EVALUATION OF PRIMARY SCHOOL PHYSICAL EDUCATION TEACHING AND LEARNING PROCESS FOR LEARNERS WITH INTELLECTUAL DISABILITY IN KENYA

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Declaration

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

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Dedication

This work is dedicated to my late parents Canon Henry Munayi and Mama Grace Andeso Munayi who instilled in me a great sense and value for education and my wife Patricia Munayi whose constant encouragement and prayer made the hurdles of waking up in the wee hours of the morning to study a bit more bearable.

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ABSTRACT

This study is an evaluation of the teaching and learning process for learners with intellectual disability. It analyses how physical education is taught in schools referred to as schools for the mentally handicap. The purpose of this study was to evaluate the teaching and learning process in physical education for learners with intellectual disability. To achieve this purpose, five specific objectives which guided the formation of five research questions were designed. These were based on a five point criteria used to lead this study. They included: rationale, effectiveness, efficiency, relevance and impacts. The target was the 44 schools for learners with mental handicap in Kenya. The study was an evaluation research. The data for the study was drawn from: an interrogation of the syllabus used to teach in schools for learners with intellectual disability , questionnaires for 31 teachers from the 44 schools for learners with intellectual disability, questionnaires for 30 principals, interview schedules for 240 learners with intellectual disability organised into 31 focus groups, interview schedules for 30 parents of former learners from these schools for learners with intellectual disability and interview schedules for 44 former learners from these schools of learners with intellectual disability. The data from the questionnaires and interview schedules for teachers, principals, focus groups, syllabus document was interrogated. It was found that, in terms of rationale, there is need for proper editing of this syllabus so that it meets the required standards. Basics such as capitalising the beginning of sentences and completion of the document as noted by missing information under heading needs to be taken into account, There is need to realise that the field of physical education, recreation and leisure are distinct areas of study and cannot be equated. The intellectual disabled learner requires physical education as it is correctly stated in the time tables. With knowledge acquired from physical education, the learner can recreate and have leisure. In terms of effectiveness, it was noted that the amount of time allocated to schools needed to be standardized. It was further noted that individualised learning was not practised by the teachers. In terms of efficiency it was noted that funds allocated to various disciplines in the schools for learners with intellectual disability was arbitrarily done without any set criteria and varied from school to school. This may have led to the limited equipment and facilities that in turn could affect the number and choice of activity. Indeed it was noted that the repertoire of activity provided may impact on the experiences that a teacher may be able to be offer. In terms of relevance, the learners seem to have enjoyed the teaching of physical education. In terms of impact, it was noted that most learners who go through the schools for learners with intellectual disability have tended to show positive changes in behaviour. Former learners from such schools have continued to show physical literacy hence confirming the finding that the learners considered physical education their best subject at school. It was concluded that the syllabus needed to be reviewed. It was further noted that learners with intellectual disability takes a keen interest in number work prompting the question whether it is possible that the learner with intellectual disability is still grossly misunderstood and there is need to dig deeper to establish the underlying potential for learners to excel in other areas hitherto not considered such as number work.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Globalization in all spheres of modern life calls for the improvement of learning and learning experiences provided at all levels in schools (Stukalina, 2012; Dart, Didimalang & Pilime, 2002). This is true across all disciplines, including Physical Education (PE). The United Nations declared 2005 an international year of Physical Education and Sports with the expectation that everyone regardless of gender, race or ability has the right to participate in Physical Education and Sports (United Nations, 2005). This includes persons with disability. The need for appropriate access and opportunities for persons with disability to be addressed with similar emphasis as that of their peers cannot be overstated. Even persons with disability need to acquire physical literacy which is the development of fundamental movement through quality physical education rather than by *faux pas* of nature (Hannon, 2005).

Both physical and intellectual disability account for between 10 and 20 percent of the world population (Veneman, 2007). Education Commissions (Republic of Kenya, 1964; Republic of Kenya, 1976), Sessional Papers (Republic of Kenya, 1964; Republic of Kenya, 2005), an Act of Parliament (Laws of Kenya, 1980), a Working Party Report (Republic of Kenya, 1981) and even policy documents (Republic of Kenya, 2005; Republic of Kenya, 2007) ranging from 1964 to 2008 have revealed that, the Government of Kenya is cognizant of this special population. To coordinate and streamline the issues

of Special Education, the Government established a Special Needs Education (SNE) section in 1975 (Republic of Kenya, 2007). A Special Education Inspector was appointed in 1978 to be in charge of the SNE section and an Educational Assessment and Resource Services (EARS), to ensure early identification of children with special needs. All this goes to show emphasis laid on special education by the government (Republic of Kenya, 2007).

The National Development Plan 2002-2008 (Republic of Kenya, 2002) states that, there are approximately 1.8 million children with disability aged 0-19 years of whom only 100,000 or 5.5% have been assessed and only 22% (22,000) of those assessed are enrolled in both regular and special schools. Low enrolment is caused by reasons such as, the high cost of developing adequately trained teachers, specialized equipment and instructional material (Republic of Kenya, 2002).

Although the Government of Kenya is committed to provision of quality education to all (Republic of Kenya, 2008). It is not certain that this assumption holds true for learners with intellectual disability. Traditionally learners with intellectual disability have been affected by prejudice pegged on limitations in their intellectual functioning (Republic of Kenya, 2009). The need for an evaluation of the programme for learners with intellectual disability is therefore a vital step towards addressing the root cause to ensure maximum benefits for these learners.

Evaluations seek to functionally determine the impacts of the intercalation processes and outcome that take place in an institution (Anderson, 1999). The purpose of an evaluation is to collect data that helps make decisions about the value, product and techniques of a

programme (Borg & Gall, 1979). Evaluations are done for a number of reasons that include assessment of planned, ongoing or complete interventions to determine their relevance, efficiency, effectiveness, impact and sustainability (Kusek & Rist, 2004). Evaluation is a way of assessing whether or not what is being done is achieving desired results, is appropriate or determines the consequences of a programme (Borg & Gall, 1979; Anderson & Arsenault, 2002; Kusek & Rist, 2004). A number of logical frameworks have been used to evaluate educational programmes (Anderson & Arsenault, 2002). One framework that has been of great utility uses the principles of rationale, effectiveness, efficiency, relevance, effect and impacts to evaluate educational programmes (Anderson & Arsenault, 2002; Hammond, Cook, Jacquith and Hamilton, 2012). This study borrowed from the set criteria of rationale, effectiveness, efficiency, relevance and impact to evaluate the teaching and learning of physical education for learners with intellectual disability.

The National Development Plan (Republic of Kenya, 2002) states that the government is committed to making curriculum content and teaching methods more appropriate to the needs of special learners. Syllabi usually hold the rationale of a programme. Rationale is a key principle in evaluation (Anderson & Arsenault, 2002) .When set out properly the syllabus ensures the attainment of programme objectives. Globally, a few studies have been done on evaluating the curriculum of the learner with disability (Faroog, Ajmal, Rehman & Nafees, 2011; Hannon, 2005; Arjmandnia & Kakabaracee, 2011). In Africa as well, researchers have sought to find the place of the syllabus vis-à-vis learners with disability (Dart Didimalang & Pilime, 2002; Oliver & Williams, 2005; Wekesa, Abosi & Amusa, 1997). Nationally, a study has been done on the syllabus of special education

(Kamere, 2004; Gathua, 1990), but, none of these studies were on learners with intellectual disability in Kenya. Some studies called for the need for a study in the curriculum of special needs education (Kamere, 2004; Gathua, 1990). This study was designed to establish the status of instruction process, curriculum content and teaching methods in Kenyan Schools for learners with intellectual disability.

Another principal in the evaluation criteria by Anderson and Arsenault (2002) is effectiveness. Effectiveness entails the achievement of programme goals. For many years the quality of physical education teaching has been questioned (Daugherty, 1973; Brophy & Good, 1974; Lee, 2002; Deventer, 2002; Fishburne and Hickson, 2003; Falson & Porret, 2004; Marshal and Hardman, 2002; Fujiura, 2007). Lee (2002) asserts that physical education contributes not only to physical fitness but also to mental alertness and development of certain qualities like perseverance, team spirit, leadership, and obedience to rules, moderation in victory and balance in defeat. Lee (2002) goes on to note that the essential points for the proper functioning of a physical education programme is timetable, equipment, the records of activity and the teacher. Lee (2002) also observes that many times, Physical Education programmes seem to suffer from low status, lack of direction and failure to offer meaningful experience for learners, yet it is categorical that the practice of physical education is a fundamental right to all (UNESCO, 2005). This right includes that of learners with intellectual disability (UNESCO, 2005). Classroom interaction plays a significant part in creating classroom climate (Sifuna, 1977; Muthwii, 1981; Ganesh, Avinash, Unnikrishnan & Kotian, 2011). However, no study has been done locally on how teaching methods impact the learners with intellectual disability hence the attempt by this study to fill this gap.

In December 2002, a new regime in Kenya, energized by a political transition following the defeat of the first ruling party since independence declared that Free Primary Education (FPE) would begin in January 2003, barely a week away from the start of the school term (Republic of Kenya, 2004; UNESCO, 2005). The response from the public was overwhelming (Republic of Kenya, 2008). The enrolment increased in public primary schools from 5.9 million in December 2002 to 6.9 million in January 2003 (Republic of Kenya, 2007). This increase created a logistical challenge for learning in terms of infrastructure, facilities and equipment (UNESCO, 2005; Republic of Kenya, 2007). Most primary schools did not have sufficient facilities, equipment and teachers were inadequate and not prepared to deal with the increased enrolment (UNESCO, 2005). In situations like these, children with special needs end up being the biggest losers (UNESCO, 2005).

The third principal in the evaluation criteria by Anderson and Arsenault (2002) is efficiency. Efficiency entails utilisation of instructional resources from a cost effective approach (Anderson & Arsenault, 2002). Utilisation of instructional resources depends on the teacher (Lee, 2002). Regionally, studies have been done on efficiency of teaching (Wekesa, Abosi, and Amusa 1997; Musangeya & Dzimba, 1997; Telewa, 2004; Mecha, 2004). Locally, a number of studies on efficiency have been undertaken by various researchers (Sifuna 1973; Njororai, 1990; Gathua, 1990, Njororai & Gathua, 1997; Njororai, Gathua & Owiye, 1997). None of these studies targets learners with intellectual disability, hence the need for this study.

An assessment of the FPE in Kenya observes that it is incumbent upon the government to provide infrastructure for children with disability (UNESCO, 2005). It was however

noted that the necessary systems were not in place to capture information on children with special learning needs (UNESCO, 2005), prompting the conclusion that although FPE had opened doors for many children to enrol in schools, it had not made any provision for the needs of children with disability (UNESCO, 2005). Additionally, records educed on children with disability tend to lean more towards children with physical disability (Republic of Kenya, 1976; Gathua, 1990; Republic of Kenya 2007; Republic of Kenya, 2008), a factor that compelled this study to focus its investigation on learners with intellectual disability.

It has been established that children with intellectual disability face great barriers in accessing education (Veneman, 2007). For instance, UNICEF has tried to put interventions in place to address or minimise some of these barriers. These interventions include, improving access to schools and special learning facilities (UNESCO, 2005). It is indicated that in the teaching and learning process, it has taken long to realize that learners with intellectual disability are underestimated in terms of their intellectual outputs (Spelling, 2007). Spelling further noted that students with disability of any nature including intellectual could still achieve set educational objectives in school. The question that begs is what the stakeholders say about the relevance of what is going on in regular schools for learners with intellectual disability.

Research on learners with intellectual disability globally have identified who the stakeholders in the teaching/learning process are (Mohsin, Khan, Dogers & Awan, 2011). While regionally one study was done in Ethiopia involving stakeholders of learners with intellectual disability (Admas, 2009), locally no study has been done on stakeholders of education for learners with intellectual disability

Experiences from implementing FPE indicate that as rolled out in Kenya free education did not provide for the needs of children with special needs (UNESCO, 2005). Twelve years later, it is important to gauge whether the situation is different. It is also imperative to evaluate the situation of learning in Kenyan schools for learners with intellectual disability, to ascertain whether FPE provides value addition for this group of learners (Republic of Kenya, 2004). For learners with intellectual disability, PE is considered a main discipline of learning (Sandt, 2008). The choice of PE was based on the assumption that this is an area that resonates with learners with intellectual disability (Finkelstein, 2001). Literature on children with intellectual disability indicates that involvement in sports results in improvement in physical health, social skills and self-confidence, (Ying, 2007). This is sustained beyond the school period as attested to by parents of learners who have gone through schools for learners with intellectual disability (Jowett & Lavellee, 2007) and other stakeholders of the learners with intellectual disability such as Special Olympics (Shriver, 2007). Other studies that have been done globally on the effects and impacts of former students of schools for learners with intellectual disability (Jowett & Lavellee, 2007; Broer, Doyle & Giangreco, 2005). No such studies have been done in Kenya, hence the relevance of this study.

A number of interventions have been put in place to address the teaching and learning of students with intellectual disability. The United Nations is focused on the needs for learners with disability including persons with intellectual disability (UNESCO, 2005). The Government of Kenya has shown concern about learners with intellectual disability (Republic of Kenya, 2008) as evidenced through training of teachers and administrators putting in place structures to address learners with intellectual disability (Republic of

Kenya, 2008). Indeed, a syllabus to address learners with disability is in place and national objectives have been proposed to address persons with intellectual disability (Republic of Kenya 1999). Families typically have hope in their children; these include those with intellectual disability (Shriver, 2007). It is however important to ponder what is happening in schools for learners with disability and whether this ties in with the various expectations of the learners, teachers, school administrators, the teaching/learning process, the syllabus and the family. Curriculum designers want to have assurance that the total system of instruction is valuable for learning (Gagne, Briggs & Walter, 2005).

1.2 Statement of the Problem

The problem in this study is that no one knows what exactly in going on in the teaching and learning process of physical education for learners with intellectual disability in Kenya. Despite the Government of Kenya taking cognisance of the need for inclusive education through setting up of special classes to cater for children with special needs (Republic of Kenya, 2007), the already overworked and overstretched teachers involved with FPE are unable to cope with additional tasks (UNESCO, 2005). The situation is also compounded by the fact that some teachers are not trained to handle various disabilities and special learning needs including the hyperactive and dyslectic children (Government of Kenya, 2004).

The Government of Kenya emphasizes that the goal of education is to provide equal opportunities for all children, including those with special needs. The various government policies indicate that since independence special education category is not reflected in the growth of education (Republic of Kenya, 2007). The Kenyan government has stated

through Sessional Paper Number One of 2005 that, special education is important for human capital development as it prepares those who are most likely to be dependent to become self reliant (Republic of Kenya, 2005). The new Constitution of Kenya recognises the need for all persons with disability to access educational institution and facilities (Republic of Kenya, 2010). Whether the teaching and learning process for learners with intellectual disability also take cognisance of this need for equal opportunities is the subject of this evaluation.

Physical education has been documented as one of those disciplines that would be considered important for learners with intellectual disability (Ying, 2008). While FPE is variously lauded for expanding opportunities to education access for many pupils who would have otherwise been left out of the school system, notably the situation for the learners with disability remains the same. From the onset, it is noted that FPE led to congested classes and lack of motivation of the teachers (UNESCO, 2005), which has left the classroom situation inexplicable (UNESCO, 2005), more so for children with disability (UNESCO, 2005).

It is also worth noting that the Kenya Institute of Curriculum Development (KICD) has one curriculum to cater for mental handicap, while in essence there are various intellectual disabilities (Republic of Kenya, 2009). The fact that PE is not examined at any level in primary and secondary schools means that its status is not as significant as that of examined subjects, including those of the special needs learners. With this kind of environment, how learning takes place in the classes of children with intellectual disability is definitely a matter of concern to stakeholders.

In Kenya, vision 2030 forms the framework for the government policy implementation up to the year 2030 (Republic of Kenya, 2008). Education is considered as one of the social pillars. It is noted that there are 26,885 out of the 1.8 million school-going age population with special needs that are enrolled in the few special education schools, units and integrated programmes (Republic of Kenya, 2008). It is recognised that there is need to provide appropriate educational facilities, materials, equipment and a cadre of trained teachers and other professionals as well as support staff (Republic of Kenya, 2008). Whether this is the situation in institutions referred to as schools for the mentally handicapped is what this study designs set out to establish.

1.3 Purpose of the Study

The purpose of this study was to evaluate the teaching and learning processes during PE lessons of learners with intellectual disability in Kenya.

1.4 Objectives of the Study

The objectives that guided this study were to:

i. Appraise whether the programme made sense by assessing the rationale for the teaching and learning process of physical education for learners with intellectual disability.
ii. Establish the extent to which the programme has achieved its objectives by considering its effectiveness in the teaching and learning process of physical education for learners with intellectual disability.

iii. Ascertain how well the programme was managed by weighing its efficiency in the teaching and learning process of physical education for learners with intellectual disability.

iv. Assess whether the objectives of the programme are sustainable by assessing the relevance of the teaching and learning process of physical education for learners with intellectually disability.

v. Establish what has transpired as a result of the programme by judging the impacts of teaching and learning processes of physical education for learners with intellectual disability.

1.5 Research Questions

The study was guided by the following research questions:

i. What is the rationale for the teaching and learning process of physical education for learners with intellectual disability?

ii. How effective is the teaching and learning process of physical education for learners with intellectual disability?

iii. How efficient is the teaching and learning process of physical education for learners with intellectual disability?

iv. How relevant is the teaching and learning process of physical education for learners with intellectual disability?

v. To what extent does the teaching and learning process of physical education impact learners with intellectual disability?

1.6 Significance of the Study

The findings of this study have implications for teaching and learning for learners with intellectual disability. The findings could act as an enlightenment on what transpires in the classroom interaction of the learners with intellectual disability. These findings provide education stakeholders with information that may hopefully guide policy formulation regarding instruction for learners with intellectual disability to be more results oriented. The findings should ideally be factored into the training of teachers being prepared for teaching children with learning disability to make the learners more productive at the end of the teaching/learning process.

Some of the strengths/weaknesses of the syllabus used for learners with intellectual disability are exposed to enhance the teaching of physical education. Resources used in schools for learners with intellectual disability were assessed to provide a basis for policy advisers to recognize the situation on the ground based on empirical findings. This study's findings will play a critical advocacy role for learners with intellectual disability especially through dissemination at conferences, seminars and eventually journal publications.

1.7 Limitations of the Study

The dynamics of classroom interaction are complex. Some dynamics that go on during the teaching/learning process were difficult to capture due to the nature of human behaviour. This situation could have been affected even more by the presence of an observer in the classroom during the teaching process. The researcher went out to assure the sampled teachers, school principals, learners, former students and parents that the

information they gave was purely for research and would not affect them individually. Finally, this study is a survey and hence it assessed the situation of teaching and learning process as it is now. This current situation may change since there is no control about what the future may hold after a few years.

1.8 Delimitations of the Study

This study is an evaluation of the physical education teaching and learning process for learners with intellectual disability. Learners with intellectual disability are divided into those with mild and moderate intellectual disability and those with severe and profane intellectual disability. The mild and moderate learners are enrolled in normal primary schools with special units. Those with severe and profane intellectual disability are registered in schools referred to as special schools for the mentally handicapped. The study was delimited to those learners who are enrolled in the special schools for the mentally handicapped. This study was limited to gathering data from learners, teachers, schools administrators, parents of former learners and former learners from 44 special schools for learners with intellectual disability.

1.9 Basic Assumptions of the Study

The study was guided by the assumptions that physical education is timetabled and taught in the sampled schools according to the Ministry of Education Science and Technology guidelines. It was also assumed that stipulated government regulations are used in the teaching and learning of physical education in the sampled schools. Additionally, the study assumed that the sampled teachers and the administrators are academically and professionally qualified to teach learners with intellectual disability. Further, it was

assumed that learners' sex does not affect the teaching/learning process. Finally, it was assumed that the sampled learners had all attained similar cognitive abilities.

1.10 Operational Definition of Key Terms

The key terms in this study include:

Effectiveness: Assesses whether the teaching and learning achieved its objectives.

Efficiency: Refers to how well the teaching and learning process has been managed; whether there are better ways of achieving these results at lesser costs; Who is administering the teaching and learning and which resources are available.

Evaluation: Refers to the judgement value of the quality of the teaching and learning process. This takes cognisance of rationale, effectiveness, efficiency, relevance and impact of the teaching of learners with intellectually disability.

Impacts: What has happened as a result of teaching/learning? It also measures the sustainability of the programme.

Integration into society: The learners beyond school becoming part of human capital that society can benefit from.

Learners with intellectual disability: Learners with sub-average intellectual functioning existing concurrently with deficits in adoptive behaviour; in the case of this study, those who are severe and profound. Also considered as learners with intellectual challenge, or learners in schools for the mental handicap.

Mentally Impaired: A term used by the Ministry of Education in Kenya to refer to learners with intellectually disability.

Methods of teaching: The process and techniques of teaching which results in learning for learners with intellectual disability

Physical Education: An educational process that uses physical activities as a means to help individuals acquire skills, fitness, knowledge and attitude that contribute to their optimal development and well being.

Primary Schools for learners with intellectual disability: Schools for Mentally Handicapped Schools which are formal government schools that caters for learners with intellectually disability who are severe and profound.

Professional: Special training or skill especially one that needs a high level of education

Rationale: Does the programme make sense? What is the content of the syllabus being implemented?

Relevance: Is the teaching and learning sustainable? Is it supported by stakeholders? Are parents and the Government of Kenya happy about it?

Resources: Teaching facilities (such as field, tracks, aquatic facilities, gymnasiums, courts) and equipment (including bibs) for physical education. This includes changing rooms used before and after the learner participates in a physical education class.

Schools Administrators: Principals/ Deputy Principal of handicapped schools.

Special Olympics: An International organisation that provides year-round sports training and athletics competition in a variety of Olympic-type sports for people eight years of age and older with intellectual disability.

Stakeholders: All the people who feel attached or will benefit from the teaching/learning of learners with intellectual disability. These include the parents, social groups such as Special Olympics, the Government of Kenya and anyone who is likely to reap benefits when this learner becomes human capital.

Syllabus: A programme of study created by the Ministry of Education agencies that is used to guide and standardize the teaching and learning process, and in which the objectives of the programme are embedded. In the case of this study, that of learners with intellectual disability.

Teaching/Learning process: Instructional process between teacher and learners with the intention of achieving predetermined objectives.

1.11 Organisation of the Study

The study's report is presented in five chapters. Chapter one contains background of the study, the statement of the problem, the purpose of the study, the objectives and research questions. This is followed by significance of the study, limitations and delimitations of the study. Further, basic assumptions and operational definition of key terms follow. Chapter two comprises literature review, followed by a discussion of the theoretical framework. Chapter three describes the methodology, instruments used in the study and how data was collected and analysed. Chapter four comprises the findings analysis and

discussion of collected data. Chapter five consists of the summary, conclusions and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

Literature review is organised under the following headings: literature related to evaluation of instruction, literature related to rationale of programmes, literature related to the effectiveness of programmes, literature related to efficiency of programmes, literature related to the relevance of programmes, literature related to the effects and impacts of programmes and finally, the theoretical frameworks that guided the study.

2.2 Literature Related to Evaluation of Instruction

According to Gagne, Briggs and Walter (2005), designers of instruction want to have assurance that the total system of instruction is valuable for learning. Indications of how well the system of instruction has performed are obtained from systematically gathered evidence (Gagne, Briggs & Walter, 2005). According to Stufflebeam and Shinkfield (1985) this is referred to as an evaluation. Worthen and Sanders (1987) pointed out that any evaluation needs to determine what needs are to be addressed, what resources are available, how well the plan is being implemented and what results are to be obtained.

Over the years various frameworks to rationalise educational evaluations have been developed (Stufflebeam & Shinkfield, 1985; Anderson & Arsenault, 2002; Kusek & Rist, 2004). Stufflebeam and Shinkfield (1985) describe a framework referred to as Context Input Process and Product (CIPP) model which views evaluation as the process of delineating, obtaining and providing useful information. Worthen and Sanders (1987)

suggested that, there is a logical structure for designing each type of evaluation by using methods such as document reviews, interviews, hearings, analysis of human and material resources and by performing both qualitative and quantitative analyses amongst others. This study also utilises documents review, interviews, analysis of human and material resources and by performing both qualitative and quantitative analyses amongst other methods of data collection and review. Kusek and Rist (2004) noted that evaluation is an assessment of a planned, ongoing or complete intervention to determine its relevance, efficiency, effectiveness, impact and sustainability of all concepts used in this study. Anderson and Arsenault (2002) have developed a model that uses five criteria to evaluate educational programmes. These criteria include rationale, effectiveness, efficiency, relevance and impacts. This model shown in Appendix XIII was adapted for this study.

Kinyua (2001) undertook an evaluation of the implementation of environmental education integrated curriculum in primary teacher training colleges in Kenya. The study analysed adequacy of syllabus content, resources used by tutors and techniques emphasized by tutors. In the study, the tools used to collect data included questionnaires, interview guides and an observation schedule. Although this study is also an evaluation, it chose to use a different criterion that analysed the rationale, relevance, efficiency, effectiveness and impacts of the teaching/ learning process. The study evaluated learners in a PE setting. Further, the learners in the case of this study are in schools for learners with intellectual disability.

According to Hansen (2009) evaluations are a natural part of everyday life. As a routine, people judge almost nonstop whether something can be considered good or bad. Hansen noted that traditionally teachers have always been evaluated. Hansen performed a study

in Sweden, Denmark, and Norway and discovered that evaluation practices are systematic and organised and have become institutionalised at all levels of the education system. It was further noted that evaluations had evolved into policy strategy as well as a tool for quality assurance. Hansen addressed two questions. One on whether the Scandinavian countries had developed a common approach in education evaluation and secondly on the kind of dynamics that were pushing the process of institutionalised evaluation. The study analysed public accessible documents, policies, evaluation reports and websites. Hansen separated evaluation into micro, meso and macro evaluations. In conclusion Hansen noted that the purpose of an evaluation is to produce evidence with a purpose to promote well informed decisions about policy initiatives and professional practices. This study is also an evaluation of professional practices amongst Kenyan in schools for learners with intellectually disability and also analysed public documents, policies and practices in these schools. This study however went further to examine how pupils in the schools of mentally handicapped go through the process of teaching and learning. The data in this study thus, provides an evaluation of the Kenyan situation.

Stukalina (2012) undertook a study that discussed the importance of using regular educational environment evaluation which involved students' indirect participation in decision making. In the study, Stukalina noted that a number of definitions existed for the term "evaluation" in education. Stukalina characterized evaluation in education as the organised collection and analysis of data to provide feedback on different aspects of education. Stukalina's study discussed the significance of utilizing systematic educational environmental evaluation suggesting that students' participation in evaluation played a significant part in quality assurance. This was pointed out as a customer driven

educational view point. This study opted to use Anderson and Arsenault's (2002) definition of evaluation. Like in the case of Stukalina this study also looked at students as stakeholders picking vital information from them. Stukalina concluded by noting that educational evaluation is a complex multivariate system, a context also appreciated by this study as noted by the fact that eight different tools were used to pick up data to meet this multi-dimensional nature of evaluation.

