item across all the three groups. This was done for both the pre and post tests. A statistical analysis of this data was conducted on the pre and post tests in order to determine whether there was statistically significant difference between each group's mean scores on this issue. The results of both pre and post tests on obstacles to mainstream are shown in Table 10.

TABLE 10 Teachers' responses to statements on problems facing the mainstream education implementation

STATEMENTS	PRE-TEST RESULTS			POST-TEST RESULTS		
	Control Group N=40	Comp. Group N=40	Expt. Group N=20	Control Group	Comp. Group	Expt. Group
Funding of mainstream education is adequate	1.700* (.608)	1.856* (.483)	2.300* (.470)	2.691* (.603)	1.950* (.552)	3.400* (1.353)
Present number of teachers is adequate for the mainstreaming	1.675* (.616)	1.800* (.464)	2.050* (.686)	2.466* (.758)	1.975* (.620)	3.800* (1.005)
Teachers are not only adequate but competent to work with SEN pupils	1.625* (.705)	1.725* (.506)	1.900* (.852)	2.416* (.707)	1.800* (.564)	3.900* (.852)
Non teaching staff support teachers during P.E practical lessons	1.750* (.630)	1.675* (.616)	1.600* (.754)	1.316* (.462)	1.775* (.530)	4.100* (1.071)
Parents provide support to mainstream education	1.630* (.622)	1.994* (.716)	1.850* (.813)	2.443* (.599)	2.050* (.714)	4.510* (.513)
Cordial relationships exist between the SEN pupils and their able-bodied peers	2.075* (.674)	2.275* (.751)	2.100* (.718)	2.543* (.628)	2.500* (.847)	4.450* (.605)

* = Mean scores; Figures in brackets indicate Standard Deviation.

As Table 10 shows, the teachers' pre-test scores on all the statements concerning obstacles to mainstream education were very low. The low scores suggest that the teachers disagreed with the statements concerning funding, staffing, their competence, non teaching staff and parental support. They also confirmed that a poor social atmosphere appeared to exist between SEN pupils and their non-disabled peers in mainstream classes.

The teachers' response to these statements could probably be attributed to their awareness of problems facing the implementation of the mainstream programme of integration.

Control group

The post-test results of the teachers in the control group was as low as the pre-test scores, thus indicating that the teachers' opinion of the obstacles confronting mainstream education remained unchanged during the period of the study. The mean score of 2.691 for the statement concerned with the funding of mainstream education was probably due to the teachers' feeling that they did not know enough about the school funding, let alone knowing the amount of money that has been devoted to implementing the government policy of mainstreaming. The teachers' responses to statements related to other issues affecting the implementation of a mainstream integration policy suggested that schools were understaffed, both parents and non teaching staff were un-supportive in meeting the needs of SEN pupils and that relationships between SEN pupils and their able-bodied peers was not cordial. These results demonstrate the extent of the problems facing the implementation of a mainstream programmes of integration in primary schools in Nigeria.

Comparison group

There was little difference between the pre-test and post-test of scores of teachers in the comparison group. In fact the comparison group

scored lower on this variable than the other two groups. Teachers in the comparison group had the scores on this issue as those in the control group except on the statement concerning the funding of mainstream programmes.

A comparison of the teachers' opinion on funding showed that those in the control group uncertain about funding of mainstream education while the responses of those in the comparison group suggested that they were aware of the inadequate funding in the area. The mean scores of 2.691 and 1.950 which were recorded for the control and comparison groups respectively, indicated how uncertain their opinions were on the issue of funding. The difference in the scores also suggests that teachers in the control group probably had the opportunity of being informed about fund allocation to mainstream programmes of integration while those in the comparison group may not have had access to such information. This suggests that some school administrators have an open information policy while others may not.

The low scores recorded by the comparison group on this issue suggests that these teachers have become more aware of the implications of mainstream integration after the intervention. The intervention (in the form of information booklets) may have increased the teachers' awareness of the inadequate funding of mainstream programmes, under-staffing in schools, the lack of skills and knowledge among teachers to support the programmes of integration; and the lack of support from parents and non teaching staff towards mainstream programmes of integration.

Experimental group

Teachers in the experimental group had a different perception of the problems of implementing the mainstreaming programme in Nigeria. Their response to all the statements on this issue were favourable as shown in their mean scores of between 3.400 and 4.510. Their opinions therefore appear to differ from those given by teachers in the control and comparisons groups.

The responses of the teachers in the experimental group may possibly be due to a number of factors. Firstly, it could be that the teachers had looked at the issue from a narrow point of view by limiting the scope of their consideration to their own school and did not consider what might be happening elsewhere. Secondly, they may be reluctant to criticize the system for fear of being quoted and thirdly, they may possibly not have weighed the implications of their responses to the statements concerning this issue.

It is doubtful whether the views expressed by the teachers in the experimental group are a reflection of the situation in primary schools in Kaduna state, particularly as it relates to the integration of SEN pupils into the school physical education programmes.

An analysis of the statistical significance of the difference between the pre and post test scores on this issue was conducted and table 11 provides the details.

TABLE 11 Problems facing the mainstream education:Statistical Analysis of group Pre and Post-test Mean Scores

Group	pre-test mean scores & standard Deviation	post-test mean scores & standard Deviation	t-value	df
Control	1.7458 (.445)	2.3125 (.392)	0.6194*	78
Comparison	1.8792 (.423)	2.0083 (.470)	0.1106*	78
Experimental	1.9667 (.520)	4.0250 (.398)	3.0778	38

*T-value not statistically significant at 0.05 level of significance. Figures in brackets indicate standard derivation.

The null hypothesis for this issue was as follows:

Teachers who were provided treatment variables would not differ significantly in their opinion on obstacles to mainstream integration implementations than those who received no treatment.

Control Group

The teachers' responses to the statements related to obstacles to implementing a mainstream education policy were almost similar as there was no significant difference between the group's pre and post test scores. The test of difference for the mean scores was carried out and it showed that the calculated t-value (0.6194) was smaller than the critical value. This result shows no statistical significant difference ($t=0.6194$, $P<0.05$) exists between the opinion held by these teachers between the pre and post-tests, hence, the acceptance of the null hypothesis for this group.

It would be unlikely that these teachers would change their opinion on these issues without some sort of intervention strategy

Comparison Group

There was a slight improvement in scores between the pre and post mean scores of this group of 0.1291. The test of difference in the group mean scores showed that the critical value was greater than the calculated t-value (0.1106). This result suggests that there was no statistical significant difference ($t=0.1106$, $P<0.05$) in the opinions expressed by these teachers as a result of the experimental treatment (in form of booklet) offered to this group. The result suggests that teachers do hold strong views on the implementation of mainstream education policy which they find difficult to change even when offered information supporting the positive benefits of such a programme.

Experimental group

There was a substantial difference between the teachers in this group for the pre and post -test scores (2.0583) to this group. The various form of interventions provided to these teachers may be responsible for such a large difference. When the test of difference was performed, the calculated t-value was shown to be higher than the critical value. This result suggests that there is statistical significant difference ($t=3.0778$, $P>0.05$) between the teachers' scores before and after the interventions and therefore the null hypothesis for the group is rejected.

In conclusion, it is important to note that the interventions offered to the teachers in this group may have created a better understanding of what involved in implementing a programme of mainstream education. They largely mentioned the issue of inadequate facilities and equipment as the main problem rather than the catalogue of constraining factors mentioned in Table 17.

Apart from the factors identified by the researcher and the teachers were asked to respond to statements concerning these factors, it was also discovered that there were some other factors that might pose threats to the success of a programme in integration in primary schools in Nigeria. As a result of observing teachers' working with SEN pupils in physical education lessons, it was discovered that facilities and equipment were not only inadequate but were also found to be inappropriate to support the learning of SEN pupils. This makes the participation of SEN pupils in physical education more difficult.

It was also observed that most of the schools involved in this study did not have safe environments for the teaching of physical education as most of the schools being studied conducted their physical education lessons in open playgrounds which were full of hazards such as pot-holes, broken sticks and were overgrown with grass. The advantage of having a gymnasium is that it is safer and physical education lessons can be conducted even when it is raining.

The size of the classes was also a problem. In some classes there could be as many as fifty children managed by one teacher. The teacher-pupil ratio of 1: 50 may be the reasons for the

teachers' inability to provide the personal attention that is so important in the teaching of children with special educational needs in mainstream physical education lessons.

In conclusion, the responses made by teachers in the control and comparison groups in conjunction with the findings of the lessons observed and interviews conducted among teachers provided some evidence to suggest that the mainstream education programme in schools in Kaduna state is at present facing some difficulties.

Also, it appears that most of the Local Government Authorities in the state are not prepared to absorb the additional cost of educating children with special needs in ordinary schools and do not see it as a priority. Funding required to create the necessary services is just not available and with the current staffing level in schools, it is impossible to initiate expensive favourable teacher-pupil ratios required for most specialized programmes. The financial situation in most of the schools is untenable and is likely to slow down the rate of development of special education programmes. These problems related to both human and physical resources and are likely to inhibit the implementation of a comprehensive and effective mainstream policy of integration.

Apart from the fact that these teachers have been identified as having poor attitudes towards SEN pupils, inadequate knowledge and skills to implement a mainstream programme at the primary school level, may be seen as a major obstacle to the implementation of the national policy of mainstreaming.

Also, teachers may have doubts that putting such a policy into practice is worth the effort as they believe that integration may not achieve the intended objectives. They may reject the philosophy as pedagogical or curricular theories used to justify the why of integration, they may also doubt that the necessary resources will never arrive, or they may think the policy, however appealing in the abstract, cannot be made to work in practice with their pupils. In addition, these teachers may conclude, (again with good reason), that the introduction of a new idea such as mainstream education may mean more work without additional remuneration. During the informal interviews conducted, the teachers expressed their feelings about the placement of SEN pupils in ordinary schools, which they considered as an additional responsibility which does not attract any extra payments. This could be one of the reasons why these teachers reacted negatively in the pre-test to the idea of introducing programmes of integration in primary schools in the state.

If these teachers can be persuaded that the new policy regarding the placement of SEN pupils in ordinary schools represents a significant educational development compared with the previous policy (which stresses the exclusion of this group of children from ordinary schools), they may be willing to make the sacrifices demanded of them. But they are not easily persuaded and no serious attempt is made to convince them through the provision of adequate in-service education. Without a positive and effective programme of in-service education and training the attitudes and skills of teachers in the Kaduna state of Nigeria may

inhibit the development of the programmes of integration aimed at physically educating SEN children in the mainstream setting.

4.8 COLLABORATIVE EFFORTS

" Clapping with the right hand only will not produce a noise" (Hanson & Widerston, 1993, (p.149).

As this Malay proverb rightly pointed out, it takes more than just one hand to make a noise when clapping. A programme of integration requires more than one hand to make it work and therefore, teachers cannot do it all alone.

Educational developments cannot take place without some form of collaboration. In fact, by its very nature, the educational process involves a large number of people and a variety of resources. The importance of placing children with special educational needs in an integrated educational setting with their non-disabled peers has been supported by legislation in the United States of America (Stedman, 1988; Obiakor, et al., 1991). Many children with special educational needs have long been denied access to mainstream education in Nigeria. To ensure that these children receive better access to the integrated settings created by their compulsory placement in ordinary schools, teachers, parents and other professionals must work together. In a mainstream education programme, consultation and collaboration is essential to the successful implementation of any programme of integration .

The need for collaboration was stressed by the Warnock Report of 1978 (DES,1978) when it pointed out that the successful education of children needs a close partnership with parents and other professionals.

If the idea of partnership with other professionals is welcomed by the schools, and if well planned, coordinated and delivered, it may be regarded as one of the factors that might help develop and sustain a mainstream education programme.

The collaboration referred to in this study involves professionals such as teachers, speech therapists, physiotherapists, and educational psychologists who are willing to enter into partnership with parents with the sole aim of providing the SEN pupils the support they need to participate in physical education alongside their able-bodied peers.

The placement of children with special educational needs in ordinary schools in Nigeria has created a new challenge for teachers as they are required to organise learning environments that could accommodate SEN pupils. Teachers therefore, need the support of others from within and outside the school in order to implement a programme of integration.

In order to establish and maintain a working relationship between the school and home, teachers' opinion were sought on a number of items presented in the questionnaire. The teachers scored their opinion on a rating scale of 5 " Strongly Agree" to 1 " Strongly Disagree" . The results are shown on Table 12.

TABLE 12 Teachers' responses to statements on their attitudes to collaboration in mainstream education.

STATEMENTS	PRE-TEST RESULTS			POST-TEST RESULTS		
	Control Group N=40	Comp. Group N=40	Expt. Group N=20	Control Group	Comp. Group	Expt. Group
I like to maintain a partnership with parents	2.653* (.667)	2.875* (.747)	3.000* (.459)	2.800* (.464)	3.975* (.423)	4.450* (.605)
I consider parents' present attitudes to mainstream education as positive	1.893* (.686)	2.325* (.747)	2.450* (.510)	2.525* (.554)	4.025* (.577)	4.550* (.759)
I like to maintain cooperative & consultative relationship with other professionals	2.567* (.714)	2.375* (.586)	2.300* (.733)	2.182* (.494)	3.975* (.660)	4.700* (.470)
I am prepared to share my professional knowledge with others	2.252* (.620)	2.525* (.698)	2.100* (.718)	2.208* (.675)	3.900* (.632)	4.700* (.470)
I support parents' participation in decision making on their children's education	1.992* (.698)	2.200* (.597)	2.300* (.657)	2.235* (.723)	3.900* (.632)	4.700* (.470)
I support the release of records of SEN pupils' performance to their parents	2.593* (.549)	2.550* (.552)	2.700* (.657)	2.300* (.723)	3.750* (.670)	4.700* (.470)

* = Mean scores. Figures in brackets indicate Standard Deviation .

Table 13 shows that the pre-test scores of teachers on all the statements related to maintaining collaboration with parents and other professionals in education were generally very low. These scores suggest that they were not interested in establishing and maintaining such a close relationship. The results also show that the teachers were not prepared to share their professional expertise with others; not interested in parents' participation in decision-making about their children's education and do not support the release of records of SEN pupils' performance to parents.

These teachers' responses to all the statements regarding collaboration could make it difficult for parents and other professionals to work together with teachers towards supporting a programme of integration. Finally, it is when all parties (parents, teachers and other professionals) are ready to share their experiences together that an effective working relationships can be established and maintained.

The post-test result of teachers in the control group was similar to the pre-test scores, thus, indicating that they remained opposed to the idea of establishing any form of partnerships with parents and other professionals. A glance at the scores of this group shows that there is a slight increase in their mean scores on statements related to maintaining partnership with parents and parents' attitudes toward mainstream education but not substantial enough to suggest that they had a more favourable attitude toward collaboration. Though these mean scores of 2.800 and 2.525 show an increase over the pre-test scores, it could only

suggest that they were undecided in their opinion whether or not to support a concept of partnerships and whether parents' attitudes were positive enough toward mainstreaming.

It is interesting to note that teachers in the comparison group showed improvements in their scores on all the items related to maintaining collaboration with parents and other professionals. The result suggests that the teachers were in favour of developing such relationships. The teachers considered the parents attitudes toward mainstream education as being favourable, hence, the statement was scored with a mean of 4.025. With this positive assessment of parents' attitudes, it may be considered an appropriate time to encourage partnerships with parents. The scores which ranged between 3.750 and 4.025 suggest how significantly the teachers had improved in their attitudes toward maintaining collaboration with parents and other professionals. The positive attitudes shown may be due to the intervention given in the form of booklets provided to the group.

Experimental group

Similarly, teachers in the experimental group improved on their scores on all the statements between the pre and post-test. Their scores were consistently high, suggesting that they support the idea of maintaining partnerships with parents. Apart from the general scores which reflected their positive attitudes, they identified specific practices that may strengthen the establishment of collaboration among teachers, parents and other professionals. These included, maintaining a cooperative and

consultative relationship with professionals; supporting parents' participation in decision-making about their children's education; and the idea of releasing records of SEN pupils' performance to their parents. Teachers' ability to co-operate with parents and other professionals may create more opportunities for parents and other professionals to give their support to the integration of SEN pupils into the P.E programmes in primary schools in Nigeria.

The teachers' improved scores on this issue suggest a more positive attitude toward encouraging collaboration with parents and other professionals. The intervention with this group may have initiated such a change of attitude. A test of statistical significant between the scores of both tests for each group on this issue, was undertaken using the Students' t- distribution. The result of the test was shown in Table 13 below.

TABLE 13 Collaboration in mainstream education:Statistical Analysis of Group Pre and Post-test Mean Scores

Group	Pre-test mean scores & standard Deviation	Post-test mean scores & standard Deviation	t-value	df
Control	2.3250 (0.377)	2.3750 (0.303)	0.0602*	78
Comparison	2.4750 (0.255)	3.9208 (0.210)	2.2102	78
Experimental	2.4750 (0.2930)	4.6167 (0.281)	2.8268	38

*T-value not statistically significant at 0.05 level of significance. Figures in brackets indicate standard deviation.

The statistical test results shown in Table 13 were used to test the null hypothesis stated below:

Teachers who received more treatment variables would not show favourable attitude towards maintaining collaboration with parents and other professionals than those who received no treatment.

Control Group

The teachers' scores on their attitude towards maintaining collaboration with parents and other professionals between the pre and post-tests showed only a slight improvement which was not statistically (0.0602, $p < 0.05$) significant. The test of difference which was performed, showed a calculated t-value of 0.6602. The calculated t-value obtained was smaller than the critical value therefore, the null hypothesis stated for this group has been accepted.

These test results therefore suggest that the teachers may have not perceived collaboration as being an important aspect of a mainstream education policy and their opinion is unlikely to change unless they were made more aware of its value in the development of an effective mainstream education.

Comparison Group

The results of teachers' scores in this group is interesting because the interventions provided had failed to make a sufficient impact on their opinion on the value of collaboration although a difference of 1.4458 was recorded between the pre and post test mean scores.

