PHYSICALLY DISABLED STUDENTS AND PHYSICAL EDUCATION: CHALLENGES AND OPPORTUNITIES; THE CASE OF SELECTED SCHOOLS IN ADDIS ABABA

BY
ELIAS FEKADE

A THESIS SUBMITTED TO SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE DEPARTMENT OF SPORT SCIENCE

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Physically Disabled Students and Physical Education: Challenges and Opportunities; the Case of Selected Schools in Addis Ababa

BY
Elias Fekade

APPROVED BY THE EXAMINING BOARD

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<td>AAHPERD</td>
<td>American alliance for health, Physical education, recreation and Dance.</td>
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<td>APE</td>
<td>Adapted physical education.</td>
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<td>IDEA</td>
<td>Individuals with disabilities education act.</td>
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<td>IEP</td>
<td>Individual education plan.</td>
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<td>ILO</td>
<td>International labor organization.</td>
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<td>IMEP</td>
<td>Individual motor education plan.</td>
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<td>IPEP</td>
<td>Individual physical education plan.</td>
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<td>Students with disabilities.</td>
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ABSTRACT

The main purpose of this study was to investigate the existing challenges and opportunities of students with physical disabilities in physical education (PE) regular practical classes in some selected schools in Addis Ababa. It is also aimed at suggesting possible recommendations that help to improve the level of involvement of these students in the PE practical classes. Qualitative approach of research was used in this study. Data were collected from the subjects through interview guides, focused group discussion guides and observation checklist. Data’s were organized and analyzed from in-depth interviews, practical field observations were analyzed qualitatively. Results of the study showed that, the exclusion of students with physical disabilities from PE practical classes, support made by teachers to crate effective inclusive PE was found very low, low level of awareness of stakeholders like school principals, educational officials, ‘normal’ peer groups, parents and others about the participation of the physically disabled students in PE practical classes so that their support and encouragement to the issue raised was found discouraging. Teachers training, curriculum materials and the required facilities and equipments were also found inadequate. Finally, based on the findings and conclusion of the study, it was recommended that, awareness creation strategy should be designed to the school principals ,teachers, families and other stakeholders so that they could support and encourage inclusiveness of PE in the regular schools. Curriculum materials for PE should be improved in order to address the special needs of students with physical disabilities. PE teachers should be provided relevant training and they need to be innovative, flexible, creative, willing and capable of initiating participatory inclusive PE.

Key words: challenges, inclusiveness, physical disabilities, physical education, qualitatively, recommended.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

World War I a period that greatly advanced medical and surgical techniques designed to ameliorate many physically disabled conditions. The relationship of physical activity to functional development and well-being has long been valued. In 460BC Hippocrates used exercise to strengthen muscles and aid rehabilitation. Galen (30 BC) recommended specific exercises for muscle tonus, and era’s stratus advocated walking for dropsy. Physical or mental impairment is that substantially limits one or more major life activates such as: caring for one’s self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working (Auxiter et.al.,1993).

Impaired is further defined by Dunn (1989), referring to those with “identifiable organic or functional disorders” and disabled as referring to those “who because of impairment are limited or restricted in executing some skills, performing tasks or participating in certain activities. Disability affects hundreds of millions of families in developing countries; currently around 10% of the world’s population, or roughly 650 million people, live with disability, the proportion and number significantly higher and on the rise in developing countries (http://www.disabeled-worlded.com/disability).

According to Auxiter, et al., (1993) Physical education was developed in conjunction with federal law that assured students with disabilities the right to free, appropriate physical education instruction.

i) The term means the development of
A. Physical and motor fitness
B. Fundamental motor skills and patterns and
C. Skills in aquatics, dance, and individual and group games and sports.

ii) The term includes special physical education adapted physical education, movement education and motor development.

Physical education was the only educational curriculum specifically named. This singular identification has placed unique opportunities and responsibilities on physical education, profession to serve persons with disabilities. During the past years a great transition in the professional fields that deliver assistance to individuals who have motor disabilities has taken place. Physical education teacher instruct children with a variety of disability conditions in many different instructional settings.

Its mission is to promote the development of motor skills and abilities so that children can live healthful and productive lives and engage in independent recreational and sport activities of their choosing.

Physical education is one part of education in general. That part of children through the use of movement experience. It’s activates are valuable education activates which deserve a faired share of school time (Neilson, 1966).

Auxiter, et al., (1993) The primary purpose of physical education instruction is to change psychomotor behaviors, there by facilitating self actualization, particularly as it relates to understanding and appreciation of the body and the self in motion and at rest. Physical education is not limited to vigorous activities but includes instruction in relaxation, opportunities for creative expression, practice in sport that will enhance leisure thought the lifespan, and participation in large-muscle games that teach cooperation and social skills.
Adapted physical activity is a cross disciplinary body of knowledge directed toward identification and solution of psychomotor problems thought the lifespan. It is one approach to increasing the quality and quantity of positive movement experiences. This is an area of study that prepares professionals to help resolve psychomotor problems that limit success.

In 1952 the committee on Adapted physical Education (AAHPERO) adopted the following resolution to accommodate children with disabilities in physical education programs. It consisted of a diversified program of developmental activities, games, sports, and rhythms suited to the interest’s capacities, and limitations of students with disabilities who may not safely or successfully engage in unrestricted participation in the vigorous activities of the general education program.

Recreational sports opportunities for persons with these abilities very at differing stages of life. In preschool and infant programs for children with disabilities, the focus is on motor development that is prerequisite to a wide variety of physical activities. When the individual enters the public school there are three opportunities for participation in recreational sports activity. One is the physical education instructional program which teachers the student the physical skills and knowledge necessary to play games and then actually generalizes the skills in to play. A second environment that may be available in some schools is an intramural program. Here the student with disabilities has opportunity to exercise the skills learned in physical education class in recreational play activity within the schools. A third sources opportunity for the child with a disability is community-based recreational programs that may take the form of integrated activity with other children in the community, in addition, organizations may organize physical activity to enable participation for specific group (e.g. Special Olympics for mentally
retarded individuals and wheel chair sports for orthopedically impaired persons).

1.2 Statement of the Problem

In our affluent society no longer must a person be relegated to living in isolation due to lack of physical and motor abilities prerequisite to independent domestic and recreational physical activity Auxiter, et al., (1993).

Students with permanent or temporary mental, physical and emotional disabilities who are unable to have all their educational needs met in a regular P.E class during the school or to be adequately educated the public schools are identify as children with disabilities these students need special consideration in the planning and implementation of the P.E programming provided to them. If not, they will not be able to participate safely and or successfully, thus not gain the physical, social and psychological benefits that a quality P.E program can offer.

In many cases regular P.E Teacher are not equipped with the knowledge and skills to effectively include children with disabilities in to their classes (http://sped.wikidot.com/pe-for-the-physically-disabled).

1.3 Research Questions

The purpose of this Study is to explore the challenges and opportunities in inclusion of Students with physical disabilities in regular practical classes in Addis Ababa some selected schools through the following basic question.

- Does disable student’s engage in physical activities during physical education classes?
• What are the challenges for disabled students to participate in physical education classes?
• What are the benefits of physical education for students with physical disabilities?
• How do physical educations Teacher assess disable students?
• Does a disabled student believe they can participate in physical activities?

1.4. Objective of the Study

General Objective
The overall objective of this study is to investigate the existing involvement and challenges of physically disabled students in Physical Education regular practical classes and to identify opportunities provided in selected Addis Ababa schools.

Specific Objective
• Provide clear picture about physical education subject and its contributions to physically disable students.
• To observe how P.E teachers provide lesson and evaluate physically disable students.
• To explore the effort done by PE teachers, school principals and others to create effective inclusive PE practical classes in the school.
• To identify the major factors that hinders the participation of children with disabilities in PE practical classes.
• To suggest possible recommendations to improve the degree of involvement of these children in the PE practical session.
1.5 Significance of the study

When a chilled is identified as having a disability, it serves notice to educators and parents that the chilled risks becoming dependent on others for social living skills. The physical educator can make a major contribution to reduce this risk and facilitate independent living through physical activity (Auxiter, et., al., 1993).

It is known that P.E is a unique subject which serves to children with disabilities by teaching motor skills to help them for their daily life and recreation. It is hoped that findings of this study would in help the following instances.

- Indicate the extent to which PE practical classes are open and conducive for children with disabilities in the schools.

- Identify the major problems hindering children with disabilities to be involved in PE practical activities and suggest some possible solutions for further improvement of the curriculum concerning PE approaches.

- Provide some important recommendations and forward possible solutions for the problem and challenges identified by the study.

- To give some insight to P.E teachers to include physical disable students in their physical activity program.

- It increase awareness to concerned bodies how much P.E is vital for physically disable students.

- It used as a source for researchers, governmental and nongovernmental organizations.
1.6 Limitation of the Study

The study would have include all schools in Addis Ababa However, it is limited in four schools because of financial and time constraints. In addition, due to absence of sufficient and relevant materials related to the study in Ethiopian context, the researcher has been forced to rely mainly on foreign sources. In spite of these however, the researcher has attempted to make the study as complete as possible.

1.7 Scope of the Study

There are different variables to be conducted in the study of inclusion of children with disabilities in education this study gives priority to assess only the level of involvement, opportunities and factors that hinder the participation of children with physical disability in PE practical classes.

1.8 Definition of Terms

Adapted Physical Education: is a diversified program of developmental activities, games, sports, and rhythms suited to the interests, capacities and limitations of students with disabilities who may not safely and successfully engage in unrestricted participation in vigorous activities of the general physical education program.

Challenges: refers to the situations that are difficult and non-stimulating to the deaf child’s participation within the environment.

Disabled; referring to those “who because of impairment are limited or restricted in executing some skills, performing tasks or participating in certain activities.

Inclusion: Involves a process of reform and restructuring of the school as a whole, with the aim of ensuring that all pupils can have access to
the whole range of educational and social opportunities offered by the school.

**Opportunity:** refers to the access or possibilities that are appropriate and suitable to participate in school.

**Physical Disability:** is any impairment which limits the physical function of one or more limbs or fine or gross motor ability. For the purpose of this paper, physical disability refers to those students whose Orthopedic, visual, and hearing limitations affect their participation in Physical Education practical activities.

**Physical Education:** is that phase of general educational program which contributes to the total growth and development of the child, primarily through selected movement experiences and physical activities.

**Practical Activities:** refers to physical education activities which are done practically in the field (Gymnastics, games, etc.).

**Regular Classes:** are classes designed for “regular” or academic, work as opposed to classes for “special” work.

### 1.9 Organization of the Study

The study consists five parts(chapters) in which the first part contains background, statement of the problem, research questions, objective of the study, significance of the study, limitation of the study, scope of the study, definition of terms. Chapter two contains review of related literature. Chapter three contains the research design and methodology, approach and design of the study, data collection instruments, data collection procedure, data organization and analysis and ethical considerations. Chapter four is about presentation of the findings and discussion and the last chapter is about summary, conclusion and recommendation.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

In these chapter basic concepts that will constitute issues about contribution of physical education for disabled students. Concepts reviewed for P.E teachers to help disabled students to be included in physical activities given due attention. Major problems of disabled students in physical education and possible solutions from different materials will also be addressed. The researcher used different materials, the review of scholar literatures, books, different websites and documents as a source of data (information).