Paulsen and Dailey (2002) undertook an evaluation on elementary and middle schools. They noted that an important function of an evaluation research is monitoring of programme implementation. This they attributed to the fact that evaluation of implementation is essential in identification of problems before the end of a programme since changes during programme implementation creates an opportunity for a more directed impact. They note that to monitor a programme, one should spend some time measuring the satisfaction rate of students, parents, teachers and the challenges noted by them. Paulsen and Dailey noted that a wide range of methods may be used to gather data. These include: observations, record of documents, syllabus, lesson plans, physical facilities, information from school administrators, parents amongst others. They believed evaluations keep programmes on track and act as quality control and also notes whether the programme works. This study is also an attempt to find out whether there is a problem in the teaching and learning of students with intellectual disability. The study measured the perceptions of teachers, administrators, students, parents, alongside those of former students. Further, this study used eight tools to collect data. Some of these included direct observations, analysis of syllabus, policy documents and use of questionnaires and interview schedules.

2.3 Rationale for Teaching and Learning Process of Physical Education

According to Anderson and Arsenault (2002), the principle of rationale is to question whether the programmes make sense. Further, it queries whether the attainment of the objectives achieves the goals of the programmes. This study looked at what is used to guide learners with intellectual disability. The syllabus is an important prop in education. Kamere (2004) observed that in Kenya, it has been found that the special education syllabus needs to be investigated to examine if it is applicable to the learner. Wekesa, Abosi and Amusa (1997) undertook a study in Botswana where it was observed that there was lack of syllabus to cater for the needs of children with disability. Gathua (1990) also decried the absence of an appropriate curriculum for physically challenged learners in primary schools in Kenya. Gathua (1990) recommended that there was need for an apt syllabus that makes sense and further research in the need for specific syllabi for special needs learners amongst other suggestions. This study, while it looks at the syllabus, is different in that it evaluated the physical education syllabus for learners with intellectual disability amongst other issues.

Faroog, Ajmal, Rehman and Nafees (2011) evaluated the curriculum of vocational subjects for learners with hearing impairment in a secondary school in Pakistan. The study consisted of 100 vocational teachers for learners with hearing impairment. They noted the curriculum used in the sampled schools was that issued by the Ministry of Education. They also noted that there was need to provide teachers with pre and in service training. The data was collected through three questionnaires. The study concluded that the curriculum content of vocational subjects in Pakistan was apt for the level of physical and mental maturity for the hearing impaired. The study did however

recommend that the curriculum needed to be reviewed to meet the market and future needs of the learners. This study looked at PE in schools for learners with intellectual disability to see whether their curriculum was apt.

Hannon (2005) undertook a study on the promotion of people with physical disability in physical activity in Ireland. It was noted that barriers that contributed to low levels of participation in physical activity by people with disability included: poor physical education in schools, negative school experiences from teachers, families or peers, lack of knowledge about what was available, poor communication, poor facilities and lack of access of facilities by persons with disability, as well as untrained staff, poor programmes and, lack of a sports culture amongst other issues. Indeed Hannon noted that Ireland was in danger of becoming a "spectator nation" owing to its failure to involve its learners in physical activities. From Hannon's empirical research, five factors emerged as essential for quality experiences for persons with disability. These factors were: strong leadership, improved and inclusive community facilities, adequate and accessible information services, comprehensive education training, coaching programmes that provide teachers and others with required inclusive physical education training; other factors were the fact that the physical education curriculum needs to be modified and, impacts and outcomes of the modification dully monitored until physical education is of sufficient quality and quantity to ensure everyone acquires physical literacy. This study also looked at some of the aspects noted in Hannon's study. This included: strong leadership, facilities in terms of quality, quantity, training of the teachers involved in teaching learners with intellectual disability and the adequacy of the curriculum used for the learners. This study however

dwelt on learners with intellectual disability as opposed to learners with physical disability.

Dart, Didimalang and Pilime (2002) undertook an evaluation of special units for children with what they refer to as mental retardation in Botswana. Amongst areas investigated by Dart, *et al*. (2002) study was appropriate curriculum, teaching and learning, parental involvement, appropriate staff, appropriate infrastructure, resources and funding. They discussed the lack of a curriculum designed to cater for children with mental disability as an emerging issue. A curriculum adopted from South Africa was in use but there was need to contextualise it to the Botswana situation. They noted that many parents were supportive, though a few showed poor attitude towards the professionals who dealt with the intellectually disabled learners. It was further noted that staff was adequate and qualified to deal with learners with disability. This was the first research done on the learner with intellectual disability in Botswana. The study used multiple methods to gather data. Both quantitative and qualitative methods were used through questionnaires, observation of head teachers, teachers, parents and pupils. Documents were also analysed. This study also used similar methods to seek for data on teachers, pupils, head teachers, parents and former students. In the Kenyan case, a syllabus is in place.

Oliver and Williams (2005) researched on the challenges faced while teaching intellectually disabled learners. They noted that teachers for special schools have the responsibility to offer not only quality but highly individualised and goal directed instruction. They quantified the South African situation where learners with special needs are accommodated in special units. Further, the South African Bill of Rights provides a framework for inclusive education. The study suggested that the education of the

mentally handicapped child must do much more than simply follow a fixed prescribed curriculum. They postulated that the education of the intellectually disabled learner must adapt to the specific and unique needs of each child.

Oliver and Williams (2005) observed that the mentally handicapped child has limited reasoning power and conceptual ability, factors that necessitate adjustment of the curriculum accordingly. They recommended empathy and not pity for these children. Oliver and Williams further pointed out that teachers of the mentally handicapped children should not get over involved but play a complementary role to parents. They concluded their study by noting, first, that the handicapped child required much more than the ordinary educational teaching and assistance. Secondly, that the child with intellectual disability is either neglected or over protected by parents.

From Olivier and Williams (2005) study the issues emerging include: the need for strong leadership in the teaching of the mentally handicapped, need for resources, need for teachers of special education to display unique qualities, significance of the special needs parent in the teaching learning process, desire for age group appropriate curriculum and, need to keep an appropriate individualised record system for each child. Whether these issues are similar on the Kenyan scene is what this study had gone out to investigate in schools for learners with intellectual disability by interrogating the syllabus, teachers, leadership, parents, learners and resources amongst other issues as reported in chapter four of this thesis.

Arjmandnia and Kakabaracee (2011) evaluated the physical education curriculum in special schools that teach students with mental retardation in Iran. The research sampled

physical educators, school managers, content, sports space, equipment and the teaching learning process. This study also sampled the same factors alongside former students of schools for learners with intellectual disability and their parents as in the Kenyan situation.

Arjmandnia and Kakabaracee (2011) used 20 managers, 20 physical educators from 20 schools in Tehran. Within the content, they analysed the curriculum in terms of components such as goals, content selection, organisation styles and teaching experiences in conjunction with the teacher's guidebooks. It was observed that physical education led to decrease in risk for diseases such as chronic heart diseases and diabetes amongst others. It was further noted that physical education was not free play, and that motor skills picked from physical education are important components of growth and personality.

Arjmandnia and Kakabaracee (2011) postulated that the most fundamental benefits of training motor skills for intellectually disabled learners relates to the fact that these are functioning skills related to essential movement. They note that skills that should have been picked at the age of 5 years and below are still a challenge for some individuals with intellectual disability into adulthood. They observe that the intellectually disabled learner in Tehran suffers from growth delay, small body, weak muscles, retarded motor skills, alongside suffering from limited access to suitable opportunities to develop these deficiencies. They used questionnaires to pick their data. They concluded that the physical education curriculum for the intellectually disabled is not only weak, but also needs to be reviewed. Further the study noted that, physical education teachers were not

skilful, not familiar with the mentally retarded association but also not satisfied with their salaries. All these issues were also sought in this study to get a Kenyan perspective.

2.4 Effectiveness of Teaching and Learning Process of Physical Education

Effectiveness determines whether a programme has achieved its objectives (Anderson & Arsenault, 2002). Does what is going on in the programme create a situation for the achievement of the programme's objectives? Sifuna (1973), Sifuna (1977), Muthwii (1981), Abidtha (1982) and Wasanga (1982) undertook studies around the theme of classroom interaction. These studies were seeking to uncover the complex classroom situation to enable the factors that shape and influence pupils' experiences to be acknowledged. The main tools that have been used to unlock these complex classroom environments are observation schedules that fall under two main groups: interaction analysis and systematic-observations (Muthwii, 1981; Hitchcock & Hughes, 1989). This is an attempt to produce an objective and systematic account of what happens in a classroom. Researchers have used terms such as classroom interaction patterns (Muthwii, 1981), classroom climate, quality teaching (Abidtha, 1982) and, teacher effectiveness (Wamukuru, Kamau & Ochola, 2006) in order to try and decipher the complex classroom environment and achievement of the teaching /learning objectives. None of the studies mentioned above were however carried out on learners with intellectual disability. This study is an evaluation of the current status of schools for learners with intellectual disability in Kenya.

Muniu (1986) in a study to evaluate the efficacy of the Physical Education curriculum in Diploma Colleges established that staffing, time allocated to PE and facilities were

amongst the causes in reduction of effectiveness of the implementation of the PE Diploma syllabus. This study was similar to that of Muniu in that it looked at a syllabus, but different in the sense that the syllabus in question is that for learners with intellectual disability.

Ganesh, Avinash, Unnikrishnan and Kotian (2011) did a study on the mentally disabled adolescents. In the study it was noted that intellectual disability accounts for about a quarter of the world's persons with disability. Ganesh, *et al* (2011) noted that the quality of life is more significant for persons with disability than the constant psychosocial discrimination. The study was conducted with the objective of grading disability. Students between the ages of 12 and 18 in special schools were sampled. Mental disability was assessed using the Indian Disability Evaluation and Assessment Scale (IDEAS). It was noted that students with intellectual disability are capable of learning a great deal only that they need to be taught systematically and creatively. The results from this study indicated that social skills needed by the learner with intellectual disability can be enhanced through appropriate methodology. It was further noted that if the level of intelligence of the learner is low, the usual methods of classroom interaction may not suffice. Finally Ganesh, *et al* (2011) concluded by noting that life skills should be made part of the curriculum in special schools for the mentally disabled learners.

2.5 Efficiency of the Teaching and Learning Process of Physical Education

Anderson and Arsenault (2002) note that efficiency gauges how well a programme has been managed and whether the most cost effective methods have been used. Who is involved in the teaching of the programme? In this regard, the perceptions of the teachers,

qualification of the teachers, administrators and availability of the resources play a crucial role in the efficiency of the programme. Studies have been carried out on different kinds of teachers in classrooms. These include superior quality versus moderate teachers (Sifuna, 1973), direct or autocratic versus indirect or democratic teachers (Muthwii, 1981), teachers with undesirable behaviour versus teachers with desirable behaviour (Wasanga, 1982) and flexible teachers (Abidtha, 1982). None of these studies has however dealt with teachers of learners with intellectual disability especially in PE. Different variables were used to gauge what kinds of teachers exist in the classroom (Sifuna, 1973, Muthwii, 1981 & Abidtha, 1982). According to Abidtha (1982), even the trained teachers seem to display anomalies in their teaching patterns. It becomes imperative to examine how teachers in schools for learners with intellectual disability classrooms communicate and how the learners respond.

According to Lee (2002), in the teaching and learning of PE, the teacher is central in what goes on in the classroom. Further, Lee remarks that teachers create the right atmosphere for students to be involved in learning. This study also went out to note what kind of atmosphere is created in classrooms of learners with intellectual disability. Njororai (1990), in a study to assess PE resources in schools recommended the need to further establish those who taught PE in schools. It was noted that location, that is, whether PE was taught in rural or urban setting, made a difference. This study set out to establish who is teaching PE in schools of learners with intellectual disability. Secondly, the study also evaluated the use of the instructional resources in the teaching of PE for learners with intellectual disability and attempted to respond to Njororai's call for research on who is teaching PE by looking at the case of learners with intellectual disability in Kenya.

Gathua, (1990) undertook a study attempting to establish the actual practice in schools during PE lesson. It was established that, though timetabled, PE is sometimes not taught and that where it is taught, the availability of sporting facilities and equipment greatly influenced the choice and eventual involvement of the learners. Gathua assessed the instructional constraints experienced in the teaching of PE in schools for learners with physical disability in Kenya. Questionnaires, an observation tool and interview schedules were used to collect data. It was found that amongst instructional constraints identified were lack of equipment tailored for use by learners with physical disability, lack of a distinct syllabus for learners with physical disability, trained teachers and time allocated to PE. This study used questionnaires, observation tools and interview schedules to collect data. It however dealt with learners with intellectual disability unlike Gathua (1990).

Wekesa, Abosi and Amusa (1997) noted that there is need for teachers to be trained in special education. Whether teachers of PE dealing with learners with intellectual disability are trained in special education was an important concern in this study. Asembo (1997) noted that coaches of persons with intellectual disability also acknowledge how sports improve self-perception and develop social adaptability and self-reliance of the disabled. To achieve this however, there is need for training of the teachers in philosophy, principles and structures that enhance PE and special education (Mold, 1993). Njororai (1990) had established similar results as Mold (1993). This study sought to establish the professional qualification of teachers for learners with intellectual disability. Wasonga (1997) noted that school administrators play a crucial role in allocating finances hence the kind of facilities and equipment available for the teaching

of PE. None of the studies from Gathua (1990), Wasonga (1997) or Njororai (1990) dealt with school administrators of learners with intellectual disability. This study was an attempt to fill this gap.

Musangeya and Dzimba (1997) and Telewa (2004) indicate that literature on the use of resources for quality teaching abounds. Mecha (2004) acknowledges that the use of resources and the quality of teaching go hand in hand. Mogeni, (2004) undertook a study on utilization of teaching resources. To gauge quality of the teacher, Mogeni investigated curriculum, methodology, teacher/tutor qualification, the use of teaching resources and facilities. The instruments used in the studies cited above which were survey researches include: interview guides, classroom observation schedules, questionnaires, resources checklists and analysis of documents manifests (Musangeya & Dzimba, 1997; Mecha, 2004; Mogeni, 2004; Telewa, 2004). None of these studies were done in PE. Further they seem to have concentrated only on the teacher, who though significant, is not the only player in the classroom.

Wamukuru, Kamau and Ochola (2006) in a study on the implementation of Free Primary Education in Kenya and its effect on teacher expediency found that numbers of learners influence the use of teaching and learning resources. They argue that the larger the numbers, the less effectual the teacher will be. What the teachers say about use and availability of resources is one of the questions this study addresses to highlight how efficient the teaching and learning of PE is.

2.6 Relevance of the Teaching and Learning Process of Physical Education

According to Anderson and Arsenault (2002) relevance concerns whether the objectives are still appropriate and whether the programme is supported by stakeholders. This begs the question, how sustainable is the programme? Do the learners feel that the programme is still pertinent in the Kenyan situation? Ying (2008) noted that, studies in special education indicate the incongruity with which learners with disability compare to those without. According to Falson and Porret (2004), mixed results have been found relating to the amounts of physical activity between children with disability and those without.

Wekesa, Abosi and Amusa (1997) noted that in Botswana, teaching persons with disability presented several challenges to the teacher. This study went out to evaluate whether the challenges reported in Botswana are also prevalent in Kenyan primary schools for the intellectually disabled learners.

Asembo (1997) noted that learners with intellectual disability benefit from lessons in PE and further noted that learners with intellectual disability cannot be taught in the same way as normal children. This establishes the relevance of the teaching/learning process for schools with learners with intellectual disability and became a matter of focus for this study.

According to Wekesa, Abosi and Amusa (1997) for the benefits to be credible, the teacher must be trained. Further, Wekesa, *et al* (1997) recommended training for teachers of persons with intellectual disability due to the fact that learners with intellectual disability tend to function at the concrete stage of learning. This means that they tend to

have little or no ability to generalize knowledge. This study also investigated whether the teachers in schools for learners with intellectual disability were trained.

Mohsin, Khan, Dogers and Awan (2011) researched on the role parents play in the training of children with intellectual disability. They identified the multiple roles parents play in the education of children with intellectual disability. Notably parents play a vital role in the training and development of children with intellectual disability. They are considered fundamental mentors for children in early life as well as later in life. Mohsin, *et al* (2011) used two students and two parents for their study. They used various instruments to collect their data, which included diaries to monitor children. The study concluded that parents are equal partners with teachers in the training of children with intellectual disability. These conclusions were mutually felt at the designing stage of this study hence the use of parents as a sample in this study.

Admas (2009) studied intervention practices in special units in Ethiopia. The study focused on a special unit for children with intellectual disability. The data was collected through interviews of three teachers who had served for 20 years in the units. Admas (2009) noted that children with intellectual disability need to learn different behaviours alongside academic skills that would help them live independently. It was further noted that children with intellectual disability need effort, time, resources, trained manpower and other things that are prominent to bring about change in their lives. Physical education was used to address the learners' physical limitations as well as their communication and social skills. It was acknowledged that children who found difficulty in sitting and walking benefited from the teaching of physical education. Parents' involvement in the schooling of children with intellectual disability was a challenge.

Some parents were not willing to take part in the intervention process. Many parents want to see improvement without their input. It was noted that the Ministry of Education in Ethiopia showed little concern by not monitoring the goings on. The study concluded by taking cognisance of the fact that the learners showed improvement in self care, safety and communication skills after being in a school for learners with intellectual disability for a few years. This study also sought to find out whether it would draw similar conclusions given that its focus was on learners who had attended schools for learners with intellectual disability in Kenya.

2.7 Impacts of Teaching and Learning Process of Physical Education

Anderson and Arsenault, (2002) illustrated that effects and impacts measure what has happened as a result of the programme. What are the unplanned effects and long term programme consequences (Anderson and Arsenault, 2002)? According to Jowett and Lavellee (2007) in the formative years of learning, parents play a crucial role in the learners' achievements. Indeed, learners' fundamental view of themselves as competent and socially acceptable is related to their perception of how they think their parents view them. Families of Special Olympics athletes indicate significant improvements in their children's health, social skills and self-confidence due to their involvement in sporting activities (Jowett & Lavellee, 2007). These are all important attributes in PE (Ying, 2008). These studies (Jowett & Lavellee, 2007; Ying, 2008) were done out of Kenya. This study looked at the impacts of teaching/learning of physical education in schools for learners with intellectual disability in Kenya. It was interesting to involve the families of learners with intellectual disability in Kenya in a bid to corroborate the findings above.

The attitudes of families of the learners in this regard were indicators of whether the programme had an impact on the learners.

According to Shriver (2007) Special Olympics is a catalyst force in developing the world for people with intellectual disability. It is further noted that Special Olympics can play a role in helping the United Nations fulfil its global development goals (Shriver, 2007). Shriver (2007) acknowledged efforts of Special Olympics and noted that the United Nations explicitly recognises the important role sports can play in the lives of persons with disability. In this regard Special Olympics is the ultimate a learner with intellectual disability would expect after being involved in PE. This study goes out to investigate learners who have transited from the PE classes to Special Olympics as a way to gauge what has happened as a result of the programme.

Broer, Doyle and Giangreco (2005) undertook a study on the perspective of students with intellectual disability about their experiences with paraprofessionals. In developing their study it was noted that 23 studies had been carried out on special education between 1997 and 2004. To rationalise their study Broer, *et al* (2005) noted that none of these 23 studies included the voice of the students. Their study described the perspective of young adults with intellectual disability about their experience of receiving paraprofessional support in general education. They further noted that exploring perspectives of former students yielded important information about service delivery issues that can inform the educational situation. They used 16 young adults identified through the assistance of two advocacy organisations. Interviews were audio-taped and transcribed verbatim and reviewed. The finding of the study presented participants positive, negative and sometimes ambivalent perspectives about paraprofessionals as mother, friends, protectors

and primary teachers. They concluded by observing that although a small number of respondents recalled their school experiences with fondness, the vast majority of former students expressed powerful messages of disenfranchisement, embarrassment, rejection, fear and stigmatization. This study tried to capture the feelings of former pupils of schools for learners with intellectual disability in Kenya.

2.8 Theoretical Framework

Evaluations are criteria-based methods of systematically gathering worthy information. This study is informed by a multiple evaluation approaches. This entails the use of a combination of evaluation theories for design of the study. According to Bledsoe and Graham (2005) the use of multiple evaluation approach enhances the viability and fidelity of programme evaluation.

Specifically two theories informed this study. First, Kirkpatrick evaluation theory which involves a four level approach to evaluation. Many good evaluations still derive inspiration from this four criteria model (Foxon & Lybrand, 1989). This theory uses reaction, learning, behaviour and results as the levels for evaluation. Based on these four levels it captures the dynamics and interactions of the various dimensions and attributes of a programme (Eseryel, 2002).

The second theory that informs this study is the theory driven evaluation. This theory uses the syntheses of both stake holders programme logic and social science theories to explain the programmes integration of the how, what, effects and outcomes (Bledsoe & Graham, 2005). Carter (2012) notes that theory driven evaluations is an approach that examines underlying assumptions all the way from input, to outcome and finally to

impact. Sharpe (2011) explains this theory by noting that, theory based evaluation creates basis of evaluating relatively uncontrolled programmes. Further, it supplies a conceptual basis for reforms and improvements of what exists. Coryne, Noakes, Westine and Schroter (2011) acknowledged that evaluation theory describes and prescribes what evaluators do or should do when conducting evaluations.

These two theories, viz, Kirkpatrick's four level theory and the theory driven evaluation, contextualise the Anderson and Arsenualt (2002) evaluation criteria of rationale, effectiveness, efficiency, relevance and impacts which the researcher chose to use in this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section is divided into eleven subsections. These are: Introduction, the research design, the target population, sample size and sampling procedures, research instruments, validity of the research instrument, reliability of the research instruments, data collection procedures, data analysis techniques and ethical concerns.

3.2 Research Design

This study is an evaluation of the teaching and learning of PE for learners with intellectual disability. This is an evaluation research involving descriptive survey. Evaluations utilize the same methodology as traditional social research (Trochim, 2006). This is a design which involves determining the views or practices of a group through interviews and questionnaires (Baumgartner, Strong & Hensley, 2002). Evaluations assess the worthiness of a programme through determining a number of elements. For an evaluation to be complete, it must assess the dimensions of a programme that include rationale of the programme, its effectiveness, efficiency, relevance and impacts (Anderson & Arsenault, 2002; Gagne, Briggs & Walter, 2005). Additionally, evaluations focus mainly on making decisions about programmes, products and practices (Gay, Mills & Aivasion, 2006). Evaluation falls under both qualitative and quantitative methods of data collection (Hitchcock & Hughes, 1995). This study investigated how rationale, effectiveness, efficiency, relevance and impacts affect the teaching and learning process

of PE and how this related with the syllabus and stake holders expectations with regards to learners with intellectual disability.

3.3 Target Population

Schools for the Mentally Handicapped are spread all around the country. These institutions cater for learners who, by virtue of their intellectual disability, are rated as either severe or profound. There are 44 such institutions in Kenya (Appendix IX) catering for 42,864 mentally impaired learners (Republic of Kenya, 2009). This study targeted principals, teachers and learners from the 44 schools for learners with intellectual disability, former learners of schools with intellectual disability and their parents. This study targeted the final year learners since they are expected to graduate from these institutions.

Learners with intellectual disability are classified into mild, moderate, severe and profound. These terms emphasise the levels of intellectual functioning of the learner (Republic of Kenya, 2009). Two main kinds of schools cater for these learners. First, special schools set-aside for learners with intellectual disability rated as severe and profound; these are also referred to as schools for the mentally handicapped. Second normal schools with special units catering for learners with intellectual disability amongst other disabilities. Learners with mild to moderate intellectual disability are usually enrolled into these normal primary schools with special units. This study targeted learners from mentally handicapped schools. Out of the 44 schools mentally handicapped in Kenya (Republic of Kenya, 2009) targeted by this study 35 schools were surveyed.

3.4 Sample Size and Sampling Procedure

Simple random sampling was used in this study. The sample was developed from an alphabetical list of schools. Using random numbers (King'oriah, 2004) out of the 44 schools for learners with intellectual disability, 35 schools were selected. A group of 30 (n=30) is usually considered an acceptable minimum sample size (Baumgartner, Strong & Hensley, 2002). Four of out of the 35 schools were randomly selected for the pilot study. Those schools used for the pilot study were not used for the final study.

Once an institution was selected the teachers of the final year group in those schools were sampled during the teaching of the PE lessons. The sampled classes were put into small groups of five to twelve children for the focused group discussion. This depended on the size of the class.

In the case of families, 34 parents were randomly selected from a list of 40 provided by administrators of schools. This list was compiled by the researcher. These parents' names were numbered alphabetically as per the first names after which the 34 were randomly selected using a list of random numbers. Out of the 34 parents sampled, four were used for the pilot study. Those used in the pilot study were not used in the main study.

In the case of former students, 48 were randomly sampled. The aim was to use 50 former learners. However, two of these former learners were not coherent enough and the information gathered from them could not be used. Four former students were used in the pilot study. Those four were not used in the final study.

3.5 Research Instruments

The teaching learning process is a compound exercise that entails a number of formal procedures, people and activities. This includes: syllabus, teachers, school administrators, learners and their parents. This process being an evaluation, even former learners had to be part of this search to understand the teaching learning process. In this regard and due to the nature of this research, eight instruments were developed.

A syllabus review documentary analysis form was developed (Appendix I) to critique the syllabus. The items were developed using Ralph Tyler's model on curriculum design. From the original four questions in Ralph Tyler's model, 17 items were developed for this study (Anderson and Arsenault, 2002).

Data from the teachers was collected using a questionnaire for teachers (Appendix II), and a separate one for principals/ deputy principals (Appendix III). Questionnaires have the advantage of collecting large samples of information (Kombo & Tromp, 2006). In the case of the questionnaire for teachers, the questionnaire was divided up into three sections. In section A of the questionnaire the bio data of the teacher was captured, in section B, information on teaching physical education was captured while section C captured information on instruction. Further, the researcher sought to find out about the teachers years of services, the use of lesson plans, the adherence of the lesson plan to the scheme of work, the classroom climate created by the teacher, and finally information on constraints the teacher faced when seeking for content, information, equipment and facilities. There was a section D, where the researcher sought to find how the teacher felt

about exposure of the learners to external games and sporting agents. In the questionnaire for principals (Appendix III) the researcher sought to find how the

On the question of school principals/ deputy principals the questionnaire sought to find out about the goals of physical education in the school, the principals' knowledge on the teaching of physical education in the school and supervision of the teaching of physical education. Further the questionnaire sought to find how the principals allocated funds to different subjects in the school, policy of government on funds allocation, government input in the school, consistency of government in put, number of facilities in the school, the proposals principals' had for physical education in the following year, the principals' training and parents' input in the schools.

Data was also collected using an observation tool (Appendix IV). The essence of this observation is to capture what actually happens in classes of physical education during the teaching and learning process. The tool used for classroom observation was informed by two processes. One, the fact that a physical education class runs through six distinct phases, and two, that there are some expectations that must be fulfilled by the teacher that lend to a successful lesson. The six phases of a lesson are initiated by a warm up phase where the learner's muscles are prepared for the activities that will follow. This is specific to the muscles that will be used in the expected activities. This is followed by a compensatory phase where flexibility exercises are done to prepare the joints that will be used in the activities. The third phase entails the actual teaching of a new skill. Phase four is practice of the new skill and reinforcing of previously taught skills in groups to allow the teacher to see each individual practise the taught skill as well as some of the recently taught skills. Phase five is a games session for enjoyment by the learners as they continue

to practice the taught skills in controlled games like session. The class is brought to an end by the sixth phase which entails a cool down session to allow the learners to get their breath back and also allow for active recovery.

The observation tool also captured other dynamics that happen in classrooms. These dynamics include expectations of teachers that prop up a lesson which include: the dressing, personality, audibility, capacity to manage discipline, use of a lesson plan, mastery of content by the teacher, the use of facility and, the use of equipment during the lesson. These expectations were conceptualised from the current assessment tool used to observe the student teachers from the University of Nairobi during teaching practice and modified to take cognisance of the dynamics of a PE lesson.