This difference was statistically significant ($t=2.1202$, $P>0.05$) and therefore the null hypothesis was rejected for this group.

This result suggests that the intervention may have created a greater awareness for the need for collaboration to be maintained with parents and other professionals for a policy of mainstream education to be successful.

Experimental Group

There was a significant difference between the pre and post -test for the teachers in this group on issues of collaboration with parents and other professionals. The difference in the scores was in fact substantial. With the calculated t-value greater than the critical value of 2.021, the null hypothesis for this group has been rejected ($t=2.8268$, $p>0.05$) because the teachers in this group showed a more favourable attitude towards maintaining collaboration with parents and other professionals after the interventions.

The main objective for encouraging an atmosphere of collaboration between teachers, parents and other professionals is that it helps to develop a partnership approach to the education of SEN children with both parties working together on equal terms. This type of relationship between parents and teachers can be particularly important in terms of fulfilling many of the services that families are unable to meet for their SEN pupils when working alone.

Some families have difficulties catering for the needs of their SEN and it is therefore essential that the school should offer some form of support. In order to accomplish this, the teachers and

other professionals must be adequately informed of the true meaning of this relationship so that intentions are not misconstrued, while allowing the individuals to make a considerable contribution toward its success.

Teachers who are in a position to coordinate such a working relationship need to understand the necessary procedures before the school takes any step towards establishing such partnership. Therefore this study attempted to make teachers more aware of this issue.

Although the teachers were initially opposed to the idea of maintaining a working relationship with parents and other professionals, when an in-service education and training was introduced to those in the comparison and experimental groups, their attitudes became more positive. The result of the post test with this group showed that teachers' attitudes may be changed when they became more aware of the need for a such partnership to be maintained.

Maintaining a working relationship with parents and other professionals has become particularly important for teachers working with SEN pupils in physical education in ordinary schools in Nigeria because greater opportunities may be created for them and this can be expanded at both school and community level.

Collaboration between teachers, parents and other professionals on meeting the needs of SEN pupils may be a valuable source of professional development for teachers and others. This is because it is regarded as an aspect of maintaining a multi-professional working relationship. For example, where three

professionals (teachers, speech therapist and education psychologist) are involved, apart from the contact and co-operation that is made possible, the three partners may have the opportunity of setting themselves the task of developing an assessment profile for the child. The ability to work together may even sharpen their perceptions of the children with special educational needs and ways of dealing with their problems. Apart from these advantages, it may also afford them the opportunity to make an objective assessment of the children's 'needs' and learning difficulties and in turn, agreeing on a possible common approach to tackling their problems.

This joint approach towards meeting the needs of SEN pupils in physical education can be possible through the establishment of collaboration among teachers, parents and other professionals.

Teachers' resentment of the idea of establishing collaboration with parents and other professionals may be as a result of fear that parents may wish to dictate to them what should be done with their children at school and may even attempt to impose their ideas on them. Teachers may see such relationships as threatening their academic freedom and interference in their professional practice. It is important for teachers to realise that collaboration requires giving up the idea of ownership and control of a situation and working closely with others to achieve the common goal of adequate provision of P. E. for special educational needs children in mainstream schools. To achieve this goal, mutual trust and the development of an understanding of collaboration as well as its practical applications is necessary.

It is important also to note that the roles of parents cannot be ignored in the planning of educational programmes for their children as they may know a great deal more about them than the teachers. Information provided by parents could be vital to developing appropriate programmes in physical education for children with special educational needs .

DeWert and Helsel (1985) offer a piece of advice to professionals on their attitudes to parental involvement in the education of their children:

Be accepting of parents as equal partners. Even the most limited parents have information and insight into strengths, weaknesses, and potentialities in their children.....A professional's job is to find ways, not excuses, to get parents to participate as equals in the planning process and to feel comfortable enough to use their information (p.105).

This statement emphasises that the co-operation of parents may be essential to the welfare and progress of SEN pupils in mainstream education. It also emphasizes that professionals should seek areas of co-operation with parents rather than making up excuses to exclude parents from participating in decision-making regarding their children's education.

One of the findings of this study supports the view that the teachers felt that parental involvement might lead to an interference with their professional practice and possible imposition of their ideas on them. Therefore, they use these excuses to exclude parents from involvement in discussion about

their children's education which is contrary to the principles of developing collaboration.

It is evident from the results that the intervention provided to teachers in the comparison and experimental groups made a considerable influence on their attitudes to collaboration. These results also suggest that if similar interventions are provided to larger populations, the similar results may possibly be forthcoming .

Mainstream education as a concept is now part of the social and educational history of Kaduna state. Its' future may be less dependent upon the difficulties it poses than upon the response with which those difficulties are met. One way of minimising the difficulties to the development in the area is the creation of a systematic and cooperative partnership between educators, parents and other professionals and the special support services with the aim of coordinating their activities towards achieving a common goal. The overall aim is to create opportunities for children with disabilities to receive their education in mainstream classrooms.

6.9 INTEREST IN FUTURE RESEARCH

Research is an on going activity among professionals from various walks of life aimed at developing and improving the use of existing knowledge.

The aim of introducing school-based research as one of the component variables to be examined in this study is to determine the teachers' level of interest in participating in the study that might increase our knowledge of Educational issues.

Participation in research activities by teachers may provide them with the opportunity of becoming more aware of the existing practices and strategies that might be used in a programme of integration for SEN pupils attending ordinary schools in Nigeria.

Research has been one of the major activities that is carried out in higher educational institutions (Universities, Colleges of Education, polytechnics) in Nigeria. Teachers at these levels of education are actively involved in research activities and they teach their students how to conduct research in education, hence, research methods is offered as a compulsory course for students in these institutions. But teachers in primary schools are not encouraged to participate in such research activities even though the government is aware of the contributions that research could make towards their professional development.

It is imperative for teachers in primary schools in Nigeria to face the challenge posed by the introduction of mainstream education in ordinary schools.

As one of the sources of improving knowledge of educational issues teachers might be encouraged to participate in school based action research to enable them to gain greater knowledge of the needs of SEN pupils in mainstream classes.

In order to determine the extent of the teachers' interest in participating in research activities, they were asked to respond to a number of statements related to this important issue in Education. Each statement was to be scored on a five point scale provided (5 'Strongly Agree' to 1 "Strongly Disagree'. The results are shown in Table 14 below.

TABLE 14 Teachers' response to statements on their attitudes toward participation in research activities.

STATEMENTS	PRE-TEST RESULTS			POST-TEST RESULTS		
	Control Group N=40	Comp. Group N=40	Expt. Group N=20	Control Group	Comp. Group	Expt. Group
Teachers, administrators & other professionals should participate in research work	2.600* (.639)	2.475* (.554)	2.700* (.571)	2.075* (.730)	3.775* (.733)	4.500* (.607)
I would like the specialist P.E teacher to be appointed as a chairperson for the research team.	2.525* (.679)	2.575* (.549)	2.550* (.686)	2.400* (.632)	3.650* (.736)	4.250* (.786)
I understand that involvement in future research would support teachers' work with SEN pupils	2.450* (.594)	2.525* (.599)	2.550* (.605)	2.525* (.599)	3.850* (.622)	4.350* (.671)
I am prepared to support any research team involved in conducting any future research	2.350* (.622)	2.375* (.667)	2.550* (.605)	2.500* (.641)	3.775* (.768)	4.200* (.523)
I understand that future research creates increasing opportunities that would benefit both teachers and SEN pupils	2.525* (.640)	2.500* (.641)	2.550* (.761)	2.550* (.597)	3.600* (.744)	4.450* (.510)

*= Mean scores; Figures in brackets indicate Standard deviation.

Whole sample

Teachers were offered the opportunity to give their opinions on a number of statements related to their interest in participating in research activities.

The pre-test scores of teachers across all the groups suggest that teachers had mixed feelings about participation in future research.

Teachers in the control and experimental groups were uncertain about the involvement of school administrators and other professionals in future research activities as shown by their mean scores of 2.500 and 2.700. The comparison group scored the statement with a mean of 2.475, thus suggesting that they also disagreed with the idea of involving the school administrators and other professionals in research and their opinion did not change between the pre and post-test.

The teachers were also unable to decide on the statement concerned with the appointment of a specialist physical education teacher as a chair-person for a research team as the mean scores of 2.525 to 2.550 showed. These scores suggest that the teachers in the experimental group were sceptical about supporting those who are involved in conducting future research and were unaware of how their participation might benefit SEN pupils attending ordinary schools in Nigeria.

Control group

The post-test scores of the teachers in the control group of 2.075 and 2.400 showed that they remained opposed to the general idea of participating in future research and to the appointment of a specialist P.E. teacher as a chair-person of a research team.

Their responses to the statements concerned with supporting future research and the value of this to their work with SEN

pupils and those involved in the research activities were scored with means of 2.525 and 2.500. This result suggests that the teachers were uncertain about the value of such research to meeting the needs of SEN pupils.

Comparison group

There was a slight improvement in the post-test scores of teachers in the comparison group. The scores of 3.600 and 3.850 suggest that they may have become more interested in participating in research activities. This may have been due to their awareness of the value of research recognition of SEN pupils' needs and the development of effective teaching strategies for those working with the SEN children. The teachers may have thought that one of the means of giving support to a programme of integration is to develop an interest in research activities designed to improve the teaching of P. E for children with SEN.

Experimental group

The teachers in the experimental group recorded much higher scores in the post-test, suggesting that the intervention may well have persuaded them of the value and benefits of being involved in an educational research programme.

It is interesting to note that the teachers in the experimental group recorded a mean score of 4.500 on the statement that deals with the involvement of school administrators and other professionals in research activities.

This suggests that these teachers have become more aware of the need to work co-operatively with others for the development of the programme of integration in primary schools in the Kaduna state of Nigeria. The establishment of an awareness of the need to have an effective working relationship between teachers and other professionals is one of the objectives of this study.

Other mean scores worth noting were those related to the statements concerned with the opportunities available to become involved with research activities in education and how these research activities might benefit the teachers' work with SEN pupils in mainstream settings. The post-test mean scores of 4.450 and 4.350 suggest that the teachers in this group became more aware of the benefits of taking part in research activities.

The teachers in this group also seemed to be prepared to support the idea of appointing a specialist P.E. teacher as a chair-person for a research team and also to support any team involved in conducting research that was directed towards improving P.E for SEN pupils. The high scores on this issue suggests that the teachers were fairly positive about all the statements related to participation in future research regardless of the views they held before the intervention. This suggests that the intervention influenced the teachers' attitudes toward developing an interest in participating in research activities that may subsequently lead to an improvement in their knowledge of effective teaching strategies within an integrated setting.

The data was subjected to additional statistical analysis and the results of this are shown in Table 15.

TABLE 15 Teachers' interest in future research activities:
Statistical Analysis of Group Pre and Post-test Mean Scores On interest in research activities

Group	Pre-test mean scores & standard deviation	Post-test mean scores & standard deviation	t-value	df
Control	2.4650 (0.357)	2.4100 (0.365)	0.0651*	78
Comparison	2.4900 (0.205)	3.7300 (0.179)	2.0010	78
Experimental	2.5700 (0.294)	4.3500 (0.215)	3.5284	38

* T-value not statistically significant at 0.05 level of significance. Figures in brackets indicate standard deviation.

This statistical analysis was calculated to test the following null hypothesis:

Teachers who were not exposed to treatment variables would not show significant interest in participating in future research activities than their counterparts.

Control Group

Although the mean scores recorded for this group were higher at the pre-test than the post-test period, there was no statistical difference ($t=0.0651, p<0.05$) between the two mean scores. The null hypothesis stated for this group was therefore accepted.

Comparison Group

There was a statistically significant difference between the pre and post test results ($t=2.0010, p>0.05$) of this group on the issue of participation in research activities suggesting that the

response to the intervention may have influenced the teachers' opinion on this topic.

This result has also shown that teachers in this group had responded positively to the intervention given which has led to the rejection of the null hypothesis stated.

Experimental Group

There was also a statistically significant difference ($t=2.0298$, $P>0.05$) between the pre and post test scores of this group of these teachers regarding their interest to participate in participating in research activities leading to a rejection of the null hypothesis.

In conclusion, the results suggest that the various interventions given to teachers in this group may have accounted for the significant change in their opinions on this issue.

Although the treatments offered were different, teachers in the comparison and experimental groups appeared to develop a more positive response in their attitude toward participation in research activities. This may have been because they became more aware of the importance of research activities in the development of new strategies for meeting the needs of children with disability in mainstream settings.

One of the objectives of this study was to explore areas that might stimulate teachers' interest on a number of issues and to improve their knowledge and skills about the practice of integration, which in turn may help SEN pupils to benefit from integrated physical education programme.

The statistical difference between the responses of the teachers in the various groups concerning their attitudes toward participation in research activities showed that the teachers who were given in-service education and training appeared to display more favourable attitudes toward research activities. It is possible that improvements in teaching and learning can be achieved through the development of the critical and creative powers of individual teachers as a result of involvement in research activities. As a result of participation in school based 'action research' the teachers may in turn become more reflective practitioners.

Development of an interest in participating in research on various mainstreaming issues could be beneficial to both teachers and pupils alike. For example, teachers may gain more knowledge about attitude formation and the nature of stigmas that can influence the process of adjustment and assimilation when pupils with special needs attend ordinary schools. With such knowledge teachers are in a position to assist children with disabilities, with problems of adjustment in their social and academic when moving to an integrated setting.

It is also an opportunity for teachers to be involved in curriculum development as they become more aware of the concept and practice of integration and may help them to modify their initial negative attitudes towards mainstream education in primary schools. These teachers may as well learn about precision teaching which is used for solving particular problems facing pupils in an integrated setting.

To employ this method of teaching, it means that the teachers must have already identified what the children's problems are and have worked out how to tackle them. Teachers' participation in research activities may also help them to develop frameworks that might facilitate inter-disciplinary and inter-professional working relationships.

Apart from the various advantages of participating in research activities, teachers may also improve their critical thinking about their everyday practices with the children. Such critical thinking may create opportunities for self-appraisal which may in turn lead to improvements in the strategies they use to help children with special educational needs in mainstream settings.

Webb (1988) states that the concept of the teacher-as-researcher had its' origin in the Humanities curriculum project (HCP) of 1967-1972 and which was further developed by the Ford Teaching Project (FTP) between 1972 and 1974. This project generated a number of research strategies which helped teachers to develop a greater understanding of classroom processes through data collection and analysis.

The spread of the teacher-as - researcher movement has been encouraged through teachers' participation in several projects such as Guide-lines for Review and Internal Development in schools (GRIDS) (1981), Holly,(1984) and in-service training programmes(Bridges & Eynon,1983). With the introduction of school-based research, teachers had the opportunity to register their research for award bearing courses leading to Diplomas, Bachelor of Education (B.Ed) and Master of Arts (M.A)

certificates which accounted for the increase of teachers' interest in research activities (Nixon, 1981; Walker, 1985; Woods, 1984).

The initial survey of teachers' interest in research participation during the pre -test showed that they were not initially in favour of this idea probably because they were not aware of its benefits to education in general. The results of the post-test showed that teachers in the experimental group who received various interventions showed improvement in their mean score, thus suggesting that they may have become more interested in participating in research activities after the interventions. These results suggest that if INSET opportunities are extended to other teachers who are working with SEN pupils in physical education in ordinary schools in Nigeria, they may be influenced to become more interested in participating in research activities.

6. 10 Analysis of Data Obtained Through Observation of School Physical Education Activities.

Earlier in chapter Three, mention was made of the use of observation in data collection. The researcher visited the five schools used for this study to observe a number of scheduled physical education lessons.

The aim was to assess the level of involvement of special educational needs children in school physical education lessons. In most lessons activities were centred on the usual school general physical training and exercise approach aimed at the promotion of fitness of the pupils rather than developing skills. The results of the observations have been recorded on Table 16

As part of the effort made by the reseacher to gather valid information concerning the practice of integration in school physical education lessons, further interviews and discussions were held on the level of involvement of SEN pupils. The teachers involved in this study were given the opportunity to select one of them to represent the school during the interviews and discussions. This approach was adopted in order to avoid duplication of information on the same topic. It is therefore necessary to point out that the responses recorded on Tables 16 and 17 (level of involvement and factors affecting the SEN pupils) respectively, were the views of those teachers that represented their schools.

TABLE 16 Responses of Teachers who represented their schools on Level of Involvement of SEN pupils in school P. E. lessons.

School	Involvement of SEN pupils		
	Substantial	moderate	low
ABU staff school	_____	**	_____
Saidu LEA school	_____	_____	**
Lemu LEA school	_____	_____	**
Army children school	_____	_____	**
Therbow school	_____	**	**

Note: ** The austeriks shown in the Table represent the level of involvement of SEN pupils in P. E lessons.

As Table 16 shows it was observed that two of the schools allowed SEN pupils to participate in physical activities at moderate level. Moderate here, refers to little participation of SEN pupils in activities such as throwing and catching, aiming targets using bean

bags, and rolling of balls to partners. In other schools, SEN pupils' involvement were quite low. For example, they watched others most of the time, and were not encouraged to do any of the activities. Most of them did what they liked because of neglect from their teachers, or could do what appeared disruptive rather than being involved because of lack of planned programmes for these children. It was observed from the responses given by teachers who represented the views of those involved in the actual teaching of SEN pupils that none of the schools involved children with special educational needs substantially in P. E. lessons. This might suggest that the SEN pupils were missing out of an appropriate physical education experience.

The observation also confirms that generally, during physical education lessons, the SEN pupils were always asked to stay out of the playing field and watch others participating in P. E. activities. Teachers were also interviewed on issues concerning the factors that inhibit active involvement of SEN pupils and the responses have been recorded in Table 17.