2.1 Disability

The first ever World report on disability, produced jointly by WHO and the World Bank (2011) on disability and rehabilitation, suggests that more than a billion people in the world today experience disability. People with disabilities have generally poorer health, lower education achievements, fewer economic opportunities and higher rates of poverty than people without disabilities. This is largely due to the lack of services available to them and the many obstacles they face in their everyday lives (http://www.who.int/disabilities/world_report/2011/en/index.html).

According to the World Health Organization, a disability is:

“Any restriction or lack (resulting from any impairment) of ability to perform an activity in the manner or within the range considered normal for a human being”
The most commonly cited definition is that of the World Health Organization in 1976 which draws a three-fold distinction between impairment, disability and handicap, defined as follows. 'An impairment is any loss or abnormality of psychological, physiological or anatomical structure or function; a disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being; a handicap is a disadvantage for a given individual, resulting from an impairment or a disability, that prevents the fulfillment of a role that is considered normal (depending on age, sex and social and cultural factors) for that individual.

According to United Nations Standard Rules on the equalization of Opportunities for Persons with disabilities:

- The term "disability" summarizes a great number of different functional limitations occurring in any population in any country, of the world. People may be disabled by physical, intellectual or sensory impairment, medical conditions or mental illness. Such impairments, conditions or illnesses may be permanent or transitory in nature (http://hcdg.org/definition.htm).

### 2.2 Disability in Ethiopia

According to federal democratic republic of Ethiopia country profile on disability (2002) Following the World Health Organization (WHO) and International Labor Organization (ILO) definitions on disability, “Disability” is defined as follows in Ethiopia,

“A disabled person is any person unable to ensure by himself or herself a normal life, as a result of deficiency in his or her physical or mental capabilities”
Nearly 10% of the world’s population has disabilities, of which 80% live in developing countries. Most of those in developing countries do not have access to rehabilitation services due to a lack of resources and other various factors. Further strengthening the above issue UNICEF Ethiopia’s disability program by the Japan International Cooperation Agency (2002) it estimated that 7.6% of the population lives with a disability (approximately 5 million).

A separate WHO study estimates that it is 10%, meaning that 7.7 million people are living with a disability. Disabled people living in Ethiopia have to cope with poor awareness and limited support. Begging is a prevalent method of survival in urban centers, as is help from religious institutions and charities. Certain disabled groups are victims of prejudice, especially in rural areas. Children suffer from neglect and abuse. In the most extreme cases they have been shut inside their homes and deliberately kept away from other people because of the “shame” they bring their families.

Sources from (http://www.righttoplay.com) also show People living with a disability in Ethiopia are very rarely given the opportunity to partake in the workforce, school or sports activities, which often leads them to a life in the street or in seclusion.

**2.3 Physical Disability**

A physical disability is any impairment which limits the physical function of one or more limbs or fine or gross motor ability. Other physical disabilities include impairments which limit other facets of daily living (http://en.wikipedia.org/wiki/Physical_disability).

The term physical disability is broad and covers a range of disabilities and health issues, including both congenital and acquired disabilities.
Within that range are physical disabilities or impairments that interfere with a child’s ability to attain the same developmental milestones as his or her age-mates. The number of students with physical disabilities is expected to grow as medical advances continue to reduce mortality rates for infants and children. According to the Individuals with Disabilities Education Act (IDEA), a person with an orthopedic impairment, brain injury, or other health impairment that, by reason of that impairment, needs special education and related services is considered to have a physical disability. The condition must interfere with or substantially limit the child’s ability to take part in routine school activities (http://sped.wikidot.com/physical-disabilities).

As cited in (http://www.csun.edu/~sp20558/dis/physical.html) Physical impairment refers to a broad range of disabilities which include orthopedic, neuromuscular, cardiovascular and pulmonary disorders. People with these disabilities often must rely upon assertive devices such as wheelchairs, crutches, canes, and artificial limbs to obtain mobility. The physical disability may either be congenital or a result of injury, muscular dystrophy, multiple sclerosis, cerebral palsy, amputation, heart disease, pulmonary disease or more. Some persons may have hidden (no visible) disabilities which include pulmonary disease, respiratory disorders, epilepsy and other limiting conditions.

As John (1989), states that some students have no restrictions on what they can do and learn, while others are extremely limited in their activities and require intensive medical and educational help. A physical problem can hamper a student’s mobility, coordination, stamina, communication, or learning abilities to such an extent that educational objectives are difficult to accomplish and special education intervention is required.
2.4 Types of Physical Disabilities

According to Wikipedia, the free encyclopedia cited in (http://en.wikipedia.org/wiki/Physical_disability) state types of physical disability as follows:

- **Mobility impairment**: is a category of disability that includes people with varying types of physical disabilities. This type of disability includes upper limb disability, manual dexterity and disability in co-ordination with different organs of the body. Disability in mobility can either be a congenital or acquired with age problem. This problem could also be the consequence of some disease. People who have a broken skeletal structure also fall into this category of disability.

- **Visual impairment**: is another type of physical impairment. There are hundreds of thousands of people that greatly suffer from minor to various serious vision injuries or impairments. These types of injuries can also result into some severe problems or diseases like blindness and ocular trauma, to name a few. Some of the common types of vision impairments include scratched cornea, scratches on the sclera, diabetes-related eye conditions, dry eyes and corneal graft.

- **Hearing impairment**: is the category of physical impairment that includes people that are completely or partially deaf. People who are only partly deaf can sometimes make use of hearing-aids to improve their hearing ability.

2.5 Causes of Physical Disabilities

As cited in (http://en.wikipedia.org/wiki/Physical_disability) causes of physical disabilities are:
- **Prenatal causes**: Those disabilities that are acquired before birth. These may be due to diseases that have harmed the mother during pregnancy, or genetic incompatibilities between the parents.

- **Per natal causes**: Those disabilities that are acquired during birth. This could be due to prolonged lack of oxygen or the obstruction of the respiratory tract, damage to the brain during birth (due to the accidental misuse of forceps, for example) or the baby being born prematurely.

- **Postnatal causes**: Those disabilities gained after birth. They can be due to accidents, infection or other illness.

Seaman and Depauw (1989) identify that Physical impairments adversely affect the movement of the body, especially the skeletal system, including the spine, muscles, bones, and joints. Although many factors contribute to this impairment, the three main causes are:

1. Neurological impairment
2. Musculoskeletal conditions
3. Trauma caused physical impairments

1. Neurological impairment: implies damage or deterioration to the central nervous system the brain and spinal cord. Be aware that whenever the central nervous system suffers damage, muscular wellness or paralyses are almost always present.

2. Musculoskeletal conditions: some individuals are physically disabled because of defect or diseases of the muscles or bones. The condition of the musculature or skeletal system or both affects the ability to move problems arising from musculoskeletal conditions, without neurological impairment, may be congenital or acquires after birth. The causes of these conditions may include genetic
defects, infections disease, accidents, or dovetail disbars. In the majority of individuals, Intellectual functioning is not affected.

3. Trauma-caused physical impairments
   Trauma refers to those accidents or mishaps that occur after birth to an otherwise normal individual. Accident fractures, dislocations, Sprains, bruises, contusions, poisoning, and various wounds Can result in temporary or permanent impairments.

2.6 Society and the Disable
Regarding about society and disability (Daniels, 1954) write as follows:

2.6.1 Primitive Peoples
Absence of the modern humanitarian sprit and medical knowledge, added to the greater struggle for existence experienced by the able bodied, left very little time or service for the handicapped. Unable to care for themselves, Deviations in physique or function caused by disease or injury were not understood by primitive peoples.

2.6.2 Early Societies
The attitude or primitive peoples to word those unable to carry their share of the burdens of living carried over in to early societies. The reasons for the continuance of unfavorable attitudes and harsh treatment were several. Basically they were elimination of the unfit to improve the quality of society reduction of the social and economic burdens of caring for those unable to care for themselves, and superstition which related the crippled and deformed to evil and the work of Satan. Some early oriental peoples forced their cripples to leave centers of living and face certain death in uninhabited areas. Others, as in India, cast their disabled in to rivers to end their lives. In some instances the crippled were not permitted to enter the court.
2.6.3 Modern society

The revival of learning, world exploration, and the establishment of monarchies brought about tremendous social change. Superstition unreasonable faith in the supernatural and extreme forms of asceticism gave way to scientific investigation, logic, and greater understanding of the function of human society. Human dignity was gaining recognition. The foundations of educates as a social instruction were being laid. The values of an interest in sports, health and exercise were noted by educators, philosophers, physicians, and some religious leaders. Sport, games and other forms of recreation were recommended for the sake of health and personal welfare.

Further strengthening the previous issue (Luo, 2000) also state as follows:

**Primitive societies:**
- Children born with defects generally perished at an early age as a consequence of
- their inability to withstand the rigor of primitive man’s strenuous existence, ‘the
- Survivor the fittest’.

**Spartan, the early civilized society Greek:**
- Children with disabilities are left on hill to be perished.
  - **Athenians:**
    - Permitted such babies to die of neglect.
  - **Roman Empire:**
    - Babies born with birth defects suffered a like fate.
  - **Middle ages:**
    - Those with disabilities were believed to have been caused by Satan.
      Hence they are
    - Sinful and evil and treated harshly and carefully avoided.
• **Renaissance:**
  - Gained understanding of their problems but did not extent to include treatment,
  - Care and education.

• **1900s:**
  - Social awareness of the problems gained momentum in this country with the
  - Opening of schools for them and centers for treatment.

• **World War I and II**
  - Gave impetus to the development of treatment for injured veterans and even
  - Civilians with disabilities and to help them become useful and self-sufficient citizens.

### 2.7 Problems Facing Physically Disabled Children

According to Demand Media (1999-2011) as cited in (http://www.ehow.com/info_7992571_problems-physically-mentally-disabled-children.html). Children with physical or mental disabilities can face many difficulties in their lives. Discrimination, social stigma and poverty does." Therefore, it is important to be aware of the people who are interacting with a disabled child. Nevertheless, with adequate care and education, disabled children can lead rich and happy lives.

➢ **Ridicule**

A serious problem that all physically and mentally disabled children face is mockery and derision by others. The adolescent and teenage years can be a difficult time for anyone, but disabled children often face a higher degree of teasing and taunting due to their mental and physical differences. Physically and mentally
disabled children may also experience more teasing because they have difficulty standing up for themselves.

➢ **Isolation**

Another difficulty physically and mentally challenged children face is increased isolation. Although it is not always the case, children with these problems can be ignored by their peers and adult figures. Other children may find it difficult to interact with children with developmental challenges, while adults may tend to focus on children without these problems. As the severity of the disabilities increases, the child may become increasingly isolated. Extreme disabilities may cause a child to be confined to his home or an institution.

➢ **Abuse and Neglect**

A tragedy that some physically or mentally disabled children face is abuse or neglect. Children with certain disabilities are unable to stand up for themselves, or may be unaware that they are being abused. According to the Abuse Victim Hotline, "People with developmental disabilities are 4 to 10 times more likely to be victims of crime than other people are." Sadly, the vast majority of abuse toward those with disabilities is perpetrated by family members, peers with disabilities or professional caregivers.