For the availability of resources, an inventory (Appendix V) was used. The intention of the inventory was to find out about all the equipment and facilities available to the teacher for the teaching of physical education.

Learner's perceptions were collected via an interview schedule for learners (Appendix VI). Interview schedules have the advantage of having open ended questions, flexible enough for the researcher to note unexpected responses and proceed with further exploration (Baumgartner, Strong & Hensley, 2002). Further, the learners were organised into focus groups to allow the learners to actively participate in discussions. Focus groups allow the participants to freely express themselves (Baumgartner, Strong & Hensley, 2002). The interview schedule sought information on the learners feeling while in classes of physical education, the school subject learners most enjoyed, most appreciated part of the lesson, learners' and motivation for the physical education lesson.

An interview schedule was used for family expectations (Appendix VII) and for former learners' transition to Special Olympics (Appendix VIII). The interview schedule for former learners with intellectual disability sought to find out how long ago the former learners had left school, the sports played while at school and after leaving school, level of participation, current frequency and level of participation in sporting activity, distance of current playing facility from former learners school, who administers the current sporting activity and, the level of current participation of the former learner's parents' in the sporting activities of these former learners.

The family interview schedule sought information on whether the learners were different after going through the programme at school, involvement of former learners with Special Olympics and continued parental participation in the sporting lives of these former learners.

3.6 Validity of Research Instruments

Validity concerns whether what is intended to be measured is what is actually being measured by the instrument (Nachmias & Nachmias, 1996). The two questionnaires (Appendices II and III), the document analysis form (Appendix I), the three interview schedules (Appendix VI, VII and VIII) and a class observation schedule used for this study were subjected to a validity test. Initially, the questionnaires and the interview schedules were given to at least five lecturers in the School of Education at the University of Nairobi. This captured concepts that the researcher may have missed out. The interview schedules were considered by the same lecturers to determine whether the questions asked were at the level of the learners, parents and former students. The idea

behind this validation exercise was to find out whether the questionnaire, the syllabus review document and the interview schedule measured what they were intended to measure. Both the Observation tool (Appendix IV) and the resource availability inventory (Appendix V) were given to three PE lecturers to check on content validity.

Seven instruments- the questionnaire for teachers, questionnaire for principals, interview schedules for parents, interview schedule for former learners, interview schedule for the learners and the observation tool and the resources inventory were each piloted in four schools. Random sampling method was used to select the schools and participants of the pilot study. The schools that were used for the pilot study were not used in the main study. Four parents and four of former students were used to pilot the interview on the family. This helped the researcher to find out whether the instruments developed were able to answer the research questions set for this study. For the syllabus review document a syllabus for the visual impaired was used to see how well it worked.

3.7 Reliability of Research Instruments

Reliability is the extent to which an instrument contains variable errors. Out of the eight tools developed for this study, the two questionnaires for principals and teachers and, observation tool used test-retest to seek out the tools reliability (Nachmias & Nachmias, 1996). The retest was done after a period of two weeks. Two of the schools selected for the pilot study were used for test retest. The findings from the two tests were compared to ascertain reliability. A retest reliability of at least 0.6 was sought. A population Pearson correlation coefficient was computed using the formula:

$$r^2 = \frac{\text{Total variation} - \text{Unexplained Variation}}{\text{Total Variation}}$$

The study found correlation efficiency for the questionnaires tools and the observation tool:

i.	Questionnaire for teachers	0.89
ii.	Questionnaire for principals/ deputy Principals	0.91
iii.	Observation tool	0.96

For the three interview schedules for learners, former learners and parents, the reliability was determined by restating the questions after the initial encounter. For the syllabus review document that was used to interrogate the syllabus, the syllabus for learners with visual impairment (Republic of Kenya, 2001) was used. The researcher and a lecturer from the physical education department at the University of Nairobi both used this tool to interrogate the syllabus for the learners with visual impairment. A comparison of the two results computed using the Pearson correlation coefficient found a coefficient of 0.95. The eighth tool the inventory had extra space to capture whatever else may have arisen in the field.

3.8 Data Collection Procedures

Initially, permission was sought from the Ministry of Higher Education Science and Technology, whose mandate it is to authorize research in Kenya. A permit was issued. Once this was done, the Ministry of Education was then approached for permission to carry out research within institutions. Administrators of the schools were consulted and the relevant teachers of physical education identified and alerted about the study. Participants were requested to volunteer to participate in the study.

Questionnaires were administered by the researcher directly to the teachers and schools' administrators. Class Observation tool was used when class was in progress. Learners were organized as focus groups of about five to twelve for discussions. The consensus of the learners was captured. Parents of former learners and former learners were identified through the administrators of schools for learners with intellectual disability and the interview schedule was administered to them individually. Where information not in the interview scheduled was offered, the researcher took field notes to enrich the study.

3.9 Data Analysis Techniques

Data captured by the syllabus review document (Appendix I) was dealt with qualitatively (Miles & Huberman, 1994). Questionnaires on the teacher (Appendix II), school principals (Appendix II) and resource inventory (Appendix V) were summarized and analysed qualitatively and quantitatively.

Data captured through the classroom observation tool (Appendix IV) was qualitatively analysed. This was followed by cross tabulating some of the observations with a few items from the findings derived from the questionnaire on teachers (Appendix II).

Interview schedule for the pupils, for the families and for former students was analysed both qualitatively and quantitatively. For the qualitative data, content analysis was done to identify similar and different characteristics emerging from the data. For the quantitative data, the information was computed into frequencies and percentages. For the data from the observations tool (Appendix IV) chi-square was used.

Chi-square tests were done on the data collected through the classroom observation tool. Chi-square is an inferential test whose null hypothesis claims the absence of any

relationship between the variables of interest. A calculated statistic is assessed alongside the critical statistic at the corresponding degrees of freedom. If the calculated statistic is greater than the critical statistic (in which case significance is established at 0.01 levels or 0.05 levels or 0.1 level of testing), then the null hypothesis is rejected. It is important to note that only the relationships that were found to be statistically significant are reported in each level of the five activities from the introductory to the final stage. Further, for the chi-square test, it is assumed that the sample is random, the population is normally distributed and observations are independent.

3.10 Ethical Concerns

Permission to conduct this research was sought and given by the National Research Council. Before the researcher collected any data, further permission was sought from the principals of schools where the fact that this was a research for the purpose of pursuing a degree was explained to each principal individually. It was noted that the information given would be treated confidentially, no names or institution would be mentioned anywhere in the thesis thus the use of pseudo-names and coding was deemed appropriate for this study. The research also approached each teacher, former learner and their parents and gave similar explanations and assurance before embarking on the data collection exercise. For the learners, a consent letter was given asking them to raise any objection if unwilling to take part in the study.

CHAPTER FOUR

FINDINGS AND DISCUSSIONS

4:1 Introduction

This chapter presents results of analysis of the data collected based on the research questions documented in section 1.5. This is preceded initially by background of the participants.

4.2 Demographic Information on Participants

Schools for the mentally handicapped cater for learners with severe and profound intellectual disability. Learners with either mild or moderate intellectual disability are catered for in special units found in primary schools all over Kenya. The teachers in schools for the mentally handicapped are supposed to have qualification of at least P1 Certificate and a further qualification from Kenya Institute of Special Education (KISE) in the teaching of special needs education.

All the teachers from 35 sampled schools cooperated with the researcher in offering information. Out of these 31 were used for the final study while four schools were used for the pilot study. The four schools used for the pilot study were excluded from the final study. All the 31 schools sampled responded to the questionnaire. This was due to the fact that the researcher was willing to come back a second and third time until the information was collected. One principal was however away on study leave and the acting principal categorically refused to offer information on his behalf even though he allowed the researcher access to the teachers and the learners. This accounted for a return

rate of 100% for all the questionnaires and observation tools directly related to the schools, except the case of the principals where the return rate was 96.77%. Of the 50 former learners who sought to participate in this study, 48 were used. Four former students were used in the pilot study and all gave comprehensive responses. Two learners were not coherent. This gave a return rate of 91.67%. The four former students used in the pilot study were not used in the main study. All sampled 34 parents of the former learners with intellectual disability cooperated thus giving a return rate of 100%. Four parents used in the pilot study were not used in the main study.

4.3 Findings on Research Question One: What is the rationale for teaching and learning process of physical education for learners with intellectual disability?

The rationale of a programme goes out to answer the question whether or not the programme makes sense and whether or not it will attain the objectives embedded in the programme to ensure that the set goals are achieved. This study went out to interrogate the syllabus and seek views of principals and teachers about the syllabus document. In this regard the study sought what is considered the environmental context of the programme. It also sought to find out to what extent the teachers' interpretation of the syllabus during the teaching/learning process makes sense and ensures attainment of the set objectives for learners with intellectual disability. Finally parental input and feelings of the learners about physical education teaching was sought.

A syllabus is a plan for learning experiences that are provided by a school (Oliva, 2009). It carries the directions of a programme; hence an analysis of the syllabus should be able to answer the question whether or not the programme makes sense. The study established

that the Kenya Institute of Curriculum Development (KICD) has a special needs syllabus for learners with mental handicap in line with the national goals of education (Appendix X). These national goals are reflected in the objectives of special needs education and implemented through objectives for learners with mental handicap (Republic of Kenya, 2009). The syllabus is a cardinal document that indicates to the Ministry in charge of education that aspirations of Kenyans, captured in the objectives of education, including for learners with intellectual disability, is actually taught as expected. The teacher in schools for learners with intellectual disability is supposed to be the guide that ascertains that objectives set out in the syllabus are attained.

The syllabus contains the overriding national goals of education which are captured in Appendix X. These are well thought out goals that capture the aspirations of the Kenyan people. These goals seek to create a well rounded morally upright patriotic citizen who is a self driven individual. The goals also seek to promote socially responsible, environmentally and health conscious people with a positive attitude. This implies that the goals in the syllabus are cascaded down from national goals and these goals meet the aspirations of the Kenyan people. This suggests that these goals make sense for learners with intellectual disability.

Objectives of special needs education are derived from the national goals of education which are captured in Appendix X. These are wholesome objectives that to a large extent, if followed by the teachers of learners with intellectual disability, will create the human capital that the government of Kenya envisaged its education system to create. These objectives contextualise the spiritual, mental, social and physical needs of the learners. The objectives' intentions are to equip learners with suitable basic foundation, self

concept, attitudes, and analytical skills which will allow the learners to excel in future. The objectives also aim to equip learners with skills that will rehabilitate and promote independent living of the learners. These objectives which are domesticated from the national goals of education, presume that disability is not inability hence, make sense to learners with intellectual disability.

Objectives of education for learners with mental handicap are developed from objectives of special needs education. These are crosscutting objectives, an indication that the programme taught in schools for learners with disability makes sense. As long as the teachers adhere to these objectives, the attainment of these objectives will lead to attainment of the goals of this programme for learners with intellectual disability. The objectives of education for learners with mental handicap, as the Ministry of Education refers to learners with intellectual disability, are captured in Appendix X. These objectives include: to equip the learners to be able to interact with their peer, acquire skills that enable learners to earn a living, assist in developing emotional security, equip learners with literacy and numeracy skills, occupy them in leisure, develop independence, self adjustment skills and, enable them to become productive in society. This implies that these objectives are wholesome and achievable. Further, these objectives domesticate and mirror the objectives of special needs education (Appendix X). Based on Appendix X, the objectives that are set for learners with intellectual disability are commensurate with learners with intellectual disability. This agrees with a study by Faroog, Ajmal, Rehman and Nafees (2011), who found similar results when they interrogated the curriculum of the learners with hearing impairment in Pakistan. Faroog, *et al* (2011) used the word apt to indicate that the curriculum that had been interrogated was commensurate with the

relevant level of learners. Further Faroog, *et al* (2011) implied that the programme investigated made sense. This study returns similar findings on the Kenyan situation as well, further suggesting that the outlined objectives make sense.

An analysis of the syllabus (Appendix X) for schools with learners' with intellectual disability noted that the syllabus placed physical education under recreation and leisure. The content is brief and incomplete. In fact the third sub-heading on content which states, "factors to consider in choosing leisure and recreation activities", has the content missing. The physical education section of the syllabus for learners with mental handicap (Republic of Kenya, 2009) is called recreation and leisure. This may lead to the conclusion that there is need to review and edit this important document. In one of the schools visited, one of the teachers observed that physical education is different from leisure and recreation as stated in the syllabus. This was captured as part of the field notes by the researcher. This suggests that achieving the objectives of the content of leisure may not lead to the attainment of the goals for teaching physical education to learners with intellectual disability.

This study set out to seek the situation evident in schools for learners with intellectual disability on whether teachers adhere to the syllabus that had been developed by the educational authorities. Table 1 shows the results of the data.

Table 1: Teachers' Adherence to Physical Education Syllabus for Learners with Intellectual Disability

Adherence	Frequency	Percentage
Yes	11	35.48
No	3	9.68
Adapt	17	54.84
Total	**31**	**100.00**

Table 1 shows that only 35.48% (n=11) of the teachers claimed they adhered to the syllabus while 54.84 % (n=17) adapted the syllabus to the issues on the ground. However 9.68% (n=3) of the teachers do not adhere to the syllabus. This suggests that the majority of the teachers (64.52%) claimed they may not have adhered to the syllabus document for learners with intellectual disability.

This implies that about two thirds of the teachers for learners with intellectual disability teaching physical education do not see the sense in adhering to the syllabus while about one third of them feel that the syllabus is adequate and either chose to use it or modify it to meet the needs of teaching physical education. This also implies that approximately a third of these teachers in schools of learners with intellect disability claim to adhere to the syllabus, an indication that the teachers may have little faith in the activities set out in the syllabus. Ideally, the syllabus should be the guide for all teachers and they should therefore adhere to it if indeed they believe it makes sense.

Each teacher must use this syllabus document to maintain the standards set by the government. The fact that the majority of teachers did not feel the need to adhere to this proclaimed guide may indicate that there is an underlying challenge with the syllabus. Also, the fact that a majority of teachers chose to adapt to something else is also telling of

what these teachers feel about this syllabus for learners with intellectual disability. This may imply that teachers at schools for learners with intellectual disability have thought through and have decided that adhering to this syllabus as it is may not meet the needs of learners with intellectual disability, hence, the need for adaption. This could be a pointer to the fact that teachers do not think that the syllabus meets the rationale set out for learners with intellectual disability.

In the field notes captured by the researcher, one of the teachers made the observation that the syllabus is not quite thought through in terms of activities hence may not give clear direction to the teacher. The same teacher further indicated that it is difficult to teach activities based on the syllabus as structured. Another teacher noted that he did not bother to use the syllabus because it offers no direction yet another teacher acknowledged that he has never seen the syllabus.

Kamere (2004) in a study in Kenya on education for learners with physical disability suggested that, there was need to examine whether the special needs syllabus is applicable to the learner. Kamere's study implied that sometimes a syllabus may be present, but may not apply to the learners it is supposed to serve. This study notes that, while there is a syllabus in place for the learners with intellectual disability, majority of teachers in these schools still opt to adapt rather than use the authorised syllabus. This implies that the syllabus used currently may not be apt, hence justifying Kamere's (2004) suggestion to examine whether special needs syllabuses are applicable to the population they intend to serve. The findings of this study also concur with Gathua (1990) and Wekesa, Abosi and Amusa (1997) who had also expressed concern that there was a

tendency by teachers to adapt instead of using what was in the syllabus for learners with special needs.

The study also sought to find out the activities taught in schools for learners with intellectual disability. These activities would indicate whether the programmes objectives make sense as set out in the syllabus. The results are shown in Table 2.

Table 2: Sports Skills Taught in Schools for Learners with Intellectual Disability

Skills Taught	Frequency	Percentage
Handball	2	6.45
Athletics	5	16.13
Soccer	18	58.06
Netball	3	9.67
Softball	1	3.23
Basketball	1	3.23
Volleyball	1	3.23
Total	**31**	**100.0**

Table 2 indicates that 6.45% (n=2) of the teachers taught handball, while 9.67% (n=3) taught netball, 3.23% (n=1) taught softball, 3.23% (n=1) taught basketball, 3.23% (n=1) taught volleyball, 16.13 %(n=5) taught athletics and, 58.06% (n=18) taught soccer.

This finding suggests that a majority of teachers teach a variety of big ball sports with soccer (58.06%) being the most popular though the syllabus had suggested activities such as singing and play. It is imperative to note that none of the teachers actually adhered to the syllabus on the day they were observed by the researcher, even though 35.48 (n=11) had stipulated that they adhere to the syllabus. This shows a disconnect between what is on the ground and what is proposed in the syllabus. This suggests that there is need to review the curriculum to meet contemporary demands. The need to review the syllabus

tends to agree with Faroog, Ajmal, Rehman and Nafees (2011) in a study in Pakistan in schools for learners with hearing impairment where they recommended the need to review the curriculum from time to time to meet market and contemporary needs. When the syllabus for learners with intellectual disabilities was analysed, it was not clear why the teachers chose to teach ball games yet they were expected to teach recreation that included singing, storytelling, dance, hosting, play, making cards and cleaning pets. This anomaly may have been created by the fact that teachers were taught how to teach physical education and not leisure and recreation as stated in the syllabus.

Sentiments from the teachers about adherence to the syllabus attempt to explain the situation on the ground. Two teachers noted that there are inadequate facilities and equipment to be able to follow a structured programme. In this regard, teachers tend to flow with what is available. Another teacher noted that resources within the school are overstretched, and that since physical education is not a priority, provision for it is not given preference. These statements were oblivious to the facts that the syllabus suggested more basic and less costly set of activities compared to the ball games the teachers opted for.

The syllabus contains the objectives that the authorities within the realms of education are expected to impart. When the teachers who are supposed to be the agents to implement these objectives choose purposely to adapt to something different, then the need to question the syllabus becomes justifiable. This indicates a possible disconnect between the syllabus and what teachers for learners with intellectual disability feel the objectives should be. These arguments suggest that a majority of the teachers do not believe that the syllabus provides an opportunity that meets the objectives of learners

with intellectual disability. This could also imply that these teachers in schools for learners with intellectual disability are not certain that this syllabus makes sense.

The specific objectives of physical education for the intellectually disabled learners are as captured in Appendix X. They include identification of leisure and recreational activities and making choices of activities for enjoyment and participation in excursions and camps. This implies that the catch phrases in these objectives are to identify state, make choices and participate. All these are verbs that are measurable. If the teachers in schools of learners with intellectual disability apply these objectives as stated they should be able to identify these actions. The specific objectives set out, even though they could be interpreted by different teachers in many different ways, are actually measurable.

It is noted that in schools for learners with intellectual disability, chronological age is not a significant factor (Republic of Kenya, 2004). Learners are quantified by their mental and health age. In a class their diversification of age ranges from 7 years to 21 years. In this regard it is left to the teacher to provide learning opportunities that are at the mental and health level of the learner. The syllabus (Appendix X) seems to take this issue into account and to offer activities that cut cross age lines even though, as noted earlier, these activities are in the area of leisure and not in physical education. This suggests that the syllabus for learners with mental handicap takes cognisance of the age differences in classes for learners with intellectual disability.

To conclude about the syllabus in relation to the rationale criteria, in the current state, the syllabus document caters for activities in leisure and recreation while the discipline taught at the schools for learners with intellectual disability is physical education

(Republic of Kenya, 2009). In this regard the document seems ambiguous and may not meet the interests of the learners. Suffice here to therefore state that the syllabus used in the teaching of physical education in schools for learners with intellectual disability does not meet the interests of the learners.

While singing, storytelling and play are a significant part of growing up, this could also be captured in the area of teaching language. Activities that develop the physical fitness component of these learners could have been more appropriate here. Indeed it is noted that teachers of learners with intellectual disability have tended to recognise this anomaly and have chosen big ball sports as noted in Table 2 as opposed to singing, storytelling and play.

The school principals play a significant part in dictating the environment in which physical education operates (Dart, Didimalang & Pilime, 2002). The *mode operandi* of the institution depends on what is allocated to physical education. This is expressed through what the principals believe the goals of the school are. When the principals of the schools for intellectually disabled learners were asked what they believed the goals of physical education were in their institutions they came up with the following statements as captured in Table 3.

Table 3: Goals of Physical Education as Noted by Principals in Schools for Learners with Intellectual Disability.

Goals of Physical Education	**Frequency**	**Percentage**
Enjoyment	3	10.00
Fitness	12	40.00
Learning New Skills	7	23.33
Health	2	6.67
Mobility	4	13.33
Holistic Education	2	6.67
Total	**30**	**100**

All these items listed in Table 3 are the rich goals of physical education. This implies that the principals of schools for the intellectually disabled learners understand the importance of physical education which is education through the physical. These are: enjoyment (10.00%- n=3), fitness skill development (40.00% - n=12), health (6.67%- n=2), mobility (13.33%-n=4), holistic education (6.67%-n=2) and learning of new skills (23.33%-n=7). These concepts are embedded in the teaching of physical education for learners with intellectual disability.

This suggests that principals of schools of learners with intellectual disability appreciate the holistic nature of physical education and recognise the values of the multifaceted capacity of learning that is activated while teaching physical education. This is a positive attribute that needs to be encouraged. This implies that the principals believe that this programme makes sense.

Principals were asked for the input of parents for learners with intellectual disability. Input of parents is an indicator on whether the parents assume that the programme makes

sense to them. Parents of the learners with intellectual disability are amongst the main stake holders. Table 4 shows the parental input as noted by the principals.

Table 4: Parental Input in Schools for learners with Intellectual Disability

Parents Input	Frequency	Percentage
Fees	20	66.66
Transport	3	10.00
Social Support	5	16.67
Nothing	2	6.67
Total	**30**	**100.00**

The information in Table 4 indicates that parents' input is basically obligatory, that is, school fees (66.66%- n=20), transport (10.00%-n=3) and social support (16.67%-n=5) to take care of issues directly related to the learner such as first aid and incidentals. Other than that the schools receive no other financial support from the parents.

This implies that apart from the obligatory fees, parents of learners with intellectual disability do not make any further input in the learning of their children. This is an indication that parents for learners with intellectual disability make minimum financial input to schools for learners with intellectual disability. This may suggest that the parents do not believe that this programme makes sense.

Other issues related to parents that were raised by the principals included lack of interest in the wellbeing of the learners once they were delivered to school. One principal intimated that parental support was limited and wanting. It was noted by one teacher that some learners were even physically abused by their parents. Another challenge noted was inconsistence of learners' attendance of classes with no explanations. One teacher

quipped that parents are non-cooperative, assuming the responsibility usually shift to government once the child is admitted to school. Another teacher noted that since there were no examinations for these learners, parents do not bother to follow up once the students are admitted to the school. This shows lack of interest by parents in whether the learners achieve the objectives of the programme. This ends up demoralising the teachers.

Admas (2009) found similar traits by parents in Ethiopia. Admas noted the significance of parents in the schooling system for learners with intellectual disability, but decried the unwillingness of parents to be directly involved in the learning of their children with intellectual disability. Admas (2009) concluded by observing that these parents expected to see improvement without their input. Jowett and Lavellee (2007) also noted that parents play a crucial role in learners' achievements and that learner's view of themselves as competent and socially acceptable people is pegged on their perception of their parents' approval. This suggests that although the role of the parents in the learning and general progress of learners with intellectual disability is crucial, these parents do not value the programme for learners with intellectual disability.

The learners were asked how they felt while undertaking physical education classes. Table 5 shows their responses.

Table 5: Learners Expressing the Feelings of Attending a Physical Education Lesson in Schools for Learners with Intellectual Disability.

Expression for Class	Frequency	Percentage
Enjoyment	18	58.07
Fun	2	6.45
Good	5	16.13
Happy	4	12.90
Excitement	2	6.45
Total	**31**	**100.00**

It is noted from Table 5 that all the expressions used by the students to describe their feelings during the physical education lesson were all (100%- n=100) positive oriented, whether it was about enjoyment (58.07%-n=18), happiness (12.90%-n=4), good (16.13%-n=5), excitement (6.45%-n=2) or simply fun (6.45%-n=2).

This may also indicate that the students felt some attraction towards physical education. This suggests that learners feel positively about the atmosphere created during the physical education lesson in schools for learners with intellectual disability. The feeling the learners get while in a classroom plays a part in the creation of a conducive atmosphere for learning. Whether the learners are happy or sad enables learning to take place or not to take place respectively. Implicitly therefore pupils in school for learners with intellectual disability believe that this programme makes sense.

Findings which answer the questions on whether the programme made sense and whether attainment of programme objectives ensured attainment of the programme goals can thus be summarised as follows:

i. The syllabus document provided for learners with mental handicap has objectives for the learners with intellectual disability cascaded from the national goals. The

syllabus was however incomplete, implying the need for its review. Further interrogation of the syllabus document indicates that:

a. This syllabus was for the teaching of leisure and recreation while what was taught and timetabled for in schools for the intellectually disabled is physical education. This implies teachers trained in the traditional physical education system may find it difficult to conceptualise the exact needs of this syllabus. The specific objectives while measurable tended to be for leisure and recreation and not for physical education. The implication for this is the need to review this syllabus so that it makes sense to the teacher.

b. The educational goals set out by the syllabus document were commensurate with the learners of intellectual disability which are to develop human capital by socialising these learners. This implies that attainment of the syllabus objectives would ensure attainment of the programmes goals.

c. The syllabus was able to identify activities that could be used at all ages for both intellectual and chronological ages. This setting also allows for the varied ages that are standard in these classes to be taken care of.

ii. The content was broad and may allow for many interpretations depending on background, training and experience. Some terms used such as ‘play’ are too broad and need further quantification. This implies the need to create a syllabus that allows for a standard interpretation by all teachers.

iii. In terms of adherence to the syllabus, a majority of the teachers noted that they did not adhere to the syllabus document in the design of their schemes of work and lesson plans. They attributed this lack of adherence to a number of reasons, one which included not having seen the syllabus. This implies that there is need for better supervision by the principals and quality assurance staff from the Ministry of Education.

iv. Principals who lead institutions for learners with intellectual disability appreciate that physical education plays a part in creating holistic education for the learner with intellectual disability hence suggesting that this programme makes sense. This implies that the teaching and learning process for physical education in schools for learners with intellectual disabilities is in good hands.

v. Parents of learners with intellectual disability tend to show little concern for their children once they deliver them to the school. This suggests that parents may not feel that this education is sufficiently significant for their children with intellectual disability. This may also point to enlighten parents about the significance of their roles in the teaching and learning process of learners with intellectual disability.

vi. Learners with intellectual disability believe that physical education is an enjoyable discipline and consider it their favourite lesson implying they believe it makes sense.

The implication of the findings on the criteria of rationale thus suggests that a syllabus, which is a policy document, is in place to guide the teachers and administrators in schools

for learners with intellectual disability. However, a majority of teachers have opted not to use it blaming the structured inadequacies inherent in this policy document. Overall, key stakeholders except the parents involved with schools for learners with intellectual disability lend support to this programme suggesting it makes sense and that the attainment of the programmes' objectives ensured the attainment of the programmes goals.

4.4 Findings on Research Question Two: How effective is the teaching and learning process of physical education for learners with intellectual disability?

Effectiveness entails achievement of objectives. In this regard stakeholders in the teaching and learning process for learners with intellectual disability must be involved in assessing whether the said objectives have been achieved. The overarching objective of the programme for learners with intellectual disability is to create human capital out of the products of this programme. To achieve this objective a number of indicators are used. This includes: development of individualised learning through the policies in the syllabus, classroom climate as created by the principals, teachers, learners, availability of resources and the parents' interest in the teaching learning process of these learners with intellectual disability.