TABLE 17 Responses of Teachers who represented their school on Factors Affecting level of Involvement of SEN pupils in School physical education lessons

School	Lack of facilities & equipment	Fewer No. of SEN pupils	Fear of aggravating their condition	Sympathy with movement difficulties	Teachers' lack of Knowledge & Skills
ABU Staff school	**	—	—	—	—
Saidu LEA school	**	**	**	—	**
Lemu LEA school	**	—	**	**	**
Army children school	**	**	**	**	**
Therbow school	**	—	**	**	**

Note:- ** The asteriks shown in the Table represent factors that inhibit SEN pupils from active participation in P. E. lessons

6.11 Reasons Given by Teachers for the level of Involvement of SEN pupils in Physical education Activities

Teachers advanced several reasons for SEN pupils' moderate and low involvement in physical education activities in their schools. Lack of facilities and equipment, and teachers' lack of knowledge and skills on the management of SEN pupils, were all mentioned by teachers at interview as being the most constraining factors, and this are shown in Table 17.

At ABU staff school, lack of facilities and equipment were identified as a problem inhibiting the involvement of SEN pupils in P. E. activities while other schools had their own specific problems. Saidu LEA school attributed the low level of SEN pupils' involvement in Physical education activities, to all factors except

the issue of sympathy with difficulties encountered by SEN pupils during P. E. programmes.

In the case of Lemu LEA school and Therbow school, all other factors were listed as constraints except that the teacher said the few number of SEN pupils enrol in the school was not responsible for not involving them as their able-bodied peers. Notably, the Army children school believes that all the factors mentioned accounted for the low level of involvement of SEN pupils in physical education lessons.

The observation of school P. E. lessons and the reasons given by teachers for the levels of involvement of SEN pupils in their schools yielded useful information. Firstly, it supported the general claims that SEN pupils' involvement in P. E. activities in Nigerian schools are relatively low (Fatile,1980; Ajisafe, 1977). The teachers provided a variety of reasons for why SEN pupils are rarely involved in P. E. lessons and mentioned a number of obstacles to the practice of integration. For SEN children to enjoy greater participation in P. E. programmes, on equal terms with their able-bodied peers solutions to these obstacles need to be found.

CHAPTER SEVEN

7. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

In Chapter 4, the data collected in this study was presented and statistically analysed. The results were discussed and implications for future educational policy and practices for mainstream education highlighted.

This chapter not only offers a summary of the main findings of this study but also attempts to draw conclusions and put forward certain recommendations concerning development of the teaching of physical education within mainstream settings in Nigerian primary schools. Suggestions for future research are also outlined.

7.2 Summary of findings

The main findings of the study were as follows:

1. The majority (98%) of the teachers sampled were males. Only a very small proportion (2%) were females. The teaching profession, especially as it affects physical education, in the schools studied, is predominantly a male affair.

2. The majority of teachers working with SEN pupils were between the ages of thirty and thirty-nine years. A considerable proportion (39%) were below thirty-nine years, and only few teachers (4%) were above the age of thirty-nine.

3. The Majority of the teachers in the primary schools studied (87%) were holders of Grade Two Teacher's Certificates. Fewer than expected had degree and diploma qualifications. It would appear that the objective of the Federal Government of Nigeria to have only holders of the National Certificate in Education (N. C . E) or higher qualifications for teaching in primary schools is yet to become a reality because there appear to be shortage of qualified teachers in most Nigerian schools especially in the Northern parts of the country.

4. In the primary schools studied, a small percentage of teachers (5%) had teaching experience of less than four years while a substantial number (37%) had experience ranging between four to nine years. Relatively few teachers (12%) had taught for more than ten years. This suggests that the teaching of physical education in primary school is done by relatively inexperienced teachers. It may be that more experienced teachers leave the profession for better paid civil service careers but there is no statistical evidence on this point.

5. Teachers working with SEN pupils in physical education in the schools sampled did not seem to have necessary training to deal effectively with the teaching of physical education for special needs' pupils. This may be because such specialised skills and knowledge are not offered in the conventional teacher training curriculum.

6. Only when these teachers were made aware of the need for specific training to help them integrate SEN children into the mainstream physical education programmes, did they recognise the importance of such training. Generally, the more information on the subject that was conveyed, the greater the awareness created, and the higher the teacher's recognition of the need for additional training.

7. Although the teachers agreed on the need for additional training, their preference was that such training should be in the form of short, regular and continuous in-service courses organised on a part-time basis.

8. The attitudes of teachers in both the comparison and experimental group to in-service training changed significantly after they were made more aware of the need to cater for SEN children in the mainstream setting. No change in attitude was recorded for the control group. This suggests that teachers were more likely to have a positive attitude towards catering for SEN children in the classes if they were first of all made aware of the value and benefits of such provision through INSET.

9. There was a general lack of knowledge of approaches to integration on the part of the teachers and a lack of awareness of how to tackle the individual problems of children with special educational needs. However, teachers' attitude and knowledge improved after treatment was provided in the form of relevant information. Also, the more the information that was offered to

the teachers the greater their appreciation of the value of a policy of integration.

10. Teachers in all the groups were unaware of how to devise and implement a variety of strategies to effectively integrate SEN pupils into mainstream physical education lessons. However, after the treatment in the form of an INSET programme the experimental group displayed a greater appreciation of worthwhile and effective teaching approaches within an integrated setting.

11. After the intervention of the INSET programme, it was noticeable that teachers in the comparison and experimental groups became more aware of their strengths and weaknesses in working with SEN children, were more open to new ideas for working in an integrated setting and were more willing to accommodate the behaviour of these children in their classes.

12. A significant change of opinion concerning the objective assessment of SEN pupils' needs, provision of reinforcement, the need to ensure safety and freedom, and provide a sympathetic approach to skill learning for SEN pupils in physical education lessons occurred in the comparison and experimental groups after the INSET interventions.

13. Pre-test responses of teachers on issues concerned with the problems facing the implementation of mainstream education were generally negative. This highlights the difficulties any policy

of mainstream education may experience unless problems are eradicated.

14. Post-treatment responses of teachers in the comparison group on such issues as the adequacy of funding of mainstream education, the feelings of competency to teach SEN children in mainstream settings, support from non-teaching staff, support from parents for a policy of mainstream education, and whether or not a cordial relationship exists between SEN pupils and their able-bodied peers did not show any significant change, indicating that these issues were likely to remain as barriers to the implementation of a mainstream policy in physical education regardless of INSET.

15. However, teachers in the experimental group did show a substantial positive change of opinion on items listed as obstacles to mainstream education, suggesting that the extra information provided to this group may have resulted in a more positive attitude to such a policy.

16. The initial responses of teachers to the need to maintain some sort of partnership with parents and co-operation with other professionals in order to ensure effective integration of SEN pupils into school physical education programme were low, but improved remarkably after the interventions for comparison and experimental groups were introduced.

17. There did appear to be a consensus among teachers in the comparison and experimental groups after the treatment on the need to share professional knowledge with other professionals, seek parents' support in the decision-making processes affecting their SEN children, and also on an issue concerning the release of SEN pupils' performance records to their parents.

18. There was therefore a general support for collaboration in the implementation of a mainstream education policy but this was particularly the case after INSET programme had created a greater awareness amongst the teachers of the value of such collaboration.

19. The teachers did not appear to be initially interested in being involved in school-based research to improve their knowledge of effective strategies for teaching physical education in an integrated setting.

20. However, there was a remarkable change of opinion in both the comparison and experimental groups on issues related to seeking their support for SEN pupils' education in ordinary schools and interest to participate in research activities which might benefit SEN pupils in physical education lessons. This change in opinion was probably due to the awareness of need which the interventions have created.

21. Subjective observation of a selected sample of lessons taught by the teachers suggested that the level of involvement of SEN pupils in physical education lessons in the schools sampled was low.

22. Only two of the schools, namely Ahmadu Bello University (ABU) staff school and Therbow school attempted to involve SEN pupils in physical education lessons at a moderate level of activity. None attempted to involve the pupils in a more substantial level of activity.

23. All the schools sampled identified lack of facilities and equipment as the main constraint in involving SEN pupils more substantially in school physical education lessons.

24. Fear of aggravating SEN pupils' disabilities, and the teachers' lack of knowledge and skills in catering for SEN children with a range of disabilities were identified as major constraints to integrating SEN children into school physical education lessons.

25. Three out of the five schools gave their reasons for the low involvement of SEN pupils in school physical education lessons as being teachers' having "sympathy with the child's movement difficulties".

7.3 Conclusions

The success of any programme of integration in physical education for Special Educational Needs pupils in Nigeria will be dependent on an adequately trained teaching force who are confident and feel competent to cater for SEN pupils. In addition, since there is a fairly equal distribution of boys and girls within the SEN population there is a need to have a balance of male and female teachers in the profession. This study has discovered that the majority of teachers involved in teaching physical education in the Kaduna state, and in many Northern states of Nigeria and probably the rest of the country, are mainly males. This may be that Islamic influences may account for this trend as cultural factors discourage women from active participation in public services such as teaching.

One direct implication of this situation is that female disabled pupils seeking gender protection, and therefore preferring to share personal feelings with female teachers, are denied the opportunity of such confidential counselling. Although male teachers are believed to be more physically active and therefore considered to be better for teaching physical education, they cannot always take the place of a female teacher in such situations. The need for more female teachers in primary education is therefore essential for an effective scheme of integration.

There is some concern that most teachers are leaving the profession for better paid jobs in the civil service and the private sector. This may explain the finding of this study that older and more experienced teachers were rare. One major factor

influencing teachers leaving the teaching profession is the general feeling that teaching is no longer a noble and rewarding career in Nigeria. In most cases, the payment of teachers' salaries is often delayed for months. Since the Government is the sole employer of teachers, any political instability or financial mismanagement (as is frequently the case in most states in Nigeria) affects teachers' welfare adversely. Therefore, a lot of teachers are forced by unpleasant experiences to seek more secure and better paid jobs elsewhere.

The problem, however, is that for any programme of educational integration to succeed, every effort must be made to recruit highly qualified teachers who are also interested in teaching physical education and most importantly, retain them in the teaching profession. The present situation whereby older and more experienced teachers are forced to leave the profession needs to be reversed.

The Federal Government objective that only teachers with at least the National Certificate in Education (N. C . E) as a minimum teaching qualification in primary schools is not yet a reality. This is reflected in the findings of this study that most of the teachers working with SEN pupils in physical education had Grade Two Teachers Certificate as their highest teaching qualifications. There may be a number of explanations for this situation.

For example, in the Northern part of Nigeria, western educational approaches are slowly being accepted by the predominantly Muslim population because of its link with Christianity. Much of the content of Grade Two teachers' courses in this region has an

Islamic approach. Beyond this level, the curriculum is standardised to conform with national standards.

Secondly, the shortage of qualified teachers generally, means that Grade Two teachers may well be accepted as competent as far as the Northern states are concerned. It is difficult for schools in the North to accept qualified Christian teachers from the South. The solution to the problem, therefore, would be an accelerated special teacher training scheme specially designed to provide more N. C . E teachers for teaching physical education programmes in Northern schools. In fact, this course of action is already being followed by most Northern states including Kaduna state.

This study has set out to investigate the state of readiness of teachers teaching physical education in Kaduna state to be able to be involved in a programme of integration of Special Educational Needs pupils into mainstream education activities. The major finding of this study, therefore, is that there was a generally low level of awareness among the teachers concerning most aspects of integration for SEN pupils. This is because the present teacher training curriculum does not provide courses in the teaching of physical education to SEN children. Consequently, teachers in Kaduna state are very much generalist teachers and are unable to identify the needs of SEN pupils in physical education. The fact that there is a substantial number of SEN pupils in schools in the Northern states of Nigeria, and very few specialists to handle the needs of these pupils, does suggest that there is an urgent need to address the issue of special training programmes for teachers working with this group of children in physical education lessons.

The apparent lack of knowledge of the teachers concerning the essential practice of integration means that some changes in the teacher training programme must be made to address this need. It is not likely that every teacher-trainee would be interested in working with SEN pupils. But the fact that the issue has not been considered by those planning teacher training courses is a possible reason for the general lack of interest among teachers. When teachers were made more aware of the value of mainstream education and programmes of integration they may express more interest in attending additional training courses related to approaches to integration. Their willingness to undergo short and regular in-service training courses and their preference for part-time courses, suggest that a well planned INSET programme may lead to a greater awareness of the value of integration in the teaching of physical education to SEN children.

In this study it was noticeable that teachers who were offered information about the physical needs of SEN children and guidance concerning suitable teaching approaches for SEN children in mainstream classes were more likely to be positive about the need to cater for SEN children in their classes and their personal competency in providing for those needs.

It must be noted, however, that just providing information may not be sufficient, additional further support in the form of regular follow up training courses may need to be introduced to maintain teachers' knowledge and competency. Initial exposure to new ideas and teaching approaches may only change attitudes in the short term. Teachers need regular training to develop the knowledge and skills that sustain an innovation.

The only instance where the opinion of teachers differed significantly was in the case of problems facing the implementation of mainstream education. The funding of education in Nigeria has been a major cause of strike action by teachers. The response of teachers in the comparison group did not change after the treatment concerning the question of the funding of mainstream education. They generally felt that funding was totally inadequate. It is not clear why the opinion of teachers in the experimental group changed positively on the issue of funding after the treatment. It may be that they were persuaded to see issues in a different light following the provision of more information on the development of a programme of mainstreaming and what it entails.

When the teachers in the study were asked about what they thought were the main obstacles to the implementation of a policy of mainstreaming, it was noticeable that their opinion did not change after the INSET programme. The influence of these barriers may only be lessened by more adequate funding, the training of teachers to make provision for SEN children, the development of a better rapport between SEN children and the able-bodied peers, and greater collaboration between teachers, parents and other professionals.

The initial attitude of teachers towards collaboration with parents and other professionals was relatively unfavourable, but showed a substantial positive change after treatment. The consensus among teachers was that there was a need to develop a partnership with parents as an essential collaborative strategy. Also, the involvement of parents in decision-making about their

children's education was generally accepted by teachers, as they began to appreciate the important role of parents in the child's education. Bringing up a disabled child, and making him or her physically active cannot be the responsibility of the teachers alone. It must be a co-operative process involving extensive collaborative efforts between expert teachers and their colleagues in other fields of profession who have responsibility for the welfare of SEN pupils, and of course, the support and commitment of parents, for whom success in terms of physical capability can mean a great deal in as far as greater mobility and self-reliance is concerned. Releasing the records of SEN pupils' performance to their parents from time to time, may reinforce the need for such records to be kept, as they provide useful information on the progress made by each SEN pupil, and helping to identify areas of physical education requiring greater attention.

The need for research into effective strategies of integration in physical education and the role of all professionals in such research, cannot be ignored. One direct benefit of any research is the generation of information about new strategies to improve the process of integration. Without research, new ideas and more effective teaching approaches may not be developed. Dealing with SEN pupils in mainstream classes calls for a better understanding of all the issues involved, and how they can be improved upon. It is essential that new knowledge generated as a result of research should be made available to all teachers engaged in teaching SEN pupils in mainstream physical education classes in Nigerian schools, but also to those in teacher training colleges.

This study has revealed that teachers in Kaduna state were ill-prepared for the integration of SEN pupils into mainstream school physical education, and that the provision of appropriate INSET information and guidance can create greater awareness, changes in attitude, and generate greater interest in the subject. In this study, the subjective observation of SEN pupils' involvement during physical education lessons suggests that the physical education experiences of SEN pupils in mainstream classes are likely to be very limited.

In formal observation it appears that SEN pupils were rarely actively involved in physical education lessons suggesting that teachers need guidance on ways of engaging these children in school physical education lessons. The school creates a two-tier system, one for able-bodied pupils, and the other for disabled pupils. While able-bodied pupils fully enjoy the lessons and facilities in physical education, disabled pupils are treated as second-class learners, sitting and watching able-bodied pupils during physical education classes. Such a situation is not only discriminatory, but openly depressing for these pupils, who are reminded by such a neglect.

The fact that there are substantial numbers of SEN pupils in these schools, means that they cannot be ignored. If schools in developed countries of the West are addressing the issue of integration for pupils with disabilities in physical education, there is no reason why the developing countries cannot develop a similar policy of integration. As there are often more SEN pupils in such countries there is therefore a greater need for such provision. It is simply not enough to show sympathy to these

children, or express concern that exposure to physical education activities might aggravate their disabilities. The truth is that they deserve to have equal opportunity of access to an appropriately planned programme of physical education while doing everything possible to minimise difficulties they may encounter as the result of their disabilities.

It has also been observed that apart from the various obstacles to proper implementation of mainstream education programmes in Nigeria and in the Kaduna state in particular which have earlier been mentioned, a number of other factors may contribute to these problems. These include, the administrative structure in the state Ministry of Education, and religious and cultural factors.

The Federal Ministry of Education controls the activities of various states' Ministries of Education from its headquarters at Abuja, the Federal capital. It establishes a special education unit in each of the state Ministry of Education and the staff of this unit have autonomous power which allows them to act independently of the state Ministry of Education. Those working with the state Ministry of Education have the feelings that since the special education unit is established to serve the citizens of the state, the staff in this unit should be accountable to them. This often leads to conflicts between the two bodies and which probably may have caused strained relationships between them. This lack of co-operation and understanding between the different organisations may be responsible for the present poor state of special education programmes in the state.

One of the reasons which may be held responsible for the failure of the Universal Primary Education(UPE) introduced in 1976 to redress educational imbalance in Nigeria, was the lack of consultation. There was a communication gap between the Federal, States and Local Government Areas in the various states of Nigeria. Each of these arms of government, particularly, the states and Local Government Areas do not communicate with each other properly to facilitate sound educational programmes for SEN children. Teachers who should be consulted, informed and involved in any changing process that takes place in schools have always been left out of the consultation process. They are always instructed to implement educational policies which they do not participate to formulate but takes the blame for poor academic performances of their pupils.