➢ **Poverty**

There is also a strong link between poverty and disability. Without proper care or education, disabled children are at greater risk of becoming impoverished or homeless. For instance, according to a study in the United Kingdom, "the poverty rate for disabled people was 23.1 percent compared to 17.9 percent for non-disabled people, but when extra expenses associated with being disabled
were considered, the poverty rate for people with disabilities shot up to 47.4 percent"

2.8 Psychosocial Deficits of children with disabilities

According to (Auxter, et al, 1993) Children with disabilities may find it difficult to experience typical psychosocial development for number or reasons. They may face rejection, overt or covert, by their parents, siblings, teachers, or peers. In ancient Greece and Rome, for example, infants with disabilities were perceived to be disgusting to the gods and were abandoned to die. In the middle ages, individuals with disabilities were believed to possessed by “evil spirit” unfortunately, some of this type of mentality persists. The psychosocial development of children with disabilities may be seriously affected by the prejudice of others in fact, the prejudices of others may pre dispose the child to have low self-esteem ,children with disabilities may be overprotected and, subsequently, prevented from developing age appropriate play and interaction skills. Well-meaning parents and teachers may keep children with disabilities from participating in activities with their siblings and peers. Individuals with disabilities generally experience more problems in individual and social development and adjustments than do their peers without disabilities. Some of the problems with psychosocial development are a function of the prejudice and expectations of other. Some of the problems may be a function of the behaviors of children with disabilities some disabilities cause, by their very nature, serious difficulties in social interaction skills. Ways in which children with disabilities may differ socially from other as follows.

1. They may have difficulty with basic communications skills and, as such, lack ability to relate to other and response appropriately.
2. They may lack impulse control.
3. They may have significant difficulty following directions and following rules, infarct, they may be unable to follow directions.
4. They may have difficulty in age appropriate social interactions with peers and teachers, particular in a structured school environment.
5. They may be verbally or physically aggressive towards self peer and teachers.
6. They may have difficulty taking turns and share equipment, particularly toys and balls etc.
7. They may have difficulty understanding social cues and, subsequently, responded inappropriately to the advances or rebuffs of others.
8. They may exhibit difficult processing and understanding gestures, faced expressions, and vocal inflections that are crucial to understanding the context or on interaction with other.
9. They may exhibit “out of control” behaviors or temper tantrums, particularly in response to over stimulation or change in routine.
10. They may exhibit developmental delays in play behavior basic to the social development of children.

2.9 Major theories explaining Behavior of disable
Daniels, (1954) stated that little progress can be made in understanding physical disabilities as a social psychological problem if we consider it only from a physical standpoint. He states that physical disability is simply a variation in physique on which, ordinarily, we place highly negative value. He describes these negative values as:-

1. Negative values imposed by society. These results in social distance (the disabled from normal groups) because of the low tolerance for differences in physique.
2. Negative values imposed upon the person by himself. These stem in part from his low status in his culture, self imposed negative values may be intensified if the handicapped once had full
acceptance prior to the handicapped condition. In such cases the physical handicapped tends to become an emotional one as well, and the individual becomes “handicapped all over”.

3. Negative values of the disability may be conceived to rise from inability to achieve simple goals common to others. The deaf cannot communicate easily, the blind have trouble moving from one place to another and the orthopedic and neurologically disabled experiences great difficulty or frustration in performing the simple physical acts of daily living involving locomotion.

### 2.10 Physical Education

According to Bucher, (1975) the word physical refers to the body. It is often used in reference to various bodily characteristics such as physical development, physical strength, and physical prowess, physical health, and physical appearance. It refers to the body as contrasted to the mind. Therefore when the word education is added to the word physical, thus forming the phrase physical education, it refers to the process of education that concerns activities which develop and maintain the human body. Times have changed, and physical education must change with the times. New problems face our society and the world. As a result, if education is to be relevant to current needs, it must do something about these problems.

Further as Eugene, et al, (1958) Physical education has suffered in the past from the fact that it has been thought of too often exclusively interims of exercise, skills, muscle building, respiration, metabolism or excretion. All these are considerations in P.E, but the terms are out of place in a definition of P.E. society has set up the school as a more or less effective agency to promote certain modifications of the individual in mind, body, morals and manners which society thinks will enable the individual to live a more complete and effective life than would be
possible otherwise PE should never but thought of as a “frill” or ornament attached to the institution or the school, but rather as an integral phase of the project of educating the whole individual. When this understanding of the nature of P.E becomes generally accepted, we may look for less confusion about the subject and for more intelligent progress in the field.

2.11 Origin and Evolution of Physical Education for Individuals with Disabilities

According to Seaman and Depauw (1989) Physical education for individuals with disabilities can be traced to the curative physical regimens found in China on 2700 BC. The ancients relied on activities such as gymnastics, preventive exercise, and therapeutic exercise to alleviate physical disorders and illnesses.

The European cultures influenced the development of P.E for individuals with disability primary through medical gymnastics. Because exercise was considered the best medicine, a large part of medical gymnastics consisted of prescribed exercise to remediate specific disorders. In the early twentieth century in the United States the medical gymnastics model for P.E continued to be applied preventive and corrective exercise was still emphasized.

Prior to the world wars virtually no formal PE was provided for those with physical and mental impairments, little changed until after World War I, when the needs of returning war veterans caused the structure of programs to be altered. The success of physical rehabilitees for war veterans helped promote the use of physical activity in the school for the development and enjoyment of those with disabilities.
2.12 Physical Education within the School Program

As Daniels, (1954) identifies the purposes and methods of modern P.E are rooted in general education. P.E has also been influenced strongly by the methods of general education as well as by its purposes. In each instance, however, the general has been analyzed and interpreted interims of the specific contribution P.E can make to the ultimate goal; The complete education of youth. The aim of P.E obviously must have its base in the framework of general education many efforts to state such an aim have been made one with wide acceptance has been proposed by Williams as follows; “the aim of P.E is to provide an opportunity for individuals and groups to act in situations that are physically wholesome mentally stimulating and satisfying and socially sound”.

In breaking down the broad generalization that an aim must inevitably be, the purposes of P.E have been more clearly identified in statement concerning objectives. Most such statements are included in the following main points:

1. The improvement of physical and organic efficiency.
2. The development of overall neuron-muscular coordination’s, as well as Skill in sports, games, rhythms, and related activities.
3. The development of socially desirable and acceptable patterns of behavior through the many opportunities presented in play situations.
4. The development or an appreciation of the significant of competency in P.E activities and its relationship to utilizing leisure resources for richer living.

Further strengthening the previous issue John (1989) writes one of the main considerations is the use of the team approach in developing and carrying out a child's educational program. The team generally includes
the parents, teachers, medical professionals, and health-related professionals such as a physical therapist. Parents are critical members of the team and should be involved in all educational decisions. A program that meets the needs of the student in five basic goal areas:

- Physical independence, including mastery of daily living skills;
- self-awareness and social maturation;
- Communication.
- Academic growth.
- Life skills training, Interdisciplinary services such as occupational and physical therapy, speech and language therapy are of prime importance for youngsters who have physical disabilities.

2.13 Physical Education for Individuals with Disabilities

According to Seaman and Depauw (1989) physical activity has been an integral part of society throughout history physical vitality has long been admired. In the days of the early Greeks, physical activity was considered primarily curative. Since that time, it has also been used in rehabilitation remediation, and illness or injury prevent.

Current emphasis is on the development of fitness wellness, and the maintenance of an active life style. This emphasis applies to both able bodied individuals and individuals with disabilities.

A well designed problem of P.E provides many benefits for individuals with disabilities, contributing to:

- The development of physical fitness and motor skills necessary for activities of daily living and participation with peers, family, and friends,
The development of a more positive self image and feeling of self-worth, and
The development of skills and abilities that will enable them to participate in enjoyable leisure time activities and recreational pursuits. To this end, PE and sport for individuals with disabilities has evolved.

Bucher (1999) also suggest that Physical education can contribute to the goals of education in many significant ways. Physical education makes a unique contribution to the development of the total person. It is the only area of the school curriculum that promotes the development of motor skills and fitness. No other curricular area contributes to development in the psychomotor domain.

2.14 Regular Physical Education For Disabled Student

As stated by Auxter, et al., (1993). In order for a child with a disability, even a mild disability, to be educated in the regular P.E class, careful preparation must be made. Accordingly there are four variables that must be considered before making a decision to place a child in to the regular P.E program:

(1) The professional preparation of the physical educators to teach a child with disability.
(2) The attitude of the Physical Educator toward the disable child,
(3) The support of the primary campus administrator of the concept of inclusion.
(4) The readiness of the non disabled children in the school to accept and interact with the child. These four factors all must be considered.

The first variable to be considered in the decision to include children with disability in regular P.E program is the preparation of the P.E
teacher. In order to serve children with disabilities in the regular P.E class, the teacher must have knowledge of the following.

- Physical, mental, and emotional characteristics of children with disabilities.
- Learning styles of children with disabilities.
- Teaching techniques and methodologies appropriate for children with and without disabilities.
- Behavior management strategies appropriate for children with and without disabilities.
- Techniques for modifying play, games, and sport activities to include children with disabilities.
- Methods for modifying evaluation and grading for children with disabilities.

If the Physical Educators did not acquire this knowledge during undergraduate or graduate professional preparation, the physical educator must be provided access to this information through in-service preparation before a child with disabilities is included in the regular program.

The 2nd variable that must be considered before placing a child with a disability into the regular P.E classroom is the teacher’s attitude toward teaching those with disabilities. If the teacher has a negative attitude about including children with a disability in the class, the child will know it instantly and be devastated by it: the child with disability simply cannot be placed in a classroom in which he or she is not wanted. Teacher may have negative attitudes toward a disabled child for a variety of reasons, but attitudes are learned behaviors which, when necessary, can be changed. French and Henderson noted;
It is important to find ways to teach Physical Educators the knowledge and skills necessary to work effectively with students with disabilities in the regular classroom and increase positive attitude towards team. These are not mutually exclusive. Teachers may have negative attitude towards students with disabilities because they do not know how to teach them. The 3rd variable that must be considered is administrative support for the inclusion of children with disabilities in the regular P.E classroom. If the local campus administrator principals, or dean or instruction supports the nation that children with disabilities should be integrated into the regular P.E program, then the administrator must be in a position to support the physical educator in a number of ways. The administrator’s comities to inclusion in P.E will do one of the three things to ensure that a quality P.E is received by all.

1. Decrease class size by hiring additional professional personnel or arranging alternate scheduling patterns.
2. Decrease teacher-student ratio by assigning trained para-professionals to assist the teacher.
3. Decrease teacher-student ratio by assigning school volunteers to assist the physical educator.

In addition to limiting the teacher-student ratio, administrating must also provide support by addressing other concerns. The Physical Educator must be encouraged to attend classes and in-service presentations that address the Education of children with disabilities.

The Physical Educator must be given release time to participate actively as part of the motor development or the multidisciplinary team in the assessment /evaluation/ of the children’s gross motor skills and create implementation of the child (IMEP) or individual P.E plan (IPEP). The fourth consideration is the readiness of the other children to accept and interact with the disabled students.
2.15 Benefits of Physical Education for Students With Disabilities

The physical educator can make a major contribution to reduce the risk and facilitate independent living through physical activity in the following ways.