The essence of education is to create an individual (Ying, 2008). One method of achieving this is through individualised instruction. Divisioning is a process used to sort out players by level of capacity of skill where athletes are graduated in terms of competency so that each athlete is able to play at his/her own level of competence (Shriver, 2007). Divisioning is an attempt to individualize learning so that the learner is

not discouraged by participating in an activity that will discourage the learner due to the difficulty of the task and the competition around the learner. The syllabus for the intellectually disabled learner is set out broadly and does not seem to take cognisance or demand that the teacher takes care of the issue of divisioning. The content in the syllabus is laid out in terms of song, dance, play, hosting, making cards and cleaning pets. Based on these arguments it may be suggested that the syllabus as cited does not take care of the issue of divisioning.

Oliver and Williams (2005) in their study on challenges that face the teaching of learners with intellectual disability noted that education at this level must be more than just following a prescribed curriculum. They went on to suggest that it was the responsibility of the teacher to provide quality and highly individualised goal directed instruction. This study also discovered that the syllabus does not encourage individual instruction. One teacher decried the fact that the syllabus did not take cognisance of the fact that these learners had varied skill levels. The teacher suggested the need for divisioning otherwise some learners would be denied the opportunity to meet their potential in classes of physical education.

While the syllabus (Appendix X) set out for the learner with intellectual disability does not necessarily lay out resources, the activities planned tend to suggest the use of basic resources. Singing and dancing are not high resource prone activities. This implies that the current syllabus for learners with intellectual disability as laid out currently suggests the use of basic resources in the teaching of physical education.

The teachers were asked whether they considered their teaching to be individualised. It is noted that 80.65% (n=25) of the teachers believe that the instruction they are delivering constitute individualized instruction while 19.35% (n=6) did not think so. This implies that a majority of the teachers in schools for learners with intellectual disability felt that they offer individualised learning.

The essence of education is to create individuals at the end of the process (Ying, 2008). To achieve this, the lessons taught need to take care of individual differences. A majority of the teachers of physical education for learners with intellectual disability believe they cater for individualized learning. The fact that they recognized this need for individualized learning is important as learners have varied capacities and capabilities. The teacher's responsibility is to attempt to benefit the learners by exploiting these individual strengths and weakness. To achieve this, the teacher tries to make learning as individualised as possible. While the teachers felt they offered individualised instruction, the lack of divisioning is an indicator that teachers in schools for learners with intellectual disability tend to offer generalised as opposed to individualised instruction. This implies that to some extend generalised teaching may not lead to individual learners that the objectives of education strive to create.

The climate in a class is created by the teacher, the instruction method and the other learners in the class. The learners were asked what they thought of their classmates. Up to 77.42% (n=24) of the learners with intellectual disability are confident that their peers are their friends while the other 22.58 % (n=7) do not think all the other learners are their friends. This suggests that a majority (77.42%-n=24) of the learners in the class believe that their peers like them hence creating a warm classroom environment.

Peer relation is a component of classroom climate (Flinkelstein, 2001). Other learners dictate whether a particular learner will enjoy his/her class experience or not. If the other learners are friendly then the experiences in class will be pleasant for the learner. If the other learners are unfriendly, the climate in the class will be negative, making the class a hostile environment for a learner. In this regard whatever the programme would have set out to achieve will not be achieved. In the case of this study, a majority of the learners felt that the classroom climate created by their peer was positive. That is conducive for the learners (Flinkelstein, 2001). In the Maslow hierarchy of needs, love is designated below self esteem and self actualization (Flinkelstein, 2001). This indicates the need for a warm classroom atmosphere before the development of self esteem that education is supposed to inculcate. This is more so in the case of learners with intellectual disability. Hannon (2005) would seem to agree with these findings by noting that negative school experiences from peers amongst others, impact on learners with physical disability.

Another important component of classroom climate is the quality of communication by the teacher. Appropriate communication creates a cordial classroom environment. If the teacher is a good communicator, the chance of a cordial relation between the learners and the teacher is more apparent. The learners were asked whether they understood their teacher clearly. The responses from all (100.00%- n=31) focus groups acknowledged that the teacher was well understood and there was not a single voice that felt different. Based on this argument, it may be stated that teachers of learners with intellectual disabilities have clear communication skills. This suggests that whatever the teacher sets to communicate gets appreciated by the learners. This may point to the achievement of set objectives.

The amount of time allocated to teaching of physical education is significant in the achievement of the objectives set out. Table 6 shows the number of hours allocated to the teaching of physical education in schools for learners with intellectual disability as recorded by the principals.

Table 6: Time Allocated to PE in Schools for Learners with Intellectual Disability.

Time allocation in hours	Frequency	Percentage
1.5	2	06.67
2.0	8	26.67
2.5	8	26.67
3.0	4	13.33
3.5	3	10.00
4.0	4	13.33
5.0	1	03.33
Total	**30**	**100.00**

From Table 6, it can be noted that 26.67% (n=8) of the schools allocate two hours a week which works to four half hour lessons per week. Another 26.67% (n=8) gives two and a half hours which works out as half an hour each day. The other times allocated was one and a half hours a week (6.67%-n=2), three hours a week (13.33%-n=4), three and a half hours a week (10.00%-n=3), four hours a week (13.33%-n=4) and five hours a week (3.33%-n=1). This shows a lack of pattern. It seems that different schools allocated different periods for the teaching of physical education hence no rationale is found in the time allocation for the teaching of physical education in schools for learners with intellectual disability. The varied timings allocated by different schools imply that the policy of half an hour a day for 5 days is not adhered to by the schools of learners with intellectual disability.

Time allocation is a component of classroom climate. Higher than prescribed time allocations could be due to the fact that physical education could be connected to play. The school administration would probably feel that the learners are better off playing than being involved in structured lessons. This would work counter to trying to achieve the creation of human capital out of the students in schools for learner with intellectual disability. Half an hour per day should provide the teacher with an opportunity to provide experience that the learners would enjoy. None of the studies reviewed quantified time as a significant resource in the teaching of learners with intellectual disability. Arjmandnia and Kakabaracee (2011) in an evaluation of the physical education curriculum in Iran stated that physical education lessons should not be considered free play periods since this means that the programme is not created to meet its objectives.

Asked what kind of climate they created in the classroom, all (100%-n=31) of the teachers claimed they provided an atmosphere that is pleasant. This proposes that all the teachers of physical education in schools for learners with intellectual disability feel they create an atmosphere conducive for learning. The researcher noted that the learners tended to enjoy their lesson as exemplified by the concentration that was evident in the games session of the lesson. While the creation of a pleasant atmosphere in class by the teachers may just be perception, the fact is that these teachers recognize this is important. The teacher creates classroom climate either by omission or commission (Lee, 2002). The kind of classroom climate depends on the teaching methods the teacher uses and the way the learners react to these methods. Lee (2002) also recognized the significance of the teacher as the central factor in the development of the right atmosphere in the classroom.

Teaching entails trying to achieve preset objectives. In this respect teachers were asked whether the objectives they set out were achieved. According to all the teachers, 100.00% (n=31) of the objectives set were achieved. The fact that teachers are aware that they have set out objectives which they feel were achieved is important to the learner. The teacher's years of experience and time at training institutions all tie in to the fact that the teacher feels that it is important for the objectives set out to be achieved.

In conclusion, on research question two on the effectiveness of teaching and learning of physical education for learners with intellectual disability, the following is the summary of the findings:

i. It is recognised that individualisation of instruction is fundamental in the attempt to achieve the programme's objectives. This implies that the content as laid out in the syllabus does not recognise this individualisation and neither does the syllabus suggest activities that could be used in achieving the objectives.

ii. Divisioning is the process of graduating learners' competencies to enable them to compete with peer at their level to avoid frustration during play. This creates the possibility of individualised learning. This implies that this individualisation of instruction did not come out clearly in the syllabus document or even in the conceptualisation of teaching. Individualised teaching was also noted as a challenge to teaching by one of the principals interviewed.

iii. It was noted that different timings were allocated to the teaching of physical education, from one and a half hours to five hours a week. This pointed to lack of a policy that informs consistency in time allocated to the teaching of physical

education in schools for learners with intellectual disability. This may imply that the teaching of PE is not taken seriously hence the extra hours allocated because the syllabus is elastic and does not need to be adhered to.

iv. Classroom climate plays a significant part in achievement of programme objectives. All the teachers believed they create a pleasant atmosphere in the class. All the learners supported this assertion. This implies that the programme objectives can be achieved in this kind of environment.

v. Learners purported to have enjoyed their classroom interaction, a precursor to achievement of programme goals.

The implication of the findings on the criteria of effectiveness which entails an assessment of whether the programme has achieved its goals thus suggests that individualisation of instruction is not addressed adequately. This may be attributed to lack of policy framework. Lack of guideline from the syllabus and lack of a document to underpin timing in the teaching of physical education has negatively affected achievement of the programmes' objectives. However the positive classroom climate created by both teachers and learners provides a conducive atmosphere for the achievement of the programmes objectives.

4.5 Findings on Research Question Three: How efficient is the teaching and learning process of physical education for learners with intellectual disability?

Efficiency of learning entails the management of the teaching and learning process for learners with intellectual disability. It involves how well this teaching and learning process has been managed. It queries whether there are better ways of achieving these

results at a lesser cost, how and who is administering the teaching and learning, which methods are currently being used in the teaching learning process and which resources are available at schools for the intellectually disabled learners to make the teaching and learning process successful. The factors in management in these regard are: the syllabus, the principles managing the schools, the teachers managing the class and, the resources available to make these learning experiences worthy for learners with intellectual disability.

According to the syllabus (Appendix X), educational experiences that are supposed to cater for the objectives offered include: song, stories, dance, play, hosting, making cards and print, cleaning pets, storytelling, practice, new song, dancing and role play (Republic of Kenya, 2009). These are quantified under the heading, "leisure and recreation activity". The content given is fairly broad and in that respect could actually serve the purpose. However, it may also be too broad, allowing many interpretations to the level that it may not offer sufficient guidance to the teacher to allow this content to be of value to the learners. In that respect it may not provide educational experiences that are likely to attain the expected purposes for learners with intellectual disability.

Maybe the lack of adherence to the syllabus as noted in Table 1 by a majority of the teachers and the fact that only a third of the teachers opted to choose their activity from the syllabus as shown in Table 2 is informed by this lack of tidiness of the syllabus of physical education used in schools for learners with intellectual disability. This calls for the need to review the syllabus in line with a similar recommendation by Faroog, Ajmal, Rehman and Nafees (2011) in a study in Pakistan on the curriculum for schools for learners with hearing impairment.

This suggests many possibilities that could lead to a number of questions. As noted in Appendix X, terms such as ‘play’ are broad and need further quantification to make sense for instance the teachers expected to use balls or toys to define the extent of this play? Are the stories in 1.2.1 different from Storytelling in 1.2.2 or is it repetition? Is Dance in 1.2.1 different from Dancing in 1.2.2 or is it a mere conjugation of the term? Is ‘song’ found in 1.2.1 cardinally different from ‘practicing new song’ in 1.2.2? May? Whatever the situation, the content suggested provides limited guidance to the teacher. This may be the reason why the students with intellectual disability seem to be taught a large variety of activities during the same period of learning in the school term. The item, ‘hosting’, is ambiguous in terms of content and needs to be substantiated otherwise it is hanging and appears out of place. From the information above, it seems that the specific objectives as set out in the syllabus document relate to leisure and recreation while what is time tabled in schools for learners with intellectual disability is physical education. This may be an anomaly that needs to be corrected as various schools may end up teaching different aspects, making the syllabus not unify the teaching and learning process in the Kenyan schools.

This study also sought to find qualifications of physical education teachers in schools for the learners with intellectual disability. The more qualified the teachers the better they are able to interpret the syllabus and administer the programme (Faroog, Ajmal, Rehman and Nafees, 2011). The results are shown in Table 8.

Table 7: Teachers' Qualifications in Schools for Learners with Intellectual Disability

Educational Level	Frequency	Percentage
P-1 Certificate	1	3.23
Diploma in Education	8	25.81
Bachelors of Education	15	48.38
Masters of Education	7	22.58
Total	31	100.00

Table 7 shows that 3.23% (n=1) of the teachers hold a P-1 certificate in education, 25.81% (n=8) hold a diploma in education, 48.38% (n=15) hold a bachelor of education degree while 22.58% (n=7) of the teachers hold a masters in education degree. This implies that 70.96% (n=22) of the teachers involved in the instruction of physical education are graduates and only 3.23% (n=1) have a P1-certficate. This implies that all teachers have the required professional qualification to handle physical education in schools for learners with intellectual disability. This suggests that these teachers ideally would have no problem interpreting the syllabus document.

One of the teachers noted that they were all appropriately trained. However, there was lack of support staff hence these well trained teachers are forced to occasionally double up as support staff. Another teacher noted that there were no incentives accrued from training beyond the minimum required stage. Yet another teacher noted that this programme for learners with intellectual disability made a lot of sense but the government did not take it seriously as noted by lack of incentives for teachers in this area of teaching. With lack of incentives for teachers, the situation begs the question

whether government cares about the achievement of objectives that have been set for learners with intellectual disability.

This finding ties in well with proposals made by Faroog, Ajmal, Rehman and Nafees (2011) that teachers need to be provided with pre-service and in-service training. Hannon (2005) also noted that in the promotion of people with physical disability in Ireland, untrained staff was a major barrier contributing to low levels of participation. Being professionally trained and qualified empowers the teacher to render quality service to the learners (Hannon, 2005).

Higher qualification of the teachers is indicative of the fact that teachers are likely to be motivated to teach PE. The Teachers Service Commission (TSC) is in-charge of posting most teachers to schools in Kenya. Usually this posting is based on qualification of teachers. To have been posted to these schools ideally the teachers required a P-1 certificate, while a diploma from the Kenya Institute of Special Education (KISE) is an added advantage. For some of the teachers to have achieved a bachelor of education degree and subsequently a masters of education degree, they must have put in their own extra effort. In this regard it is quite clear that teachers in schools for learners with intellectual disability have what it takes to offer the best to their pupils.

The principals were asked what criterion was used to allocate the funds received to different disciplines their responses were captured in table 9.

Table 8: Cash Allocation Criteria per Discipline for Learners with Intellectual Disability.

Allocations	Frequency	Percentage
Non Quantified	5	16.67
Depends on Priority	5	16.67
Depends on Needs	11	36.66
Quantified 2%-7%	6	20.00
Unknown	1	3.33
Vote Based	2	6.67
Total	**30**	**100**

Table 8 shows that up to 36.66% (n=11) of the principals said that the allocation of cash per discipline depended on priorities, 16.67% (n=5) claimed it was based on the votes while 20.00% (n=6) of them allocate 2%-7% per discipline. Another 16.67% (n=5) of the principals are not able to actually quantify how much was allocated to each subject taught at the school while 3.33% (n=1) principals were not able to clearly state how much was allocated to each discipline. Only 6.67% (n=2) declared they based the allocation for funds on vote heads, meaning each vote head was allocated at least a percentage of the money received.

It is noted that a number of procedures are used to allocate funds per discipline. This may lead to the conclusion that there was no clear policy on the allocation of funds at schools for learners with intellectual disability. The allocation of resources to different activities in schools of the intellectually disabled learners is usually left to the principal. The principal at the school level makes all the decisions in terms of allocation of resources. This includes fiscal, physical and social resources. The principal's work entails overseeing the running of the institution, making him/her the cardinal management factor

in the administration of the school. In this regard, the principal has a significant stake in the efficiency of teaching and learning for learners with intellectual disability.

Without a clear policy on funds allocation, it may be assumed that the development of the physical education department is left to the whims of the principal. Where the principal considers physical education important, the allocation is bound to be higher compared to where physical education is considered insignificant. This means that disciplines such as physical education are likely to be left to individual whims of the principals. For the teachers of physical education this cannot be a comfortable position to be in. This could be the reason why a majority of teachers have chosen to teach basic big ball games since they are cheaper to teach. The need for strong leadership in the teaching of physical education in schools for learners with intellectual disability can therefore not be overemphasised. Olivier and Williams (2005) in a study on the challenges facing special schools agreed with the need for strong leadership and availability of resources, both which play a crucial role in the provision of learning experiences for learners with intellectual disability.

Table 9 shows the fiscal resources distribution pattern indicating what was allocated by principals to different disciplines.

Table 9: Cash Allocation to Different Disciplines by the Principals of Schools for Learners with Intellectual Disability.

Allocations	Frequency	Percentages
Not Quantified	6	20.00
Depends on Needs	10	33.33
Prioritised	5	16.67
1% to 5% of Cash Received	6	20.00
Depends on Capitation	3	10.00
Total	**30**	**100.00**

Table 9 indicates the allocations as follows: 16.67% (n=5) depends on priority of the school, 33.33% (n=10) depends on needs, 20.00% (n=6) was not quantified, 10.00% (n=3) depends on capitation and 20.00% (n=6) of the time the allocation was pegged on 1-5% per discipline. These allocations show that there was no clear criterion and the tendency seems to be more on a case by case consideration.

This suggests a number of possibilities including: the need for proper training of the principals to understand the need to create criteria for funding allocation, the need for training of principals in the area of physical education so as to capture underlying needs and challenges and, the need for qualified self-driven professionals of physical education to be able to articulate the need to prioritize physical education against other burning priorities. Based on the argument above, it is implied that there is no policy on the allocations of funds to various disciplines in schools for learners with intellectual disability. The principals' arbitral allocation of funds depended on unqualified and un-quantified criteria. The amount of money allocated to a discipline dictates the kind of resources that would be available. The type of instructional material the teacher uses

impacts the academic success of students with special needs (Marilyn and Bursuck, 2006) hence the criterion of how much is allocated to each subject becomes fundamental.

The principals were asked whether their allocation policy was commensurate with the government policy on allocations of funds at schools for the intellectually disabled learner and their responses were recorded in Table 11.

Table 10: Whether Allocations are based on Government Policy in Schools for Learners with Intellectual Disability.

Policy Allocations Based on	Frequency	Percentage
Yes Government Policy	15	50.00
Not Government Policy	2	6.67
Free Primary Education Policy	8	26.67
Schools' Own Policy	7	6.67
Principals Self Created Policy	3	10.00
Total	**30**	**100.00**

Table 10 indicates that 50.00% (n=15) of principals note that the allocation of funds is a government policy, 6.67% (n=2) said it was not, 10.00% (n=3) of the principals felt this was self created, 6.67% (n=2) attributed this to their school policy, while 26.67% (n=8) of the principles interviewed linked the allocation to the Free Primary Education policy. Based on notes taken in the field, two principals noted that fund interfered with the efficiency of the implementation of the programme in schools for learners with intellectual disability. One other principal felt that the funds from government were not enough and that disbursement was erratic. Another principal noted that while funds were disbursed in the same manner as was done for regular/normal primary schools learners with intellectual disability have many more needs compared to those that attend normal primary schools. A principal from a school in the informal settlement areas of Nairobi

claimed they had been promised support by a foreign donor but had inadequate land for new projects. This principal further noted that the government had only made allocation under the Free Primary Education docket and provided no further funds beyond that. Another principal noted that a prominent bank had partnered with his school as part of the banks cooperate social responsibility. The bank constructed a few buildings helping ease the facility situation at the school.

This information tends to suggest too many variations in funds allocation, an indication that there is no clear government policy on how school funds are used at schools for learners with intellectual disability. From Table 11 it is noted that there is no clear evidence of where the policy on funds allocated per discipline originates from. This suggests that principals are cardinal in the way physical education is viewed in schools for learners with intellectual disability. The allocation given to the head of the department for physical education is an indicator of how much the principal values this discipline. A government policy would compel principals to allocate finances based on criteria that can be justified and that would be standard at schools for learners with intellectual disability. In this regard the Government of Kenya would ascertain some control on the allocation of finances and ensure a clear pattern is adhered to. Wasonga (1997) established the same result that administrators play a crucial role in allocating funding in schools, a factor that directly affects the kind of facilities and equipment available for the teaching of physical education.

Table 11 indicates the number of facilities in schools for the intellectually disabled learners in Kenya.

Table 11: Number of Sports Facilities in Schools for Learners with Intellectual Disability.

Number of Sports Facilities	Frequency	Percentage
1	1	3.33
2	11	36.68
3	13	43.33
4	1	3.33
5	3	10.00
6	1	3.33
Total	**30**	**100.00**

Table 11 indicates that at 43.33% (n=13) most schools have three facilities for sports. Other schools had: six (3.33%-n=1), five (10.00%-n=3), four (3.33%-n=1), two facilities (36.68%-n=11) and one facility (3.33%-n=1) for the teaching of physical education. A majority of the institutions (80.00%-n=24) have either two or three facilities for the teaching of physical education.

The sports facilities in an institution provide the latitude for the teacher to be able to express his/her professionalism in the provision of experiences for the learner. That means the higher the number of facilities the better for the learner. As was noted in Table 2, most of the teachers taught soccer (58.06%-n=18), athletics (16.13%-n=5) and Netball (9.67%-n=3). This may not allow much latitude for the teacher in terms of possibilities. This may have been due to choices that were available to the teachers. The lack of facilities such as a gymnasia and an aquatic facility implies that only a limited number of skills and learning experience can be offered. A majority (80.65%-n=25) of the institutions for learners with intellectual disability have limited sports facilities to teach physical education.

The principals were asked about whether they have been trained in physical education for the learner with intellectual disability. Up to 80.00% (n=24) of the principals are trained to teach physical education to learners with intellectual disability while 20.00% (n=6) of the principals are not trained to teach physical education to these learners. The fact that such a large number of principals are trained in physical education for special needs education is an indicator that these schools are in capable hands. This is a positive attribute implying that at least 80% of the managers heading schools for learners with intellectual disability have the capacity to comprehend the bigger picture of the needs of physical education. Training in physical education is thus crucial to help the principal understand the intricacies of teaching this subject to the challenged learner and to develop the bigger picture of what to expect in this area of discipline. This is because trained personnel understand the need for an adequate class size as well as the need for a sensible learner equipment ratio. This ties down with the fact that up to half (50%-n=15) of the principals felt the need to procure new equipment as their proposal for the following year.

The principals were asked how many years of training they had received. Table 12 depicts the answers given.

Table 12: Years of Training of Principals in Schools for Learners with Intellectual Disability.

Years of Training	Frequency	Percentage
2 Years	14	46.67
3 Years	7	23.33
4 Years	6	20.00
6 Years	2	6.67
7 Years	1	3.33
Total	**30**	**100.00**

Table 12 indicates that most principals had received at least two years (46.67%-n=14), three years (23.33%-n=7) and four years (20.00%n=6) of training. It was interesting to note however, that a few principals had actually received six years (6.67%n=2) and seven years (3.33%-n=1) of training, an indication that levels of competence of principals in these schools for the learners with intellectual disability is high. This implies that a majority (53.33%) of the principals in charge of schools for learners with intellectual disability have more than three years of training. Principals, it seems, are adequately prepared for the task of handling schools for learners with intellectual disability. It was notable that about 10% of the teachers have over six years of training. These are indications of depth in training for these teachers, more so if this training was all towards preparation to teach in schools for learners with intellectual disability. The number of years of training can be equated to competence especially if this training is in tertiary institutions. Ideally the higher the number of years of training the more competent one is expected to become.

Further, the principals were asked about the number in years of experience they have had after training (Table 13).

Table 13: Principals' Years of Experience in Schools for Learners with Intellectual Disability.

Years of Experience	Frequency	Percentage
1-2 Years	4	13.33
3-5Years	8	26.67

6-9 Years	11	36.67
10 Years and More	7	23.33
Total	**30**	**100.00**

Table 13 shows that 13.33% (n=4) of the principals had one to two years of experience, 26.67% (n=8) of the principals had three to five years of experience, 36.67 % (n=11) of the principals had six to nine years of experience and 23.33% (n=7) had more than ten years of experience. This indicates that there are principals with varied years of experience in running schools for the intellectually disabled learners. Of this, 60.00% (n=18) of the teachers have over six years of experience while, 86.67% (n=26) have over three years of experience in teaching.

Next to the amount of training one gets, the number of years after training is a good gauge of the sheer experience one has accumulated especially if the experience is at an institution or the discipline one has been trained in. In effect three years and more of experience promotes competence and adds value to teachers in schools for learners with intellectual disability. It is noted that a majority of principals have three years and or more of teaching experience in schools of learners with intellectual disability. This is valuable experience that can create opportunities for rich learning experiences.

Principals were asked whether they had taught physical education in the schools. Up to 80.00% (n=24) of the principals heading institutions for learners with intellectual disability have actually taught physical education in the schools they are currently heading while only 20.00% (n=6) of the principals had not taught physical education in their current schools. This implies that a majority (80.00%) of the principals understood the kind of challenges their particular school had in the teaching of physical education.

This therefore suggests that 80.00% of the principals understand the challenges of teaching physical education in the institutions they manage.

The fact that the principal of the school had taught physical education suggests that the principal is aware of the challenges that physical education teachers face. He/she is therefore likely to try to address emerging challenges in a bid to influence the climate created in the classes of teachers of physical education for the intellectually disabled learner. Hannon (2005) also agrees with this assertion when he points out that strong informed leadership is a factor for provision of essential and quality experiences for learners with physical disability.

The principal is the cardinal supervisor of the teacher. In schools for learners with intellectual disability, lessons need to be planned so that the experiences offered to the learners are well thought through. In this regard, principals were asked whether the teachers who taught physical education used lesson plans. All (100.00%) indicated that they did. This implies lessons of physical education are actually said to be planned for.

Planned lessons provide rich learning opportunities for learners. An important part of teaching is the planning of what will be taught. A teacher does this through various accepted tools. The scheme of work gives guidance of the school term teaching plan. Based on this, the lesson plan is derived and gives guidance on the daily teaching plan. Since this is a plan derived from the scheme, adherence and use of the lesson plan is an indicator that the teacher is sticking to a prescribed plan and is not simply running the lesson without direction.

The researcher used the observation tool in Appendix IV to physically observe the teachers. Table 15 shows what the researcher discovered is going on during the physical education lesson in schools for learners with intellectual disability as it pertains to the use of a lesson plan.

Table 14: Use of Lesson Plan by the Teacher of PE in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Very poor	1	3.23
Poor	16	51.61
Satisfactory	12	38.71
Good	2	6.45
Total	**31**	**100.00**

From Table 14 the researcher observed that, 3.23% (n=1) of the teachers were rated as very poor in the use of a lesson plan, while 51.61% (n=16) were considered poor. Only 38.71% (n=12) were considered satisfactory and a paltry 6.45% (n=2) rated as good. No teachers were rated as very good in the use of a lesson plan. This suggests that a majority (54.84%-n=17) of the teachers were less than satisfactory in the use of a lesson plan during the period of actual teaching of physical education in schools for learners with intellectual disability.

This implies that teachers in schools for learners with intellectual disability do not see the value of investing in planning for the physical education lesson. This result is verified by the fact that when teachers were asked about where the source for the choice of activity originated from, 64.52% (n=20-Table 4) said they either looked at what was available at school or simply adapted to the situation. This points to lack of systematic planning for the lesson, and thus agrees with the findings of Arjmandnia and Kakabaracee (2010) that

physical education teachers in Iran dealing with learners in schools for intellectual disability were not skilful during their lessons.

This implies that the assertions by the principals that all lessons taught at schools for learners with intellectual disability are planned for through a lesson plan may not be a true reflection of what happens on the ground. The fact that a majority (54.84%-n=17) were observed to not use a lesson plan points to the need for head teachers to be more vigilant in supervision. Hannon (2005), while dealing with learners with physical disability in Ireland, had noted that poor programmes act as barriers and end up contributing to low levels of participation in sports.