It is always the practice of governments and international agencies to over look the role of teachers in implementing educational reform. It seems the only way forward in minimising the problems in education is to introduce proper consultation with teachers, parents and other professionals. This will lead to establishing better understanding among the various arms of government and the International Agencies such as the World bank, UNESCO and UNICEF.

The funding of educational programmes in Nigeria remains a controversial issue probably due to the different political and religious ideologies held by the people. Investment in education in Nigeria is determined by misconceived ideas and political considerations rather than by national criteria which is focused on the needs and rights of individuals to quality education. This is

because the expenditure in education is not treated as investment expenditure but as welfare expenditure. This may suggest why the government has developed a lukewarm attitude towards adequate funding of education and towards special education programmes in particular. It seems that the policy makers from the Northern part of Nigeria and from the Kaduna state in particular have a laissez-faire attitude towards making provision for children with special educational needs in ordinary schools than those from the southern states. Whilst there are several special schools established by the state governments and provisions made for SEN pupils in ordinary schools in the southern part of Nigeria, there are only a few such schools for SEN pupils in the Northern part and in the Kaduna state in particular.

Cultural barriers seems to be one of the factors that may have caused the delay of proper implementation of special education programmes in Nigeria. It has been observed that the influence of such cultural factors such as early marriage, neglect of women education and keeping them in 'Purdah' (keeping women behind closed doors) on their education seems to more in the Northern states and in the Kaduna state in particular than in the southern states of Nigeria. The introduction of christianity in most parts of the southern area by the Missionaries have helped to minimise the influence of their cultural practices on their education(Fafunwa,1976).

In contrast, the Muslims in the northern part were opposed to the advent of Missionaries because they believed that the 'Western' type of education which is closely associated with Christianity, would destroy their cultural heritage.

Being a Muslim dominated area, the Kaduna state of Nigeria has diverse cultural activities which remain opposed to the establishment and development of a Western 'type' of education. For example, keeping women in 'Purdah' thus, limiting their level of interactions with other members of the community. They must also always be accompanied and have their heads covered with black cloth if they are going out to public places. This practice prevents their female from attending schools because they are needed to help with home chores, running errands and performing other domestic and social duties for their mothers.

Another cultural practice that seems to affect the education of women in the Kaduna state and the girls in particular, is the emphasis on early marriage. Girls between the ages of 10 and 12 are betrothed to men without their knowledge or consent. A girl may be withdrawn from school in order to get married and may not get back to school.

It is interesting to note that parents of children with disabilities in Nigeria and in the Kaduna state in particular, encourage these children to go into the streets to beg for alms. Some of the parents depend on what ever their children bring home from such daily begging in the streets. In this type of situation, it seems unlikely that children with disabilities may never benefit from a mainstream education programme. A lack of co-operation from parents seems to account for the government of Kaduna state lukewarm attitudes towards making provision for SEN children in ordinary schools.

7.4 Recommendations

As the concept of integration in physical education lessons is relatively new to practising teachers in Nigeria, a well planned programme of INSET is necessary to educate teachers about the value of integration and provide them with the teaching approaches, knowledge, skills and understanding to effectively teach SEN children in mainstream classes. Also, it would be valuable for the education authorities, parents and general public to use a variety of techniques and approaches to make teachers more aware of good practice in the integration of SEN children into mainstream classes in physical education. Booklets, circulars, posters and lectures/workshops may all be used for this purpose.

The general lack of well qualified teachers is a major constraint on the implementation of a programme of integration. It is equally disturbing that most teachers do not stay long in the profession for reasons advanced earlier. More women should also be encouraged to enter the teaching profession to help cater for the specific needs of girls with SEN. A number of measures, therefore, must be taken to recruit, train, and retain teachers of both gender for the purpose of implementing a sound programme of integration.

To attract women into teaching in a predominantly Muslim society would require an intensive campaign of enlightenment directed at parents, traditional rulers and religious leaders on the urgent need to encourage women to join the teaching profession, particularly in relation to the teaching of physical education to children with disabilities. It is important that any cultural bias that may lead to objections of women's involvement in the

teaching of physical education teaching must be clearly understood and avoided when planning the training programmes for female teachers.

Also, some sort of incentive should be provided to female teacher trainees which might encourage them to join the profession and help with the teaching of physical education. Teachers with SEN children in their classes should be paid special allowances in order to persuade them help them to accept these children in their classes. The practice of paying an extra allowances to these teachers may also help to motivate other teachers to develop an interest in programmes of integration.

While the recruitment of new teachers is considered important to the development of a mainstream policy, it is equally important to retrain those involved in the teaching of physical education to SEN pupils concerning the new concept of integration. This study showed that teachers lack knowledge and understanding of mainstreaming and approaches to integration and this has tended to affect their initial attitude to the whole policy of integration. The provision of in-service training courses is one way of introducing knowledge, understanding and skills about integration to practising teachers. The possible positive effects of INSET has been illustrated in this study. This study has also shown that teachers may prefer INSET to be arranged on a part-time basis, preferably during school vacation periods, with teachers rotating through various programmes organised at different times on different aspects of integration.

It is also important that such courses are free in order to attract as many teachers as possible. The content of such courses

should cover all aspects of the practice of integration in relation to physical education and may include also information on the needs of different SEN children, the teaching approaches for the integration of SEN children with specific disabilities in physical education lessons, suggestions for evaluation and assessment of their progress. Similar content ought to be included in the general curriculum for teacher-trainees, irrespective of whether or not such trainees are aiming to work with children with disabilities at the end of their professional training. In this way all future teachers teaching physical education to SEN children in mainstream classes may become aware of the practice of integration and the needs of children with special educational needs.

The provision of in-service training for teachers who teach physical education to SEN pupils could be one of the avenues for raising the qualifications of teachers for the teaching of physical education. If such programmes were award bearing, and in fact, designed to lead to the award of the National Certificate in Education (N. C . E), these teachers might be more motivated to attend such courses.

This study also, identified factors that might act as obstacles to the development of mainstreaming policy. It is therefore important to make suggestions on how to reduce the influence of such factors. Firstly, a programme of integration needs adequate funding, which can only be provided if the policy-makers and those responsible for making funds available are persuaded to accept the need for such programmes as a matter of priority. Issues concerning the value of a policy of integration to society in

general should be made the focus of educational discussions at various administrative, management and institutional levels. Academics, professionals and all those involved in the implementation of a policy of integration for SEN pupils must come together, and provide a common front in arguing for the need for better funding.

Also, the parents of disabled pupils have a vital role to play in the realisation of the goal of integration. It has already been suggested that parents must be included in the decision-making process, and records of the performances of the SEN pupils should be made available to their parents from time to time. It is also suggested that teachers working with SEN pupils in physical education and parents of these children should meet regularly to discuss all issues involving the practice of integration and the progress of the pupils. Some sort of parent-teacher association is advocated to act as a sort of open forum for the discussion of the provision for SEN pupils in the school.

The roles of parents must be clearly defined so as to avoid any interference with the official role of teachers and avoid any possible areas of conflict between parents and teachers. Solving the problems of SEN pupils is therefore a collaborative responsibility of teachers and parents, each group respecting and appreciating the contributions of the other group, while the general objective remains the integration of special educational needs pupils into mainstream school physical education programmes.

Improving the knowledge and skills of teachers in physical education is as important a measure as providing the necessary

facilities for the integration of SEN pupils. It is difficult to imagine how any programme of integration can succeed without appropriate equipment and other material resources made available at the onset. The findings of this study suggested that lack of resources, particularly the necessary equipment for effective implementation of an integration policy is responsible for the low involvement of SEN pupils in school physical education lessons in Kaduna state.

With regards to funding, similar measures earlier suggested that is, and steps to combat misappropriation of fund allocated should be employed to enable teachers to meet the needs of SEN pupils attending ordinary schools. The provision of facilities and equipment may a rouse the interest of these children and may also create greater opportunities for teachers to involve them in P.E lessons.

One way of seeking assistance in the provision of teaching equipment for SEN pupils is to launch a direct appeal to wealthy individuals, philanthropic organisations, clubs, associations and groups, and even churches/mosques to help raise money through voluntary efforts. Other fund-raising avenues might be identified and explored.

It has also been observed from this study that provision for various forms of in-service education and training have been made for teachers of primary schools in Nigeria, but it appeared that there was no significant impact of this training on teachers' knowledge, skills and understanding of programme of integration. As part of the government's efforts to improve teachers' level of competency to cope with the new challenges of mainstream

education, the researcher has suggested the following modules for in-service education and training. These suggestions illustrated in Table 7, are short and long term arrangements which may suit the individual school's needs.

Figure 7 Developing a whole-school approach: Priority for school-focused INSET for 5 years)

MODULES	INITIAL INSET NEEDS
1	<ul style="list-style-type: none"> -General aims of P. E. curriculum-applicable to all children -Additional specific aims of P. E curriculum for SEN pupils -Establishing goals and objectives of P. E. -Changing concepts of Special Educational Needs (SEN) -Philosophy of P. E. and SEN programme -Definition of Special Educational Needs; what SEN mean to physical educators. -Classification of SEN children (according to Needs) -Characteristics of children including SEN pupils(physical, social, emotional, mental and psychological).
2	<ul style="list-style-type: none"> -Definition of integration/mainstreaming -Identification of SEN of children with disability -Assessment of needs of SEN pupils/forms of evaluation -Strategies for meeting SEN children's needs in physical education. -General principles guiding selection of activities in P. E. -Selection of appropriate activities and instructional strategies -Rationale/Benefits of P. E for SEN children.
3	<ul style="list-style-type: none"> -The range of alternative provision in P. E.. for SEN pupils -Provision for specific areas of disability/implications for P. E programmes (e.g. Asthma, Epilepsy, Cerebral palsy, Clumsiness -Adapting curriculum resources for SEN pupils -Alternative teaching approaches and classroom management strategies - Modification of games; the use of equipment. -Assessing performance/Achievement/monitoring progress of SEN pupils -Good practices in physical education with SEN pupils -Intervention approaches for SEN pupils
4	<ul style="list-style-type: none"> -Management of change within school (to include SEN pupils -Effective uses of LEA support services available -Methods of working with colleagues in mainstream settings -Cross-curricular links between P. E. & other subjects in school curriculum. -Methods of developing resource centres -Learning observation techniques -working with ancillary staff
5	<ul style="list-style-type: none"> -Promoting colleagues professional development in relation to SEN pupils -Developing subject-based resources -Identifying school's contributions toward improving pupils' behaviour (e.g. counselling services) -Developing knowledge in record keeping -Strategies for working with parents & other professionals -Partnerships between schools & Higher Education institutions

Finally, proper understanding of the problems and learning difficulties of SEN pupils, and the ways of alleviating such problems can best be tackled through research activities into such areas. The Ministry of education should therefore establish, as a matter of priority, a research unit looking at the integration of children with disabilities, and experts drawn from a variety of disciplines to study ways of improving the practice of integration. Again, the success of such a measure would depend on the extent to which policy-makers see the usefulness of such a measure. It therefore means that a strong case must be made in support of such measures by all concerned with programmes of integration in physical education.

7.5 LIMITATIONS OF THE STUDY

This study was carried out in primary schools in Zaria and Soba Local Government Areas of Kaduna state of Nigeria. The choice of Kaduna state among other states that make up the Northern part of the country (as shown in Appendix 6) was influenced by several factors:

1. There were twenty-one states in Nigeria and the federal capital territory, Abuja at the time the research study was planned. Four months after the plan, new states were created thus bringing the total number of states to thirty. Forty-five primary schools in the selected state have placements for children with special educational needs and twelve of these schools were located in Soba and Zaria Local Government Areas. It was out of the twelve schools that five of the schools studied were selected from.

2. Kaduna state has a large geographical spread. To include all the primary schools that have placements for SEN pupils in this study would be a difficult task, and moreover, the limited time available to the researcher to carry out the field work could not accommodate such an extensive visit to schools .

3. This study was conducted in primary schools because it is at this level of education that all the basic school subjects are introduced. To encourage the participation of SEN pupils who had been denied such opportunity in physical education, it is necessary to introduce the basics here as a means of instilling confidence for further participation. This level is considered appropriate for introducing the basics of P. E. hence, the limitation of this study to primary schools.

4. Nigeria operates a uniform policy on Education throughout the entire country which is divided into several states for administrative convenience. All directives on education are given from the Ministry's headquarters located at Abuja, the present federal capital territory. The code of service for teachers in primary schools is the same throughout the country. There is therefore a common practice of teacher training as a result of the centralisation of training for teachers.

5. The study focused on teachers who are working with children with special educational needs. The sample size was drawn from the population of teachers involved in the teaching of physical education to SEN pupils attending primary schools. By this definition, other teachers who are teaching physical education but

are not working with these children were not selected for this study.

6. Since this study is limited to teachers in primary schools in Kaduna state, and those working specifically with SEN pupils, the findings made are limited in their generalizability of Nigerian situation. However, the homogeneous nature of teacher training programmes in Nigeria could allow high degree of generalisations.

7.6 Further Research

Every study has its limitations. The focus of this study was on the knowledge, skills and attitudes of teachers who were involved in the teaching of physical education to SEN children in mainstream classes. There are other aspects of this topic that need examining but they were beyond the bounds of this study.

One of such areas is the assessment of parents' attitude to their SEN children being involved in physical education lessons. This could reveal parents' hopes and apprehensions, and even raise useful information on how to improve such a practice for their children.

Further research might also attempt to investigate the feelings and opinions of SEN pupils concerning approaches to integration. There is also the issue of identifying good practice in an integrated programme of physical education. A comparative study of the practice of integrated education in different countries at different levels of economic development would be of considerable interest.

This study focused specifically on the practice of integration education in the Kaduna state of Nigeria. Therefore, the findings in the study are limited in that they may not be representative of the situation in other states of Nigeria. It would be advisable if this study can be replicated in other states of Nigeria, taking into account the differences that may exist in the culture and educational policy of each state. It is hoped that such studies would reveal a clearer picture of the general practice of integration for SEN pupils in physical education in Nigeria.

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APPENDICES

- Appendix 1** **Teacher Questionnaire.**
- Appendix 2** **Booklets on Information about SEN children's integration in physical education lessons.**
- Appendix 3** **An overview of the Teachers' responses to the Questionnaire.**
- Appendix 4** **List of good practices with SEN children in physical education.**
- Appendix 5** **Case studies**
a) **Ormesby primary school.**
b) **Ayton primary school-Sunderland.**
c) **Christopher Simon, A severely handicapped 11 year old Athetoid.**
d) **James Cook-Adisorganised school child.**
- Appendix 6** **Map of Nigeria showing Kaduna state in relation to other states.**
- Appendix 7** **Map of Soba Local Government Area.**
- Appendix 8** **Map of Zaria Local Government Area.**

SCHOOL OF EDUCATION
THE UNIVERSITY OF HULL, ENGLAND

Questionnaire for Physical Education Teachers in Nigerian Primary Schools

Introduction: This study is seeking your opinion on the integration of Physical Education programme for children with special needs in this area. Please, answer all questions in the various sections of this questionnaire by ticking or circling the answer options that best describe your agreement or disagreement with any question or statement.

Section A: Demographic Information

1. Sex; (a) Male ()
(b) Female ()
2. Age; (a) Less than thirty years (); (c) 35 - 39 years ()
(b) 30 - 34 years (); (d) above 39 years ()
3. Qualification(s);
(a) Postgraduate degree(s) ()
(b) First degree(s) ()
(c) Certificates & Diplomas ()
(d) Grade 2 Teachers' Certificate ()
(e) Others; please specify.....
4. Teaching Experience,
(a) Less than four years ()
(b) 4 - 9 years ()
(c) 10 - 14 years ()
(d) 15 - 19 years ()
(e) above 19 years ()

Section B: Opinion on Physical Education

Rating scale: Strongly Disagree 1; Disagree 2; Undecided 3; Agree 4; Strongly Agree 5.

