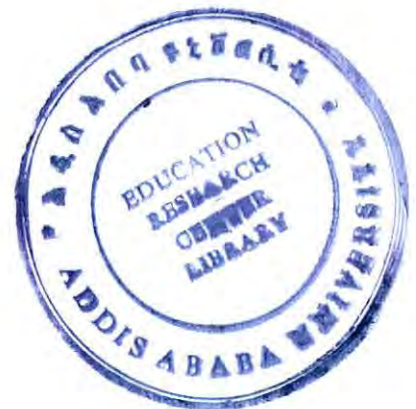


**The involvement of Students with Physical Disabilities in Physical
Education Practical Classes: Pedagogical Challenges and
Opportunities (The Case of Secondary Schools of
North Shoa Zone, Oromia Regional State)**

A Thesis Submitted to School of Graduate Studies of Addis Ababa
University In Partial Fulfillment of the Requirements of the Degree
of Master of Art in Curriculum and Instruction

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ADDIS ABABA UNIVERSITY
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Table of Contents

Contents	Pages
Acknowledgements	I
Table of Content	II
List of Tables	VI
Abbreviation and Acronyms	VII
Abstract	VIII
CHAPTER ONE	
Introduction	
1.1. Background of the Study	1
1.2. Statement of the Problem	4
1.3. Objective of the Study	6
1.4. Significance of the Study.....	7
1.5. Delimitation of the Study	7
1.6. Limitation of the Study	78
1.7. Operational Definition of Terms	
CHAPTER TWO	
Review of Related Literature	
2.1. Historical Background and the Current International Trends and Policy Issue on Education for Students with Disabilities	10
2.2. The Concept of Inclusive Education	12
2.2.1. The Shift to Inclusive Education	13
2.2.2. Advantages of Inclusive Education for Students with Disabilities .	14
2.2.3. Requirements of Successful Inclusive Education for Students with Orthopedic, Visual, and Hearing Impairments	15
2.3. Disability and the Condition of Students with Physical Disabilities.....	16
2.3.1. Visual Impairment	17
2.3.2. Hearing Impairment	17
2.3.3. Orthopedic Impairment.....	18
2.4. Physical Education	18

2.4.1. Goals of Physical Education	20
2.4.2. Physical Education: An Integral Part of General Education	22
2.4.2.1. Relationship with Education	23
2.4.2.2. Integration in Physical Education	23
2.4.2.3. Educational Value of Co-curricular Physical Activities	24
2.5. The General Concept and Development of Adapted Physical Education/Physical Education for Children with Disabilities	25
2.5.1. The Current Status of Adapted Physical Education in the World	27
2.5.2. Benefits of Adapted Physical Education for Students with Disabilities	28
2.6. Accommodating Students with Disabilities in the Regular Physical Education Classes	29
2.6.1. The Physical Activity Program and Teaching Strategies for Students with Disabilities	31
2.6.1.1. The Physical Activity Program and Specific Inclusive Strategies for Orthopedically Impaired Students.....	32
2.6.1.2. The Physical Activity Program and Specific Inclusive Strategies for Visually Impaired Students	33
2.6.1.3. The Physical Activity Program and Specific Inclusive Strategies for Students with Hearing Impairment	35
2.6.2. Assessment in Inclusive Physical Education Classes	35
2.6.2.1. Grading (Marking) Students with Disabilities in an Inclusive Setting	36
2.7. Attitudes of Teachers and Students with Orthopedic, Visual, and Hearing Disabilities towards Inclusive Physical Education	37
2.7.1. Teachers' Attitude	37
2.7.2. Students' Attitude	39
2.8. An Attributes of Physical Education Teachers in Inclusive Physical Education Classes	39
2.9. Some Major Factors Influencing the Involvement of Students with Disabilities in Physical Education Practical Classes	41

2.9.1. Lack of Awareness	41
2.9.2. Previous Experience	41
2.9.3. Lack of Parents and Community Involvement	42
2.9.4. Teachers and Principals Competence	43
2.9.5. The Nature of Curriculum	43
2.9.6. Lack of Assessment and Identification	43
2.9.7. Lack of Appropriate School Facilities.....	44

CHAPTER THREE

Research Design and Methodology

3.1 Research Design	45
3.2. Population and Sampling Techniques	45
3.3. Source of Data	46
3.4. Data Collection Instruments	46
3.5 Data Gathering Procedures	47
3.6. Data Analysis	48
3.7. Organization of the Report	48

CHAPTER FOUR

Analysis and Interpretation of Data

4.1. Analysis of Findings Obtained From Students with Physical Disabilities through Questionnaires	50
4.1.1. Background Information of Students with Orthopedic, Visual and Hearing Impairments.....	50
4.1.2. Practice in PE Practical Classes as Perceived by Students with Disabilities	52
4.1.3. Opportunities and Challenges of Inclusion in PE Practical Classes as Perceived by Students with Disabilities	53
4.1.4. Opinion of Students with Disabilities towards Inclusiveness of PE Practical Classes	59
4.2. Analysis of Findings Obtained from Teachers, School Principals, Woreda, Zone and Regional Education Bureau Experts	66