While the principals' claim that the lesson plan is used at 100% of the lessons it is imperative that this is supervised. In this regard, principals were asked how often they checked that the lesson plan they claim are used 100% of the time physical education was taught are in fact used (Table 15).

Table 15: Frequency of Checks on Lesson Plans by Principals in Schools for Learners with Intellectual Disability.

Checking Trends	Frequency	Percentage
Weekly	13	43.37
Monthly	11	36.67
Once per term	6	20.00
Total	**30**	**100**

Table 15 shows that while the weekly (43.37%-n=13) check may make demands on the teacher, the monthly (36.67%-n=11) and once per term (20.00%-n=6) check may actually create a lee way for teachers to supervise themselves. That means in a term 56.67% (n=17) of the principals check the use of a lesson plan three times or less.

This pattern of supervision contradicts that noted in Table 14 where a majority of the teachers were observed to have poor use of lesson plans. This could mean that the principals are not as vigilant as they purport to be. This may compromise the quality work. While principals of schools for learners with intellectual disability indicate that they supervise the use of the lesson plan, a majority claim they do this on a monthly and termly (56.67%-n=17) basis. This suggests that the supervision may not be very strict. Oliver and Williams (2005) had noted that special education teachers were under the obligation to offer quality and goal directed instruction. Arjmandnia and Kakabaracee (2011) had also noted that teachers of physical education in Iran were not very skillful which could have been attributed to lack of appropriate planning.

Principals of schools for learners with intellectual disability were asked whether teachers who they supervise while teaching physical education used schemes of work. All (100.00%-n=30) the principals asserted that all the teachers in the schools used a scheme of work. On whether the scheme of work was checked, 96.67% (n=29) of the principals noted they did check this at least once a term. This is commensurate with the expectations especially if this is done at the end of the term. It was noted that 3.33% (n=1) of the schools checked the scheme of work once annually.

A majority of the schemes of work were checked once per term. This still creates possibility for abuse in that a teacher could do this planning only at the end of the term. A monthly check on the scheme of work would suffice. Checks once annually may not really meet the required standards hence the 3.33% (n=1) principals who checked these schemes once a year may need to review their visualization of the issue of checking the schemes of work.

This suggests that while the majority of the principals checked the schemes of work at least once a term, this kind of supervision is subject to abuse since the column on remarks is filled at the end of every physical education lesson which should be five times a week, hence a weekly check would be more effective. This would indicate whether teachers are covering the required information and the response to the lesson by the learners since these are both captured in the remarks column of the scheme of work.

Principals were asked how frequently they received the capitation (Table 16). While the government, which is the biggest sponsor of most schools, may transfer funds, the frequency and timing of the disbursement is important.

Table 16: Frequency of Receipt of Funds in Schools for Learners with Intellectual Disability.

Frequency of Receipt of Funds	Frequency	Percentage
Per Term	13	43.33
Annually	1	3.33
Erratically	16	53.33
Total	**30**	**99.99**

Table 16 shows that in 53.33 %(n=16) of the cases, the frequency of the funds remitted to schools is unpredictable, in 43.33% (n=13) of the time the frequency was once per term, while in 3.33% (n=1) of the time the remittance was annually. The unpredictability of receiving funds could end up deterring projections that the school may have set.

While the government dispenses its capitation in most sectors per month, funds allocated through FPE are done per term. Further, as noted through responses by the principals, this can also be largely unpredictable. Some of the principals asserted that it even comes in

unpredictably small portions; hence it cannot really be banked on. This makes planning with government finances a complex affair. This implies that in a majority (53.33%-n=16) of cases, financial planning in schools for learners with intellectual disability is affected by the unpredictable remittance of capitation by the government.

In schools for learners with intellectual disability the allocation of funds to physical education depends on principals. The principals were asked what percentage of cash they allocated to physical education in their schools. Their responses were captured in Table 17.

Table 17: Percentage of Capitation Allocated to PE in Schools for Learners with Intellectual Disability.

Percentage of capitation Allocated to PE	Frequency	Percentage
1-5%	18	60.00
6-10%	4	13.33
Unquantifiable	5	16.67
On Needs Basis	3	10.00
Total	**30**	**100.00**

In effect this means that 60.00% (n=18) of institutions allocate less than five percent capitation to physical education, while 13.33 % (n=4) allocate 6-10% to the teaching of physical education. Next to that, up to 16.67% (n=5) allocate unquantifiable amounts while 10.00% (n=3) allocate on a needs basis. This implies that 73.33% (n=22) of the schools for learners with intellectual disability spend between 1-10% on equipment and facilities of teaching physical education. Two principals noted that the resources allocated to the schools were inadequate. Further, it was noted that needs such as medical facilities and personnel, though relevant, were unaffordable for most schools. The quality of experiences that are offered in physical education depend on a number of issues that are

pegged on the finances available. Since there are 13 disciplines taught in these schools, this implies that in most schools for learners with intellectual disability physical education is considered sufficiently significant hence gets a considerable percentage of capitation. This information suggests that in a majority of the cases physical education is considered significant enough to get between 1-10% of the capitation received in schools for learners with intellectual disability.

It was imperative to investigate the programme which the government uses to disburse funds to schools for learners with intellectual disability. On the question of government input, all the principals' responses indicated that the government only supports schools for learners with intellectual disability through the Free Primary Education policy. This policy rates all learners as the same irrespective of the kind of institution they attend. The schools receive no further funding to deal with the inequality that may arise from the nature of the schools. One principal noted that a rundown school may need to repair or rebuild facilities but the government does not classify this aspect of inequalities as significant. One principal lamented that schools get capitation based on the number of students in the school. This capitation is the same for all primary schools and is not increased due to the fact that these are special needs education institutions.

The number of times the schools have been involved in external sports indicates the exposure that the learners have received. The more times the school is involved the better for the learners. Only 6.45% (n=2) of the schools have not been exposed to external fixtures whether national or international. The other 93.55% (n=29) teachers claim to have exposed their learners to external competition many times. This is an indicator that schools for learners with intellectual disability invest in exposing their learners to

external fixtures. Notably therefore schools for learners with intellectual disability tend to expose their learners to external fixtures many times. This exposure provides a rich learning environment for these learners that helps compliment what the teachers share during class.

This study went on to find out about the equipment and facilities available to teachers of learners with intellectual disability. The type of instructional material the teacher uses impacts on the academic success that was intended (Friend and Bursuck, 2006). Further the more facilities and equipment available the bigger the repertoire of instructional methods that the teacher can use. This means the teacher is able to provide more learning experiences.

The researchers created an inventory of all the equipment found in schools for learners with intellectual disability. As noted in Appendix XI, most schools tend to have soccer balls, volleyballs, netballs and bibs. These are fairly basic equipment. With this on offer, the teachers are limited to what they may be able to present. The implication of this is that teachers tend to depend on the school for formal equipment. There is need for teachers to be innovative and create their own equipment. This can be done over the years so that equipment is not limited to the little that is offered by the school.

Skipping ropes, self made balls and such like equipment will tend to increase the repertoire of activities that will be available to the teacher making the learning process for the learners with intellectual disability richer and more meaningful and enjoyable. Schools for learners with intellectual disability tend to have basic equipment such as soccer balls, volleyballs, netballs and bibs. Further, it is noted that there are few

improvised equipment which means teachers may not be interested in creating any new equipment to enrich their learners.

Facilities are basically considered capital development. It is a requirement by the Government of Kenya that for a school to be officially registered it must have a certain amount of acreage. Most schools do have a ground set aside for playing fields. These are usually converted into soccer fields which mainly require simple levelling. The number and kind of facilities to a large extent dictate the options available to the teacher. The larger the number and type of facilities the more options a teacher has to provide for learners with intellectual disability. Figure 1 captures the situation of facilities in schools for learners with disability in Kenya

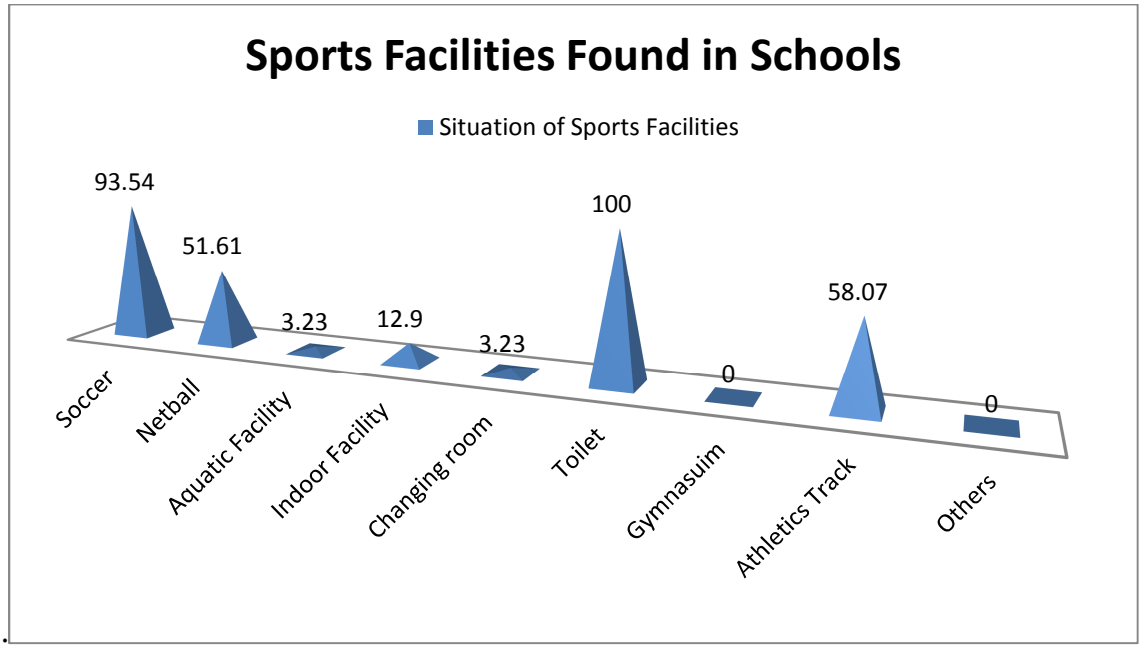

Figure 1: Kind of Sports Facilities Found per Institution in Schools for Learners with Intellectual Disability.

From Figure 1, up to 93.54% (n=29) of the schools have soccer pitches, 58.07% (n=18) have athletics tracks and 51.61% (n=16) have netball courts. It is noted that only 3.23% (n=1) actually have changing rooms though this could be compensated by the use of toilets which are available in a 100% (n=31) of the schools. It was noted that only 3.23% (n=1) of the sampled institutions actually own an aquatic facility of any kind. This could be attributed to the sheer expense of building a swimming pool or even maintaining one.

Thus it is suggested that a majority of the schools for learners with intellectual disability lack a variety of sports facilities. All schools have basic sports facilities that include soccer fields, athletics tracks and netball courts. However few schools have changing rooms or aquatic facilities. It was noted by various teachers interviewed that, the facilities were inadequate, and further, there were no financial resources or room for expansion of these facilities. According to these teachers the facilities such as changing rooms near the sporting facilities were basically a luxury that these schools for learners with intellectual disability could ill afford. Gathua (1990) established that availability of sporting facilities and equipment greatly influenced the choice and eventual involvement of the learners.

It was also imperative to find out what actually goes on in physical education classes of learners with intellectual disability including whether there were better ways to administer classes. In this regard the researcher went out to observe how classes are actually conducted to gauge the efficiency of the programme. An observation tool (Appendix IV) was used to discover what methodology was being used in the classroom. The physical education class is divided into six phases. These are: introductory activity, compensatory activity, class activity, group activity, game and, final activity.

The observation tool used a likert scale with the following items: very poor, poor, satisfactory, good and excellent. A chi-square (χ^2) test statistics was conducted to test for a relationship between teacher characteristics, experience and how well the teacher is able to perform the PE class during the various distinct phases of the lesson. The Statistical Package for the Social Sciences (SPSS) was used for this study to compute and analyze all the inferential statistics.

The introductory activity phase in the classroom is supposed to provide a warm up session for the learners. Observations recorded for this phase are captured in (Table 18).

Table 18: Observation of Introductory Phase of a PE Lesson in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Poor	5	16.13
Satisfactory	18	58.06
Good	8	25.81
Total	**31**	**100.00**

Table 18 shows 16.13% (n=5) of the teachers were observed as poor during the warm up session of the lesson, 58.06% (n=18) were observed as satisfactory, while 25.81 % (n=8) were observed as good. This suggests that a majority (83.87%-n=26) of the teachers in schools for learners with intellectual disability provide sufficient warm up in both quality and quantity for their learners at the beginning of each lesson.

Here the teacher who has planned the lesson should provide a warm up that prepares the muscles that will be used in the activity to follow. The muscles would be warmed up systematically starting with the bigger muscles to the smaller ones. Further, this should

be interesting enough to catch the learners' curiosity lest they get bored. Warm ups plays a crucial part in making sure the learners do not get injured during the lesson. The warm up activates the muscles and provides both the psychological and physiological motivation for subsequent phases of the physical education lesson. Injuries, usually muscle pulls occur due to insufficient and low quality warm up. Arjmandnia and Kakabaracee (2011) had observed in Tehran that learners with intellectual disability tended to suffer from growth delays, small body and weak muscles amongst other physically oriented anomalies hence the significance of the warm up cannot be over emphasised in learners with intellectual disability

This study also sought to find out the relationship between the experience of the teachers and the performance of the first phase of the teaching of physical education referred to as the introductory activity phase. Findings of the Chi-square test of relationship between experience (years of service) and introductory activity are displayed in Table 20.

Table 19: A Cross-Tabulation of Introductory Activity and Experience of Teachers of Physical Education for Learners with Intellectual Disability

		Rating of Introductory Activity				
		Very poor %	**Poor %**	**Satisfactory %**	**Good %**	**Total %**
Years of Service	2	-	3.30	-	3.30	6.70
	5	-	3.30	-	-	3.30
	9	-	-	-	3.30	3.30
	10	-	3.30	6.70	6.70	16.70
	12	-	-	3.30	-	3.30
	13	-	-	-	3.30	3.30
	14	-	-	10.00	3.30	13.30
	15	-	-	6.70	-	6.70
	18	-	-	10.00	-	10.00
	20	-	-	13.30	3.30	16.70
	21	-	-	3.30	-	3.30
	22	3.30	-	-	-	3.30
	24	-	-	3.30	3.30	6.70
	28	-	-	3.30	-	3.30
Total		**3.3**	**10.0**	**60.0**	**26.7**	**100.0**

No of obs.= 31; Pearson Chi-Square=57.521 (d.f. 39), Asymp. Sig. (2-sided)=0.28

Experience, measured by number of years of service, has a significant relationship with teachers facilitation of the introductory activity ($\chi^2_{42\ d.f.} = 55.639$, $p<0.05$). Teachers with more experience on the job tend to perform better on the introductory activity than their less experienced counterparts. This relationship was established at 5% level of significance. Gender, age, type of school, school location and most other attributes of the teacher and school do not seem to have influence on the teaching process of learners with intellectual disability.

The second phase of the physical education lesson is the compensatory activity phase. Table 20 shows the results that were found during the observation of the physical education lesson in schools for learners with intellectual disability during the compensatory activity phase.

Table 20: Observation of Compensatory Activity Phase of a PE Lesson in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Very poor	28	90.32
Satisfactory	2	6.45
Good	1	3.23
Total	**31**	**100.00**

The results in Table 20 show that 90.32% (n=28) of the teachers are very poor at taking the learners through stretching activities. However 6.45% (n=2) of teachers showed satisfactory and 3.23% (n=1) of the teachers proved good in the compensatory activity. This suggests that most teachers in schools for learners with intellectual disability do not think highly about compensatory activity.

In this phase after the muscles have been warmed the body is taken through a phase of stretching muscles and joints that will be used in the upcoming activities. The stretching session is usually first static then dynamic. Stretching provides preparation for the joints that will be used for the preceding activities. The stretching also helps avoid injuries. The value of stretching before an event cannot be over emphasised. The fact that stretching is not considered important implies that either the teachers do not understand the physiological significance of this or something within the preparation of teachers ignored this cardinal phase of a physical education lesson. This may also be a pointer to the

quality of teachings going on at schools for learners with intellectual disability. Hannon (2005) had noted in a study done in Ireland that the country was in danger of becoming a spectator nation if the quality of the physical education lessons was not watched. Just like the warm up stage, this compensatory phase of the physical education lesson plays a part in the creation of a quality physical education programme.

Findings of the Chi-square test of relationship between experience during compensatory activity phase and the use of lesson plan by teachers of physical education for learners with intellectual disability are displayed in Table 21.

Table 21: A Cross-Tabulation of Compensatory Activity and use of Lesson Plan during Teaching of Physical Education for Learners with Intellectual disability

		Rating of Compensatory Activity				
		Very poor	**Poor**	**Satisfactory**	**Good**	**Total**
		%	**%**	**%**	**%**	**%**
Did you use a lesson plan?	Yes	21.7	26.1	30.4	4.3	82.6
	No	-	8.7	-	8.7	17.4
Total		**21.7**	**34.8**	**30.4**	**13.0**	**100.0**

No of obs.= 31; Pearson Chi-Square=7.919 (d.f. 3), Asymp. Sig. (2-sided)=0.048

Table 21 shows the rating of compensatory activity also had a relationship with use of lesson plan, as evidenced by a Chi-square statistic of 7.919, significant at 5% and 3 degrees of freedom. Teachers who used a lesson plan had significantly better ratings for how well they conducted the compensatory activity than those who did not use a lesson plan. This is probably because the use of the lesson plan indicates what the teacher is supposed to do, at what period of the lesson. This may have slipped the memory of teachers who did not use lesson plans.

The third phase of the physical education lesson is class activity phase. Table 22 shows what was observed during the class activity phase of the physical education lesson in schools for learners with intellectual disability.

Table 22: Observation of Class Activity Phase of a PE Lesson in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Poor	6	19.35
Satisfactory	13	41.94
Good	12	38.71
Total	**31**	**100.00**

Table 22 notes that no teachers were indicated as very poor, 19.35% (n=6) were recorded as poor, 41.94% (n=13) were recorded as satisfactory while 38.71% (n=12) were recorded as good. No teachers were recorded as very good. A majority (80.65%) of the teachers can thus be said to have taught the new skill phase of the physical education lesson well.

At this phase the teacher imparts a new skill. The learners are called round and the teacher uses this phase to demonstrate a new skill. Learners are given a few opportunities to practice the new skill. This new knowledge plays a part in the physical literacy that teachers of physical education attempt to impart on a learner. During this phase learners are given a demonstration by the teacher and an opportunity to demonstrate in return. The amount of demonstration time and opportunities available to the learners depends on the availability of equipment. Obviously the more equipment available the more demonstrations a learner can undertake. Due to the small number of learners available, it was noted that most teachers actually give an opportunity to all learners to try out the new

skills. These skills, depending on how the teacher provides them, create an opportunity for quality learning experience.

Findings of the Chi-square test of relationship between experience in the class activity phase and the use of scheme of work and the lesson plan by teachers of physical education for learners with intellectual disability are displayed in Table 23.

Table 23: A Cross-Tabulation of Class Activity and use of Lesson Plan during the Teaching of Physical Education in Schools for Learners with Intellectual Disability

		Rating of Class Activity			
		Poor %	**Satisfactory %**	**Good %**	**Chi-square statistic (χ^2)**
Is what you taught in scheme of work?	Yes	16.7	46.7	26.7	5.758*
	No	-	-	10.0	
Did you adhere to the lesson plan to scheme of work?	Yes	16.7	43.3	23.3	4.987*
	No	-	3.3	13.3	

*No of obs.= 31; *** significant at 0.01 level, **significant at 0.05 level, *significant at 0.01 level*

According to Table 23 there existed a statistically significant relationship ($\chi^2_{2\ d.f.}$=5.758, p<0.1) between rating of class activity and adherence to the scheme of work. A similar relationship was observed between rating of class activity and having matched the lesson plan to the scheme of work ($\chi^2_{2\ d.f.}$=4.987, p<0.1). Thus, teachers who had aligned their lesson plan to the scheme of work received significantly higher ratings on the five point scale (1=very poor to 5=excellent) as compared to those who did not.

After the class activity phase of the lesson where learners are given a chance to demonstrate a new skill, the next session is called the group activity phase. The information on what transpired in this session is captured in Table 24.

Table 24: Observation of Group Activity Phase of PE Lesson in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Very poor	2	6.45
Poor	2	6.45
Satisfactory	19	61.29
Good	8	25.81
Total	**31**	**100.00**

As noted in Table 24 above, 6.45% (n=2) of the teachers showed very poor tendencies while 6.45% (n=2) showed poor. Meanwhile, 61.29% (n=19) of the teachers were recorded as satisfactory while 25.81 (n=8) were recorded as good. This suggests that a majority (87.10%-n=27) of the teachers were observed to have an above satisfactory result in the teaching of the group phase of physical education.

In the group activity phase, the learners get a chance to practise the new skill as they reinforce the skills previously taught depending on the number of groups. The classes were divided into two groups depending on the number of learners. It was observed that the dual challenge of few pieces of equipment and the small number of learners played against this phase of the class being considered very good, hence, the 'very poor' and 'poor recorded against the 12.9% (n=4) of the teachers. The teachers were unable to create a clear demarcation between the two phases of class activity and group activity since splitting up the class could have created groups that would have been too small to have been of consequence. Further, lack of equipment in some cases meant that some learners were idle for long periods as the other group tried out their skills. The need for quality experiences has been noted variously hence agreeing with this finding. For instance Lee (2002) noted that for proper functioning of a physical education programme

to happen, the need for meaningful experiences was apparent. Hannon (2005) in a study carried out in physical education in Ireland also agreed that quality experiences for persons with disability played a part in the development of physical literacy. Oliver and Williams (2005) also decried the need for quality and highly individualised instruction. All these findings point to the need for the teacher of physical education for learners with intellectual disability to invest in the class instruction to create quality experiences for the learners.

The next phase after the group activity phase in a physical education lesson is the game session. Table 25 captured what was observed in classes for learners with intellectual disability.

Table 25: Observation of Game Phase of PE Lesson in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Satisfactory	14	45.16
Good	13	41.94
Very Good	4	12.90
Total	**31**	**100.00**

Table 25 indicates that no teachers were recorded as very poor or poor. All the teachers were recorded as satisfactory (45.16%-n=14), good (41.94%-n=13) and very good (12.90%-n=4), an indication that all teachers (100%-n=31) provide a rich opportunity for the learners to have a session that could be enjoyed during the physical education lesson.

The game session entails a game or continuous play where the learners are given lee way to exploit whatever talent they may have learnt or had come into the lesson with. In the

games phase the learners did not necessarily have to use the skills taught in the lesson of the day. Depending on the equipment available, creative teacher could introduce some form of relay which provides the learners with enjoyment. This ties with the observation made when the principals were asked what the objective of physical education were in the school. Only 10% (n=3) noted they were for the learners to enjoy themselves. Further when the learners were asked how they felt about the physical education lesson, 100% (n=30) felt that lesson was well worth it. They used terms such as, enjoyment, fun, good, and exciting to describe what they felt.

Findings of the Chi-square test of relationship between experience and the game activity phase by teachers of physical education for learners with intellectual disability are displayed in Table 26.

Table 26: A Cross-Tabulation of Game phase of a Physical Education Class and Experience of the Teacher in Schools for Learner with Intellectual Disability

		Rating of Game instruction			
		Satisfactory %	**Good %**	**Excellent %**	**Total %**
Years of Service	2	3.20	3.20	-	6.50
	5	3.20	-	-	3.20
	8	-	-	3.20	3.20
	10	16.10	-	-	16.10
	12	-	3.20	-	3.20
	13	-	3.20	-	3.20
	14	12.90	-	-	12.90
	15	-	6.50	-	6.50
	18	6.50	3.20	-	9.70
	20	9.70	3.20	3.20	16.10
	21	-	3.20	-	3.20
	22	-	-	3.20	3.20
	24	-	3.20	3.20	6.50
	28	-	3.20	-	3.20
Total		**51.6**	**32.3**	**16.1**	**100.0**

No of obs.= 31; Pearson Chi-Square=41.708 (d.f. 28), Asymp. Sig. (2-sided)=0.046

Overall, teachers performed very well on instruction of games phase. Nevertheless there was some observed variance relative to individual characteristics. Most notably, the number of years of service has a relationship with the rating of games phase of instruction such that, teachers with more years of experience perform better than those who are less experienced. These observations seem to imply that as the teachers get more experienced, they tend to invest more in the options and quality of the games phase of the teaching of physical education. This suggests that experience of the teachers is a positive attribute in the teaching and learning process in schools for learners with intellectual disability.

The last phase of the physical education lesson is the final activity phase. In this phase the teacher takes the learner through a lumber down session to enable the learner to calm down sufficiently to be able to go to the next lesson. Table 27 shows what was recorded for teachers of physical education in schools for learners with intellectual disability.

Table 27: Observation of Final Activity Phase of PE Lesson in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Very poor	2	6.45
Poor	3	9.68
Satisfactory	20	64.52
Good	6	19.35
Total	**31**	**100.00**

Table 27 shows that 6.45% (n=2) of the teachers were observed as very poor while, 9.68% (n=3) were recorded as poor. The rest were noted to be above average with 64.52% (n=20) observed as satisfactory while 19.35% (n=6) were observed as good. This suggests that a majority (83.87%-n=26) of teachers in schools of learners with intellectual disability appreciate the place of the final activity in the physical education lesson.

The final activity, if carried out properly, has benefits to the learners. These benefits include the fact that the learners will physiologically be given an opportunity to have an active recovery. This helps against accumulation of lactic acid in the muscle hence causing pain the day after. Secondly, this final activity helps to cool off the learners psychologically so that the competitive atmospheres that may have been generated by the game phase are channelled into positive thoughts. The fact that a majority of the teachers

gave this phase its due consideration indicates the significance of this session in a physical education lesson.

Findings of the Chi-square test of relationship between the final activity phase and the use of lesson plan by teachers of physical education for learners with intellectual disability phase activity are displayed in Table 28.

Table 28: A Cross-Tabulation of Final Activity and Use of Lesson Plan during Physical Education in Schools for Learners with Intellectual Disability

		Rating of final Activity				
		Very poor %	**Poor %**	**Satisfactory %**	**Good %**	**Total %**
Did you use a lesson plan?	Yes	3.6	7.1	64.3	14.3	89.3
	No	-	3.6	-	7.1	10.7
Total		**3.6**	**10.7**	**64.3**	**21.4**	**100.0**

No of obs.= 31; Pearson Chi-Square=7.093 (d.f. 3), Asymp. Sig. (2-sided)=0.069

Table 28 shows that the final activity was also fairly well rated with the most prominent variance occurring with respect to how well the teachers used the lesson plan. Specifically, teachers who had used the lesson plan attained better ratings on the final activity than teachers who did not. This relationship is verified by a significant Chi-square statistic of 7.093 at 10% and 3 degrees of freedom. This implies that teachers who planned performed significantly better in the final activity. The lumber down plays the significant role of both psychologically and physiologically preparing the learners for the next class after physical education. It may be concluded that learners who come from lessons that were planned well and hence the teacher had lesson plan may have been better prepared to attend the next session of their school day.

A summary comparative rating of key physical education lesson of learners with intellectual disabilities was done and is presented in Table 29.