- Develop recreational motor skills for independent functions in the community.
- Develop physical and motor prerequisites to self help skills required for independent living.
- Develop physical fitness for maintenance of health.
- Develop prerequisites motor skills necessary for participation in self-fulfilling social activities.

It has been argued that participation in sports develops the social characteristics of participants. Participants alone may not, however, benefit individuals with disabilities. Early studies on the social benefit of mainstreamed students with disabilities indicated that under certain conditions the person with a disability could be adversely affected. There is some recent evidence that when the conditions of participations are well controlled (e.g. appropriate activities are offer at the ability level of the learners) and environment are designed that include a carefully structured modeling process, social development can be fostered through physical activity and sport. To ensure that social benefits occur to all persons, the social environment should be constructed so that there is a match between the environmental demands of the sport/physical activity and the social capabilities of the participants. Furthermore, the participants without disabilities must be supportive of the socialization process (Auxter, et al., 1993).
2.16 Adapted Physical Education

As Seaman and Depauw (1989) states it was not until 1952 that the scope of APE was clearly and consistently defined. The statement of the American Alliance for Health, P.E, Recreation, and Dance (AAHPERO) defined APE as:-

Diversified program of developmental activities, games sports, and rhythms, suited to the interests, capacities, and limitations of students with disabilities who may not safely or successfully engage in unrestricted participation in the vigorous activities of the general PE program (AAHPERO, 1952).

Development activities include a broad range of movement experiences for the development of fundamental motor patterns, motor skills, perceptual motor function, and physical fitness. The suggestion that games, sports, and rhythms should be included in programs for students with disabilities took PE in to uncharted territory. It wasn’t until after World War II, when disabled veterans began playing wheelchair, basketball and other life time sports, that physical educators in the school realized how numerous the possibilities for physical activity of students with disabilities.

Accordingly, it would be incorrect to view APE as a specific regiment to rehabilitative activities or as an explanation for “what goes on” in a particular area, room, or class. Rather, APE is should thought as a program of physical activities designed for and to include individual with disabilities. It is a program that not only contributes to the physical and motor development of students but also to their social, language, emotional and cognitive growth. It is a program that may include activities for the remediation of motor dysfunction, but also as appropriate.
The needs, interests, and abilities of individuals with disabilities must be considered in adapted physical education programs. A program should include appropriate modifications of the instruction, environment, and activities in as much as they enhance participation but still provide a challenge to the students. APE programs should include activities for the development of physical fitness, psychomotor and skills or adaptations to these for participants in activities of daily living, Aquatics, dance, individual and group games and sports, including lifetime, recreational and competitive experiences.

Further Luo, (2000) also write that Adapted Physical Education is;
1) An individualized program of developmental activities, exercises, Games, rhythms, and sport designed to meet the unique physical Education needs of individuals.
2) A sub discipline of P.E or emerging field of studying
   1) Designed to meet long term unique needs
   2) May take place in mainstream classes or segregated classes
   3) An active program rather than a passive one
   4) Adapted or modified sport can be used in APE program
   5) Adapted means to adjust and to fit.
   6) Service to 3-21 years old (IEP).

Regarding to APE Daniels, (1954) also suggests that, the handicapped are ordinary people with extra ordinary needs. If the outcomes of a carefully planned P.E experience contribute so much to physical, psychological, and social development it may be well direct these opportunities where they are needed so badly, who needs improvement in physical function more than the crippled child? Who needs development of the ego more than the youth who is convinced that because of his disability he has no future? Who needs social development more than the youngster who, because of inadequacies, frustrations and
embarrassments, has voluntarily withdrawn, or has been rejected by his social group? If the mission of the school is properly fulfilled, each handicapped youngster must receive rich opportunity for fullest development.

### 2.17 Evolution of Adapted Physical Education

According to Luo,( 2000) about evolution of APE, the following are stated;

- 3000 years ago, in China depicting therapeutic use of gymnastics for individuals with disabilities.
- 1879, corrective physical education established at Harvard for correcting certain pathological conditions.
- WW I and II, development of physical therapy and adapted sports.
- 1940s, fundamental changes were initiated in physical education in some universities, public schools, and special schools. Calisthenics, gymnastics, and corrective physical education supplanted in the course contents by game, sports, and rhythmic activities modified to meet the individual needs of the students.

### 2.18 Objectives of Adapted Physical Education

Regarding about objectives of APE Auxter, et al, (1993) and Daniels (1954) write that the aim of APE is to aid students with handicaps to achieve physical, mental, emotional, and social growth commensurate with their potential through a carefully planned program of regular and special P.E and recreation activities.

Specific objectives to help the student accomplish this are as follows.

- To help students protect themselves and any conditions that would be aggravated through certain physical activities.
- To help student’s correct conditions that can be improved.
• To provide students with an opportunity to learn and to participate in a number of appropriate recreational and leisure time sports and leisure time sports and activities.

• To improve physical fitness through the maximal development of organic and neuron muscular systems.

• To help each students develop a knowledge and an appreciation of his physical and mental limitations.

• To help students make social adjustment and develop feeling of self worth and value.

• To aid each student in developing knowledge and appreciation relative to good body mechanics.

• To help students understand and appreciate a variety of sports that they can enjoy as non participants or spectators.

2.19 Guiding Principles of Adapted Physical Education in Elementary and Secondary Schools
According to Auxter, et al., (1993) and Daniels, (1954) about guiding principles in APE stated it is the responsibility of the school to contribute to the fullest possible development of the potentialities of each individual entrusted to its care. This is a basic tenet of our democratic faith.

1. There is need for common understanding regarding the nature of APE.

APE is a diversified program of developmental activities, games, sports, and rhythms, suited to the interests, capacities and limitations of students with disabilities who may not safely or successfully engage in unrestricted participation in the vigorous activities of the general P.E program.
2. There is need for APE in schools and college

3. APE has much to offer the individual who faces the combined problems of seeking an education and living most effectively with a handicap.

   Through APE the individual can:
   
   ➢ be observed and referred when the need for medical or other services is suspected
   ➢ Be guided in avoidance of situations which would aggravate the condition or subject him to unnecessary risks or injury,
   ➢ Improve neuromuscular skills, general strength and endurance following convalescence from acute illness or injury.
   ➢ Be provided with opportunities for improved psychological adjustment and social development.

4. The direct and related services essential for the proper conduct of APE should be available to our schools.

   These services should include:
   
   ➢ Adequate and periodic health examination.
   ➢ Classification for PE based on the health examination and other pertinent tests and observations.
   ➢ Guidance of individuals needing special consideration with respect to physical activity, general health practices, recreational pursuits, vocational planning, psychological adjustment, and social development.
   ➢ Arrangement of appropriate APE programs.
   ➢ Evaluation and recording of progress through observations, appropriate measurements and consultations.
- Integrated r/ship with others school personnel, medical and its auxiliary services, and the family to assure continuous guidance and supervisory services
- Cumulative records for each individual, which should be transferred from school to school.

5. It is essential that adequate medical guidance be available for teachers of APE the possibility of serious pathology requires that programs of APE should not be attempted without the diagnosis, written recommendation, and supervision of physician there should be effective referral service b/n physicians, physical educators, and parents aimed at proper safe guards and maximum student benefits. School administrators, should make every effort to provide adequate staff and facilities necessary for a program of APE.

6. Teachers of APE have a great responsibility as well as unusual opportunities.

Physical educators engaged in teaching APE should:

- Have adequate professional educates to implement the recommendations provided by medical personals.
- Be motivated by the highest ideas with respect to the importance of total students development and satisfactory human r/ships.
- Develop and ability to establish report with students who may exhibit social maladjustment as a result of a disability
- Be aware of a student’s attitude toward his ability,
- Be objective in r/ship with students,
- Be prepared to give the time and effort necessary to help a student overcome a difficulty
7. APE is necessary at all school levels.
The student with a disability faces the dual problem of overcoming a handicap and acquiring an education which will enable him to take his place in a society as respected citizen. Failure to assist a student which his problems may relate the growth and development process offering APE in the elementary grade, and counting through the secondary school and college will assist the individual to improve function and make adequate psychological and social adjustment.

2.20 The Role of the Physical Educator
Auxter, et al., (1993) suggest whenever a child with a disability is placed in a regular educator for those children are the same as for any other child in the classroom. Because all children differ with respect to amount of learning, rate of learning, and learning style, modifications in methodology, curriculum, or environment are often necessary for both non handicapped and handicapped children. Special education which involves significant modifications in methodology, curriculum, or environment may also be delivered to some handicapped children in regular classrooms.

Regular educators have any or all of the following duties with respect to children with disabilities;

1. Identification of possible disabling conditions.
2. Referral of children for education and placement.
3. Data gathering.
4. Assisting children with disabilities with special equipment.
5. Participation in developing IEPs.
6. Sharing information with and without disabilities in the school environment.

Further strengthening the previous issue Dunn and Hollisfait (1989) in developing a favorable climate in the classroom for the acceptance of those who are handicapped, the teacher may disuses with the students. The importance that is sometimes attached to attractive physical appearance may be pointed out and contrasted with more Meaningful personal attitudes. The teacher might emphasize that performing to the best of one’s ability is just as admirable and worthy of respect as being the most outstanding performer.

2.21 Principles of Adapting

Sherrill, (1993) states about principles of adapting as follows;

1. Adapting should be based on assessment of affordances and constraints and include examination of the person, the environment, and interaction between the two.
2. Adapting is achieved through individualization. This is manipulation of variables and the changing of task requirements and environmental conditions so that each person can succeed.
3. Adapting requires profiting goals and attending to needs in the cognitive and affective domains that affect success in physical activity.
4. Adapting, regardless of environmental setting and goals, is a cooperative, reciprocal process shared by teacher and students(s).
5. Adapting should advance the goal of normalization. This means the adapting is used to make available opportunities as close as possible to the ground normal (average). For example, adapting should entail minimal change in structure, rules, equipment, ans
strategies of sports for persons with disabilities so that the opportunities afforded are as similar as possible to those of regular sport.

6. Adapting should be based on social criteria so that individuals are treated with dignity and respect. Adapting should never result in ridicule or teasing.

7. Adapting should use functional sport classification system to equalize abilities when activities involve competition.

2.22 Games for Handicapped Children

According to George and Hart (1983) physically handicapped children can get as much fun and enjoyment from games as any other children and, with a little thought and imagination, a wide range of games can be adapted to suit a given group. It is important to include all the children and to give all something positive to do. A muscular dystrophy child confined to an electric wheel chair can manipulate his chair to guard a goal; he may not be able to hit the ball with his hands, but he can maneuver his chair so that a ball aimed at the goal bounces off it. He can also referee or time-keep.

When playing games with physically handicapped children, one should be in mind the following.

1. The child should be encouraged to take as active a part as is physically possible, but within the bounds of safety.

2. Rules can always be adapted to suit the children in any given group.

3. In any team game or really, children of equal ability must, as far as possible, be put opposite one another.

4. When we have used the term to “run” we really mean to move as quickly as is possible for each individual.

5. Each member of the some team should be given a distinguishing
Colored bid or band, since many children especially at first, finds it difficult to identify with the right team.