In-Service Training for Teachers

Rating

- | | |
|--|-----------|
| 5. I have adequate training in order to deal effectively with the problems of children with special needs in Physical Education. | 1 2 3 4 5 |
| 6. I need additional training that is directed towards the provision of relevant knowledge on the needs of pupils with special needs in Physical Education. | 1 2 3 4 5 |
| 7. I would like such training to be short, regular and continuous in order to keep me abreast with current information and practices about pupils with special needs programmes. | 1 2 3 4 5 |
| 8. I prefer part-time in-service training to full-time because it affords me the opportunity to put to practice the new skills, ideas and knowledge acquired from the recent training. | 1 2 3 4 5 |

<u>Integrational Practice</u>	<u>Rating</u>
9. I have knowledge of several integrated approaches to tackle the individual problems of special needs pupils in the class.	1 2 3 4 5
10. I am able to devise and implement strategies to promote integration of pupils with special needs.	1 2 3 4 5
11. I can devise and implement a plan for preparing mainstream pupils to receive pupils with special needs.	1 2 3 4 5
12. I have a thorough knowledge of a variety of activities that can be of interest to pupils with special needs in Physical Education.	1 2 3 4 5
13. I have the knowledge and ability to develop and use adapted programmes and equipment for the teaching of P.E. to pupils with special needs.	1 2 3 4 5
14. I feel confident that mainstream education offers mixed group interaction that will foster understanding and acceptance of differences among the children.	1 2 3 4 5
<u>Attitudes and Skills</u>	
15. I am prepared to develop openness to new ideas in special education and the ability to evaluate new materials and programmes which are important to the success of pupils with special needs in Physical Education.	1 2 3 4 5
16. I know my strength and weaknesses in my professional role with pupils with special needs in Physical Educ.	1 2 3 4 5
17. I can accommodate the behaviour of pupils with special needs in an integrated programme of Physical Education.	1 2 3 4 5
18. I am competent in making objective assessment of needs and performances of pupils with special needs in Physical Education.	1 2 3 4 5
19. I have the knowledge and ability to provide reinforcements that can adequately motivate pupils with special needs in learning environments.	1 2 3 4 5
20. I am capable of organising learning experiences and selecting appropriate teaching strategies that would be most helpful to all the special needs children in the class.	1 2 3 4 5
21. I have the competency in ensuring the freedom and safety of pupils with special needs working alongside their nondisabled peers.	1 2 3 4 5
22. I am capable of providing clear and definite instructions that would lead pupils with special needs to realising more successes than failures.	1 2 3 4 5

- | | <u>Rating</u> |
|---|---------------|
| 23. I have a gentle approach for encouraging and persuading pupils with special needs to develop confidence that stimulates them into a continued participation in Physical Education activities. | 1 2 3 4 5 |

Obstacles to Mainstream Implementation

- | | |
|---|-----------|
| 24. I consider the funding of special education programmes by the government adequate to meet the needs of pupils with special needs in physical education in ordinary schools. | 1 2 3 4 5 |
| 25. I consider the present number of teachers in schools as adequate to provide essential services to pupils with special needs in P. E. | 1 2 3 4 5 |
| 26. We are not only adequate but competent to utilise the available resource materials for the benefit of all pupils with special needs in P. E. lessons. | 1 2 3 4 5 |
| 27. We receive high level support from our nonteaching counterparts in the area of assistance to pupils with special needs during Physical Education lessons. | 1 2 3 4 5 |
| 28. We also enjoy high level support from parents of those with special needs during P. E. lessons. | 1 2 3 4 5 |
| 29. I consider the relationships that exist between S.E.N. pupils and their nondisabled peers as cordial enough to make an integration programme a possibility. | 1 2 3 4 5 |

Collaborative Efforts

- | | |
|---|-----------|
| 30. I would like to maintain partnership with parents as a valuable step towards meeting the needs of pupils with special needs. | 1 2 3 4 5 |
| 31. I consider the present parents' attitudes as being positive towards teachers' efforts in meeting the needs of pupils with special needs. | 1 2 3 4 5 |
| 32. I have the interest in maintaining cooperative consultative relationship with other professionals working with pupils with special needs. | 1 2 3 4 5 |
| 33. I am prepared to share my expertise with other professionals and parents, and in particular, I am willing to play my part in the training of newcomers to the profession. | 1 2 3 4 5 |
| 34. I feel strongly that parents should participate in decision making on education of their children. | 1 2 3 4 5 |
| 35. I consider the release of pupils with special needs' records of performance to the parents to be a means of improving relationships with parents. | 1 2 3 4 5 |

Further Investigation

Rating

36. I consider the participation of teachers, school administrators and representatives of the Ministry of Education as vital to planning and implementation of appropriate programmes for pupils with special needs. 1 2 3 4 5
37. I consider it appropriate to appoint a Physical Education specialist, who also has some knowledge to be the chairperson of any team conducting further investigation into how services to pupils with special needs could be improved in Physical Education. 1 2 3 4 5
38. I feel that such further investigation will support the teachers' action in delivering appropriate services to children with special needs. 1 2 3 4 5
39. I am prepared to support such a team of professional in their findings to meet the needs of children with needs in Physical Education. 1 2 3 4 5
40. I feel that further investigation will provide increasing opportunities of maximising benefits in special education programmes for pupils with special needs in Physical Education. 1 2 3 4 5

Thank you.

APPENDIX 2

- 1 -

SOME GENERAL SUGGESTIONS TO TEACHERS TEACHING CHILDREN WITH SPECIAL EDUCATIONAL NEEDS IN MAINSTREAM CLASSES

Introduction

Movement is at the very centre of the lives of the children. Through movement they learn how to act, interact, and react to the world around them. Children are constantly exploring and experimenting with all that they come in contact with in order to experience the many joys of living. Movement serves as the primary vehicle by which they expand their knowledge of themselves and their world. It is their primary mode of expression, for unlike their adult counterparts, children are in the process of "becoming" rather than in the process of "being". Adults express themselves best through words, but children express themselves best through movement and we must provide them with ample opportunities for expression.

Movement is the essence of all life. To move to be alive. All of our covert as well as our overt behaviours are reflected in some form of movement, no matter how subtle. Movement is central to our complete development as full functioning, contributing members of society. The body and the mind exist in an inseparable unit. The notion that one functions independently of the mind of the other is absurd and is completely without scientific basis or support. The movement experiences of the elementary school child have a profound influence on all facts of his development.

Physical education which provides this form of movement is a compulsory part of the school curriculum in the primary and junior secondary schools throughout Nigeria (National Policy on Education, 1981). It is in realization of its importance to the development of human beings that the government of Nigeria has made this provision in the National Policy on Education. All the children with special educational needs are included in this policy. It has become apparent that teachers can no longer neglect children with special needs or prevent them from participating in the physical education programme.

Teachers can no longer make excuses for SEN children now that their legal rights to participate in the programme have been restored. Such children can no longer be asked to simply watch their mates enjoying P.E. but must be assisted to improve their own physical expertise through

regular participation. Disability can no longer be an obstacle to participation in physical education activities. This is a task for all teachers of physical education who work with SEN pupils in the mainstream setting. These teachers need to be helped in planning and developing programmes that are appropriate to the needs of SEN pupils as more are expected to be enrolled in the ordinary schools.

Teachers must be helped to develop new skills, tolerance, positive attitudes and ability to work in partnership with other professionals as they will face new challenges in their profession. The new challenges have raised several questions in the minds of teachers: How they could identify SENs of these children, how to cope with these needs in P.E. what sort of programme could be appropriate to them and how parents of these children could be convinced that their children can learn alongside others at school.

Teachers need help with the answers to these and several other questions and this is what this booklet is intended to do. The booklet contains some basic information on the professional responsibilities of teachers to children of special needs in P.E. and provides suggestions not only for the development of positive attitudes towards a programme of integration for such children but to also help teachers to acquire adequate knowledge and skills required for teaching SEN children in physical education.

The emphasis in this booklet is also on ability rather than disability and an enjoyable activity rather than therapeutic manipulation. The prime concern is to help SEN children to develop their full potential. Most activities suggested in this booklet can be enjoyed by children with varying needs and abilities, though some are designed to fulfil particular needs.

At present children with special needs tend to be offered a much less satisfying physical education programme than their peers in special schools. They must somehow be given the chance to enjoy movement. I hope this booklet can help spur our colleagues on to provide this opportunity.

1. Philosophy for the Teaching of Physical Education in Schools

Introduction

What is the meaning of physical education? The answer to this question is the function of a philosophy of physical education.

The philosophy of physical education is directed towards the goals that are set to be achieved and these goals are determined by the values and the purposes of physical education programmes.

In the broadest sense physical education is an integral part of total education programme that seeks to provide each individual with the opportunity to achieve his/her own potential. The end product, the fully functioning individual, is something to be achieved. Physical education is charged with the responsibility of contributing to the development of the fully functioning healthy individual. As part of the educational programme, P.E. is one contributor to the attainment of this larger goal. In the meeting the challenge, P.E. should provide the children with a wide range of activities that can lead to the development of their potentials and the improvement of physical fitness of the individuals.

"Learn to move - move to learn", such a simple phrase, but one of the most important goals to a child's normal development, especially a handicapped child. At the same time in their lives most children, whether recognized to have disabilities or not, will have special needs. Learning to identify and satisfy these needs, which are often quite specific, is the physical education teacher's task. The reward is seeing each child attain his/her full potential.

The philosophy of physical education makes provision for all children including the SEN pupils to participate in P.E. lessons; an area that is vital to their growth and development. In recognition of this, the P.E. teachers are guided by this philosophy to ensuring that children with disabilities require more, rather than less physical education.

Physical education does not serve physical purposes alone; pleasurable, interesting and creative experiences are all provided through physical activities. The philosophy of physical education should make the teachers realise that the ability of a handicapped child to live an independent life does not lie only in being cared for but also learning to care for himself as well. Children who are able to participate in games and other active pastimes with others will hardly be frustrated or emotionally disturbed. Therefore, the philosophy of P.E. is that which leads to the maintenance of physical fitness is therefore an essential requirement to all children.

The philosophy should guide in the provision of a wide variety of learning experiences to all children including the SEN pupils that would give them an all round development. This philosophy must guide teachers' actions toward the realization of goals set out in physical education. To be able to observe such a philosophy, physical education teachers need to address themselves to these questions:

1. What are my aims?
2. Can I justify the activities I wish to teach?
3. Am I willing to abandon the teaching of certain activities if they are shown to be educationally unsound?
4. Is the developed programme based on my own interest or pupil's interest?
5. Are the activities safe?

Teachers must have a basic philosophy regarding physical education if effective teaching is the goal. A programme based on uncertainty, unrealistic objectives, or no objective at all will not meet the needs of the pupils. It is imperative that teachers have a sound, practical basic philosophy through which to justify their programmes in P.E.

2. The Participation of Children with Special Educational Needs in Physical Education Programmes

Introduction

During the period of growth it is essential that children should have frequent opportunities for bodily activity, particularly those with special needs who have often been deprived of movement activities. For them and other children in the school, free and active movement is as necessary for health and development as are fresh air, sunshine, suitable food and ample sleep. It is indeed fortunate that children delight in these "free and active movements" since they are not only essential for health and growth, but basic to their full physical, psychological and social development.

The need for bodily activity is equally vital for a child with a physical handicap. Prolonged periods in hospital for surgical or other treatment, the necessary restrictions of his movements, over protection, or perhaps the frustrations and even pain his ill co-ordinated movements may, however, have deprived him of the fun and satisfaction enjoyed by his physically more able fellows. He is, moreover, deprived by the very fact of his disability, of sensory and explanatory activities on which depend his later development, his liveliness, his curiosity and his interests.

The importance of physical activity in the growth and the development of children with special education needs can not be over emphasized. The importance has been recognised and appreciated by teachers of physical education and other professionals working with SEN pupils. These children should be led to enjoy the activities, fun and satisfaction in physical education.

Teaching pupils with special needs is not a totally different enterprise from teaching other pupils. It presents a considerable challenge to many ordinary schools and to many teachers who had never anticipated teaching such pupils. Apart from the fact that it is commonly perceived as something new and difficult, it requires changes at two levels: the academic organisation and curriculum of the school, and the professional development of individual teachers which are some of the objectives this study intends to achieve.

It is imperative on the part of the schools to offer P.E. to children with disabilities and as an attempt to improve their growth and development, a few groups of disabilities among children have been identified in this booklet. Suggestions on teaching strategies, modifications of games rules and adaptations of equipment have been provided to assist you in meeting the needs of these children.

It is hope that these suggestions will be of value to you in the planning of your lessons.

ASTHMATIC CHILDREN

Asthma is a "Paroxysmal attack of difficulty in breathing" (Roper, 1969). Although it may be accompanied by physical conditions (e.g. certain allergies) it is often psychosomatic, that is:

"arising mainly from over activity of automatic nervous system which is influenced by the emotional state" (p.58)

Asthma sufferers are considered quite sound to participate in most P.E. activities including swimming, without any ill effects. There could be possibility to hold certain individuals from the more strenuous activities, but suitable alternatives are numerous. For safe participation, the teacher should be aware of some important information about them:

- always start a lesson by assessing the condition and the child.
- This must be followed by a pre-exercise medication.
- Encourage them to take part in gentle activity for about 15 minutes to keep them warmed up for more strenuous muscle building exercise.

- Exercise must progress extremely slowly at the child's own pace starting with a smaller number and gradually increasing until his highest potential is reached.

- It is important to offer praise and encouragement to each child on his achievement however small.

The aims of the programme include:

1. to teach better use and understanding of drugs,
2. to improve muscle power,
3. to increase exercise tolerance,
4. to improve cardio-vascular performance,
5. to liaise with the school,
6. to increase the patient's self confidence and,
7. to encourage family support and instruction.

It is important to note that children with Asthma need longer warm-up periods than the non-asthmatic, and it is extremely helpful if the principle of interval training is observed. The following activities help to build up the muscle groups, trunk and thorax mobility, cardio-vascular performance through skipping. Make sure enough time is provided for activities such as static bicycle, rowing machine and treadmill which is particularly useful as the exact time, speed and distance run can be measured accurately. Breathing exercise and relaxation must be provided as well as exercise to music most children enjoy.

CHILDREN WITH VISUAL PROBLEMS

The teacher should provide activities that deal with:-

- A) Rhythms, basic movement, movement exploration, perpetual motor areas.
 - help the child to identify each body part and the body as a whole before any skill is taught,
 - use simple activities that emphasize listening and responding to specific rhythmic patterns (e.g. tapping to pulse, beats),
 - use brightly coloured mats to cover the area, balls for throwing and catching activities,

 - the continuous sound device to give the child a sense of direction in which to move (e.g. a ball containing some objects that produce sound),

-use different surface textures to lead the child to establish boundaries (e.g. smooth, rough surfaces).

B) Activities with small and large apparatus.

-use supporters to prevent from falling from apparatus,
-help child to grasp the apparatus with his hands before using it.

-practice slow movements when first teaching skills,
- progress from stationary equipment to use of movable objects that the child can hold, stop, throw and carry about.

C) Individual and dual activities (body mechanics, development activities).

-modify procedures, rules for their games,
-use simple, clear and concise verbal instructions,
-make games active and interesting to all participants,
-use light weight ball with a noise maker inside,
-provide them with a large area for their plays,
-use brightly coloured balls,
-use appropriate balls for groups whose members have varying degrees of vision.

D) Game situations.

-put contestants in either direct or close contact with each other,
-allow a sightless child pair up with a sighted child.

E) Self testing stunts, tumbling activities.

-teach them how to fall without injuring themselves (relaxing, controlling the body parts and rolling with the body momentum),
-use the spotters frequently'
-discourage unnecessary noise,
-teach simple directions for tumbling activities.

F) Aquatics.

-familiarise children with the locker, shower and pool areas,
-develop a one-to-one teacher student ratio to your first swimming lesson,
-use land drills before getting into the water,
-have the children feel you performing the skill,
-teach them how to enter water and get acclimatized,
-use a guide rope on each side of a swimmer to guide him in a straight direction.

- support children to learn floatation,
- use belt floatation devices or support around the waist to provide confidence as he treads water.
- allow an individual to learn according his pace.

EPILEPTIC CHILDREN

Because of the unpredictability of epileptic attacks, we should be concerned about the extent to which the child should be involved in physical education activities. An epileptic child can be integrated into most groups for pursuit of most activities. For participation in several activities the leader must:

- obviously know which of the children suffers from epilepsy,
- recognise the signs that an attack is eminent and must know what action to take,
- know that an epileptic child in the swimming pool requires a one-to-one basis,
- be aware that in the gymnasium (or elsewhere) the epileptic child should not be allowed into a situation where an attack could occur and no one could prevent him from serious injuries (e.g. activities on high level climbing apparatus) and,
- know that the child should not be involved in activities such as rope climbing, gymnastics involving parallel bars, trampolines etc., where a fall could result in a seizure.

CLUMSINESS

Clumsiness refers to those children who appear to have difficulty at most things, for example, lacking in co-ordination of physical movement and frequently displaying behavioral disorders. The participation of these children have some implication for physical education which the teachers working with them should be aware of:-

- Provide all-round P.E. programme that helps to improve their self-esteem and confidence.
- Ensure that activities such as gymnastics, dance where children are free to respond to tasks at their own level of ability should be included in the programme.
- Careful and sensitive handling of such children is important.

-Always recognise their efforts and success by constant praise.

-Ensure that the gross and fine motor skills are broken into the simplest stages of progression so that they can realise more successes than failures. Activities in the areas of balancing, rhythm and co-ordination may be provided.

-Always provide close observation as performing motor skills may prove difficult. Watch every step to provide any assistance.

-You must be aware that such children find it difficult to deal with moving objects. All you need to do is to make them perform:-

- catching a bounced ball rather than a thrown ball.

- hitting a stationary ball rather than a moving ball.

- Ensure that you create small working, playing groups which provide extra movement activities which enjoyment is emphasized. This sort of participation will lead to development of skills.

SPINA BIFIDA AND HYDROCEPHALUS

These two can occur together, sometimes independently. Spina bifida is a congenital problem where the bones of the spine (vertebrae) are incomplete and the spinal cord is exposed. The situation can result to paralysis which range from minimal to complete and can be accompanied by partial to complete loss of sensation to the parts of the body below the level of the lesion. Sometimes, there could be spasticity in the upper limb caused by the brain damage. Hydrocephalus, sometimes referred to as "water on the brain" is caused by a build-up of fluid which may exert pressure on the brain.

The involvement of children with these conditions have some implications for P.E. and the teachers must know what to do with them.

- Spatial and/or perceptual difficulties are common and may effect manual dexterity, hand-eye co-ordination and fine motor control.

- Poor motor co-ordination results and may cause difficulties in ball handling skills. It requires careful attention to correct the sequences of actions.

-Children who are paralysed in the lower part of the body due to severe forms of spina bifida, may move round with the aid of a wheelchair, sticks and crutches.

-The child may be allowed to wear special boots and callipers.

Note: The damage to the spinal cord may cause lack of sensation and pain, temperature and touch and also poor circulation in the lower limbs. Teachers are therefore, required to observe these precautions:

1. During sliding activities the legs and feet should be covered to avoid friction burns.
2. Pressure on one part of the body over a sustained period (e.g. the bottom when seated) could cause bruising and pressure sores.
3. Impact or scrapes on floor, apparatus and the slide of the swimming pool could cause fractures.

4. Teachers observation is vital in all situations to avoid accidental damage.

Exercise is vital to all children using wheelchairs and other aids of mobility. Encourage them to participate as far as they could in order to help them keep fit and healthy.

-Activities that strengthen the upper body are considered valuable.

-Children with hydrocephalus may have a slightly enlarged head which will be quite heavy, so they should not be rushed in any activity they participate.

Special modifications and adaptations may be necessary. It is on record that children suffering from spina bifida or hydrocephalus or both can participate satisfactorily in P.E. activities.

CHILDREN WITH MOTOR PROBLEMS

-Substitute walking or wheeling for running parts of a game.

-Substitute a lighter apparatus to improve control over implements as they are easier to handle and can be managed in one hand.