Table 29: Comparative Analysis of Core Physical Education Activities

Type of activity	Very poor %	Poor %	Satisfactory %	Good %	Excellent %	*Mean Score*
Introductory activity	4.4	9.7	58.8	26.9	-	*61.56*
Class activity	-	17.1	47.2	35.5	-	*63.56*
Group activity	6.5	6.5	54.8	32.3	-	*62.62*
Game	-	0	51.6	32.3	16.1	*72.9*
Final activity	3.3	10.0	66.7	20.0	-	*60.68*

Table 29 shows that overall, the physical education teaching and learning process attain favourable ratings on a 5-point scale (1=very poor to 5= excellent). The teachers of learners with intellectual disability were subjected to an assessment based on five class activities: introductory activity, class activity, group activity, game and final activity. Results show that the best rated activity is games at a mean score of 72.9% followed by class activity at a mean score of 63.56%. The lowest rating came from the final activity of the physical education class (60.68% mean score). This indicates that the tendencies observed are towards satisfactory in all five phases of teaching the physical education lessons. This implies that teachers in schools of learners with intellectual disability tend to teach satisfactorily.

Alongside lesson sessions being observed, the teacher's general characteristics were also observed and recorded since this plays a part in the creation of classroom climate in terms of dressing, personality of the teachers, audibility, discipline and mastery of content.

Table 30 indicates the dressing of the teacher while attending to the physical education lesson.

Table 30: Observed Dress Code of the Teacher of PE in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Satisfactory	20	64.51
Good	8	25.81
Very Good	3	9.68
Total	**31**	**100.00**

Table 31 indicates that no teacher scored very poor or poor in terms of dress code. Indeed, the observation indicates that 64.51% (n=20) of the teachers had satisfactory dressing, 25.81% (n=8) qualified to be rated good while 9.68% (n=3) were rated as very good. This implies that all (100%-n=31) teachers of physical education in schools for learners with intellectual disability invest in dressing that is considered suitable for teaching the lesson.

Dressing plays a part in creating the correct atmosphere in a classroom. For a teacher of physical education appropriate dressing entails a track suit or other appropriate sports attire that will enable the teachers to be able to demonstrate skills without any encumbrance. The fact that all these teachers felt the need to dress up correctly implies that they take the lesson seriously.

Personality is that outward character that others may note about you and can be qualified as great, awful, pleasant, unpleasant, horrid, likeable, and unlikable and so on. This plays an important part on how one is viewed and can impact on classroom climate. Table 31

shows what was observed as personality of the teachers of physical education as noted by the researcher.

Table 31: Observed Personality of the Teacher of PE in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Satisfactory	12	38.71
Good	17	54.84
Very Good	2	6.45
Total	**31**	**100.00**

Table 31 indicates that none of the teachers' personality was viewed as very poor or poor. It was noted that 38.71% (n=12) of the teachers were recorded as having satisfactory personality, 54.84% (n=17) as having good personality and 6.45% (n=2) were indicated as having very good personality. This implies that all (100%-n=31) the teachers of physical education had personality that was qualified as satisfactory, good or very good.

This suggests that teachers in schools for learners with intellectual disability can be said to have a warm character which can be defined in positive terms such as pleasant, agreeable, amiable, and likeable. This ties in well with what the learners said when they were asked about how they view the physical education lesson. Terms such as enjoyable, fun, good and exciting were used. This could have been because the teachers radiated a pleasant personality that matched the teaching of the lesson.

For a teacher to be able to pass knowledge to the learners he /she must be heard correctly hence audibility plays an important part in the teaching/learning process. The researcher went out to gauge how audible the teachers in schools for learners with intellectual disability were while teaching physical education. Table 32 records these findings.

Table 32: Audibility of the Teacher of PE in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Satisfactory	13	41.93
Good	17	54.84
Very Good	1	3.23
Total	**31**	**100.00**

Table 32 indicates that no teachers were found to be either very poor or poor with regards to audibility, 41.93% (n=13) were satisfactory, 54.84% (n=17) were considered good while 3.23% (n=1) were considered very good. This implies that all (100%-n=31) teachers in schools for learners with intellectual disability were audible while teaching physical education. The learners felt that all (100%-n=31) of the teachers communicated well.

Audibility plays an important part in the impartation of knowledge. A physical education teacher needs to be audible to avoid a situation that may be harmful to the learners due to the fact that physical education taught in the sports fields coupled with use of equipment has an embedded possibility of unsafe situations. The teachers through the use of voice may be able to avert these unsafe situations by belting out instruction to the learners. All teachers of physical education in schools for learners with intellectual disability were found to be audible when teaching.

Discipline entails the shaping of behaviour by use of various methods to enable the recipients to acknowledge the fact that there are reasonable limits in whatever one engages in. This is also true for physical education. The researcher went out to gauge the

discipline of teachers during lessons of physical education in schools for learners with intellectual disability. Table 34 indicates the results.

Table 33: Discipline during the Lesson of Physical Education in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Satisfactory	14	45.16
Good	12	38.71
Very Good	5	16.13
Total	**31**	**100.00**

As noted in Table 34, none of the teachers were observed in terms of maintaining classroom discipline as very poor, or poor. Up to 45.16% (n=14) of the teachers were said to be satisfactory, 38.71% (n=12) were good while 16.13% (n=5) were considered very good. This implies that in all schools for learners with intellectual disability, the physical education lessons were carried out with acceptable levels of discipline.

Mastery of content taught allows the teachers to provide rich learning opportunities in class. Table 34 indicates the record of what the researcher observed about teachers of physical education in schools for learners with intellectual disability in terms of mastery of the content taught.

Table 34: Mastery of Content by Teacher of PE in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Satisfactory	20	64.51
Good	8	25.81
Very Good	3	9.68
Total	**31**	**100.00**

From Table 34 it was noted that none of the teachers was observed to be very poor or poor in mastery of content. Up to 64.51% (n=20) were observed to be satisfactory, 25.81% (n=8) were noted as good while 9.68% (n=3) were observed to have had very good on the mastery of content. This implies that all (100%-n=31) of the teachers were said to have had mastery of the content they taught.

While this mastery of the content is positive, it may have been attributed to the fact that most teachers seem to have selected big ball games which are easy to teach by virtue of the knowledge being in the public domain. This is important since it may be noted that this was in most cases (35.48%-n=11) not from the syllabus as noted in Table 1. It might also be important to interrogate whether these teachers decided to select the easiest (big balls and athletics, 96.77%-n=30) content to teach at the expense of what is prescribed in the syllabus as noted in Table 2.

The use of facility is an indicator of how keen the teacher is on the teaching of physical education. If too much of the facility is used, it is an indicator that the teacher may have chosen not to modify the sport so that it is played as internationally recognised. Table 35 indicates how the teachers were observed to have used the sports fields.

Table 35: Use of Facility by the Teacher of PE in Schools for Learners with Intellectual Disability.

Item	Frequency	Percentage
Poor	14	45.16
Satisfactory	15	48.39
Good	2	6.45
Total	**31**	**100.00**

It was noted in Table 35 that no teachers were observed to have used the sports fields very poorly, but, 45.16% (n=14) were observed to have been poor. A further 48.39% (n=15) were considered satisfactory. Only 6.45% (n=2) were said to have used the sports fields well enough to be considered good. These results indicate that while a majority (54.84%-n=17) of the teachers met the satisfactory and above mark, a significant part of teachers 45.16% (n=14) use sports facility poorly.

Sometimes teachers use the whole field for few students making the field too big for the learners. This has a tendency of the lesson becoming unstructured and tending towards basic playing. Good teachers tend to structure the lesson by reducing the size of the sports fields used by learners. This has a tendency to increase the number of times the learners interact with the equipment. The use of equipment forms an important part of the learning process. The more interaction a learner has with equipment, the more learning takes place. Arjmandnia and Kakabaracee (2011) agreed with this position when they noted that physical education is not free play.

The researcher went out to observe how much interaction with the learners had with the various equipment used. The result of this observation is recorded in Table 36.

Table 36: Use of Equipment during PE Lessons in Schools for Learners with Intellectual Disability

Item	Frequency	Percentage
Poor	14	45.16
Satisfactory	15	48.39
Good	2	6.45
Total	**31**	**100.00**

Table 36 shows that no teacher was quantified as very poor, though 45.16% (n=14) of the teachers developed lessons where the interaction between the learners and the equipment was quantified as poor, 48.39% (n=15) of the observations indicated satisfactory with regard to interaction between the learners and equipment, while a meagre 6.45% (n=2) was recorded as good. In effect this means that a majority (54.84%-n=17) of teachers create a satisfactory interaction pattern between the learners and the equipment.

The quality of interaction between the learners and the equipment plays an important part in the actual transmission of knowledge between the learners and the teachers. More interaction indicates more engagement with the equipment which translates to more knowledge for the learner. Indeed there is need for the teacher to appreciate the relationships between learners and equipment to make the transfer of knowledge of consequence to the learners. Njororai (1990) also noted the significance of equipment in the teaching and learning process in physical education and the fault that equipment plays a major part in creating a conducive classroom climate for the learners.

Just like the core activities, rating of other general characteristics of the teacher of physical education was done. Other class interaction elements measured included dress code, personality, voice projection, and discipline, use of lesson plan, mastery of content, use of facility and use of equipments. Table 37 shows a comparative rating of the general characteristics of a teacher of physical education in schools for learners with intellectual disability.

Table 37: A Comparative Rating of other General Characteristics of Physical Education Class Teacher in Schools for Learners with Intellectual Disability

Other class interaction aspect	**Very poor %**	**Poor %**	**Satisfactory %**	**Good %**	**Excellent %**	***Mean Score***
Dress Code	0	0	58.1	38.7	3.1	*68.92*
Personality	0	0	45.2	48.4	6.5	*72.34*
Voice	0	0	48.4	41.9	6.5	*69.06*
Discipline	3.2	3.2	41.9	29	22.6	*72.86*
Use of lesson plan	0	0	51.6	41.9	6.5	*70.98*
Mastery of content	0	9.7	45.2	41.9	3.2	*67.72*
Use of facility	3.2	41.9	48.4	0	6.5	*52.94*
Use of equipment	41.9	0	51.6	3.2	3.2	*45.1*

From Table 37 of all the teachers assessed the above general dimensions of class interaction record higher ratings than the previous set of core class activities. Personality and discipline of teachers of learners with intellectual disability lead the scores at 72.86% and 72.34% respectively. The worst rated in this category is use of equipment where teachers of learners with intellectual disability performed dismally with a success rate of 45.1%. This implies apart from the use of facilities and equipment, the teachers in schools for learners with intellectual disability were observes to rank highly in terms of personality, use of voice, dress code, discipline, use of lesson plan and mastery of

content. This implies that these teachers of physical education were professional in their approach to the teaching of their lessons.

In terms of research question three on the efficiency of teaching/learning of physical education for learners with intellectual disability, it is noted that efficiency entails how well a programme has been managed. It looks at whether there would have been better ways of achieving the same results at a lesser cost. It queries whether the most cost effective alternatives were used in managing the programme. The question in this regard was how the programme was administered. The following is the summary of the findings in terms of efficiency:

i. The syllabus set out was about recreation not physical education, suggesting a disconnect between what should be taught and what is timetabled. This point was strengthened by the fact that the teachers even chose to teach big ball and athletics at the expense of songs. The implication for this is that the teachers must have assumed that ignoring the syllabus was the best way of achieving the objectives of the programmes.

ii. In terms of the principals:

    a. No criteria was cited for allocation of funds to each discipline, except for what the principal considered priority, how much capitation was received, and the needs of the school. There seems to have been no documented policy by government about allocation of funds even though some principals claimed that they allocated the funds received at the school using FPE policy. This implies the need for a policy document to help in

uniform distribution of finances in schools for learners with intellectual disability.

b. It was noted that a majority of the principals had training in physical education indicating that principals understand the challenges of teaching physical education to learners with intellectual disability. All principals had at least two years of training in special needs education; a majority had between two and four years of training in special needs education. A majority of the principals had over three years of experience while some even had over ten years of experience. This implies that schools for learners with intellectual disability have experienced administrators.

iii. In terms of teachers:

a. A majority of the teachers said they used lesson plans to teach physical education lessons. The lesson plans used were derived from the schemes of work. All the teachers felt that the objectives they set out to teach were achieved.

b. These teachers indicated a high level of qualification hence could interpret the syllabus document with ease. Indeed a majority of the teachers hold graduate qualifications and above. However observations indicate that these teachers did not follow the syllabus.

iv. In terms of resources:

a. Equipment available at schools for learners with intellectual disability was basic and limited. This implied that either the teachers had to resort to creating equipment or the teaching process would be hampered by a limited repertoire of learning experiences for the pupils.

b. A majority of these schools had two to three facilities. Only one institution was found to have an aquatic facility that could provide options for variety for the learners in terms of disciplines offered. Changing rooms were nonexistent at all these schools even though all the schools sampled were of mixed sex. At least each school had some toilets though these toilets were noted to be few.

v. Tendency towards a lengthy games phase implied there was a penchant towards play as opposed to the structured physical education lesson.

The implication of the findings on the criteria of efficiency thus suggests that while the principals and the teachers had adequate training and experience to manage the programme for learners with intellectual disability well, the syllabus document suggests the teaching of recreation and leisure and not physical education creating confusion since most teachers chose to teach from undefined sources. The different resources that prop up this programme were limited further; there was no policy on the allocation of funding adversely affecting the teaching and learning process of physical education in these schools for learners with intellectual disability.

4.6 Findings on Research Question Four: How relevant is the teaching and learning process of physical education for learners with intellectual disability?

The relevance of teaching and learning entails the sustainability of the programme. Usually this is gauged by whether the stakeholders believe such a programme should continue or has run its life. In the case of this study the main stakeholders include: the government of Kenya, the administrators of the programme, the teachers in charge of the daily routines, the learners, the parents, to some extent the institutions that appreciate these learners with intellectual disability which include Special Olympics Kenya. The individual in schools of learners with intellectual disability and the community from which learners comes from.

The Government of Kenya has been mandated by the Constitution of Kenya (National Council for Law, 2010) to safeguard the rights of persons with disability. The Constitution of Kenya, Laws of Kenya 2010 Chapter Four, Part 3 on Specific Application of Rights Paragraph 54 (1) (b) states that "persons with disability have the right to access education to the extent compatible with the interest of the person with disability" (National Council for Law, 2010). In this respect, the Government of Kenya is under obligation to provide education to learners with intellectual disability. In 1978 the Government appointed a Special Education Inspector who then set up an Educational Assessment and Resources Service (Republic of Kenya, 2007). After setting up of Schools for the Mentally Handicapped, the Government went ahead to sponsor them. The government does this through capitation to the schools. It was indicated by the principals that 86.67% (n=26) of the schools of learners with intellectual disability have the

Government of Kenya as their biggest sponsor. To a large extent, this suggests that the Government of Kenya is meeting its constitutional obligation.

It is imperative to note that the Government of Kenya as a major stakeholder in the education of learners with intellectual disability has taken legal and financial steps to meet its obligations towards learners with intellectual disability. Indeed schools for learners with intellectual disability are a structural framework to meet this constitutional and social obligation. The Constitution of Kenya promulgated in 2010 is a further indication that the government, a major stake holder in the schools for learners with intellectual disability, believes that this education is still relevant.

The Government of Kenya and other policy making institution actually set the basic objectives that the education for the learner with intellectual disability aspires to achieve. The Government of Kenya does this through issuance of a syllabus. An interrogation of the syllabus reveals that first, objectives set out for learners with mental handicap take cognisance of the need for these learners to provide human capital for the society. Second, these objectives recognise the need for the learners to be independent. Third, these objectives embody the fact that these learners need emotional security and socially acceptable habits. Fourth, the objectives are mindful about the self adjustment skills for the learners. Finally, the objectives suggest the need for the learners to occupy themselves in wholesome leisure activities.

It can be argued that these objectives set, by the Ministry of Education for learners with intellectual disability, are able to distinguish between learners with intellectual disability and other special needs learners. This in effect implies that the objectives are appropriate

and still relevant to meet the needs of learners with intellectual disability. This further suggests that the objectives serve the expectations of the final stage for learners with intellectual disability. While it is possible that there are learners from this programme who may never meet these expectations due to their health and social capacity, these are realistic expectations that meet the needs of learners with intellectual disability.

The specific objectives for physical education are captured under the heading of recreation and leisure which is an anomaly. The class time table expects the teaching of physical education to take place and unless one is actually trained in the area of recreation and leisure, the possibility of capturing the bigger picture may be lost. Physical education entails the use of physical activity in creation of physical literacy. Objectives of education for special needs learners and the objectives of education for learners with intellectual disability have been portrayed in such a way that only physical education, and not recreation and leisure, will be able to capture the required needs. This implies that the values that are embedded in the physical education subject are missing. The choice of activities for the teacher in this regard is left hanging. The teacher is left to seek guidance or use his/her experience to be able to meet the needs of the student.

Some of the terms used such as ‘hosting’ in bullet 5 (Appendix X) of the leisure and recreation activities are hanging words that do not seem to make sense and hence will not guide the teacher. Hannon (2005) in a study on promotion of people with a physical disability had noted that physical education curriculum needs to be able to capture values. The syllabus for learners with intellectual disability in Kenya does not seem to capture values. This suggests that the programme needs to be reviewed to be able to continue to make sense for learners with intellectual disability.

The biggest financiers of schools usually dictate the main policies in the school. In this regard, the principals shared information about main sponsors of their schools noting that the Government of Kenya is the biggest sponsor of most (86.67%-n=26) schools for the intellectually disabled learners. This is done through capitation also referred to as Free Primary Education capitation. In only 13.33% (n=4) of the times were donors the biggest sponsors of the schools for learners with intellectual disability.

This suggests that the government is the biggest stakeholder in the teaching/learning of learners with intellectual disability in Kenya. This is an important fact in the sense that the government continues to meet its obligation to the learners with intellectual disability. It is noted that in 13.33% (n=4) of the time the government was not the biggest donor. One principal noted that a foreign donor consistently contributed to the facilities and equipment in the school in a manner the government would envy. The contribution included building of a workshop and equipping it with heavy machinery. Further the donor avails the financial requirements to help run the workshop upfront annually.

This study sought to find out the sources of activities that were taught during the physical education lessons. This source of the activities indicates the options and respect that the teachers have for the syllabus at their disposal. On the question of how the teacher source the activities taught, the following was noted (Table 38).

Table 38: Sources of PE Lessons Activities in Schools for Learners with Intellectual Disability.

Sources of Choice of Activity	Frequency	Percentage
Teacher's Adaption	13	41.94
What is Available at School	7	22.58
Syllabus	11	35.48
Total	**31**	**100.00**

Table 38 shows that 35.48% (n=11) of the teachers use the syllabus as a source of the choices of activities, 22.58% (n=7) use what is available in school while 41.94% (n=13) adapt the activities based on the school environment. This implies that a majority of the teachers (64.52%-n=20) do not use the syllabus as their source of activities.

The implication of this is that the syllabus document may not provide the kind of guidance that teachers feel is relevant to their teaching. Its relevance is in doubt if the main stakeholders including teachers are not adhering to it. While the syllabus acts as a guide to the teacher about possibilities of options that may be available, the choice of specific activity belongs to the teacher while creating the lesson plan. Dart, Didimalang and Pilime (2002) also undertook a study that looked at the choice of activity by teachers of physical education in schools in Botswana for learners who they refer to as learners with mental retardation. They noted that the curricula which borrowed from South Africa had a problem of contextualisation. This contextualisation of the curriculum is a similar situation in Kenya with teachers preferring to choose activities from other places rather than adhere to what is prescribed in the syllabus. This implies the need to contextualise the curriculum used in schools for learners with intellectual disability otherwise they become irrelevant. When the syllabus offers clear guidance the result is that teachers, to a

large extent, will be teaching similar activities to their learners at specific times. This works well in that it suggests that learners attending similar institutions are learning what is expected of them by the authorities.

The learner with intellectual disability is the cardinal stakeholder when it comes to education. He/she is what the Government of Kenya is trying to create human capital out of. This study set out to find out what the learner with intellectual disability thought about the education he/she was receiving. In every school where the questionnaires were administered, his/her learners were organised into a focus group and interviewed too. The outcome of these focus groups is described below under various premises.

Learners quantify the disciplines they feel are most worthy to them by labelling them best subject. They recognise what they feel they benefit the most from. When the learners were asked what subject they enjoyed most, 4 disciplines stood out. This information is captured in Table 39.

Table 39: School Subject Most Enjoyed in Schools for Learners with Intellectual Disability.

Subjects Most Enjoyed	Frequency	Percentage
Physical Education	17	54.83
Number Work	12	38.71
Social Studies	1	3.23
English Language	1	3.23
Total	**31**	**100.00**

Table 39 shows that Physical Education at 54.83% (n=83) was considered the most enjoyed lesson, 38.71% (n=12) of the learners considered number work their favourite

subject taught in school. Social studies which teaches about life and, the learning of English were both rated at 3.23% (n=1).

While by its nature physical education is an exciting subject for any learner due to the embedded play session within the lesson, it was interesting to note the interest in number work shown by these learners with intellectual disability. Implicitly a majority of the learners with intellectual disability believe physical education is the most enjoyable subject followed by number work. As noted earlier by (Finkelstein, 2001) physical education is a discipline that resonates with learners with intellectual disability.

The learners were asked which session of a physical education lesson they enjoyed most. Table 40 captured what the learners felt.

Table 40: Portion of Lesson Most Appreciated in Schools for Learners with Intellectual Disability.

Portion of the Lesson most Enjoyed	**Frequency**	**Percentage**
Introductory Activity	1	3.23
Compensatory Activity	0	0.00
Skill Development	3	9.68
Game	22	70.96
Lumber Down	5	16.13
Total	**31**	**100.00**

From Table 40 the game phase (70.96%-n=22) was most appreciated, followed by the lumber down phase (16.13%-n=5), skill development phases (9.68%-n=3) and finally, introductory activities phase (3.23%-n=1). The respondents did not acknowledge or

appreciate the compensatory phase. This implies that physical education in school for learners with intellectually disability is appreciated more for its game aspects as opposed to its skill development aspect. This suggests that the majority of learners with intellectual disability appreciate the game aspects most during a physical education lesson. Could this be attributed to the fact that teachers do not explain the essence of each section or maybe because there are parts that the teacher does not teach at all?

For growth of a discipline the need to create expectations cannot be over emphasised. If the expectations are bright, it can safely be noted that the prospects for the area are good. This would mean that the stakeholder believes that the programme is still relevant. Going forward the principals were asked what proposals they had for the following year for the teaching of physical education in their schools. Their responses would indicate what was in store for the area of physical education. Answers given are captured in Table 41.

Table 41: Proposals for Physical Education for 2015 in Schools for Learners with Intellectual Disability.

Next Year's Proposal	Frequency	Percentage
Develop Learners Skills	2	6.67
New Equipment	15	50.00
Increase Funds for PE	5	16.67
Have Sports day	2	6.67
Develop new Facilities	3	10.00
Travel out of School	3	10.00
Total	**30**	**100.00**

Based on Table 41 it is noted that 50.00% (n=15) of the principals propose they will increase the number of sports equipment, 16.67% (n=5) propose they will increase funds allocated to the teaching of physical education, 6.67% (n=2) propose initiating a sports

day, 10.00% (n=3) propose development of new facilities, 10.00 % (n=3) will travel out of school for sports while 6.67% (n=5) propose they would teach a new skill.

The fact that 50.00% (n=15) of the principals indicated the need for new equipments insinuates the need for new diversified equipment. This is also closely followed by the increased (16.67%-n=5) allocation of funds for physical education. A further 10.00 % (n=3) felt there was need to invest in new facilities. Thus 76.67% (n=23) of the principals were insinuating the need to invest in assets that would enrich the teaching of physical education. This information suggests that a majority of principals (76.67%-n=23) of school for learners with intellectual disability feel the need to invest in assets to enrich the teaching of physical education. This implies that the programme is still considered relevant and the investment into it worthy.

Schools usually use the little funding they get on what is considered urgent at the point. Some cash is used on capital expenditure while some is used on recurrent expenditure. As noted earlier, this is dictated by the principals. By the time some of this expenditure is done, it must really be considered crucial and time bound. The fact that 10% of the principals feel that they need to invest in facilities of such crucial and high cost project indicates that the facilities in these schools are in dire straits. This suggests the need for a study on the state of facilities in schools for learners with intellectual disability. This also implies that administrators of schools for learners with intellectual disability consider this programme sustainable hence the need to make capital investment in the facilities for teaching PE.

Many learners in their youth need extrinsic motivation to sustain their interest in certain activities. When the learners were asked what it was about physical education that motivated them towards the class, they gave their responses as outlined in Table 42.

Table 42: Motivation of Learners during PE in Schools for Learners with Intellectual Disability.

Motivation for Physical Education	Frequency	Percentage
Teacher	14	45.16
Classmates	4	12.90
Sports Played	11	35.48
Parents	2	6.45
Total	**31**	**99.99**

Table 42 indicates that 45.16% (n=14) of the learners with intellectual disability derived their motivation for physical education from the teacher, 35.48% (n=11) derived their motivation from the sports they played, and 12.90% (n=4) derived their motivation from classmates while 6.45% (n=2) derived their motivation from their parents. This implies that the teacher is considered an important part of the class by the learners.

The teacher is an essential part of what the learner with intellectual disability feels makes up the learning environment. Implicitly therefore a majority of learners in schools for learners with intellectual disability consider the teacher the main motivation for their interest in the physical education class. It is interesting to note that apart from the parents (6.45%- n=2), a majority (93.55%-n=29) of the other motivation factors in schools for learners with intellectual disability are within the environment of the school. These are issues that could be influenced and managed at the teacher's level so that the lesson becomes more beneficial to the learners. It should be noted that the learners did not quite

appreciate the place for the parent in the learning process. Mohsin, Khan and Awan (2011) looked at the place for the parent in the training of learners with intellectual disability. They concluded that parents are equal partners with teachers in the training of these learners. This was the opposite of what was found in this study where parents provided only 6.45% (n=2) motivation for learners with intellectual disability. But the fact that these learners seem to derive most of their motivation from within the school suggest that they seem to consider this programme relevant.

Research question number four on the relevance of teaching and learning of physical education to learners with intellectual disability notes that relevance entails whether the set objectives of a programme are still tenable and whether the programme is still sustainable. What the stakeholder or end user thinks about the programme at this moment in time is still important. The stakeholders in this regard include the government of Kenya, the learners who go through this programme and the parents to whom these learners return upon completion of this programme. Information about relevance was derived from questionnaires from the teacher (Appendix II) and the principles (Appendix III). The following is the summary of the findings in terms of relevance:

i. The Government of Kenya is obligated by the Constitution of Kenya 2010 (National Council for Law, 2010) to consider access to education essential for learners with intellectual disability. The government has responded by providing capitation through FPE and by being the biggest sponsor in a majority of the 44 schools of the mentally handicapped in the country. This suggests that the Government of Kenya regards the teaching and learning process for learners with intellectual disability relevant.

ii. Although specific objectives of the syllabus lean towards leisure and recreation as opposed to PE the fact that PE is timetabled indicates that the Ministry in charge of Education still values the teaching of PE.

iii. It is noted that learner rated PE lesson positively through the use of terms such as ‘enjoyable’, ‘good’, ‘happy times’ and ‘exciting’, to describe their feelings while attending a physical education lesson. A majority of the learners are thus motivated by the school based factors to enjoy physical education insinuating that they feel this schooling is relevant and can be sustained.

iv. Proposals for the year 2015 indicate that all the principals intend to increase research allocation and to pay more attention to physical education implying principals still feel that physical education is relevant and sustainable.