6. If the children cannot manage with the suggested ball size it should be modified.
7. In certain games or relays, it has been assume that the children have a given skill. However if the children have not yet acquired the necessary skill, it is best to choose games for which they do have the skills.
8. Distance can always be raise to suit the ability of children.
9. There are a few basic safety rules which should always be taken in to account.
   - Children with lack of, or alters sensation should either be on a friction free floor or on mats to prevent pressure sores.
   - In a game such as football, where the children more round a lot, all shoes, caliper stickles and other materials should be cleared from the playing area.
   - If the children are playing with stickles, then certain safety rules must be observes, for example the sticks must be kept below shoulder level and only used on the ball.
   - In those games where object is to touch another child with a ball it should be made clear that the balls used are light weights from, which can not hurt.

Furthermore as George and Brian (1983) Sport and physical recreation can cover any physical activity or game which gives pleasure and relaxation? First of all let’s consider the aims and objectives of sport and physical recreation. The most important objectives is enjoyment, this applies to any one whether he is physically handicapped, able bodies or mentally handicapped. If the game does not bring joy and pleasure to the participant, what is the point in containing the game? It must be fun.
Through enjoyment of the benefit are derived physical development and fitness, mental development, social integration, emotional experience and a sense of achievement. The physically handicapped Childs need to learn reason to make judgments, to think for himself, in the same way as any other child. Sport and physical recreation can help him to do this in a number of ways learning the rules of games and how to apply them, learning to referee, umpire or score, gives him practice instant decision making. The physical handicapped child, like any other child, must learn to control his emotions he must learn to accept and be accepted by his classmates, family and society in which he lives. In learning to play together with others according to set rules, the physically handicapped child is in a way making up the ground he has lost through being so often deprived of easily play opportunities. Not only is he learning to play but he is learning to play with others.

Thus, once a child has learnt to play team in addition to the skills he will unconsciously acquire, he will also find it easier to make positive relationships. Hence sport and physical recreation not only improve the physical well-being of the handicapped child but also give him a richer life and help him to adjust socially and psychologically. Above all, sport and physical recreation give him the joy of participating with others.

John (1989) Communication skills are often difficult for children who have physical disabilities; therefore, preschool programs need to pay special attention to this area.

2.23 Determining Unique Needs

According to Auxter et al., (1993) the procedures a teacher should follow to determine and meet unique needs of students as follows.

1. Select a test that measures the skills and abilities you are interested in evaluating.
2. Administer the test.
3. Study the results to determine which skills and abilities are deficient.
4. Analyze each area found to be deficient to determine the component that contributes to the performance.
5. Once the under developed components are identified, establish goals and objectives that are specific to their components.
6. Select activities that contribute progress toward these goals and objectives.
7. Develop a teaching sequence that permits objective monitoring of progress.

### 2.24 Areas of Modification

M.Rhinehart, (2011) Inclusive education requires that modifications be made so that all students may participate in the curriculum. For students with physical disabilities, this means adaptive physical education:

- Adaptations to the curriculum of a physical education class are made in four areas; instruction, rules, equipment and environment.
- Teachers may modify instructions by modeling what the student is expected to do. Instructions may be printed out in large print and hung up for the student to see during the time of the lesson. Oral prompts can be given. Students may have a peer partner who assists.
- Rules can be "relaxed" to allow the student to achieve the desired goal. If for instance, the students are to kick a ball into a net from 10 feet away, a student with special needs may need to get closer to be able to kick or throw the ball into the net. Time requirements and "outs" may be eliminated.
- Modifications to equipment may mean that bats or paddles have Velcro strapping, so that a child with gross motor difficulties may
hold it easily. Other adaptations may include lowering a basketball net, using larger or smaller balls or utilizing a tee to hold a ball. Students might use scoops for catching balls instead of their hands. Targets could be made larger and placed closer to the students.

Further strengthening the previous issue by John (1989) it is often necessary to modify and adapt the school environment to make it accessible, safe, and less restrictive. Accessibility guidelines are readily available, and when these guidelines are followed the environment becomes easier for the child to manage independently.

It is important that modifications be no more restrictive than absolutely necessary so that the student's school experiences can be as normal as possible. Many authorities stress the importance of avoiding overprotection of students with physical or health impairments. It is also important to permit students with disabilities to take risks just as their able-bodied cohorts do. Recent advances in technology have helped to make life more nearly normal for students with physical disabilities. For example, students with cerebral palsy can use computer terminals to aid in communication. Through technology, even a person with the most severe handicaps can have greater control over communication and daily living skills. Modifying the environment may mean providing special adaptive equipment such as specially designed desks, positioning devices, wedges, or standing tables. Adaptations also may include establishing procedures for dealing with medical emergencies when students have serious medical problems.
2.25 Assessing Students With Physical Disabilities

As stated by John (1989) examiners must have a broad base of skills in order to measure adequately the functional and cognitive abilities of students who are physically disabled or health impaired. In addition to the areas traditionally evaluated in the assessment of children with mild handicaps, measures should be included in the areas of gross motor, fine motor, and daily living skills; perception; recreation and leisure skills; augmentative communication; and sensory input. Competent diagnosticians recognize their personal limitations and seek help from therapists, educators, physicians, nurses, social workers, and others to gather appropriate data. Since the assessment of a student who has physical or health impairments is often time consuming and taxing to the examiner and the child, the team of professionals should meet before data are gathered to consider:

(1) The nature of the data base desired.
(2) The potential use of the data.
(3) Specific measurement techniques or modifications of traditional Measures.
(4) Who should present the items?
(5) The method of data collection;
(6) Appropriate response modes and/or equipment;
(7) Position for testing;
(8) Stamina and fatigue factors;
(9) The order in which professionals will conduct the testing;
(10) Implications of medications for test performance and for the best time of day to test.
(11) How data will be shared when evaluations are completed.
2.26 Grading (marking) in Adapted Physical Education

As Auxter, et al., (1977) grade in any subject should promote educational goals and should reflected educational aims and objectives for programs to be most effective, established objectives must indicate the desired goals of instruction so that they become the criteria on which grades are based if they are valid criteria, successful measurement will result in valid evolution. The grade, if one desires to translate behavioral performance of students with disabilities, the one common denominator among all students the mastery of individual performance objectives. If students are graded on the basis of how well they meet their objectives. The following criteria might be applied to students to determine how well they have met objectives in the APE class.

1. Performance: - standard of performance in reference to individual limitation such as vigorous work on specific activities and posture exercise for obese students, control of the amount and intensity of work for cardiac and postoperative students.

2. Persistence: - accomplishment of individual performance objective determines in the IPEP suggestions for recording and computing the grade are as follows:

- Since the grade may involve some subjective judgments on the part of the instructor, the student should be observed and graded many times throughout the semester (daily or weekly)
- Numerical rating (recorded on the exercise card and in the roll book or in a class spread sheet) can be given to the student in
this way, the student and instructor always aware of the student’s progress toward stated behavioral objectives.

- The numerical grades can be averaged and then should be considered, along with other factor that may influence the final grade knowledge examination and health factors, if they are considered to determine the final for the semester.
- Objective measurement should be used to test skill and knowledge.

2.27 Sports in which children with Disabilities can take part

Today, the idea of people with a disability being able to participate in sport and physical activity is not so uncommon. In many countries, opportunities exist from the grassroots to elite levels for people with a disability to showcase their abilities in sport and physical activity. But this is not the case in all parts of the world. Whilst there has been progressive and positive change in quality of life for people with disabilities in many developed countries, often this progress is not reflected in developing countries (http://www.sportanddev.org).

Through the works of modification and creative minds, the world now has plenty of sports which can help a person with a disability develops a healthy lifestyle some of them are:

Archery

A test of accuracy, strength and concentration archers shoot at a target marked with ten scoring zones, from a set distance, single, doubles and team events are held in the Paralympics. Archery is open to all persons with a physical disability including spinal cord injury, cerebral palsy,
and amputee. Special guidance is available for the visually impairers as well (Abbay BelayHun 2009).

**Horse riding**

It is a wonderful experience and benefits the rider both physically and mentally. Therapeutic benefits include improved balance, posture, coordination as well as more supple and relaxed muscles. This in turn reduces muscle spasms. Regaining mobility, with the challenge of learning something new along with a slight risk element provides a real sense of achievement. Independence and confidence grow along with the pure enjoyment of riding (http://www.outdoor-sport-leisure.net/disabled.htm).

**Wheel chair basket ball**

Sherrill, (1993) Wheel chair basket ball is the world’s most popular team sport for persons with disabilities. Rules modifications are made:

1) Five, rather than 3 sec, are allowed.
2) When dribbling or holding the ball in the lap, the player can only make two thrusts of the wheels, after which he or she must dribble, pass, or shot.
3) There is no double–dribble rule in wheel chair basket ball.
4) Player raising his or her buttocks off the chair is a physical advantage fouled.

**Wheel chair Tennis**

Wheelchair tennis officially began in 1976, this sport has few modifications. The main rule changed is two bounces instead of one. Persons with limited grip strength can use elastic, tape, or special devices to bind the racquet to the hand. If an over arm serve is not possible, the player uses a bounce-drop service (Sherrill, 1993).
Swimming for disabled

When learning to swim or taking part in water based activities it is important to set goals that are achievable and realistic. There is nothing worse than setting your aims too high and not achieving them. This could put an end to your swimming or put relate swimming to bad feelings.

Swimming for disabled as far as health and fitness is concerned is just as important for an able bodied person as for a disabled person as well as the benefits of it.

When teaching people with disabilities it is important that you look at the persons abilities what they can do with it rather than the negative disability and what a person cannot do. For this reason we need to have an open mind and treat them with empathy not sympathy meaning put you in their position and imagine what it is like to be in their situation. This way you can be more positive on the outcome of a skill you are trying to set for a person with a disability to achieve (http://www.swimming-techniques-learn.com/Swimming-for-disabled.html). Further strengthening the above idea as cited in (http://www.brighthubeducation.com) Disabled swimming programs bring with them a range of benefits for students, depending on how the program is implemented and the particular needs of each student involved. The benefits can include areas such as:

- Increased aerobic fitness
- Increased muscle strength
- Increased muscle endurance
- Increased flexibility
- Greater skills at performing transfers (eg. from wheelchair to pool)
- Improved communication skills
- Decreased extraneous movements and improved relaxation
- Greater self-control
- Improved behavioral outcomes

As a teacher of disabled swimming, it is important to consider your program planning from both a group and individual point of view. Plan your activities so they can meet the needs of all students, and allow sufficient time for dressing and transfers.

**Athletics (Track and field, wheel chair Racing)**

Being disabled does not mean one will never feel speed, strength, power and endurance again. There are many athletics activities which can bring a person with disability a rush of adrenaline, such as javelin, discuss, shot put, marathons and wheel chair racing. This is also the sport which draws the largest number of participants and a spectator at the Paralympics athletics is open to all disability groups (George and Hart, 1983 as cited in Abbay Belalyhun, 2009).

**Fishing**

Fishing is very popular within the disabled community and it is easy to see why. It provides a great opportunity to enjoy being outside in a healthy environment(http://www.outdoorsportleisure.net/disabled.htm).