- Encourage able-bodied runners to run for or to push wheelchairs.
- Larger balls could be introduced to simplify catching and striking techniques.
- Modify the size of the playing area which leads to reduction of gross motor activity.
- Increase the number of players in a game to reduce the space an individual covers.
- Restrict certain players to a specific position on court according to their freedom of movement (e.g., shooter in netball, setter on volley ball).
- Reduce the height of net for games like volley ball, tennis, basket ball etc.
- Provide large bladders or even over inflated beach balls to allow easy batting over the net in the ball games.

HEARING IMPAIRED CHILDREN

There are two types of hearing impairments:- Conductive deafness and Sensori neural deafness.

-Conductive deafness occurs mostly with the middle-ear infection caused by catarrh, fluid, inflammation, infection. It could be persistent or intermittent.

-Sensori neural deafness affects the inner ear. It is caused by malfunction of either inner ear or the auditory nerve. When this happens, there is no proper transmission of sounds to the brain. The hearing loss may be permanent and severe and in this situation, the child can be assisted by using hearing aids. There could be a possibility where a child could be described as suffering from mixed conductive and sensori neural deafness.

This situation has the following implications for P.E.

-Teachers should realise that children with partial hearing are generally allowed to participate in all P.E. activities, but exception could be given in an activity like swimming due to infection in the middle ear, a post-operative or perforated ear drum.

-Make sure that the child sees your face always as lip-reading is used by him: The teacher should try as much as possible to:-

- (a) be near the child,
- (b) be still when speaking and look towards the child,
- (c) face the light so that his/her face is not in the shadow,
- (d) avoid shouting but use the normal rhythm and intonation.

Warnings about hearing aids:-

Teachers must remember that:-

- when swimming, no hearing aids are to be worn,
- some children wear aids to amplify sound. Hearing aid is a useful tool but can not compensate fully for hearing loss,
- hearing aids tend to amplify background noise and do not always make speech clearer.

CHILDREN WITH POLIOMYELITIS

The non functioning or partially inactive flaccid muscles as a result of disease that injure the nerve circuit between the spinal cord and the peripheral nerve ending muscles. It could affect both large and small body muscles thus leaving a variety of disabilities which may affect muscles in just one limb, or involve those in all four limbs and the trunk. There will be a loss of muscle tone and unequal muscle strengths, leading to an imbalance of the body. The deformities of some limbs may require the use of splints, callipers or body braces.

This situation has some implications for teachers of P.E.

- Most children with this condition can participate in P.E. activities but all depends on the severity in an individual. To encourage his participation, modifications and adaptations may be needed on the equipment.
- Swimming in warm water is very helpful and if the legs are affected, the supine position could be adopted first as flaccid limbs float very easily.
- Those with balancing problem may be prone to falling very easily. Such children could be assisted by the use of aids such as callipers, sticks, body braces etc.

-Children with an appreciably disability will begin to tire easily.

-Always seek parents and doctor's permission before you actively involve the child.

DIABETIC CHILDREN

Diabetes occurs as a result of lack of hormone called insulin, thus resulting in the inability of the body to absorb sugar and starch properly. The diabetic children can participate in P.E. activities but teachers must make sure that the child takes some suitable snack before exercise or immediately after because the exercises can absorb sugar into the blood quickly which must be replaced.

-Strenuous activities such as swimming or cross country race should be well supervised.

-An informed staff may be ready with suitable snack to supply when required.

-Teachers should observe to see the reactions of insulin in the children:

- lack of concentration, drowsiness,
- stomach ache
- vomiting
- untypical behaviour

Orthopaedic Problems

Children who are limited in performing activities in physical education due to impairments that affect the use of their spine, muscles, bones, joints etc:

To get them involved in the physical education, these considerations are important.

A) Rhythms, basic movement exploration, perceptual-motor activities, teachers must:-

- Ensure that physical facilities are large enough for any apparatus.
- Instruct the child the correct way to fall.
- Use support apparatus for those who can not stand without crutches.
- Substitute wheelchair and crutch amputation for locomotor skills.

B) Activities with large and small apparatus (throwing, catching, play B/B).

- Attempt to work on an individual basis whenever possible.
- Provide activities that contribute to general and specific body development.
- Substitute wheelchair amputation for running and skipping activities.
- Use light weight apparatus and must be large.
- Use partner resistance exercises (pulling and refusing to move).

C) Games instructions.

- Modification of rules and area of play is necessary.
- Allow enough stopping space in games selected.
- Children to be aware of specific boundaries.
- Use as many locomotor skills in the chosen games and ensure modifications.
- Guarantee the participation of every child.

D) Individual and dual activities, body mechanics and developmental activities (rolling, tug of war in pairs, crawling, climbing).

- Modify rules of the activity and size of playing area.
- Make provisions for enough space to avoid collisions.
- Activities must have to be matched appropriately to their ability levels.
- For children with crutches, substitute the underhand throw for the over throw.
- When accuracy is required, allow the use of two hands instead of one.

E) Self-testing, stunts, tumbling.

- Ensure that you have enough spotters.
- Avoid introducing competition for comparison of performance.
- Always encourage performance at own's rate.

F) Aquatics.

- Provides experiences that allow children's acclimatization to water.
- Prevent all forms of fearful acts and splashing suddenly.
- Stress on water safety.

- Make sure you provide good demonstrations on what they should do.
- Ensure safety in and around the pool.
- Provide instructions on one-to-one basis.
 - Where possible allow the child to be in the pool area with the wheelchair.
- Teach survival skills.
 - Raise the temperature of the water to a comfortable level.
- Use ramps or rails to assist children entering the pool.

GENERAL AND SPECIFIC SUGGESTIONS FOR TEACHING CHILDREN WITH SPECIAL NEEDS IN P.E.

Introduction:

Physical education has an important part to play in the helping of children to develop in stature of mind and spirit as well as body; children with "special needs" may be helped to "live well in the world" even if that world is more limited than that of their more fortunate peers.

It is of course true to say that every child has the same basic needs - food and shelter, affection, security, self-respect and acceptance. Every child "needs" to be recognised as a person in his/her own right. Yet some children come into the school system with considerable deprivations, and in this sense they have very special needs which must be satisfied if they are to develop their full potential as adults. Some children are deprived by the very love their parents have for them, for many physically handicapped children are over protected and their development is thus limited because they are denied the opportunities to explore their environment. Most children find joy in movement; parents and child together delight in the child's first steps; older children enjoy rolling, climbing and sliding. Unfortunately, many children do not experience the thrill of physical challenge because their locomotive powers are severely limited, because they have impaired sensory perception or because their home circumstances restrict physical play. Some, who are free to play with other children, suffer the frustration of exclusion from childhood games.

What ever the educational situation, we seek to give the children the joys and excitement of physical activity and play in some form. We should use this natural childhood activity to give the

handicapped as much opportunity as possible for independence and for acceptance by other children.

As children develop more interest in taking part in physical education activities in Nigeria, teachers of physical education should maintain this interest through the provision of appropriate activities, modifications of games rules, and adaptation of equipment in order to encourage the participation of SEN pupils as well. This booklet is directed toward one of those needs - the urgent need for practical information in modifying activities and selecting methods for individuals with handicapping conditions. This approach involves developing programs for children with special needs based on functional levels in the affective (social-emotional), cognitive (intellectual), and psychomotor (skills) area rather than according to the categorization of a person relative to a particular handicapping condition.

To assist you in your efforts to meeting the special needs of children with disability, the following suggestions are provided in the schools' popular games. they are classified into three groups: Games, Athletics and Gymnastics.

GAMES

Introduction:

The number of games and sports that can be introduced to the child in the special and ordinary schools through the medium of physical education programme is as immense as the benefit that can be derived from such participation. Through the modification of these games and adaptation of the equipment. The children with special educational needs will be encouraged to participate along side others. The few selected games for discussion here include volleyball, basketball, tennis, table tennis, hockey and soccer.

VOLLEY BALL

This is a sport for all and it is popular among schools. A great feature of volley-ball is its adaptability - it can be played by all ages in sports halls and gymnasiums, in parks and play grounds; versions of the game have been developed for two, three, and four players, for younger players and sitting volleyball for handicapped players. The handicapped children can compete with and against non-disabled peers in volleyball. For the most

severely handicapped a special sitting volleyball has been developed. Variations on volleyball are becoming very popular with handicapped children because of the extent to which the game can be slowed down or wise modified.

Modifications of game rules and adaptation of equipment could be in these forms:-

1. Allow more players on the court.
2. Reduce the length of the court.
3. Modify the rules of the game, (e.g. a served ball can be helped over the net).
4. Lower the height of the net.
5. For those who can not cope with volleying, can be allowed to catch-and-throw.
6. For severely handicapped children who are too slow and/or weak to cope with the speed and weight of the ball could be given a balloon as a substitute.
7. With the net lowered slightly this version can be played in the standing position, from the wheelchair or sitting on the floor.

BASKET BALL

This major game is very vigorous and beyond the capabilities of all but the fittest players. It is a popular game among schools and can be played from the wheelchair. Handicapped children can compete favourably with their non-handicapped peers, in an environment where a hard surface is available to enable the wheelchair bound individuals to move freely. The following considerations are required for SEN pupils' participation.

1. Lower the goal to suit the needs of the participants.
2. Restrict the players to a smaller court.
3. Provide bigger goals to make shooting easier.

4. Modify the rules concerning foot work.
5. Shorten the playing time.
6. A wheelchair person may be appointed to be a shooter.
7. Allow shoots to be made from afar off to reduce movements particularly for those with movement difficulty.
8. Use different light, sized balls.

TABLE TENNIS:

Table tennis is extremely popular in both special schools and ordinary schools, and not without good reason. It requires neither greater strength nor mobility, yet it can be competitive and thoroughly enjoyable for expert and novice alike. Similarly the equipment required is minimal and this needs little if any modification. It is an excellent game, especially for the "wheelchair" player. It is important for players in wheelchairs to have room to move their chairs easily. The table must also be very firm so that it may be grasped by wheelchair players to help them move and by those on crutches to aid their balance. The following modifications and adaptations may be helpful:

1. Provide light balls.
2. The table top should be painted a bright colour for better visibility.
3. The crutch walker plays only one side of his half of the table.
4. The amputee serves by balancing the ball on his paddle throwing it up in the air and striking it for the serve.
5. Allow ambulant child to play from a wheelchair.

HOCKEY:

Hockey is a skilful game enjoyed throughout the world. Like all games, it is controlled by a set of rules, applied during any game by officials; known as umpires in the case of hockey. The rules have been designed to ensure possible safety to players and to make certain that the skilful player is protected.

It is important that all children including those with special needs be offered the opportunity to participate in the game of hockey to develop their skills, physical fitness and enjoy themselves. Modifications and adaptations in this game are necessary to enable children with special educational needs to participate.

1. For those with movement problems or who experience difficulty in the control of a stick, provision could be made for them to play the game indoors or on a smaller outdoor pitch.
2. Use a lighter and larger ball for the game.
3. Permit the use of both sides (faces) of the stick in hitting or rolling the ball.
4. Indoor hockey could be most appropriate with the use of shorter sticks by those on wheelchairs.
5. A small deflated plastic football can be a good substitute.

TENNIS

Tennis is one of the worlds most popular games that may be introduced in schools for both handicapped and non-handicapped children alike. Teachers could encourage the SEN pupils to participate actively in the games by modifying and adapting the game rules and equipment respectively.

1. Reduce the size of the court to suit the player needs.
2. Lower the net to make it easier for the balls to go over.

3. Allow the game to be played from sitting or kneeling position.
4. Allow two hits to get the ball across the net.
5. Ball may bounce twice before it is returned.
6. Provide opportunity to players to practice by playing against the wall.
7. Provide light weight rackets.
8. Provide rackets with shorter handles to drive balls.
9. Where possible use bigger and lighter balls.

BADMINTON

Badminton has been described as being popular among school children. It is a useful aid to the training of the gross-motor control and hand-eye co-ordination. At a more advanced level, such activities also have a positive effect on motor fitness, in particular on flexibility, agility and endurance. To encourage the children with special needs to participate in the game you should modify the game rules and adapt the equipment to suit their needs.

1. Provide arm-amputees with a serving tray (an attachment to the fore arm prosthesis).
2. Provide the use of velcro around the head of the racquet and shuttlecock to enable the child in the wheelchair to pick up the shuttlecock from the floor.
3. Provide more light rackets.
4. Provide sufficient light when the game is played in the hall or gymnasium in order to create clear visibility.
5. Four children in wheelchairs and four children with mild cardiac disorders are scheduled for a game of badminton with four players on each side. Those in wheelchairs play up front; each is backed up by a

cardiac team-mate. Players should not be allowed to rotate and each side is permitted two sides outs before relinquishing the serve.

SOCCKER:

This game has a long out standing popularity among adults as well as school children. Soccer is a running and kicking game, in which the game is controlled by the foot. To play soccer one obviously **NEEDS** to be able to use the feet. However, because of the enormous following which soccer enjoys by handicapped and able-bodied boys alike, numerous modifications exist, most of which are in fact a combination of soccer, hockey and handball.

1. Widen the goal posts.
2. Reduce the area of play.
3. Modify the rules.
4. Ball bladder may be a good substitute for players.
5. Provide plastic rubber balls with bright colours.
6. Restrict movement of some players.

ATHLETICS:

the value of athletics both for the disabled and the able-bodied individuals lies in the fact that participants can achieve personal satisfaction by competing against themselves to improve their own standard, be it distance throw, height or distance jumped or bettering their previous time. Through athletics physical fitness is maintained or improved and this is essential for the handicapped, especially the wheelchair child who often has weight problems. For who need the stimulus of competition, there are excellent opportunities at school, area, national and international levels. There is some activity which almost all handicapped children can enjoy. The following modifications and adaptations are necessary to allow all children to participate in all forms of athletics.

TRACK AND FIELD EVENTS:

The SEN pupils can be assisted to participate in the track and field events as far as their limitations allow them. To encourage such participation, modifications and adaptations are necessary.

1. Cables should be strung between track lanes to guide runners with severe vision loss.
2. The child with a visual limitation should be given the outside lane when running with a sighted child.
3. In the integrated class, seeing children should be made to run ahead of the visually limited child and in longer races his/her name should always be called.
4. Use brightly coloured equipment to improve visibility.
5. Start practice on an individual basis.
6. Use a flat, smooth and a hard surface.
7. Establish a set routine in the activities presented.
8. Provide appropriate implements (javelin, shotput, discus etc).
9. Give instruction orally in a clear, well-modulated voice.
10. Provide a variety of activities to enable the individuals make a choice of what to do, but they must be guided supervised.
11. Crutches, walking frames and wheelchairs can be used in a variety of ways to reflect different aspects of locomotion. For example, a simple push of wheelchair between a marked set of tram lines, with the point at which the wheelchair first crosses one of the lines being measured, can be interpreted as a jump.

SWIMMING:

As with outdoor and adventurous activities, all children can enjoy being in water, and most children with special educational needs can be taught to swim with a recognisable stroke. Only a few will be unable to float, and where this is the case, floatation devices may be used as part of the normal equipment for those children. Sensitivity to the presence of incontinence appliances is particularly important for some children; for others, there may be medical reasons why they should not be completely immersed. As a means of developing strength, stamina and fitness for health, swimming is probably the most accessible for all the areas of activity for children with special educational needs.

Water-borne activity is probably the most beneficial form of exercise for suffers of a wide range of physical and mental disabilities. It also happens that swimming is one of the most popular forms of physical recreation for adult community generally, and thus offers opportunity for the handicapped and able-bodied to share in a common activity. To find an appropriate method of teaching an assessment of individual's needs is necessary:

First although knowledge of a learner's background is essential; this should include relevant information about his medical history and his level of physical, intellectual and emotional development.

The condition for learning to swim must be suitable. The water and surrounding air must be at a comfortable temperature. For example, a swimmer with a heart condition can suffer if the water is too cold or too hot, swimmers prone to epileptic fits would be better in cool water, and a spastic is better in warm water, because it encourages relaxation. Adequate changing, toilet and shower facilities must exist. Access to and from the changing area and pool should be organised.

Guidance can be given in three ways - visual, verbal and manual. The form of guidance selected by a teacher obviously should relate to the pupil's disability. For example a deaf will benefit most from visual and manual guidance, with all words clearly mouthed and enunciated.

A mentally handicapped pupil may be seeing and through manual assistance, while a blind swimmer learns mainly by verbal and manual guidance.

The handicapped pupils can be taught to swim by two main methods: using artificial aids to support the body in water making immediate swimming movements possible. Aids can include rubber rings, arm bands, floats etc. The Hallwick method: where no artificial aids are used and the pupil is supported by another person. Provide a device that emits a sound or signal so that the blind or visually impaired child retains orientation while in the pool.

GYMNASTICS:

Gymnastics is one of the curriculum activities into which SEN children may be most easily and totally integrated. It is possible for disabled and able-bodied pupils to work together in pairs and in groups; teachers should be aware of the disadvantages of disabled pupils working together too frequently.

During the past few years children of all ages and disabilities have shown an increasing interest in gymnastic activities in Nigeria and all efforts should be made to keep this momentum going.

Gymnastic is one of the activities in physical education that SEN pupils find some difficulties because of their handicapping conditions. Teachers are expected to provide support and encourage other children to do the same to the children with difficulties. Through the medium of gymnastics, physical skills such as, balance, co-ordination and locomotion can be improved and extended. Body awareness, spatial awareness, timing and rhythm may also be developed and enhanced.

The children with special needs can not afford to miss out of the gymnastic activities because of its contribution to their growth and development. To encourage them means that the various activities and their rules modified and equipment adapted to their needs.

1. Lower all forms of obstacles for those with difficulty.
2. Provide lighter objects that can be lifted, moved and thrown.
3. Reduce the number of times and activity can be performed in a given/specific time.
4. Provide comfortable landing in order to instil confidence especially among the SEN pupils.
5. Provide all forms of support while others are encouraged to do the same.
6. Provide sufficient time to learn a taught skill and all learning should be progressively organised.