The implication of the findings on the criteria of relevance thus suggests that the people of Kenya believe this programme is relevant as noted by its inclusion in the constitution that was promulgated in 2010. Further, in most schools, the Government of Kenya is the biggest sponsor for the schools for learners with intellectual disability. The learners have declared physical education the best subject at school. Finally, the principals have positive proposals for the teaching of physical education in 2015 suggesting that this programme is still sustainable.

4.7 Findings on Research Question Five: To what extent does the teaching and learning process of physical education impact on learners with intellectual disability?

The findings on impacts answers the question to what extent the teaching and learning process contribute towards the integration of learners with intellectual disability into society. Impacts are indicators of what has happened as a result of a programme. This could be planned or unplanned. In this regard, the impacts of schooling for learners with intellectual disability can be monitored through the learners who have gone through the system and the parents who are the immediate consumers of whatever the learners have internalized.

The graduates of schools for learners with intellectual disability were asked to state their age. Table 43 indicates the ages of the former learners of schools of intellectual disability.

Table 43: Ages of Former Learners from Schools for Learners with Intellectual Disability.

Ages of Former Learners	Frequency	Percentage
20-24 Years	9	20.45
25-29 Years	18	40.91
30-34 Years	11	25.00
35-39 Years	4	9.09
40-50 Years	2	4.55
Total	**44**	**100.00**

Table 43 shows a distribution of ages from age bracket 20-24 years to age bracket 40 years and above, 20.45% (n=9) are in the age bracket 20-24, 40.91% (n=9) in the age bracket 25-29, 25.00 % (n=11) in the age bracket 0-34, 9.09% (n=4) in the age bracket 35-40 and 4.55 % (n=2) in the age bracket 40-50 years. This shows that a majority of

former learners still active are in the age bracket of 20 to 29 (61.29%-n=19). Biostatistics provides data that helps researchers note the kind of population they are dealing with. As you move towards 40-50 years there are less former learners of schools with learners with intellectual disability available. This could imply that graduates of schools for learners with intellectual disability have in recent years been more active, maybe due to better preparations to meet the challenges found in society. Notably therefore, there are more graduates of schools of learners with intellectual disability evident and active in the field in the age bracket 20 to 29 years.

To complement the age bracket as broken down above, the researcher went out to find the composition of the sampled graduates at schools for learners with intellectual disability in terms of when they left school. The former learners were asked which year they left school. The answers they gave are captured in Table 44.

Table 44: Year Former Students Left Schools for Learners with Intellectual Disability.

Year Left School	Frequency	Percentage
2002	1	2.27
2003	1	2.27
2004	2	4.55
2005	3	6.81
2006	4	9.09
2007	4	9.09
2008	6	13.64
2009	10	22.73
2010	7	15.91
2011	4	9.09
2012	2	4.55
Total	**44**	**100.00**

Table 44 shows a range of a decade and indicates that these former learners were stretched all the way from 2002 till 2012. Further, no regular pattern is seen in the distribution of these former learners with varied percentages throughout the distribution.

This implies that the distribution of the former graduates used in this study was fairly random in nature. The active graduates of schools for learners with intellectual disability are randomly distributed from the year 2002 to the year 2012.

Currently five sports are taught and played in schools for learners with intellectual disability. These are athletics, football, netball volleyball and handball. The former learners were asked what sports they played at school. Four sports were named indicating that not much had changed since these learners were at school. The frequency of the sports played is captured in Table 45.

Table 45: Sports Played by Former Students While at Schools for Learners with Intellectual Disability.

Sports Played at School	Frequency	Percentage
Soccer	13	29.55
Athletics	28	63.63
Handball	2	4.55
Volleyball	1	2.27
Total	**44**	**100.00**

Table 45 indicates that 63.63% (n=28) of the former pupils from schools for learners with intellectual disability engaged in athletics, 29.55% (n=13) in soccer, 4.55 % (n=2) in handball and 2.27% (n=1) in volleyball.

The number of sports options shows the apathy experienced by the teachers and learners in schools for learners with intellectual disability due to limited numbers of games to choose from. This means that any learner who may have had interest other than in these four sports was really not taken care of. This also suggests that the apathy seen in the limited choice of sporting activity that learners can be involved in has prevailed over the years, hence the need to diversify choices of activities learners can be involved in during physical education lessons. This implies the need for the Government of Kenya to make some capital investment in new kinds of facilities such as swimming pools and gymnasia to help reduce the apathy experienced in schools for learners with intellectual disability over the years to create room for better learning.

How sports that were played in schools affect the choice of activities that the learners will have after school is yet another question that the researcher asked. In response graduates

of schools for learners with intellectual disability indicated what sporting activities they are currently involved in (Table 46).

Table 46: Sports Played by Former Student after Leaving Schools for Learners with Intellectual Disability.

Sports Played after School	Frequency	Percentage
Soccer	9	20.45
Athletics	25	56.82
Handball	6	13.64
Floor Hockey	4	9.09
Total	**44**	**100.00**

Table 46 shows that 56.82% (n=25) of the graduates of schools for learners with intellectual disability engage in athletics, 13.64% (n=6) in handball, 20.45 % (n=9) in soccer and 9.09% (n=4) in a new sport called floor hockey.

This implies that at least one new sport has been added to the repertoire of sports available to graduates of schools for learners with intellectual disability. This also shows that two sports, netball and softball, have since been dropped by the former students of schools for learners with intellectual disability. Graduates for schools of learners with intellectual disability have learnt a new sport called floor hockey. This could be attributed to the fact that floor hockey is a new sport that has been familiarised world over by Special Olympics International. Being proxy members of Special Olympics Clubs may have played a part in the acquisition of these new skills. This suggests that the need to have learners do new sports must be deliberate and initiated from within the schools system before these learners graduate.

One essence of learning physical education at school is to create physical literacy. This allows the learner to develop sustainable methods of using physical activity for health for the rest of his/her life. Once learners pick up an interest in a game and can sustain this sport beyond school, then that means they are well on their way to being physically literate. The former learners were asked at what level they participated in this sporting activity. The answers given indicate that 70.45% (n=31) of former learners participate in sports activities for competition while the other 29.55% (n=13) participate to enjoy themselves.

Whether the former learners were participating for competition's sake or for enjoyment, it is important to note that both are signs of physical literacy. It is also imperative to note that these were the learners who were traceable. Attempts to trace former learners that were not part of the Special Olympics Clubs were futile. This suggests that graduates of schools for learners with intellectual disability backed by Special Olympics Clubs can be said to have acquired the ultimate physical literacy that the teaching of physical education seeks to achieve.

Frequency of participation is an indicator that one has more than flitting interest in an activity. The former learners of schools for the intellectually disabled learners were asked how often they participated in the sporting activities. The answers they gave are captured in Table 47.

Table 47: Current Participation Trends of Former Students from Schools for Learners with Intellectual Disability.

Frequency of Participation	Frequency	Percentage
Weekly	26	59.09
Monthly	3	6.82
Quarterly	10	22.73
Once in a while	5	11.36
Total	**44**	**100.00**

Table 47 shows that 59.09% (n=26) of the former learners participated weekly in sporting activities, 6.82% (n=3) participate monthly, 22.73% (n=10) quarterly and 11.36% (n=5) once in a while. This suggests that 59.09% (n=26) of these former learners take the participation of sports seriously hence are able to make time every week to engage in sporting activities. The participation was through Special Olympics Clubs. Special Olympics Clubs provide a social network for these former learners where they meet and interact with other former learners of these institutions. Parents who turned up for such forums emphasized their significance. This proposes that a majority of the graduates of schools for learners with an intellectual disability participate seriously in sporting activities organised by Special Olympics Clubs.

The distance from the playing ground to the school is an indicator of the significance of the school in creating and nurturing the culture of the learners to participate in sporting events/activities. Former learners of schools for the intellectually disabled were asked to state the distance between the playing ground and the school they attended. Table 48 captures the answers that they gave.

Table 48: Distance of Playing Ground from Former School Attended by Former Student for Learners with Intellectual Disability.

Distance of Playing Ground from School	Frequency	Percentage
Less than 5 km	13	29.55
5-10km	11	25.00
More than 10 km	20	45.45
Total	**44**	**100.00**

Table 48 shows that in 29.55% (n=13) of the time the schools of the former learners was less than 5 kilometres from the training ground that the former learner frequents for training, in 25.00% (n=11) of the time the ground is 5-10 kilometres away and in 45.45% (n=20) of the time the training ground is more than 10 km away.

The fact that 54.55% (n=24) of the play ground is less than 10 kilometres away from the schools attended by graduates from school of learners with intellectual disability is an indicator that the school is a pull factor towards the former learner's interest in sustaining the playing culture. For the other 45.45 % (n=20) of the former learners the fact that they travel over 10 kilometres to attend training is an indicator that they take these training sessions seriously. This implies that graduates of schools for learners with intellectual disability are not only attracted to the training ground close to their former schools but also take training for sports seriously.

On the question of whether the former learners participated at Special Olympics competition while they were students, 86.36% (n=38) of them did while only 13.64% (n=6) did not. This shows a very high level of participation for former students. This implies that investing in Special Olympics events for learners with disability while in

schools seems to have paid off since most of these learners continued to participate in sporting events organised by Special Olympics after school.

The essence of education for learners with intellectual disability is to create independent persons who become human capital (Republic of Kenya, 2009). This means that the learners should be confident enough to attend functions on their own for instance. On whether a parent or family member accompanies the former learners as they go to practice 31.82% (n=14) of the learners were accompanied to training session while 68.18% (n=30) were not. This implies a majority (68.18%-n=30) of the former learners did not need a family member leaving whatever chores they had to accompany the learners for training. This suggests that a majority of graduates of schools for learners with intellectual disability are sufficiently independent to attend training sessions alone. Making citizens from schools for learners with intellectual disability independent is one of the aims of education in the first place, hence the need to create the human capital as insinuated in the objectives of education can said to have been achieved (Republic of Kenya, 2009).

The fact that 36.36% (n=16) of the former learners are accompanied to competition while 63.64% (n=28) are not accompanied could point to two possibilities. First, the learners may have become so comfortable with themselves hence can be trusted to take the bus to their own activities, or that the schooling process has achieved its goal. Secondly, it may be an indication that parents of these learners do not feel the need to accompany them due to lack of interest in supporting the activities of their children. It is thus implied that a majority of graduates of schools for learners with intellectual disability do not get accompanied by family members when they go for competitions.

It is worth noting that the parent, as the end user of the learner who has gone through the schooling system of learners with intellectual disability, is a major stakeholder in this education system. As it were, the learners go through the process of education and land back in the hands of the parent. It therefore becomes the parent's responsibility to utilize the socialisation former learners have acquired from schools. Responses were sought from parents, 93.33% (n=28) of the parents whose children had gone through schools for learners with intellectual disability felt that there was a difference in their children after going through these schools.

The essence of education is to produce an independent individual. Schools are supposed to socialize learners going through them so that they transform them into better people. It would appear that socialisation had actually benefited the learner, hence it may be concluded that persons that go through schools for learners with intellectual disability go through socialisation and are different at the end of the school period. This finding concurs with Admas (2009) in a study in Ethiopia on learners with intellectual disability which established that learners showed improvement in self care, safety and communication skills after going through schools for learners with intellectual disability.

While learners can have differences based on the socialisation of schooling, there is need to find out what kind of socialisation took place. When parents were asked to qualify the differences they noted, their answers were captured in Figure 49.

Table: 49 Differences Quantified by Parents of Former Students of Schools for Learners with Intellectual Disability.

Differences	Frequency	Percentage
Responsible	8	26.67
Positively Social	2	6.67
Active/ Helpful	10	33.33
Organised	4	13.33
Kind	3	10.00
Talkative	1	3.33
None	2	6.67
Total	**30**	**100.00**

Table 49 indicates that the learners were quantified as kind, 10.00% (n=3), active/helpful 33.33 %(n=10), positively social 6.67% (n=2), organised 13.33% (n=4) and, responsible 26.67 %(n=8). These differences indicate that the learners have been 90.00% (n=27) socialised positively. This implies that a majority (93.33%-n=28) of graduates of schools for learners with intellectual disability have positive socialisation due to the schooling process.

Parents of learners who had gone through schools of learners with intellectual disability were asked to comment on whether learners who undergo experiences in these schools were different in any way. Up to 93.33% (n=28) of the parents noted differences while 6.67% (n=2) of the learners showed no difference. This implies that 93.33% (n=28) of parents felt that learners who went through schools for learners with intellectual disability had come through with a positive difference. This suggests that a majority of the parents of learners with intellectual disability have seen changes in the learners who have gone through the schooling system this is the essence of schools; they are a powerful

socializing agent (Republic of Kenya, 2009). In this regard therefore schools for learners with intellectual disability can be said to be on the right track.

This study also sought to establish how many of the former pupils in schools for learners with intellectual disability had been involved in Special Olympics activities. Up to 70.45% (n=31) of the former learners have been involved in Special Olympics while 29.55 (n=13) % have not been involved. This indicates that a majority of former learners from schools of learners with intellectual disability have been involved in programmes for Special Olympics. Shriver (2007) noted that Special Olympics is a catalyst force in developing the world for people with intellectual disability. The fact that a majority of learners are involved with activities of this worldwide organisation is positive.

Continued participation in sports is a factor of physical literacy. It means that the schooling process was a worthy investment for the parents. It also indicates that the teachers of physical education impacted on the learners. Further, physical literacy is also an indicator that Special Olympics has been successful in implementation of its programmes.

This study also sought to establish whether former learners were still involved in competitive sports activity. It was established that 47.72% (n=21) of the former learners continue to be involved in competitive sports activities while 52.27% (n=23) are no longer involved in sports activities. This indicates that about half of the graduates of schools for learners with intellectual disability stop playing after school. Notably however, 47.72 %(n=21) that keep playing competitively is a fairly high level of playing after graduating from school. As noted this is an indicator that the teacher impacted on

these learners sufficiently for them to feel the need to continue competitive playing beyond school.

In terms of research question number five on the impacts of teaching and learning process of physical education in schools for learners with intellectual disability, it is noted that impacts entail what has happened as a result of teaching this programme. This considered both the planned and unplanned results of this teaching. This also gauges what the long term consequences of teaching this programme are. The main beneficiaries of this programme were the learners who had gone through and their parents. Once learners go through the programme, it becomes the responsibility of parents to take these learners through the next stage of life, hence, these two stakeholders; parents (questionnaire Appendix VII) and former learners (questionnaire Appendix VIII), were interrogated. The following is the summary of the findings in terms of the extent the teaching and learning process of physical education impacts on learners with intellectual disability:

i. After leaving school, former learners from schools of learners with intellectual disability have continued to show physical literacy hence tying this to the fact that physical education was considered the learners' best subject at school. Some have even picked up a new sport in Kenya referred to as floor hockey. All this is done through the social support of Special Olympics clubs.

ii. Majority of former learners were involved in sports and played for competition. In terms of training, majority of the learners practised weekly. It was also noted that majority of the former learners go to practice less than 10 kilometres radius from

the school they attended. This implies that the schools were a pull factor for these students providing familiar grounds.

iii. Majority of the former students were not accompanied by members of the family to practice sessions. This suggests that the majority of former learners were possibly considered sufficiently independent to go to the practice sessions alone.

iv. A majority of the parents noted positive differences in the learners who had gone through schools for learners with intellectual disability. This implied that these learners had benefited from this programme.

The implication of the findings on the criteria of impact thus suggests that graduates of schools for learners with intellectual disability have acquired physical literacy by being involved in activities led by Special Olympics Kenya. Further, they attend training and competition on their own an indication that they have developed independence. Finally, parents of graduates of schools for learners with intellectual disability have indicated that these learners have shown positive improvement after going through these schools.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This section provides the summary of key findings of the study. This is followed by the conclusions based on these findings and thereafter recommendations based on the study.

5.1 Summary of the Findings

The purpose of this study was to evaluate the teaching and learning process in physical education for learners with intellectual disability. To achieve this purpose, five specific objectives were designed which guided the formation of five research questions. The data for the study was drawn from: an interrogation of the syllabus used to teach learners with mental handicap (Kenya Institute of Education, 2009), questionnaires for 31 teachers from the 44 schools for the mentally handicapped, questionnaires for 30 principals, interview schedules for 240 learners with intellectual disability organised into 31 focus groups, interview schedules for 30 parents of former learners from schools for mentally handicapped learners and interview schedules for 44 former learners from schools for the mentally handicapped.

The main findings of this study based along the line of the five step criteria developed by Anderson and Arsenault (2002) are as follows:

5.1.1 Summary of the Findings on the Rationale of the Teaching and Learning of PE in Schools for Learners with Intellectual Disability.

The syllabus was derived from Kenya's national goals on education. The objectives of special needs education as cascaded down from these national goals are wholesome and make sense. The content of the syllabus is however open to question. Majority of the teachers did not adhere to the syllabus. This begs the question, whether the syllabus made sense (Anderson and Arsenault, 2002). The syllabus document needs revision so as to meet the requirements for physical education. Further editing and rationalisation will be required to ascertain whether the document focuses on leisure and recreation or physical education. Although the specific objectives set out in the syllabus were achievable, it was noted that the teachers tended to teach big ball games and track athletics. Parental input is only statutory. Further, parents tend to shun any contact with schools once they have delivered their children to the institutions for learners with intellectual disability. Learners in these schools tend to enjoy physical education lessons. This implies that to a large extend the programme run in schools for learners with intellectual disability makes sense to the learners and that with revision, the set objectives that have been set will ensure the attainment of the programme's objectives since these objectives are derived from national goals.

With reference to research question one, this study concluded as follows. A syllabus exists to give guidance to teaching in schools for learners with intellectual disabilities, its set goals, national objectives and specific objectives makes sense. However, the choices of activities by teachers who are the main implementing agents of this syllabus tend to ignore the contents of the syllabus. Though, principals of schools for learners with

intellectual disability believe this programme makes sense as suggested by their perceptions of physical education goals for learners with intellectual disability. It was also established that some parents of learners with intellectual disability tend to ignore the schools once they deliver their children. This may suggest that these parents may not believe that this programme makes sense. Finally, physical education is considered the most enjoyable subject by pupils in schools for learners with intellectual disability, an indication that the programme makes sense to these learners.

5.1.2 Summary of the Findings on the Effectiveness of the Teaching and Learning of PE in Schools for Learners with Intellectual Disability.

Effectiveness of a programme entails the question whether a programme has achieved its objectives or not. It was noted that based on the resources available, individual learning as expected through divisioning did not take place in these schools for learners with intellectual disability, even though teachers' perception was that it occurred. The classroom climate as created by the teachers and the learners peers was conducive to learning. This would allow the programme to meet its goals. Teachers were audible and cordial and they felt that they used the lesson plan effectively. Different timings were allocated to the teaching of physical education from school to school. While two and half hours a week is the official allocated time, some schools allocated two hours a week while others allocated five hours a week. These five hours a week would encourage play instead of structured physical education hence the programme may not meet its goals. Indeed not all the classes were taught in a week. This could be attributed to the sheer number of hours allocated to this discipline per week.

5.1.3 Summary of the Findings on the Efficiency of the Teaching and Learning of PE in Schools for Learners with Intellectual Disability.

Efficiency explains the administration of a programme. It was noted that the syllabus seems to have suggested activities such as songs, storytelling and making of cards. However the teachers practised a different set of activities to provide experiences during physical education in schools for learners with intellectual disability. While the organisation of the learning experience was the duty of the teacher, it was based on the resources available and the goodwill of the principals who controlled the finances of the institution. Resources in this regard included sufficient teachers, equipment, facilities and finances. There was no policy on how funds, whether through capitation or sourced through other means, were allocated to the activity in schools for learners with intellectual disability. A majority of the principals were trained. Indeed a majority had training in physical education and had experience that could be drawn from to support the programme of physical education in schools for learners with intellectual disability. Lesson plans derived from schemes of work were used though the supervision of how this lesson plans and schemes of work were used was wanting.

Facilities and equipment available were basic and limited hence limiting the breadth a teacher had in provision of learning experiences. The few equipment available where serviceable. The facilities were also accessible. Fortunately a majority of the principals had been trained in physical education at one stage of their training. Indeed a majority of the principals had actually taught physical education in the school hence understood the challenges a physical education teacher would encounter in pursing his/her duties. Given the limited resources available and the erratic nature of funding from the main sponsors,

the programmes in schools for learners with intellectual disability can be said to have been run fairly well.

5.1.4 Summary of the Findings on the Relevance of the Teaching and Learning of PE in Schools for Learners with Intellectual Disability.

The criteria on relevance answers the question whether the objectives are still sustainable and whether the stakeholders still support the programmes. Learners rated physical education as the best subject taught in the school hence giving it relevance. The Government through policy documents and the constitution feels obligated to provide education for these citizens who go to schools for learners with intellectual disability. The Government of Kenya is thus the main sponsor of education for schools for learner with intellectual disability. This is done under the framework of capitation for Free Primary Education. Principals' proposals for 2015 put a significant funds allocation under physical education, underlining sustainability of physical education programmes in schools for learners with intellectual disability.

5.1.5 Summary of the Findings on the Impacts of the Teaching and Learning of PE in Schools for Learners with Intellectual Disability.

Impact entails what happened as a result of the programme. It was noted that some of the former learners were still involved in playing sports under the organisation of Special Olympics Kenya on a weekly basis. Indeed while most played the same sports that had been taught at school, a few of the learners had recently picked on a new sport called floor hockey introduced by Special Olympics Kenya. This was an indicator of physical literacy. It was noted that a majority of the former learners attended training and

competition on their own showing that they had picked up independence to be able to operate on their own without family support. Finally it was noted that most of the graduates of school for learners with intellectual disability were more positive, active and helpful after going through these schools. This suggests that going through the programme had long term positive consequences.

5.2 Conclusions

From the data analysis, this study made the following conclusions.

From objective one on the rationale of teaching learners with intellectual disability the following conclusions were made:

i. There is need for proper editing of the syllabus provided for learners with intellectual disability so that the document meets the required standards of syllabi. Basics such as capitalising the beginning of sentences and completion of the document as noted by missing information under some headings needs to be taken into account. It is noted that even the numbering of the content was incongruent.

ii. There is need to realise that the field of physical education, recreation and leisure are distinct areas of study and cannot be interchanged. The learners with intellectual disability require physical education as it is correctly stated in the time tables. With knowledge acquired from physical education the learner can recreate and have leisure.

iii. Teachers tend to teach soccer and athletics both of which require minimum input and may be taught by anyone, yet lessons taught in classes of physical education

should provide rich experiences and encourage the learner towards physical literacy. Teachers must realize that learners from schools for learners with intellectual disability may not find or have the capacity to learn any other sports discipline apart from what has been offered during their lessons in the school system, hence the need to provide a rich repertoire of activities for the learners while at school. Sports such as rounders are easy to teach and may not require very expensive equipment.

The implication of these findings is that while the teaching and learning process in physical education in schools for learners with intellectual disability makes sense, and while to a large extend the objectives set in the syllabus which is the guide from the Ministry of Education once achieved will meet the objectives of the programme, there is need to review the syllabus to make it more effective. Indeed to a large extend teachers in schools for learners with intellectual disability have tended to ignore this policy document. Apart from some parents who tend to ignore their children once they deliver them to the schools, the other stakeholders, including, the Government of Kenya, the principals, the teachers and the learners clearly indicate that this programme makes sense.

From objective two on the effectiveness of teaching learners with intellectual disability the following conclusions were made:

i. There is need for a clear policy on the number of lessons for physical education per week. The range of two and a half hours to five hours per week shows lack of consistence and a possibility that some of these classes will turn into simple play as opposed to instructional classes of physical education with clear objectives.

ii. The classroom atmosphere in schools of learners with intellectual disability is positive and needs to be maintained.

iv. Education at this level should be individualised. To achieve this there is need for divisioning by the teacher to enhance the experiences that are commensurate with the specific needs for each learner. Learners with intellectual disability are unique. This uniqueness needs to come out during the teaching and learning process. Physical education is one of the discipline through which this uniqueness could be reflected.

The implication for these findings is that there is need for individualised learning in institutions for learners with intellectual disability. Divisioning of the learners may be one method to help this individualised instruction. A policy on the number of hours timetabled for physical education needs to be ironed out to avoid some of these lessons ending as play instead of an opportunity to teach the values embedded in physical education through sports activity. Apart from individualising instruction and timetabling of physical education, to a large extend the programme objectives are met through teaching learning process of physical education in schools for learners with intellectual disability.

From objective three on the efficiency of teaching learners with intellectual disability conclusions made were that:

i. There is need for clear criteria of allocation of funds to help in the clear administration of the physical education programme. Currently allocation is

haphazard and undocumented and is completely dependent on the principal of each school.

ii. There is need for the Government of Kenya to be more consistent with the capitation provided under Free Primary Education programme. This is currently unreliable and creates a logistical problem, particularly in schools for learners with intellectual disability.

iii. It was encouraging to note that all the principals were well trained and had a wealth of years of experience. It was also encouraging to note that a big percentage of the principals had been trained in the teaching of physical education. This training in the teaching of physical education by the principals allows them to appreciate the challenges embedded in the teaching of this discipline. This ideally should reflect in the provision of equipment and facilities for teaching physical education.

iv. The principals have made projection about physical education for the year 2015. There is need for the principals to follow up to ensure that finances required to facilitate these projections are availed.

v. The principals and teachers experience and educational levels are commendable. Further, their perception and self-worth from the training they have received seems to have played an important part in the great classroom climate that was noted.

vi. There is need for diversification of equipment and facilities. Changing rooms are currently non-existent therefore there is need to construct some even if they are of a temporary nature.

The implications of these findings is that there is need for a policy on allocation of funding to be able to standardize the way public funds are utilised in institutions for learners with intellectual disability. The fact that there are limited facilities and equipment demand that the teachers need to think more creatively to enrich the learning opportunities in schools for learners with intellectual disability. Changing rooms which can be created closer to the playing facilities need not be permanent and provision of this will enable saving of time, which is also a valuable resource. Teachers need to observe the basic principle of teaching physical education which include going through all the phases to avoid possibilities of learners getting injuries due to lack of progression in the teaching process. Principals need to invest more in the supervision of these teachers.

From objective four on the relevance of teaching of learners with intellectual disability the following conclusions were made.

i. It was interesting to note that, physical education, which is by nature an exciting discipline due to the self embedded play session in the class which is easy to identify with, was considered the best subject for learners. Number work was voted by learners with intellectual disability as the second best subject at school. While this sounds odd, it is an indicator for the need for an empirical research to find out more about this number work which seems to excite learners with intellectual disability. It has been suggested variously that the learner with

intellectual disability should be taught at the concrete level (Asembo, 1997; Wekesa, Abosi & Amusa, 1997).

ii. The Government of Kenya through the Constitution has taken cognisance of the learner with disability. Indeed capitation for Free Primary Education is one such initiative, even though this capitation was limited and unpredictable in terms of disbursement.

The implications of these findings include the fact that the Government of Kenya is obligated by the constitution to continue to offer this programme and has done so in a basic way. There is need for the Government to step up support for this programme to make it more sustainable. Capitation based on individual learners must meet the reality on the ground which is that pupils in schools for learners with intellectual disability require a significantly higher allocation of funds than pupils going to normal schools. This will allow the principals, who have also proposed more support for physical education, to allocate more resources to this programme to make it more sustainable.

From objective five on the effects and impacts of teaching learners with intellectual disability, the following conclusions were made:

i. The education system that learners with intellectual disability go through has a positive effect as noted by the fact that some learners have shown how physical literacy can impact an individual by continuing to play well after leaving school.

ii. Learners with intellectual disability have tended to show positive attribution after going through school.

iii. Learners with intellectual disability have shown that they can learn new games by picking up the skill of floor hockey, a new sport coordinated by Special Olympics Kenya.

iv. Special Olympics Kenya has administered sports for the intellectually challenged learner both during their period at school and after they leave school.