**Bowling**

Disabled people can have access to bowling lanes. The law requires a minimum of 5 percent, or at least one of each category of bowling lane, to be accessible to disabled individuals. The areas where the lanes are located must have an accessible route leading to and serving the accessible lanes. The bowling lanes must also comply with seating requirements. Any spectator seating must also follow the rules for
wheelchair spaces, companion seats and a specific number of aisle seats based on the overall seats (http://www.ehow.com/info_8544105_types-sports-facilities-disabilities.html).

**Table tennis**

Table tennis is a sport enjoyed by millions of people around the world. It is an inclusive sport that can be played by people of all ages and abilities. If a player can serve and return a ball, they can play. This is one sport that does not exclude people because of a physical disability. Nor does it require significant modifications to remain open to everyone.

Table tennis has been part of the Paralympics Games since 1960. The program consists of five wheelchair divisions and five standing disabled divisions.

Athletes who are not able to grip a racket due to their disability use specially crafted instruments that attach the racket to the hand. Some athletes choose to simply use a bandage to affix their racket to their hand. These modifications do not give them an advantage over another player, but rather they even the playing field so that players can compete regardless of their disability.

This sport can be mentally and physically challenging, but with that challenge a sense of satisfaction when a player experiences success. Players who are dedicated and practice will not only build the skills necessary to be a competitive athlete, they will also gain the confidence that comes with working towards and achieving a goal (*Lauren Traveau, 2012*)
2.27.1. PICTURES OF SOME SPORTS FOR DISABLED PERSONS
CHAPTER THREE

RESEARCH METHODOLOGY

3.1. RESEARCH SETTING AND METHODOLOGY

The intention of this study was to collect data on the existing involvement, challenges and opportunities of students with physical disabilities in PE regular practical classes. In order to meet these particular investigation qualitative research method is employed to find out the real situation of disabled students in P.E classes. In the research work both primary and secondary data sources are used.

The total number of participants of this study was 14, from which 6 physical education teachers, 7 children with disabilities, and 1 school principals. Physical education teachers and school principals were selected using availability sampling. Students with disability were selected using purposive sampling to include the different types of disabilities. Eight students with disabilities were taken for this study from four sample schools. Six physical education teachers, one was a key informant involved in the study from sample schools.

A key informant in this study is a physical education teacher who has a bachelor degree in teaching physical education .he has got different trainings on adapted physical education given by Japanese trainer.

3.2 Approach and Design of the Study

The primary data are collected through observation, interview and focused group discussion. In the interview, the researcher take face- to-face administration of an in-depth interview with physically disabled
students and P.E teachers. It would be easy to communicate with concerned and more willing informants to obtain relevant data from potential respondents. As the research employ qualitative method ethical things will be considered. Hence objectivity and neutrality will be the principle rather than personal experience and emotion. Therefore, the researcher analyzes and evaluates the collected data against the objective and significance of the study as well as statement of the problem of the research. Secondary data collected from different sources such as books, journals, both published and unpublished relevant papers and documents. Qualitative designs call for the person most responsible for interpretation to be in the field Observation, exercising subjective judgment, analyzing and synthesizing. In line with the above views the researcher has chosen to study the challenges and opportunities in physical education lesson for students with disabilities in some selected sample schools in Addis Ababa.

### 3.3 Data collection Instruments

Qualitative approach was used as a data collection method for this study. It was concerned with the challenges and opportunities of physically disabled students during physical education practical class. To obtain adequate information multiple methods were used. This multiple methods include interview, field observation, and focus grouped discussion. The semi structured interview was the main data collection instrument, but the field observation and focus group discussion were supplementary data collection instruments.

#### 3.3.1. Field Observation

Field observation was the other data collecting instrument. The observation was conducted during physical education lesson. It takes place while the teachers were teaching the practical part of the lesson in the play grounds. The objective of the observation was to answer mainly
the first and second leading research questions. The observation format contains 8 observable questions (see appendix three).

### 3.3.2. Interview

Qualitative research takes pride in discovering and portraying the multiple views of the case. The interview is the main road to multiple realities (Stake, 1995 as cited in Abbay Belayhun, 2009). The major way in which qualitative evaluator seeks to understand the perception, feeling, and knowledge of people in program is through in-depth-intensive interview (Best & Kahan, 1989). Interview is a very useful instrument to understand reasons why and how things happen and the way they are happening. Literature indicates that interviewing has three major forms. These are structured, semi-structured, and unstructured.

The semi structured interview was taken as major sources of data administered to students with disabilities and their physical education teachers. It was developed by the researcher on the bases of his experience on teaching physical education and the ideas gained from different literatures.

#### A. Physical education teachers

Teachers are one of the important elements in the teaching learning process. Through their experience, they can gather useful information that can be channeled to useful practice. Therefore for this research, teachers were considered to be major sources of data. The interview included issues related to the challenges and opportunities of physical education for students with disabilities. The interview contains 10 leading questions (see appendix one).
B. Students with Disabilities

By its very nature reality is very complex. It could not be fully comprehended and understood by single mind and method. This very fact calls for varieties of data sources to determine its nature. Therefore students with disabilities were taken as one source of data as to furnish important information pertaining to the challenges and opportunities for students with disabilities in each sample schools. There were 8 leading questions developed by the researcher administered to disabled students (see appendix two).

3.3.3. Focus Group Discussion

Focus group discussion (FGD) was the last data collecting instrument. There were five focused group discussion guides developed by the researcher for the discussion (see appendix four) focus group discussion was conducted with PE teachers and school principals. Three of the PE teachers and one principal were from the sample schools and the fourth PE teacher was the key informant mentioned earlier.

The discussion was mainly focused on the duties and responsibility of PE teachers and school principals to minimize challenges and create opportunities for students with disabilities in PE class.

3.4 Data Collection Procedures

First, the researcher prepared semi structured interview guide, field observation format, and focus group discussion guide. After preparing the instruments, all the instruments were given to different teachers for necessary improvement.

The instruments were commented by senior physical education teachers. Finally, the researcher took the necessary notes during the discussion and make appropriate modification in all of the instruments.
The researcher organized the observation first. The observations were on the playground, where the practical part of the lesson is taking place. After the observation has made, interview was administered. The entire semi-structured interview guide was prepared in Amharic language. The researcher used a tape recorder for the interview at the same time taking notes.

3.4.1 The Pilot Study

The prepared observation format and the semi-structured interview guide were tried out on two students with disability and one PE teacher for pilot taste. The school selected for the pilot study was Yekatit 12 senior secondary school and the involved was grade twelve. The main purpose of the pilot test was to improve some important aspects of the data collection instruments for instance, to determine proper and ethical questions, whether the items are ordered properly, and to check on the best sequence of the questions. After the pilot study, all the necessary improvement were made such as changing of ambiguous words that were not appropriate and clear for students with disabilities at this level, consecutive flow of interview questions, and the like.

3.4.2 The Main Study

First, the researcher introduces his work and himself to school directors at the sample schools of the main research. The purpose of the research work was explained to the principals. Fortunately all the principals were willing to participate in the study; the principals introduced the researcher to teachers who were teaching PE. The researchers also asked the willingness to participate in the study, then after the researcher selected students with disabilities with the help of their PE teachers, and explained the purpose of the research to all of the participants. Discussion was made with all the participants whether they are willing to
participate or not on the study. After they agree to participate in the study, the researcher gave the ethical consideration in written form. The discussion and agreement was made on ethical consideration. As indicated earlier, the researcher organized the observation first. The observation was made on the field during the practical session of the lesson. Interview was administered to physical education teachers and sampled students with disabilities after the observation has completed.

3.5 Data Organization and Analysis

The collected data was organized and analyzed in sequential interrelated activities process. This includes transcription and translation, categorization, data reduction, conclusion and verification. The transcription and translation were carried out all the time, immediately after data collected before the next data collection day. Data from interview, observation, and focused group discussion were used for data analysis.

The analysis was based on the leading questions and the data collected related to the practice of physical education lesson. The information collected through multiple methods from participants was categorized, reduced, displayed, verified and analyzed in words.

Categorizing the conceptual relation of data gathered was done by broken down the data in to subcategories in line with the research questions. Data reduction in the study refers the process of selecting, focusing, and transferring, the data.

In this research analysis, the obtained data from observation, interview, and focused group discussion are analyzed and interpreted. Direct quotation and description of the learning situation, events of people interpretation and other observed elements/events/ were used to analyze
the data. Finally, the data gathered through those tools was organized and presented.

### 3.6 Ethical consideration

Denzin & Lincolin (1994), states that ethical issues should be given serious attention in qualitative research. Taking this in to account to make the research participants well aware of the purpose of the research, the researcher discussed with them before the beginning of data collections.

**Informed consent**

The researcher informed the participants about:

- The purpose of the research, expected duration, and procedure.
- The right to decline, to participate and withdrawing from the research at any time if they decided so.
- Any prospective research benefits and incentives for participation, and contact for question about the research and research participation rights.

**The codes of ethics for this research were:**

- Participation in this research study was on voluntary bases, participants were allowed to with draw from this research study any time they want.
- The researcher gave the participants honorable chance to ask about the study either before participations or during the time they are participating.
- Information’s that are given to researcher were secured.
- The researcher requested participants’ permission to get the discussion recorded by tape recorder, and also gave the chance to edit in case when they change their mind on the discussion.
- The research used coded (changed) names.
4.1 Demographic Characteristics of the Participants

4.1.1. Sample Schools

Table 1. Sample schools selected for the study

<table>
<thead>
<tr>
<th>No</th>
<th>School code given for this study</th>
<th>Sub city</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>S1</td>
<td>Gulele</td>
</tr>
<tr>
<td>2</td>
<td>S2</td>
<td>Arada</td>
</tr>
<tr>
<td>3</td>
<td>S3</td>
<td>yeka</td>
</tr>
<tr>
<td>4</td>
<td>S4</td>
<td>yeka</td>
</tr>
</tbody>
</table>

Table 1. Indicates all the sample schools selected in different sub cities of Addis Ababa so as to see the challenges and opportunities of physically disabled students in PE practical class.
4.1.2. Students with Physical Disabilities

Table 2: Students with physical disability in the sample schools

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Grade</th>
<th>Types of disability</th>
<th>Age</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>S1</td>
<td>11</td>
<td>Visually impaired</td>
<td>17</td>
<td>F</td>
</tr>
<tr>
<td>2</td>
<td>S2</td>
<td>9</td>
<td>Motor disability</td>
<td>16</td>
<td>M</td>
</tr>
<tr>
<td>3</td>
<td>S3</td>
<td>12</td>
<td>Motor disability</td>
<td>20</td>
<td>M</td>
</tr>
<tr>
<td>4</td>
<td>S4</td>
<td>8</td>
<td>Hearing impaired</td>
<td>15</td>
<td>F</td>
</tr>
<tr>
<td>5</td>
<td>S5</td>
<td>8</td>
<td>Motor disability</td>
<td>14</td>
<td>F</td>
</tr>
<tr>
<td>6</td>
<td>S6</td>
<td>10</td>
<td>Visually impaired</td>
<td>17</td>
<td>M</td>
</tr>
<tr>
<td>7</td>
<td>S7</td>
<td>11</td>
<td>Motor disability</td>
<td>18</td>
<td>M</td>
</tr>
</tbody>
</table>

As described briefly in table 2, the total No of students with disabilities in all the sample schools (grade 8-12) was 7. Of this, 42.85% were Females and other 57.15% were Males. Their age ranges from 14 to 20 years. Their disabilities are categorized in to motor disability, visual impairment and hearing impairment.
4.1.3. Physical Education Teachers

Table 3. Characteristics of teachers who teach PE for students with disabilities in the regular class rooms in each sample schools (T1-T2 is used instead of name).