4.2.1. Background Information of Teachers, School Principals, Woreda, Zone and Regional Education Bureau Experts	66
4.2.2. Analysis of Findings Obtained from Teachers through Questionnaire	68
4.2.2.1. Opportunities in PE Practical Classes as Perceived by Teachers	68
4.2.2.2. Challenges of Effective Inclusion in PE Practical Classes as Perceived by Teachers	74
4.2.2.3. Teachers Opinion toward Inclusion in PE Practical Classes	.81
4.2.2.4. Teachers' Responses to the Open-ended Questions	84
4.2.3 Analysis of Findings Obtained Through Interview	86
4.2.3.1. Interview Report Obtained From School Principals, Woreda, and Zone Education Bureau Experts.....	86
4.2.3.2. Interview Report Obtained from Oromia Regional State Education Bureau Curriculum Expert	90
4.2.3.3. Unstructured Interview Report from Students with Multi-disabilities.....	91
4.2.4. Analysis and Interpretation of Observation of PE Practical Classes	93

CHAPTER FIVE

Summary, Conclusion and Recommendation

5.1. Summary	94
5.2. Conclusion	98
5.3. Recommendations	101

Bibliography

Appendices

List of Tables

	Pages
Table 1: Research Settings and Participants of the Study	49
Table 2(A): A Prevalence and Sex in Sample Schools	50
Table 2(B): Disability Conditions of the students	50
Table 3: Age and Grade Level of the Respondent Students	51
Table 4: Previous and Present Practices in PE Practical Classes	52
Table 5: Views on Teachers' Competence	54
Table 6: Assessment Techniques used by PE teachers	56
Table 7: Relevance of Curriculum and Availability of PE facilities in the Sample Schools.....	57
Table 8: Support and Encouragement from Educational Officials	58
Table 9: Self-perception of SWD about their Own Capability for PE Activities	59
Table 10: Benefits of PE as Perceived by SWD	60
Table 11: Interests of SWD toward PE Inclusive Classes as Perceived by Themselves.....	61
Table 12: Outlooks of PE teachers, SWOD, and Parents toward the Participation of SWD in PE Practical Classes as Perceived by SWD	62
Table 13: Psycho-social Challenges in Inclusive PE as Perceived by SWD	64
Table 14: Sex, Age, Qualification, Specialization and Service Years of Respondent Teachers.....	66
Table 15: Sex, Qualification and Service Years of School Principals, Woreda, Zone and Regional Education Bureau Respondents	67
Table 16: Opportunities in PE Practical Classes for Students with Physical Disabilities.....	68
Table 17: Effort made by Teachers, Woreda, and Zone Education Bureau Experts to Effectively Include Students with Physical Disabilities in PE Practical Classes	71
Table 18: Factors Affecting the Participation of Students with Physical Disabilities in the Practical Aspects of PE	74
Table 19: PE Teachers' Outlook about Inclusion in PE Practical Classes	81
Table 20: Table Showing the Summarized Observation of PE Practical Classes in the 10 Sample Schools.....	93

Abbreviations and Acronyms

IEP	Individualized Educational Planning
IPEP	Individualized Physical Education Planning
LRE	List Restrictive Environment
MoE	Ministry of Education
PE	Physical Education
SWD	Students With Disabilities
SWOD	Students Without Disabilities
UNESCO	United Nations Education, Science, and Cultural Organization
UN	United Nations

Abstract

The main purpose of this study was to investigate the existing practice as well as pedagogical challenges and opportunities of students with physical disabilities (orthopedic, visual, and hearing impairments) in physical education (PE) regular practical classes in secondary schools of North Shoa Zone of Oromia Regional State. It is also aimed at suggesting possible recommendations that help to improve the level of involvement of these students in the PE practical classes. Mixed (qualitative and quantitative) approaches of research were utilized in this study. The study sample included a total of 123 subjects which means 94 students with physical disabilities, 14 PE teachers, 10 secondary school principals, and 5 educational bureau experts from woreda, zone and region. Data were collected from the subjects through well prepared instruments such as questionnaires, interview guides and observation checklist. Data from the sets of questionnaires were organized and analyzed quantitatively with the help of frequency, percentage and mean where as data from in-depth interviews and practical field observations were analyzed qualitatively. Results of the study showed that, the exclusion of students with physical disabilities from PE practical classes, effort made by teachers to create 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 target 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. Moreover, the target students faced psycho-social challenges due to isolation from their 'normal' peers during PE practical classes. On the other hand, students with physical disabilities showed their interest to learn every aspect of PE. Thus, it was concluded that, the ongoing practice of students with physical disabilities in the practical session of PE seems to be unfair and out of the purpose of inclusive education that was designed to provide equal education without discrimination on the basis of race, color, sex, physical conditions or other opinions. Finally, based on the findings and conclusion of the study, it was recommended that, awareness creation strategy should be designed to the whole 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 various disabilities. PE teachers should be provided relevant training and they need to be innovative, flexible, creative, willing and capable of initiating participatory inclusive PE. Further more, schools should have the correct data of students with disabilities along with their disability types in order to help them effectively in the inclusive educational setting in general and in the inclusive PE practical classes in particular.