TEACHER'S ASSESSMENT OF PUPILS' PERFORMANCE IN PHYSICAL EDUCATION

Introduction:

The assessment in P.E. focuses its attention on what each child independently knows, understands and can do. It is important that all pupils have the access to the same assessment tasks regardless of sex, gender, religion, ability or race as this will guide their future learning, progress and achievements. The assessment in P.E. is concerned primarily with the observation and recording of achievement in the practical context. It should be a continuous activity, blended in as part of normal teaching. The P.E. curriculum of special-needs pupils should provide a highly personalized programme. To ensure that there is adequate progression during the teaching of the programme, careful monitoring skills, concerning physical development and body management as well as attitudes and sociability is necessary.

Purpose of assessment

1. To recognise pupil achievement and inform future teaching/learning strategies (formative assessment).
2. To identify learning difficulties to enable appropriate, specific strategies to be implemented (diagnostic assessment).

3. To document achievement to date for each child at given intervals (summative assessment) and;
4. To facilitate evaluation of aspects of the school's curriculum delivery.

Full achievement in physical education will be observed in:

A. The physical skill and ability of the pupil.

The following characterise a performance in which skill and ability are present:

- | | |
|------------------|----------------------------|
| i) accuracy | v) ability to do more than |
| ii) efficiency | one thing at a time |
| iii) consistency | vi) good line/design |
| iv) adaptability | vii) effective expression |

B. The way in which the pupils are selected and organised

The following are evidence of planning and organisation which can be seen in the practical performance and which may be reinforced verbally:

- i) Clear action leading to successful outcome.
- ii) Appropriate solution to the task.
- iii) Safe performance.
- iv) Imaginative performance.

C. The recognition and appreciation by the pupil of performance of self and others. The following show the evidence of this:

- i) Selecting out of key features.
- ii) Making appropriate comparisons with others and or previous performances.
- iii) Expressing pleasure in the performance.
- iv) Using and devising both functional and aesthetic criteria in making judgements.

D. To give opportunity to children to give evidence of progression in achieving the tasks they are set should take into account:

- i) The level of physical development.
- ii) The stage of cognitive, emotional and social development they have reached.

- iii) The stage they have reached in the process of learning practical skills, and
- iv) The level of complexity of the practical skills necessary for each activity.

Assessment of children with special educational needs may require modification and adaption to ensure that all pupils can achieve.

No pupil needs to be excluded. Adaptation may include:

1. Modification of movement and action responses. For example, jumping with support, swimming with aids; responses to stimuli with minimal voluntary control.
2. More stable conditions in terms of both the range of equipment used and the context of the task set.
3. Moving only part of the body as opposed to a total body involvement; and,
4. Alternative contexts for assessment in relation to children with sensory impairment.

Make sure a number of imaginative and different ways of communicating evidence of achievement should be available to the pupil.

General Organization:

Any system of assessment should be based on the teaching programme, not the reverse. This will ensure that the child receives a rounded P.E. and that the minimum amount of time is spent on testing procedures.

The results of the monitoring and assessment should be recorded on cards. These will be of great benefit to teaching, medical and paramedic staff as well as the children's parents. Apart from recording progress, the card should aim to motivate the children and maintain their interest in P.E.

Wherever possible, the assessment and recording should be carried out, by the children themselves, or by a "buddy" if the partner system is in use, thus ensuring that the children are aware of their own progress.

To ensure that the children's interest is maintained, it is essential that the steps of progress to be assessed are kept small. In this way, success is seen to be achieved on a regular basis, and it becomes an effective additional aid to motivation.

PUPIL FEEDBACK

It is essential that a process of continual pupil feedback is built into the physical education programme. Good feedback will enable the teacher to:

- a) ensure that the children have understood the set task.
- b) develop the children's skill in observing and commenting on movement.
- c) ascertain that the children believe they have learned.
- d) involve the children in a process of written self-assessment.

To achieve these objectives the teacher will need to employ various teaching strategies during the lesson. It may be necessary to use one of the variety of questionnaires after a lesson, group of lessons, or module has been taught. Teachers need to determine which approach will fit their specific needs. It can not be over emphasized that pupil feedback is of the utmost importance in the field of special need.

SAFETY

All teachers must be safety conscious, but there are many additional precautions which teachers of SEN pupils must keep in mind.

Many children are unsteady at their feet and easily fall; attention should be given to the various ways of meeting the floor. In most schools, experience in landing and rolling is gained in the movement lesson.

Ferrules on the bottom of aids such as sticks and crutches should be checked as these wear through very quickly when the child is active, causing the aid to slip. Where P.E. activities are to be performed in the gymnasium, floor should be splinter-proof, for

often games are played in a sitting position. On grass stones are a hazard and every effort should be made to keep the play grounds free of any hazards.

The playing areas should be well away from traffic and footpaths; it is so easy in the heat of a game to run or slide out of play just as someone is passing. A tennis court is an ideal playing area; its enclosure and hard surface facilitate the use of wheelchairs.

Appendix 3

An overview of Teachers' Responses to Questionnaire

Introduction for completion

This study is seeking your opinion on the integration of physical education programme for children with special needs in this area. Please, answer all questions in the various sections of the questionnaire by ticking or circling the answer options that best describe your agreement or disagreement with any question or statement.

Rating scale: Strongly Disagree 1; Disagree 2; Undecided 3; Agree 4; Strongly Agree 5

		pre-test N= 100					post-test Non intervention group(control group) N=40					post-test intervention group (compariso n & experimental) N=60				
Items		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
In-service education & Training for Teachers																
5	I have adequate training in order to deal effectively with special needs in P.E.	30	62	8	0	0	3	32	5	0	0	1	0	4	41	14
6	I need additional training that is directed towards the provision of relevant knoweldge on the needs of pupils with special needs in P.E.	16	43	40	1	0	2	25	13	0	0	0	0	6	31	23
7	I would like such training to be short, regular and continuous in order to keep me a breast with current information and practices about pupils with special needs prog.	21	36	43	0	0	3	15	22	0	0	0	0	21	20	19
8	I prefer part-time in-service training to full-time because it affords me the opportunity to put to practice the skills, ideas and knowledgeacquired from the recent training.	19	36	43	0	0	6	9	25	0	0	0	0	16	24	20
Integration practice																
9	I have knowledge of several integrated approaches to tackle the individual problems of special needs pupils in the class.	30	65	5	0	0	0	38	2	0	0	0	1	10	41	8
10	I am able to devise and implement strategies to promote integration of pupils with special needs.	34	61	5	0	0	0	39	1	0	0	0	3	26	20	11

11	I can devise and implement a plan for preparing mainstream pupils to receive pupils with special needs in P.E.	39	53	8	0	0	8	30	2	0	0	0	0	24	22	14
12	I have a thorough knowledge of a variety of activities that can be of interest to pupils with special needs in P.E.	50	41	9	0	0	9	28	3	0	0	0	2	38	10	10
13	I have the knowledge and ability to develop and use adapted programs and equipment for the teaching of P.E. to pupils with special needs.	47	40	13	0	0	12	20	8	0	0	0	0	14	36	10
14	I feel confident that mainstream education offers mixed group interaction that will foster understanding and acceptance of differences among the children.	21	49	30	0	0	9	14	17	0	0	0	0	34	21	15
	Attitudes & skills															
15	I am prepared to develop openness to new ideas in special education and the ability to evaluate new materials and programmes which are important to the success of pupils with special needs in P.E.	5	34	60	1	0	2	3	35	0	0	0	0	38	22	
16	I know my strength & weaknesses in my professional role with pupils with special needs in P.E.	15	61	24	0	0	0	23	17	0	0	0	0	4	44	12
17	I can accommodate the behaviour of pupils with special needs in an integrated prog. of P.E.	15	64	21	0	0	2	28	10	0	0	0	0	32	18	10
18	I am competent in making objective assessment of needs and performance of pupils with special needs in P.E.	28	57	15	0	0	5	28	7	0	0	0	0	32	16	12
19	I have the knowledge and ability to provide reinforcements that can adequately motivate pupils with special needs in learning environments.	35	46	19	0	0	5	29	6	0	0	0	0	8	41	11
20	I am capable of organising learning experiences and selecting appropriate teaching strategies that would be most helpful to all the SEN children in the class.	41	43	16	0	0	7	22	11	0	0	0	0	24	25	11

21	I have the competency in ensuring the freedom and safety of pupils with special needs working alongside their able-bodied peers.	26	50	24	0	0	9	18	13	0	0	0	0	26	27	7
22	I am capable of providing clear and definite instructions that would lead pupils with special needs to realising more successes than failures.	17	42	41	0	0	7	16	17	0	0	0	0	23	25	12
23	I have a gentle approach for encouraging and persuading pupils with special needs to develop confidence that stimulates them into a continued participation in P.E activities	12	19	67	2	0	10	23	7	0	0	0	2	18	31	9
	Obstacles to mainstream education															
24	I consider the funding of special education progs. by the government adequate to meet the needs of pupils with special needs in P.E in ordinary schools.	23	66	11	0	0	6	12	22	0	0	10	29	11	5	5
25	I consider the present number of teachers in schools as adequate to provide essential services to pupils with special needs in P.E	29	62	9	0	0	7	14	19	0	0	8	26	16	3	7
26*	We are not only adequate but competent to utilise the available resource materials for the benefit of all pupils with special needs in P.E lessons	40	48	12	0	0	6	18	16	0	0	11	26	11	6	6
27	We receive high level of support from our non-teaching counterparts in the area of assistance to pupils with SEN during P.E lessons.	41	49	10	0	0	6	22	12	0	0	11	30	3	7	9
28	We also enjoy high level of support from parents of those with special needs during P.E lessons.	35	47	18	0	0	3	23	14	0	0	9	20	11	10	10
29	I consider the relationships that exist between SEN pupils and their nondisabled peers as cordial enough to make an integration programme a possibility.	21	42	37	0	0	3	19	18	0	0	7	8	24	11	10

Collaborative Efforts																	
30	I would like to maintain partnership with parents as a valuable step towards meeting the needs of pupils with special needs.	8	20	68	4	0	1	6	33	0	0	0	0	5	42	13	
31	I consider the present parents' attitudes as being positive towards teachers' efforts in meeting the needs of pupils with special needs.	20	49	31	0	0	1	17	22	0	0	0	1	6	33	20	
32	I have the interest in maintaining cooperative consultative relationship with other professionals working with SEN pupils.	10	41	49	0	0	1	28	11	0	0	0	0	9	29	22	
33*	I am prepared to share my expertise with other professionals and parents, and in particular, I am willing to play my part in training of newcomers to the profession.	14	52	34	0	0	6	21	13	0	0	0	0	10	32	18	
34	I feel strongly that parents should participate in decision-making on education of their children.	18	57	25	0	0	6	21	12	1	0	0	0	10	30	20	
35	I consider the release of pupils with special needs' record of performance to the parents to be a means of improving relationships with parents	6	45	49	0	0	6	16	18	0	0	0	0	15	26	19	
Further Investigation																	
36*	I consider the participation of teachers, school administrators and representatives of the Ministry of Education as vital to planning and implementation of appropriate programs for pupils with special needs	5	35	60	0	0	9	19	12	0	0	0	2	11	31	16	
37*	I consider it appropriate to appoint a physical education specialist, who also has some knowledge of special education programmes to be the chairperson of any team conducting further investigation into how services to pupils with special needs could be improved in P.E	4	40	53	3	0	3	18	19	0	0	0	0	24	21	15	

38	I feel that such further investigation will support the teachers' actions in delivering appropriate services to SEN pupils	5	41	54	0	0	2	15	23	0	0	0	0	14	31	15
39	I am prepared to support such a team of professionals in their findings to meet the needs of SEN pupils in P.E	8	44	48	0	0	3	14	23	0	0	0	2	12	35	11
40	I feel that further investigation will provide increasing opportunities to maximising benefits in special education programmes for pupils with special needs in P.E	9	33	58	0	0	2	14	24	0	0	0	2	16	29	13

APPENDIX 4

LIST OF PRACTICES NEEDED FOR THE INTEGRATION OF SEN PUPILS IN PHYSICAL EDUCATION.

1. CHOICE OF ACTIVITIES.

- a. provision of variety of activities.
- b. Appropriateness of the activities to the needs of all children.
- c. Relatedness of the activities to the individual needs and interest.
- d. Creating feelings of success and satisfaction within the individuals at the end of the lesson.

2. LANGUAGE OF COMMUNICATION

- a. Usage of appropriate language to convey concepts/ ideas, feelings to them.
- b. Avoidance of derogatory language on the pupils ,particularly the SEN.
- c. Providing clear and definite instructions..

3. APPROACHES TO SKILL LEARNING

- a. Progressively organized activities leads to skill acquisition.
- b. Provision of adequate time for practice
- c. Demonstration of every single step in skill learning
- d. Avoidance of using the SEN pupils to demonstrate activities
- e. Allow individuals to progress at own rate

4. TEACHING STRATEGIES

- a. Use of small group of mixed abilities
- b. Use of individual approach
- c. Use of large group

5. MODIFICATION OF EQUIPMENT / FACILITIES

- a. Modify equipment /facilities to suit their needs
- b. Modify games rules

APPENDIX4 (contd.)

6. OPPORTUNITIES FOR INTERACTIONS

- a. Create opportunities for interactions between SEN and other pupils.
- b. Maintain regular interactions with SEN pupils

7. SUPPORT SERVICES AVAILABLE

- a. Encourage the non-disabled peers to support the SENpupils
- b. Make provision for ancillary staff
- c. Teacher to provide support always

8. ATTITUDES TO CHILDREN

- a. Show no sign of frustration when working with them
- b. Feel happy,cheerful and ready to assist them
- c. Never condemn an effort made by any child
- d. Never let them feel you do not like them bother about them
- e. Do not exempt them from any activity except when considered dangerous. Always get them to do something close to what others are doing.
- f. Never give activity that require too little or no effort in executing it.
- g. Always control your emotions

9. FEEDBACK

- a. Give praises for all efforts
- b. Encourage other pupils to appreciate efforts made by SEN pupils.
- c Always include their work among others when you want to display them .

10. SAFETY PRECAUTIONS

- a. Make provision for soft landing in their playing areas mats,foams,
- b. Provide support during landing to instil confidence
- c Observe SEN pupils very well to ensure that they do not exceed the level their limitations can allow.
- d. Always disallow the use of the equipment when you are not around or when you have not authorised them.
- e. Avoid introducing competitions that will eventually lead to comparison of results.

APPENDIX 5(a)

CASE STUDIES IN MAINSTREAMING IN PHYSICAL EDUCATION

The researcher paid several visits to schools in the region to observe the integration practices for children with special needs in Physical education. These visits afforded him the opportunity to meet teachers and school administrators who are directly involved in the teaching and planning of learning experiences for the children described as being 'special'. The researcher observed teachers in physical education lessons, inspect some facilities and equipment available for SEN pupils and made personal observation of few children with some learning difficulties in physical education.

CASE 1: Ormesby Primary School

Ormesby primary school is one of the best schools in the region(England) that serves the interest and needs of children with special needs in Physical Education. The mainstream education is well organized and coordinated. The staff in the school are all involved, each being assigned his/her responsibilities.

The deputy Head teacher, who is a specialist in special educational needs is appointed as the general coordinator of SEN programme. Some senior staff are also appointed as coordinators in their respective subject areas. Each of them is responsible for supervising the SEN activities in their respective classes. With this set up, the general coordinator handles problems which the sub-coordinators cannot deal with in their subject areas.

Both the staff and pupils in this school work together co-operatively in a conducive environment. The ability to organise and maintain the mainstream education programme in the school is attributed to good human relations that exist between the entire staff and their pupils. They live as a family and those with disabilities among them are never addressed as 'handicapped' but as children with learning difficulties. This gives the entire children the impression that all children have learning difficulties which may be identified in different subject areas. The knowledge of this, will inculcate the idea in the minds of non-disabled children to appreciate the difficulties faced by the disabled peers and would like to support them. This measure taken by the school really helped in enhancing the personality of children with special educational needs.

The school authority ensures that all the rooms are made accessible to all children including those in the wheelchairs. Ramps and swing doors are provided in the corridors and to the doors of the classrooms and toilets. Games rules are modified and equipment are adapted in various sizes, weights and heights to encourage the participation of SEN pupils in Physical education lessons.

During the Physical education lessons, both the disabled and non disabled children are brought together in the school gymnasium where the activities are introduced to them. Those with disabilities were offered greater opportunities to participate in various activities in order to assist them to develop confidence, physical fitness, and interact with others to improve their social behaviour.

Teachers in the P.E Department provided a comprehensive programme in movement education(gymnastics and dance), swimming, ball games(small sided games), athletics, cricket, striking games (short tennis), badminton and weight lifting. Participation of SEN pupils in these games was possible through the adaptation of equipment and modifications of rules of the games.

For easy implementation, the children are organized in small groups of four or five and this made it possible for teachers to move round the groups, thus providing guidance and support . This also made it possible for them to demonstrate how various activities are performed, appropriate ways to handle equipment, and correct poor performances. There were a lot of interactions between the teachers and children, particularly the SEN pupils who need some greater encouragement. The use of ancillary staff was employed and this supported the teachers' actions with the children.

The school organized a lot of social activities for all children. During such activities, the children were always allowed to mix freely and enjoy themselves. Apart from the fact that the school organizes evening games for the children, the teachers always provide activities during their morning assembly and lunch breaks through which they get to know each other well. Other recreational activities provided were swimming, horse riding, snooker game and tennis which were always supervised by teachers. The Ormesby primary school offers greater support to mainstream education programme and this has helped both SEN pupils and their parents to repose their confidence in the teachers

and the school administrator. By this parents became more involved in the school activities which improved the relationship between the school and home.