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Studied grade</th>
<th>Age</th>
<th>Sex</th>
<th>Experience</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>T1</td>
<td>11&amp;12</td>
<td>31</td>
<td>M</td>
<td>8</td>
<td>Degree</td>
</tr>
<tr>
<td>2</td>
<td>T2</td>
<td>11&amp;12</td>
<td>49</td>
<td>M</td>
<td>24</td>
<td>Degree</td>
</tr>
<tr>
<td>3</td>
<td>T3</td>
<td>9&amp;10</td>
<td>30</td>
<td>M</td>
<td>7</td>
<td>MA</td>
</tr>
<tr>
<td>4</td>
<td>T4</td>
<td>8</td>
<td>28</td>
<td>M</td>
<td>6</td>
<td>Degree</td>
</tr>
<tr>
<td>5</td>
<td>T5</td>
<td>9&amp;10</td>
<td>33</td>
<td>M</td>
<td>9</td>
<td>Degree</td>
</tr>
<tr>
<td>6</td>
<td>T6</td>
<td>7&amp;8</td>
<td>34</td>
<td>M</td>
<td>10</td>
<td>Degree</td>
</tr>
</tbody>
</table>

Table 3. Indicates the No of teachers who were participant for this research. All teachers were teaching PE for students with disability in regular class. The table not only indicate each teachers qualification but also the grade they are teaching. All the participants were male and involved in the observation and interview of the study. Letters “T” and numbers 1-to-6 is used to represent teachers in the study.
4.2 Data Analysis and Discussion

As it was mentioned in many parts of this paper, the main purpose of the study was to investigate challenges of physically disabled students in PE class and to identify opportunities in selected schools in Addis Ababa. The researcher has used narrated the data by forming the thematic issues.

In this section, students challenges to participate in the practical classes of the physical education class is also summarized. The researcher believes that this summarized data from the interview may reflect the entire students with disabilities challenge to learn PE. Researcher has also shown his own understanding and interpretation.

For my first day observation, as I have mentioned on the methodology part, I have contacted each school principals and explained the aims and objectives of the study and got permission to contact PE teachers who have students with disability in their class. The discussion was made with the teachers and they told to their students why I was there.

The main purpose of my observation was to understand how physically disabled students treated during the practice of PE class in those sample schools. During each day of my observation, all the things that happened in the practical classes of the subject were founded to be the same. Thus to reduce redundancy of events and not to make readers bore, I have summarized those five weeks observation events.
As I observed, I can say that relatively only one school that have excellent or suitable play grounds and the others play ground need to get repair and constructed, not only for SWD but also for the students without disabilities. Almost all sample schools have no equipment to teach PE subject for students with disabilities. Regarding to the school environment to teach PE, for disability again only one school from those samples have Conducive environment. The researcher has observed that in many selected sample schools, students with disabilities did not participate actively. In most schools they stayed under the trees, near to the school fence, stay in class to do their own job, or allowed to go in library. According to Seaman and Depauw (1989) P.E provides many benefits for individuals with disabilities, contributing to:

- The development of physical fitness and motor skills necessary for activities of daily living and participation with peers, family, and friends,
- The development of a more positive self image and feeling of self-worth, and
- The development of skills and abilities that will enable them to participate in enjoyable leisure time activities and recreational pursuits. To this end, PE and sport for individuals with disabilities has evolved.

With the above introductory data and my own reflection, let us see how the research participants understand the issue.

4.2.1 Description of the Case

I have discussed different issues in this part based on the participant’s reflection, understanding and my own observation. All the names in this research paper are coded.
As stated in the methodology part there were Six PE teachers (one is a key informant for this study) and seven students with disabilities and one school principal is from sample schools participated in the interview. All teachers have not taken adapted physical education course in their degree and diploma courses, but all participated on different trainings and workshops on how to teach PE for students with disabilities. The findings collected were analyzed and discussed by classifying in to four thematic issues as follows.

4.2.1.1. Values of Physical Education for Students with Disabilities

Teachers do not let SWD to participate in the practical session of the lesson, they agree on the value of the performing activates for disabled students. All teachers believe that activates are help full to every one for all rounded development. T1 explain about activates as follows,

Performing exercise is help full for disabled students in different perspectives like; to have good respiration system, to develop their muscle, to be healthy to forget their disability and to feel as they can do anything like as others who are not disabled”.

He also believes that physical exercise is important for their future life. He said,

“They can develop ability to function jobs effectively for their day to day life, even to be competent in their future, if they practice in sport they like, they can participate in a competition for disabled like Para Olympics and lead a better life in their ability like elite athletes we know.”

He also said “they can recreate and refresh their minds by performing game type and some fun exercise with their ability,
what matters is we should identify their disabilities and make the exercise to fit for their abilities”.

Through physical activates one can be physically fit, to meet mental and emotional challenges. The individual’s confidence will be high in areas of life such as social, academic, work, and competitive sports. According to Auxter et al,(1993) physical activities:

- Develop recreational motor skills for independent functions in the community.
- Develop physical and motor prerequisites to self help skills required for independent living.
- Develop physical fitness for maintenance of health.
- Develop prerequisites motor skills necessary for participation in self-fulfilling social activities.

According to George and Hart (1983) physically handicapped children can get as much fun and enjoyment from games as any other children and, with a little thought and imagination, a wide range of games can be adapted to suit a given group.

**4.2.1.2. Factors Hindering to include physically Disabled Students in PE Practical class.**

The participants related to factors which inhibit disabled students in physical education class, some of them shift the problems towards school administrators. Some associate the problem with their educational background, others with the curriculum, and some others with attitudes.

T4 is one of the participants of this study. He has thought PE more than 18 years and work as a unit leader also related to his problem to let
students with disabilities to participate in the regular class of PE subject. He said,

“Surprisingly in this school PE subject is not given for disabled students, there is no mark at all, but we inform them the benefit of exercise to all individuals including disabled students. Administrator’s attitude towards the subject is also one problem even when we ask about teaching materials (spots wear) for teachers their response is not positive.

T6 who was one of the samples said,

“even in the text book it is not given special infuses for disabled students, and the background of students and teachers is not supported in schools for example in our school the suitable field which can make disabled students to practice will be replaced by building for administration purpose in the future”.

Surprisingly, the one who was taken as a sample he does not have any interest to teach students with disabilities even to communicate with them about physical activity when I ask him the reason he was not willing to tell me the reason.

According to Bucher, (1975) Times have changed, and physical education must change with the times. New problems face our society and the world. As a result, if education is to be relevant to current needs, it must do something about these problems. As Auxter, et al., (1993) There are four variables that must be considered before making a decision to place a child in to the regular P.E program:

(1) The professional preparation of the physical educators to teach a child with disability.
(2) The attitude of the Physical Educator toward the disable child,
(3) The support of the primary campus administrator of the concept of inclusion.

(4) The readiness of the non disabled children in the school to accept and interact with the child. These four factors all must be considered.

4.2.1.3 Supporting disabled students to Engage in Physical activities

As the definition of physical education implies the subject is given through physical activities. Physical activities are very important to be able to meet the mental and emotional challenges. Through physical exercise one can be physically fit. Physical fitness supports not only physical work but also mental and emotional endurance. The individual confidence will be high in areas like social, academic, work and competitive sports. In short, it improves our wellness in that it improves us totally. Infants, children’s, and youth with disabilities have the right to receive the full range benefits from physical education just as their able bodied peers.

Though all most all the participants do not let students with disabilities to participate in the practical session of the lesson, they agree on the importance and benefits of PE for individuals in general and for SWD in particular.

T5 is a PE teacher in one of the sample school taken for this research. He has been teaching PE for about eight years. In different places in Ethiopia, he has degree in PE. In our discussion, he said,

It is difficult to say we are supporting disabled students during PE class, there are a lot of reasons such as;

- Number of students in the class.
- Disabled students base, in lower class.
- Attitude of students and society.
- Administrators are not supportive; not only for disabled but also as a subject they have no positive attitude to PE.
- There are no Materials for disabled students to engage in practical class (Shortage of PE equipments in the school).

He also said, in our school visually impaired students are not allowed to take the subject even, but other disabled students take only the theoretical part. We support disabled students only by advising them they can be benefited from exercise.

T3 also another participant complains the Number of students in the class. He only supports and encouraging disabled students who have interest and talent to practice in sport activities.

According to Auxter, et al., (1993) the first variable to be considered in the decision to include children with disability in regular P.E program is the preparation of the P.E teacher. In order to serve children with disabilities in the regular P.E class, the teacher must have knowledge of the following.

- Physical, mental, and emotional characteristics of children with disabilities.
- Learning styles of children with disabilities
- Teaching techniques and methodologies appropriate for children with and without disabilities
- Behavior management strategies appropriate for children with and without disabilities.
- Techniques for modifying play, games, and sport activities to include children with disabilities.
- Methods for modifying evaluation and grading for children with disabilities.
4.2.1.4. What other Problems in inclusive PE practical classes

Most teachers in the sample school suggested that, SWD except some talented students others do not show their interest to be a part of inclusive PE practical classes. Even, they feel shame, shy, hide themselves, feel inferior and are too much depressed, Even if we want including them. It is too difficult to convince them because of their long duration psychological problem resulting from their disabilities and back grounds.

T2 said,
The existing practice seems simply accepting the problem rather than searching for the solution every teacher and students with disabilities believe and consider it is prohibited to think about including SWD in PE class , as he said ,for your surprise even we PE teachers who had take many Trainings and workshops for disabled students dominated by others attitude, because even the courage to apply the training is meaningless , the reasons are;

- Attitudes of others is not encouraging
- Shortage of time and large class also factors
- Sometimes we don’t know how and we afraid of the risk after injury if may it happen.
- There is no Competition for disabled students between schools.
- Lack of responsible teachers for SWD (inclusive education) experts at all level.”
Eugene, et al. (1958) Physical education has suffered in the past from the fact that it has been thought of too often exclusively in terms of exercise, skills, muscle building, respiration, metabolism or excretion. All these are considerations in P.E, but the terms are out of place in a definition of P.E. society has set up the school as a more or less effective agency to promote certain modifications of the individual in mind, body, morals and manners which society thinks will enable the individual to live a more complete and effective life than would be possible.

In the focused group discussion “the challenges of including disabled students in practical class” was the main topic to discuss. Accordingly to the discussion all schools should give value and believe SWD can perform activates and beneficiary like their peers. And all schools must find to include all students in PE, vacations, interscholastic, club or intramural competition.