Implication of these findings is that, to a large extend, learners that go through these schools for learners with intellectual disability benefit from the education process as noted by their independence and physical literacy. In this regard the programme was worth their while.

5.3 Recommendations

Based on this study the following recommendations were made:

i. There is need to review the syllabus for the learners with intellectual disability to make it more suited to set objectives. For instance, while content is based on leisure and recreation, the subject taught at schools for learners with intellectual disability is physical education. Indeed in some cases the titles are interchanged and mismatched.

ii. As noted with the issue of the interest with number work, could it be possible that the learner with intellectual disability is still grossly misunderstood and may in fact be able to handle number work effortlessly. Could it be possible that there has been an over generalisation about learning for this learner and that there is need for more research in the way this learner conceptualises knowledge?

iii. The principals and teachers are well trained but need to be given the tools to exploit this potential hence the need for diversification of equipment and facilities to enable the teacher to provide rich learning experience for the learners. There is need to individualise instruction through provision of a bigger number of equipment and divisioning.

iv. The Government of Kenya needs to make the disbursement of capitation used to run the schools consistent. This will allow for planning. The current trend where the funds that come to school are erratic and unpredictable has led to inconsistent planning, consequently interfering with the experiences that the teacher would wish to offer the learners with intellectual disability. Further, there is need for a policy on the distribution of funds at schools whether from capitation or sought from donors.

v. The ministry involved with education needs to note that current policy where the capitation going into schools for Free Primary Education is the same for all schools needs to be reviewed. The need for equipment at schools for learners with intellectual disability is different from other schools hence the need for the capitation to be increased to meet these needs.

vi. There is need for research that isolates the other areas of special needs education such as visual, physical and hearing disability, in terms of physical education to see if similar challenges are noted nationally and internationally.

vii. Teachers need to learn to modify facilities used in the teaching of physical education in schools for learners with intellectual disabilities so as to increase emphasis on skills as opposed to mere play.

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APPENDICES

Appendix I: Syllabus Review Document

1. What educational purposes does the document seek to attain?
    a. Are they commensurate with learners with intellectual disability?
    b. Is the document able to distinguish between learners with intellectual disability?
    c. Are the values stated?
    d. Are they measurable?

2. Does the document capture what educational experiences that can be provided that are likely to attain this purpose?
    a. Does the document recognise age of the learners?
    b. Does the document recognise interest of learners?

3. How can these educational experiences be effectively organised?
    a. Does the document indicate the issue of divisioning?
    b. Does it indicate the kind of resources required to achieve these objectives?
    c. How are these experiences financed?

4. Does the document determine whether these purposes are being attained?
    a. Does the document indicate how this evaluation will be done?
    b. Does it take care of aspects of resources, teachers, learners, and environment?
    c. Does it suggest any threats and how these will be resolved?
    d. Who is in charge of the learning process?

Appendix II: Questionnaire for the Teacher

Please complete the following items and questions (please tick where you have the option:

A. Basic Information

1. Educational Background of Teacher: Certificate __ Diploma ____ Degree _____ Postgraduate __
2. Years in service _____
3. Years teaching at this school: 1-2 _____ 2-5 _____ 5-10_____ above 10 _____

B. **Information on Teaching Physical Education**

4. Number in classes with Intellectually Disabled Learners in the school (ICL) _____
5. Number actually taught_____
6. What disciplines was taught_____
7. Equipment available_____
8. How usable was the equipment Very Usable__ usable ____ Not usable__
9. What equipment did you use for your activity _____
10. What is the number of equipment vis-à-vis students' numbers_____?
11. What is the state of equipment New_____ Usable _____ Not Usable _____
12. What facilities are available _____
13. What is the state of facilities: Very Usable_____ Usable ____ Not usable__
14. Was the whole facility used: Yes _____ No _____

C. Information on Instruction

15. Did you use a lesson plan: Yes _____ No _____
16. Is what you taught in your scheme of work: Yes _____ No _____
17. Did you adhere the lesson plan to scheme Yes _____ No _____
18. Does your scheme adhere to the syllabus Yes _____ No _____
19. Do you consider your lesson Individualised learning: Yes _____ No _____
20. How did you pick on the activities taught do you think you provided enough time: Syllabus ___ Availability at School _____ others (state) _____

21. Did you provide ample opportunity to practice: Yes _____ No _____
22. Were your objectives achievable provided achievable objectives: Yes _____ No _____

D. **What Constraints did you run into in the following areas?**

23. Content related _____
24. Information related _____
25. Equipment related _____
26. Facility _____
27. Training of teacher _____

E. **Interest of School in exposing ICL**

28. Number of times school has been involved in external games ____
29. Relation with Special Olympics: Good _____ Unavailable _____ Bad _____

Appendix III: Questionnaire for School Principal/Deputy Principal

Please provide answer for the following questions:

1. What percentage of cash is allocated to the different subjects in the school? _____

2. Is this a policy from governments? _____

3. How many sports facilities do you have in this institution? _____

4. What do you propose for next year for physical education? _____ _____

5. Are you trained in physical education for the disabled? Yes_____ No _____
6. Years of training _____
7. Years after training for ICL 1-2 _____ 2-5 _____ 5-10_____ above 10 _____
8. How many hours are allocated to PE per class in this school? _____
9. How many of these are actually taught? 100% _____ 75% ____ 50% ___ 25% ___ 0% __
10. What are the goals for PE in this school? _____
11. Have you taught PE at all in this school? Yes _____ No _____
12. Do the PE teachers use lesson plans to teach? Yes _____ No _____
13. How often do you check these lessons plans? Daily __ weekly ___ Monthly __ once per term __ annually _____ never _____
14. Do they use schemes of work? Yes ___ No _____
15. How often do you check the schemes of work? Once a term ___ Annually __ Never ___

16. Where and what percentage do you receive your financial support from? Government _____ Donors (state) _____ Parents _____
17. How often do you receive these funds? Monthly _____ Per term _____ Non periodically _____
18. What percentage of these fund support the teaching of physical education_____
19. What is the Government input in your school? _____
20. Do you attend local, national or international competitions? _____
21. What input do parents of the learners in this school have? _____

Appendix IV: Observation Tool for Classroom interaction

Lesson						
Lesson Section	**Very Poor**	**Poor**	**Satisfactory**	**Good**	**Excellent**	**Time**
Introductory Activity:						
Compensatory Activity:						
Class Activity:						
Group Activity:						
Game:						
Final Activity:						
Others						
Dress Code:						
Personality:						
Voice:						
Discipline:						
Use of Lesson Plan:						
Mastery of Content:						
Use of Facility						
Use of Equipment:						

Appendix V: Inventory for Availability of Resources in Schools

Location _____ Number of Students _____

Equipment	**Quantity**	**Equipment**	**Quantity**	**Facilities**	**Quantity**
Soccer balls		Ten quiet		Soccer Fields	
Netballs		Bibs		Netball courts	
Volleyballs		Bean bags		Aquatic Facilities	
Safety equipment		Tennis		Indoor facilities	
Wheel chairs		Bocce		Changing rooms	
Table Tennis Equipment		Soft ball		Toilets	
Basketballs		Rounders		Gymnasium	
Badminton Equipment		Bowling		Athletics Track	
Handballs		Others		Others	

Appendix VI: Interview Schedule for Learners

1. What words can you use to express your feeling during a PE class (enjoyment)? _____
2. List the subjects you enjoy in order (attitude) _____
3. What words can you use to describe your teacher (teacher/ learner relation)? _____
4. Which part of the PE class do you enjoy (content analysis explain to them the demarcations of the lesson) Introduction ____ Skill development _____ game _____ Final session _____
5. Which is your best subject in the school (strength of PE)? _____
6. Do you teacher speak clearly (communication)? Yes _____ No _____
7. Do you like your classmates (peer relations)? Yes _____ some _____ No _____
8. What makes you like physical education most (motivation)? The teacher _____ My classmates _____ the sports we play _____ My parents _____

Appendix VII: Interview Schedule for Parents of Former Learners

1. Is your child different from when he went to the school? Yes ____ No _____
2. Quantify some of these differences if any.
   _____
   _____
   _____
3. Has he/she ever been involved with Special Olympics Yes _____ No _____
4. Does he/she still participate in sports after school? Yes _____ No _____

Appendix VIII: Interview Schedule for Former Students

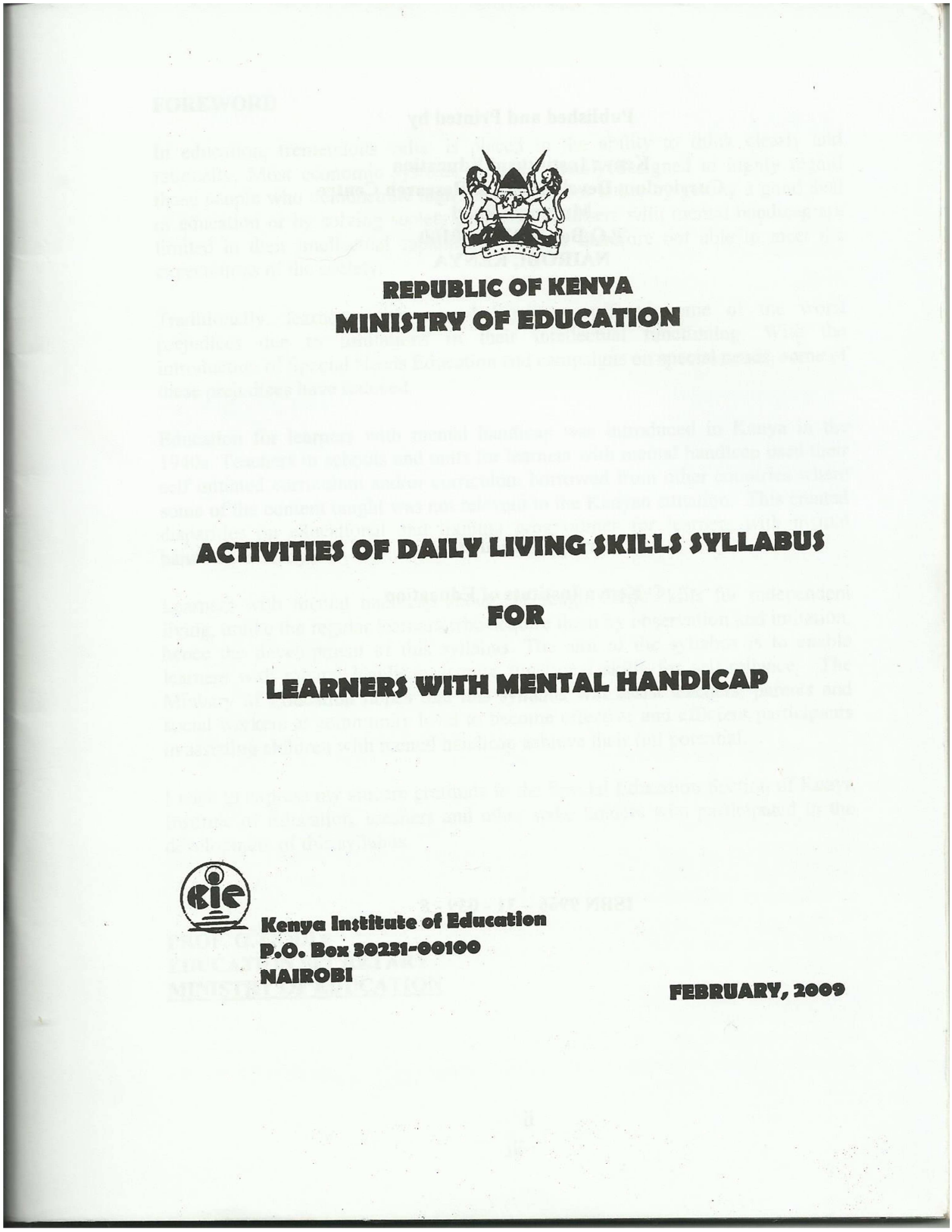
1. How old are you_____
2. When did you leave school _____
3. Which school did you attend? _____
4. What sports did you play when you were at school? _____
5. How many years ago did you leave school? 1-2 _____ 2-5 _____ 5-10_____ above 10 _____
6. What have you played since you left school? _____
7. At what level have you participated in this sporting activity? For competition ____ To enjoy myself _____
8. How often do you participate? Daily ___ Weekly ____ Monthly _____ Per term ____ Never _____
9. How far is this from your former schools? Less than 5 km radius _____ 10 km radius _____ more than 10 Km radius_____
10. Who is involved in the administration of this sports you are involved in since you left school? Special Olympics _____ some neighbours _____ parents _____ others (specify)
11. Did you participate at Special Olympics competition during school? Yes_____ No _____
12. Does any of your parents or family member accompany you to the competitions (specify whether parent or sibling)? Yes_____ No _____
13. Do any of your family members accompany you to training?

Appendix IX: List of Schools for of Learners with Intellectually Disability

1. Ihwagi Primary School for Mentally Handicapped-Karatina
2. Kiambu-ini Primary School of the Mentally Handicapped-Gatundu.
3. Rumuruti Primary School for the Mentally Handicapped-
4. P.C.E.A. Wandumbi School for Mentally Handicapped-Nyeri
5. Dagoretti School for the Mentally Handicapped-Dagoretti
6. Hola Full Primary School for Mentally Handicapped –Hola
7. Lamu Special School for Mentally Handicapped-Lamu
8. Kwale Special School for Mentally Handicapped-Kwale
9. Miss Maseno Zuhuru Mohammed School for Mentally Handicapped-Malindi.
10. Embu Special School for Mentally Handicapped
11. Karatina School for the Mentally Handicapped.
12. Kathithyama School for Mentally handicapped-Kangundo
13. Wamuyu School for Mentally Handicapped-Wamuyu
14. Kitui School for the Mentally Handicapped
15. Kaaga School for the Mentally Handicapped-Meru
16. Nile Special School-Nairobi
17. Jacaranda Special School-Nairobi
18. Tree Side Special School –Nairobi
19. Dagoretti Special School-Nairobi
20. Race Course Special School-Nairobi
21. Githurai Special School
22. Our Lady of Mercy Special School for the Mentally Handicapped.
23. Undugu Society
24. Mathare S. P. Training
25. Garissa School for the Mentally Handicapped-Garissa.
26. Lutheran Special School for Mentally Handicapped-Kisumu
27. Oganda School for Mentally Handicapped-Homa Bay
28. Equator Round Table School-Ugunja
29. Kisii Special School for Mentally Handicapped-Kisii

30. Rabuor School for Mentally Handicapped- Arbour
31. Nyairicha D. E. B School for Mentally Handicapped- Nyamira
32. Salvation Army Special School for Mentally Handicapped- Njoro.
33. Hill Special School-Nakuru
34. Makutano Special School for Mentally Handicapped-Kapenguria
35. St Martin Kibuk School for Mentally Handicapped- Kapsokwony
36. Eldoret Special School for Mentally Handicapped
37. Nangina Special School –Funyula
38. Butula School for Mentally Handicapped
39. Akoreet Primary School for Mentally Handicapped-Bungoma.
40. Kapenguria School for the Mentally Handicapped
41. Meru School for the Mental Handicapped

Appendix X: Syllabus Document for the Learner with Mentally Handicapped



REPUBLIC OF KENYA

MINISTRY OF EDUCATION

ACTIVITIES OF DAILY LIVING SKILLS SYLLABUS

FOR

LEARNERS WITH MENTAL HANDICAP

Kenya Institute of Education
P.O. Box 30231-00100
NAIROBI

FEBRUARY, 2009

NATIONAL GOALS OF EDUCATION

Education in Kenya should:

1. **Foster nationalism, patriotism and promote national unity**
   Kenya's people belong to different communities, races and religions, but these differences need not divide them. They must be able to live and interact as Kenyans. It is a paramount duty of education to help the youth acquire this sense of nationhood by removing conflicts and by promoting positive attitudes of mutual respect, which enable them to live together in harmony and foster patriotism in order to make a positive contribution to the life of the nation.

2. **Promote the social economic, technological and industrial needs for national development**
   Education should prepare the youth of the country to play an effective and productive role in the life of the nation.

   a) **Social Needs**
   Education in Kenya must prepare children for the changes in attitudes and relationships, which are necessary for the smooth process of a rapidly developing modern economy. There is bound to be a silent social revolution following in the wake of rapid modernization. Education should assist our youth to adapt to this change.

   b) **Economic Needs**
   Education in Kenya should produce citizens with skills, knowledge, expertise and personal qualities that are required to support a growing economy. Kenya is building up a modern and independent economy which is in need of adequate domestic manpower.

   c) **Technological and Industrial Needs**
   Education in Kenya should provide the learners with the necessary skills and attitudes for industrial development. Kenya recognizes the rapid industrial and technological changes taking place especially in the developed world. We can only be part of this development if our

international community with all the obligation and responsibilities, rights and benefits that this membership entails.

8. **Promote positive attitudes towards good health and environmental protection**

   Education should inculcate in the youth the value of good health in order to avoid indulging in activities that will lead to physical or mental ill health. It should foster positive attitudes towards environmental development and conservation. It should lead the youth to appreciate the need for a healthy environment.

OBJECTIVES OF SPECIAL NEEDS EDUCATION

The objectives of Special Needs Education in Kenya are to:

a) facilitate the development of all learners with special needs spiritually, mentally, socially and physically;
b) develop in the learner's analytical and productive abilities so that they may excel in learning and in their future careers;
c) enable learners acquire a suitable basic foundation for the world of work in the context of economic and manpower needs;
d) enable learners develop positive self-concept and attitudes towards life, based on moral and religious values;
e) enable learners develop skills of coping and independent living, aimed at habilitation, rehabilitation and adjustment;
f) identify and assess learners with special needs for early intervention services;
g) promote inclusion of learners with special needs in regular schools and institutions with appropriate support and related services;
h) provide learners with special needs in education with appropriate resources for learning in a barrier free environment;

i) create awareness in the community on the needs and potentials of learners with special needs so as to be more responsive to their diverse needs;
j) provide educational facilities, materials and equipment for the education of learners with special needs;
k) develop appropriate human resource for special needs education.

OBJECTIVES OF EDUCATION FOR LEARNERS WITH MENTAL HANDICAP

Objectives of education for learners with mental handicap are to:

a) enable them get along with their peers and other members of the society;
b) equip them with necessary skills to enable them participate in various activities for the purpose of earning their own living;
c) assist them develop emotional security and independence at school, home and in the society;
d) equip them with socially acceptable habits;
e) equip them with basic literacy and numeracy skills for functional purposes;
f) instill in them the ability to occupy themselves in wholesome leisure time activities;
g) develop in them self help skills for independent living;
h) equip them with self adjustment skills;
i) enable them become economically productive people in the society.

GENERAL OBJECTIVES OF TEACHING ACTIVITIES OF DAILY LIVING

By the end of the course, the learner should be able to:

a) acquire personal care skills;
b) develop communication and social skills;
c) acquire independent living skills;
d) develop awareness of the environment and the need to care for it;
e) develop good character and general etiquette;
f) acquire time management skills;
g) develop into a self-reliant and independent individual;
h) appreciate contemporary issues in the society.

COURSE SUMMARY

NO.	TOPIC
1.	PERSONAL CARE • Toileting • Control of drooling • Care of body parts • Bathing/showering • Brushing teeth • Hair care • Use of cosmetics • Packing and storage of personal effects
2.	FEEDING
3.	SOCIAL AND COMMUNICATION SKILLS • Making friends • Courtesy • Sharing • Modes of communication
4.	OUR ENVIRONMENT • Our home • Our school • Our Neighbourhood • Environmental pollution and destruction and prevention
5.	CARE OF THE HOME • Cleaning the home • Orderliness of the house • Kitchen utensils and equipment • Choice of materials and equipment in the home • Repair and maintenance in the home

	• Budget for the home • Improvisation of cleaning materials • Home decorations
6.	FOOD SELECTION AND PREPARATION • Types of food • Classification of food • Sources of food • Food storage and preservation • Preparation of foods
7.	SAFETY AND SECURITY
8.	FIRST AID • Meaning and importance of first Aid • First Aid equipment • Action at an emergency • Dressings and bandages • Wounds and bleeding • Shock • Fractures • Burns and scalds • Poisoning • Chocking • Fainting • Epilepsy • Handling and transportation of injured persons
9.	TIME MANAGEMENT • Time, days and dates • Time planning • Time signals and punctuality

	• Consequences of poor time management
10.	RECREATION AND LEISURE
11.	MONEY • Different denominations of money • Uses of money • Sources of money • Keeping money safely • Saving money • Record keeping
12.	HIV and AIDS • Causes of HIV and AIDS • Prevention of HIV and AIDS • Misconception about HIV and AIDS • Living positively with HIV and AIDS • Taking care of people with HIV and AIDS • Effects of HIV and AIDS • Intervention measures for HIV and AIDS
13.	CAREER PREPARATION
14.	FAMILY LIFE • Types of families • Roles of family members • Rights of children • Family relationship • Changes during adolescents • Challenges faced by adolescence • Drugs and substance abuse • Sex Education • Family Planning

10.0 RECREATION AND LEISURE

10.1.0 Specific Objectives

By the end of the topic, the learner should be able to:

a) identify leisure and recreational activities,
b) State factors to consider in choosing leisure and recreation activities,
c) make choice of activities for enjoyment,
d) participate in excursions and camps.

1.1.2 Content

10.1.2.1 Leisure and recreational activities

- Songs
- Stories
- Dance
- Play
- Hosting-
- Making cards and print
- Cleaning pets

10.1.2.2 Leisure and recreation activities:

- Story telling
- Practicing new songs
- Dancing
- Role playing

10.1.2.3 Factors to consider in choosing leisure and recreation activities:

Appendix XI: Inventory for Availability of Equipment for Physical Education in School

School	Soccer balls	Net-balls	Volley-ball	Safety Equip	Wheel chair	Table Tennis	Basket-ball	Badminton	Hand-ball	Ten Quiet	Bibs	Bean bag	Tennis	Rounders	Others
1	3	2	2	0	4	0	1	0	1	0	10	0	0	0	-
2	5	5	3	0	157	0	3	0	1	0	40	20	0	0	-
3	3	1	2	0	5	0	0	0	1	0	20	0	0	0	-
4	3	2	2	0	10	0	2	2	2	0	25	50	0	0	-
5	9	8	10	1	1	1	6	0	2	0	40	0	0	0	-
6	4	1	2	0	0	0	0	0	1	0	20	15	0	0	-
7	8	2	3	0	10	0	0	0	2	0	30	12	0	0	-
8	5	2	2	2	0	2	0	0	2	0	0	10	0	0	-
9	10	1	6	2	0	2	0	0	2	0	10	20	0	0	Jump ropes
10	3	3	2	0	0	0	0	0	1	0	0	0	0	0	-
11	5	2	2	0	0	0	0	0	2	0	10	0	0	0	-
12	20	2	3	10	10	10	0	0	1	0	20	30	0	0	-
13	4	3	2	0	0	0	0	0	1	0	10	0	0	0	-
14	5	2	2	0	1	0	0	0	2	0	15	0	0	0	-

15	4	2	2	0	0	0	0	0	2	0	15	5	0	0	-
16	6	1	1	0	0	0	0	0	1	0	12	0	0	0	-
17	4	2	2	0	0	0	0	0	1	0	15	0	0	0	-
18	3	2	2	0	0	0	0	0	1	0	10	7	0	0	-
19	4	2	2	0	1	0	0	0	2	0	11	0	0	0	-
20	4	1	1	0	2	0	0	0	2	0	10	0	0	0	-
21	3	2	1	0	0	0	0	0	1	0	5	3	0	0	-
22	2	1	2	0	2	0	0	0	1	0	6	0	0	0	-
23	3	1	1	0	0	0	0	0	1	0	10	0	0	0	-
24	4	2	1	0	1	0	0	0	1	0	10	0	0	0	-
25	4	2	2	0	0	0	0	0	2	0	16	0	0	0	-
26	3	1	1	0	0	0	0	0	1	0	9	4	0	0	-
27	5	2	1	0	0	0	0	0	1	0	12	0	0	0	-
28	4	2	1	0	0	0	0	0	1	0	10	0	0	0	-
29	3	1	1	0	0	0	0	0	2	0	13	0	0	0	-
30	4	1	1	0	2	0	0	0	2	0	15	0	0	0	-
31	4	2	2	0	2	0	0	0	2	0	16	2	0	0	-
Total	**152**	**66**	**67**	**15**	**206**	**15**	**12**	**2**	**45**	**0**	**319**	**178**	**0**	**0**	**-**

Appendix X11: Inventory of Facilities in Schools of Learners with Intellectual Disability

School	Soccer Field	Netball Court	Aquatic Facility	Indoor facility	Changing rooms	Toilets	Gymnasium	Athletics track	Others
1	1	1	0	0	0	4	0	1	0
2	1	0	0	0	0	12	0	0	0
3	1	0	0	0	0	8	0	1	0
4	1	1	0	1	1	2	0	1	0
5	1	1	1	1	0	6	0	1	0
6	1	1	0	0	0	6	0	0	0
7	1	1	0	0	0	10	0	0	0
8	0	0	0	4	0	10	0	0	0
9	1	0	0	0	0	24	0	1	0
10	1	1	0	0	0	6	0	0	0
11	1	0	0	0	0	2	0	1	0
12	1	0	0	0	0	8	0	0	0
13	0	0	0	1	0	4	0	0	0
14	1	0	0	0	0	6	0	0	0
15	1	1	0	0	0	6	0	1	0
16	1	1	0	0	0	4	0	1	0
17	1	0	0	0	0	6	0	1	0
18	1	0	0	0	0	4	0	0	0

19	1	1	0	0	0	8	0	1	0
20	1	1	0	0	0	6	0	1	0
21	1	1	0	0	0	4	0	0	0
22	1	0	0	0	0	4	0	0	0
23	1	0	0	0	0	6	0	1	0
24	1	1	0	0	0	5	0	0	0
25	1	1	0	0	0	6	0	1	0
26	1	0	0	0	0	4	0	1	0
27	1	0	0	0	0	6	0	1	0
28	1	1	0	0	0	5	0	1	0
29	1	1	0	0	0	4	0	1	0
30	1	1	0	0	0	5	0	1	0
31	1	1	0	0	0	6	0	1	0

Total	**29**	**16**	**1**	**6**	**1**	**87**	**0**	**18**	**0**
Number of Institutions	**31**	**31**	**31**	**31**	**31**	**31**	**31**	**31**	**31**
Number of Institution with Facility	**29**	**16**	**1**	**4**	**1**	**31**	**0**	**18**	**0**
Percentage Institution with Facilities	**93.54**	**51.61**	**3.23**	**12.90**	**3.23**	**100**	**0**	**58.07**	**0**

Appendix XIII

Issues of a Logical Approach to Programme Evaluation (adopted from Anderson and Arsenault, 2002)

Major Issues	Essential Questions	Comments
Rationale	Does the programme make sense? Will attainment of the programmes' Objectives ensure attainment of its goals?	The evaluator must understand the programme and its environmental context .
Effectiveness	Has the programme achieved its objectives?	The programme must have explicit Objectives on which everyone agrees
Efficiency	How well has the programme been managed? Were there better ways of achieving the same results at less cost? Were the most cost effective alternatives used in managing the programme?	Major concern in programme administration.
Relevance	Are the objectives still relevant? Is the programme supported by stakeholders?	Is it sustainable?
Effects & Impacts	What has happened as a result of the programme? What are the unplanned effects? What are the probable long term programme consequences?	the evaluator must be sensitive to both planned and unplanned Programme effects.