APPENDIX 5(b)

CASE 2 : AYTON PRIMARY SCHOOL SUNDERLAND

What happens with mainstream education programme in this school is quite similar to the situation in Ormesby school earlier discussed. Here, there are few children with special educational needs.

The Head teacher never allow any child to be addressed as 'handicapped' child because it helps to project such a child as being significantly different from others in the school.

The children with special needs enjoyed most of the school programmes because of the support provided by teachers especially during the physical education lessons. The staff of the school work co-operatively to providing the needs of these children with disability. They got the children to participate and enjoy themselves in various activities organized in physical education and where it became difficult or impossible, an alternative provision was always made to ensure that the needs of these children were met. Where an alternative provision was provided, the teachers made sure that the modifications in the games rules and adaptations to the equipment represent the real ones. The children with special educational needs did not only participate in P.E. programmes but also in other social activities organized by the school. This was always organized to bring children together so as to strengthen their relationships.

Teachers were always available to supervise the children during their lunch time(12.30__ 1.30) and children engage themselves in activities that interest them such as swimming, gymnastics, throwing and catching activities.

The school has a lot of facilities and equipment that are used to support the SEN pupils' learning in physical education. This removes the major barrier to the participation of children with special needs in physical education. The modifications are done to the swimming pools, courts, athletics track, gymnasium and football field while balls, rackets and table tennis are adapted to suit these children. Lighter balls, rackets, balloons of different sizes were made available for their use. The brightly coloured apparatus were provided to give better visibility to those suffering from visual impairment.

The school encourages children from the neighbouring schools to participate in the school's recreational activities. This is to widen their scope of interactions aimed at enhancing their relationships. Another major role the teachers play during most of their physical education lessons was the provision for safety of the children. They did this by organising learning experiences in progressive steps (simple to more difficult ones), activities were selected with consideration to the children's developmental rate and the handicapping condition of the individuals. Teachers gave simple and direct instruction and also provided thorough supervision during the lessons.

The teachers in the school were committed to ensuring the participation of SEN pupils in almost all the activities in P.E as well as other school programmes and this serves as an encouragement to parents who saw their children well integrated in the ordinary school.

APPENDIX 5(c)

CASE3: Christopher Simon. A severely handicapped 11 year old Athetoid

This 11 year old athetoid boy is now integrated in an ordinary class in a school which takes children from grades 1 to 6 and which also has four special classes mainly for cerebral-palsied children. He is extremely unsteady, cannot walk without support, makes gross involuntary movements with his arms and facial muscles and his speech is barely intelligible to a stranger.

After spending the four years in special classes, he was transferred to ordinary class, only returning to the special class for physiotherapy which his own class spending the four years in special classes, he was transferred to an ordinary class, only returning to the special class for physiotherapy when his own class has physical education. He has a special desk and other technical aids and an assistant who helps him during certain lessons and the breaks and spends the rest of his time in the special classes. He noted that although his classmates look after him during break, they like the assistant to be there in the background as a responsible adult.

At first, christopher found an ordinary class tiring but this is no longer a problem. Academically, he is near the top of the class, and even more striking is the fact that despite his severe difficulties and his very abnormal movements and appearance he is not only accepted by the rest of the class but obviously very popular among the classmates.

His entry into an ordinary class was carefully planned. Firstly, the matter was thoroughly discussed by the two class teachers

concerned; his ordinary class teacher was at first worried but became enthusiastic about having him.

Secondly, after Christopher himself had agreed to this, his special class teacher spoke to his new class and their teacher herself(while the child waited outside with his mother) explained his difficulties and introduced his assistant that was working with him in the special class.

Christopher was made to feel welcome in the class and the problem of teasing has never arisen.

APPENDIX 5(d)

CASE 4: JAMES COOK A DISORGANISED SCHOOL CHILD

James is 11 years old with a balanced height- weight ratio for a boy of his age and no apparent physical disability. He is not an articulate child and on closer examination his receptive, interpretive and expressive language is a weak link in his learning. He frequently draws attention to himself when he fails to understand a task through noisy, disruptive behaviour, by exhibiting an over-confidence or by displaying obvious signs of boredom and disinterest.

On issue of dressing, James brings a sense of disorder to the movement learning environment by his appearance, with his shoes on the wrong feet, untidily dressed and frequently in a state of part undress because his attempts to button, lace the shoes, find sleeves, identify the top, front/back of a shirt have failed, often causing frustration to the child and his teacher. When he has undressed for physical education, his untidy heap of clothes conveys much about his problems. Sleeves, trouser legs, socks, are inside out or inside the garment, shoes are unfastened and the clothes are in a tangle, and so when dressing commences following physical education lesson, the scene is one of frustrations, disorder and chaos in his life.

On movement with self, James conveys disorder in his movements and in the way he moves. He gives an appearance of being rushed and this scrambled effect spills over to create a movement mess. He usually generates more chaos by tripping, falling and bumping into other children or objects .

An inability to co-ordinate movements and exert the required degree of effort results in a lack of control in both fine and gross movement tasks.

James attempts to interact with other children in a movement context with and without apparatus are fraught with difficulties and result in disharmony and discord in a class physical education lesson. In an open and unstable environment further difficulties of a temporal and spatial nature James demonstrated a lack of understanding in terms of the movement task and in his performances in physical education activities.

To help James in overcoming his difficulties, this approach is needed. That is, he should be helped to understand the essential requirements of the task, as well as, be helped to perceive the task as a whole in order to conceive the purpose and how to perform it. The teacher who works with him in physical education lessons, needs to illustrate the task as a whole in a meaningful context, and then analyse it into sequential steps to provide an order. These steps can be developed through the use of action, words and/or body parts, and this should be limited to one to four words. This will enable James to establish a beginning, middle and end to the task, and whilst he is performing, he can match the words with actions. The teacher can make the steps to achievement as small or as large as is appropriate, and he can progressively adapt them in order that success is assured.

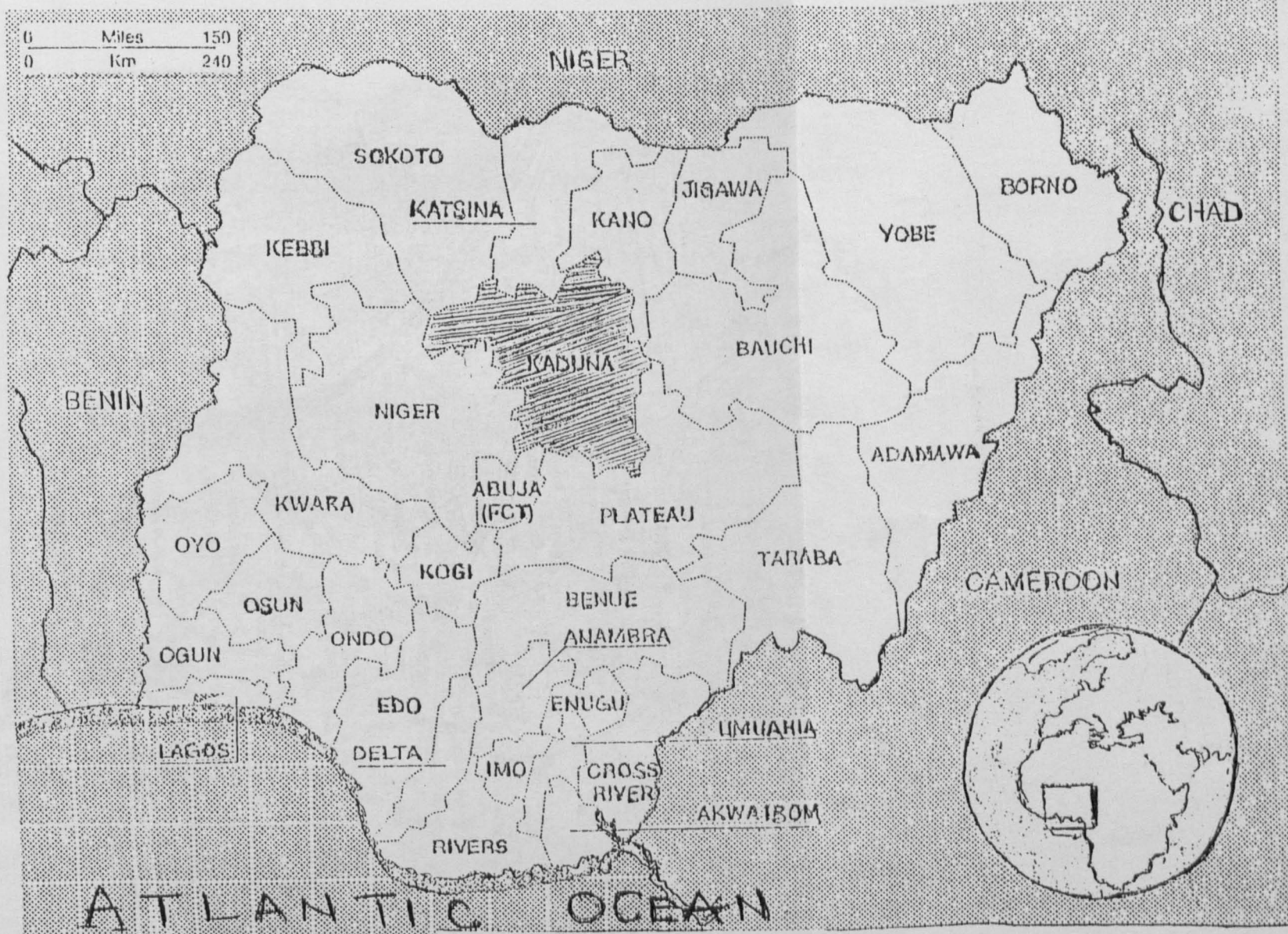
The advantage of this approach is that James now feels secured in his learning environment and with time he will look upon the teacher as an 'enabler', who provides stepping stones for him to follow during the learning a task.

It also allows the teacher to simplify and reduce the learning demands for James so that he can begin to learn with success.

This approach could as well help to focus his attention on each necessary step in order to secure achievement. The sequential steps are visually encoded through a process of look, listen, say and do and supplemented with tactile guidance which helps to activate the short term memory, so that James will eventually be capable visually, verbally, and through movement to recall the sequence of the task.

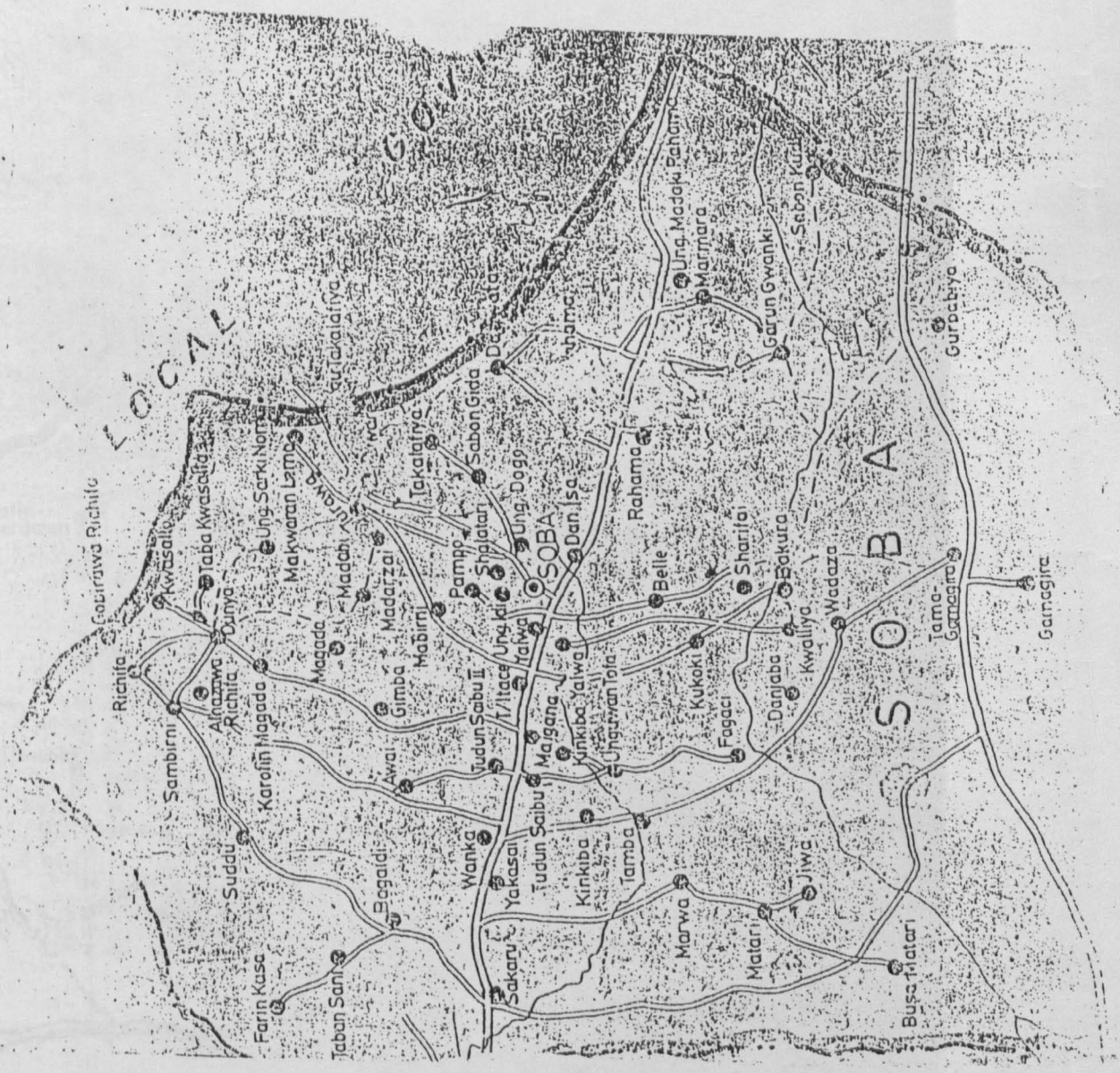
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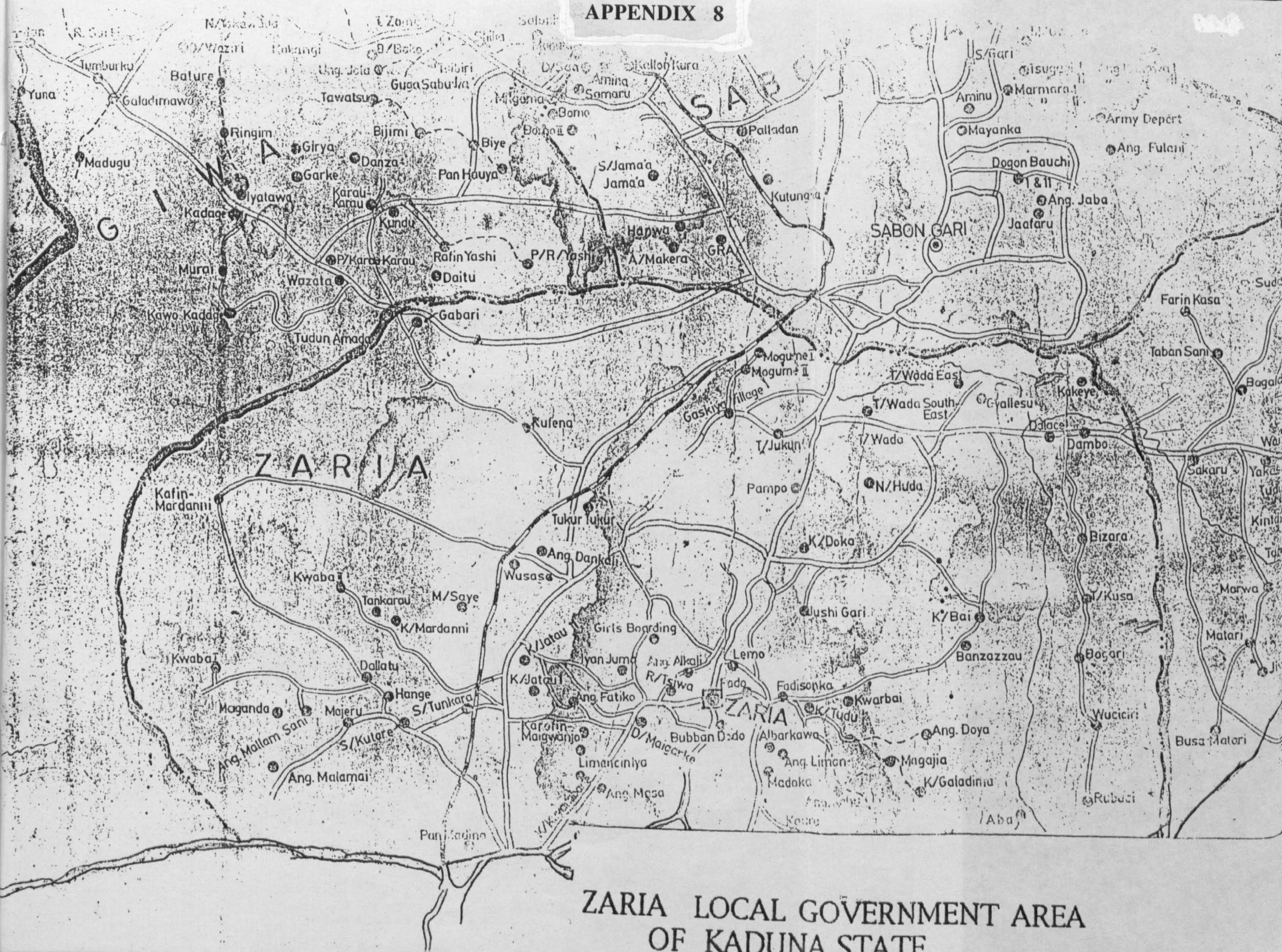


Federal Republic of Nigeria showing Kaduna state in relation to other states of Nigeria.

160 kms



SOBA LOCAL GOVERNMENT AREA
OF KADUNA STATE



ZARIA LOCAL GOVERNMENT AREA OF KADUNA STATE