For example, all school system should:

- Work by sharing duties to change the attitudes of society.
- Develop specific sport programs, e.g. wheelchair basketball, athletics competition and other games performed by disabled students during school celebrations.
- Allocate budget to buy facilities for disabled students.
- Modify rules and regulation of the game in which students with disabilities participate.
- Make SWD to participate in the department meetings.
- Make contact with stakeholders and with organizations.

School principals said that, they know PE is given as a subject or as a part of general education properly in the schools. However, they do not
have related information about the participation of SWD in PE practical classes. Their belief about whether PE contributes for SWD or not, Principal said that “no doubt, all subjects have equal contribution for all students disabled or non-disabled”. Concerning the support provided from principals to teachers principals in order to make inclusive PE classes effective, most principals responded that, support is given from the school to the departments. But their support is not specifically intended for inclusive PE practical classes.

4.2.2. Semi Structured Interview Report from Students with Physical-Disabilities

Semi structured interview was held with students who have physical disabilities at different time and place and their responses are summarized as follows:

- Primarily they were asked their previous experience and existing practices in PE practical activities and they responded that, throughout their school life they have no participation in PE practical classes. They claimed that they were totally rejected.

- When asked about their beliefs about benefits of PE they said, we only know it is important to non disabled students, during PE class they enjoy, and in sport clubs there is a competition for them which exclude our participation, so we can’t say it is beneficial for us.

- When asked did your family encouraging you to participate in PE, surprisingly no one’s family believe their disabled students can be benefited from PE like others subjects.

- When describing their duty during PE regular practical classes, they replied that, sometimes they never go to sport field, they stay in their class and do own work or sit idly anywhere in the school. And sometimes they go to sport field and recommended to watch
and keep materials of participant students under shadow up to the class end.

- They were asked again about the teachers’ attitude and commitment to motivation and help them to be take part in inclusive PE. They answered as, there is no help and encouragement to involve them, they are totally forgotten. According to these respondents, PE practical time is the time when they feel a great depression and inferiority and when their mind is go back to ask nature why they are disabled. Because PE practical time is the time when their peer groups are play and enjoy while they are sit idly due to their disability, and the issue of assessment and evaluation in this subject is raised to them and they confirmed that, they participate only in the classroom theoretical tests. Hence, their PE result is very low since they are not involved in continuous practical assessment equal to other students. Even some are not taking the subject as a whole. Finally, they were asked to mention the major challenges that hinder their involvement in PE practical classes and possible strategies to overcome the problems. As to them, the following are the major hindering factors:

  - Lack of competence and positive outlook(attitudes) among teachers and school communities to help SWD;
  - In adequate curriculum materials which did not include a single Content and strategy about how SWD could be able to involve in PE Practical classes;
  - Lack of support and concentration from school administration, and guidance and counseling are not working on our cases in relation.
• Trained teachers who can modify activities to address the special needs of SWD.

They recommended possible solutions to solve the problem as follows:
• Like others club there should be club for disabled students in the school.
• Develop and create awareness program to all the concerned bodies.
• Curriculum modification as well as successful teachers training.
• Continuous support and encouragement of the school administration and other school communities.

According to Bucher, (1975) Times have changed, and physical education must change with the times. New problems face our society and the world. As a result, if education is to be relevant to current needs, it must do something about these problems. Further as Eugene, et al, (1958) Physical education has suffered in the past from the fact that it has been thought of too often exclusively in terms of exercise, skills, muscle building, respiration, metabolism or excretion. All these are considerations in P.E, but the terms are out of place in a definition of P.E. society has set up the school as a more or less effective agency to promote certain modifications of the individual in mind, body, morals and manners which society thinks will enable the individual to live a more complete and effective life than would be possible otherwise PE should never but thought of as a “frill” or ornament attached to the institution or the school, but rather as an integral phase of the project of educating the whole individual.
CHAPTER FIVE

Summary, Conclusion and Recommendation

5.1. Summary

The main focus of this study was to investigate the challenges and opportunities of students with physical disabilities during PE practical class. To achieve the purpose of this study, basic questions were raised regarding the existing practice, opportunities, hindering factors and strategies to be made to address inclusive Physical Education practical classes. To gather the data on the issue raised participants of the study were physical education teachers, students with disabilities, and school principals. For data collection, the researcher used field observation, interview and focused group discussion. The data obtained were presented in narrative form and analyzed vis-à-vis the theoretical formwork discussed in chapter two. The main findings of the study revealed that there are lots of challenges in engaging disabled students in Physical education practical class. In this section an attempt was made to present conclusions and possible suggestions of the study for further action are presented.

5.2 Conclusion

From the reviewed literatures one can concluded that Physical education is the integral part of the total educational activities which is beneficial for mental, physical, social, and psychological aspects of an individual’s life through planed and selected physical activities. Therefore, one has to understand that physical education plays a great role in the society,
Especially for SWD if efficiently and effectively practiced. Hence, based on the findings of the study it can be concluded as follows.

- In promoting inclusive education, awareness creation is crucial for all Stakeholders. Especially, teachers and principals were found more concerned to the issue raised.

- The study concluded that most of the school administrations do not give special attention and have no enough knowledge about benefits of including children with disabilities in PE practical class.

- It is fact that positive attitude of teachers can enhance the achievement of any new strategy in any educational system. However, positive outlook without related knowledge, skill and duty is not the end in the process.

- The finding show that back ground of disabled students in performing activates is poor, which can be one big challenge.

- Similarly, relevant curriculum materials (syllabus, teachers’ guides, student textbooks, etc...) could accelerate the fulfillment of inclusion strategy at any level of education. In this study curriculum materials are not supportive for disabled students.

- The study pointed out that there was shortage of important equipment and facilities to include disabled students in PE practical class in the sample schools.
• Motivations and support of family for their children with disabilities was found low in this study. Parents give less expectation to the education of their children with disabilities to their abilities particularly in PE practical activities.

• In the study shortage of time and large class size are also factors hindering not to apply inclusive teaching.

• The study revealed that none of the sample school had sport competition for disabled students.

• The study also showed that there is no responsible part in the sample school who takes the duty to help disabled students.

• Psychological and social factors are also challenges to achieve the general objective of PE. As it is received by the study, the sample students with disabilities face several psycho-social challenges in PE practical classes. Most of these students reported that they feel low self-esteem, frustration, shy, isolation, etc...which in turn affect their whole life and academic performance.

It is possible to conclude from the above findings in most schools students with disabilities are deprived from physical education practical class. Therefore, it is possible to say that most of the students with disabilities are not advantageous from PE lesson which is taking currently.
5.3. Recommendations

Based on the findings of study, the following recommendations are forwarded the researcher appreciate if the concerned bodies give their attention.

I. Measures to be taken at school level

- The school should create awareness among the school community (teachers, SWD, all staff members) and parents. This would help the school community to develop positive attitude toward SWD and inclusive education.
- The school has to make and build communication with all concerned stakeholders.
- Design free class for practical part for disabled students and motivate PE teachers to help them.
- The school should report to (MoE) to modify the current teacher-training curriculum which does not include certain skills, which enable teachers to facilitate the inclusive classes for disabled students.
- SWD have to participate in and outside the school environment in sport activities like their “normal” peers. Therefore, the school has to facilitate such opportunities to enhance the social interaction skill of SWD.
- The school has to support and encourage teachers to produce and use relevant teaching aids which can be made locally to promote the teaching-learning process for practical activates for SWD.
- Absent of facilities for sport activates deter riot not only SWD but it also affects motivations of teachers, so schools should solve such problems.
II. Measures to be taken by teachers

- PE teachers as a department should plan and assign teachers who can take the duty to promote and organize sport competition for disabled students in the school.
- Encourage and motivate physically disabled students in their practical class.
- Teachers have to be well aware and try to understand students with physical disability to promote inclusive PE.
- They should be innovative, flexible, creative, ready to learn from the learners, give chance to disabled students and capable of initiating active learning in inclusive PE setting.
- The learning environment of inclusive education needs some sort of modification and adaptation. Thus, teachers should work out the necessary modification and adaptation of educational materials, methodology, facilities, equipment and environmental conditions in order to address specific educational needs of students with disabilities.
- PE textbooks are found not suitable for physical disability students in an inclusive educational setting. They need revision so as to incorporate more suitable activities and methodologies that promote communication and participation; the inclusive class teacher should be able to modify textbooks according to the needs of students with disabilities in inclusive PE program.
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APPENDIX 01

Observation Guide Format During P.E. Practical Class.

School __________                                Date __________
Grade ___________                                Unit of instruction __________

Key Guide
1= Excellent                                            3. Need attention
2. Good                                                   4. Not present

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<tr>
<td>1. Availability of suitable play grounds in school.</td>
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<td>2. Facilities and equipments and its appropriates.</td>
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<td>3. Environment safety for disabled students.</td>
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<td>4. Teachers ability to help students with disability.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>5. Physically disabled student’s participation during practical class.</td>
<td>1</td>
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<tr>
<td>6. Teachers ability to modify instructions for disabled students.</td>
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<tr>
<td>7. Instructional opportunities are adapted to diverse learners.</td>
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<tr>
<td>8. All students are treated in a fair and equitable manner.</td>
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APPENDIX 02

Semi Structured Interview Guide Administered to P.E. Teachers.

Personal Information

Part I Background Information

A. Personal data
1. School _______________ Sex ____________
2. Age ________________ Grade teaching __________

B. Educational background
1. Educational qualification 3. Experience in teaching P.E _______
2. Major ____________
   Minor ____________ 4. Additional training ______

Part II the challenges and opportunities of P.E class for physically disabled students.

1. Have you taken courses on adapted physical education?
2. Have you taken any training for disabled students?
3. Do you let students with disabilities to participate in your P.E practical session?
4. How do you Assess and give marks to physically disabled students?
5. What do you think is your problems to let students with disabilities participate in to regular P.E class?
6. In what way do you think that children with disability benefit physically from exercise?
7. How Adequate is the school administrates support for the participation of students with disabilities?
8. Do you try to improvise the teaching material to fit with students with disabilities?
9. Do you try to modify the teaching method to include disabled student?
10. Do you think the environment is suitable to teach P.E for students?
APPENDIX 03

Interview guide administrated to students with disability
Personal Information

School _____________                      Sex ______________
Age ________________                      disability type _________

1. Do you think P.E is important for you?
2. Do you like to learn P.E?
3. Do your teachers motivate you to participate in P.E practical class?
4. Do your classmates help you to participate in practical class of the subject
5. Do school administrators help you to participate in any sport activities?
6. Does your family encourage you to participate in practical class?
7. What kind of exercise do you like to do in practical period of lesson?
8. Does your disability restrict you from participating in P.E practical period?
APPENDIX 04

Focus group discussion guides administered for PE teachers and School principals

1. Discuss on the responsibilities of school principals to enhance the participation of disabled students in the practical period of PE lesson
2. Discuss on the duties and responsibilities of PE teachers to modify the practical part of PE for disabled student.
3. Discuss on how to improve society attitudes toward disable students
4. Discuss on exercises more suitable for disabled students
5. Discuss on the improvisation of materials to teach PE for disabled students.
DECLARATION

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in any other university and that all sources of material used for the thesis have been duly acknowledged.

Name ______________________________
Signature __________________________
Advisor ____________________________
Signature __________________________

Place and Date of Submission:       Addis Ababa University
                                     May 2012