CHAPTER ONE

Introduction

1.1. Background of the Study

The problems of children with disabilities are so diverse and complex. They are facing various life challenges due to the complex socio-economic factors. All these factors have a profound implication on the effective functioning and adjustment of persons with disabilities. If the social environment is a rejecting, insensitive, hostile and degrading type, that will not only complicate the adjustment of these persons but also affects their development and self-esteem. This is usually characterized by lack of trust and confidence in oneself and the surrounding, low self-esteem, and feeling of hopelessness (Tirusew, 2000). Among many other factors the most important one is the educational involvement of students with disabilities into regular educational settings. With this regard, there are several views of writers.

Recently, global education reforms have focused on education for all and inclusive education. Hence, inclusion of students with disabilities seems to be a global trend; of course, without denying the existing controversy over it. As noted by many educators, one of the reasons for inclusion of students with disabilities into the regular classroom was to facilitate positive relationships, among both with disabled and non-disabled students (Warren, 1977, as cited in Horne, 1985).

In its broadest sense, inclusion refers to the process of reforming and restructuring of a 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 (Mittler, 2000). It is a process of including students with diverse disabilities in to regular schools and classrooms instead of placing them in special institution. Specifically, it is the instructional and social integration of children with disabilities in a regular classroom (Schulze et.al., 1991).

Tirusew (1999) strengthened the above ideas as; inclusion is a move towards schools that are structured around pupils' diversity and can accommodate many different ways of organizing pupils for learning to attain excellence in diversity. This is in line with the Salamanca statement and frame for Action on Special Needs Education (UNESCO, 1994) that provides the clearest and most unequivocal call in articles 2 and 7 as follows:

Article 2 states

...that ordinary school should accommodate all children, regardless of their physical, intellectual, emotional, social, linguistic or other requirements. It further states that all educational policies should stipulate that children with disabilities attend their neighborhood school.

Article 7 also states

...that all children should learn together, wherever possible, regardless of any difficulties or differences they may have. Inclusive schools must recognize and respond to the diverse needs of their students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organization arrangements, teaching strategies, resource use and partnerships with communities.

Furthermore, through research it has been proven that children develop better physically, psychologically and socially if they learn together with other children (Claesson, 1995, cited in Tirusew, 1999). Therefore, the need to make a shift to inclusive education in Ethiopia is a logical choice to overcome practical problems faced in educating children with disabilities (Tirusew, 1999).

It is obvious that the main objective of any educational system of a country is to cultivate the individual's capacity for problem solving and adaptability to the environment by developing the necessary knowledge, ability, skill and attitude. It may be difficult to achieve this general objective of education in the presence of distinction or discrimination of some beneficiary groups on the basis of race, color, religion, sex, physical conditions, political or other opinions from specific practices of the school. To this effect, different streams of education are used as tools to reach this educational goal. Physical Education (PE) is so one of the part of general education which is developing very rapidly in a wide range due to the more attention given to it on the basis of its several benefits for every person including students with disabilities.

It is the phase of general education that contributes to the mental, physical, psychological and social growth and development of the child primarily through selected movement experiences and physical activities (Dauer, and Pangrazi, 1979). As stated by Scholl (1986), a sound physical education program for students with disabilities can develop the physical fitness and motor skills necessary for activities of daily living and orientation and mobility, a more positive self concept and sense of personal worth, and sport skills. Moreover, physical educators today believe that, a typical child can best learn to live a normal life if he/she participates as fully as possible in the school life as other children. In fact students with permanent handicap need help in making better adjustment to their disabilities and in finding ways to compensate for them (Johnson, 1969). Hence, school is the responsible organization to provide every aspects of PE (theory or practice) to the diverse group of personalities equally irrespective of any physical, mental, cultural and other characteristics with the help of suitable instructional strategies that can address the diverse needs of these students.

Though, students with physical disabilities are some of the school diversities and are the composition and characteristics of the so called "regular" classes of PE, those who are responsible must be aware of these types of learners to be able to execute an

adequate teaching-learning environment in which the target students could be effectively involved specially in the practical session of the subject so that they can be self-supportive and self-reliant.

Having said all these about the importance of PE practical activities for students with disabilities, the intention of this paper is to investigate the level of involvement of students with physical disabilities particularly those with orthopedic, visual and hearing impairments in PE practical activities and to identify the predominant pedagogical problems that prohibit their involvement. The reason for selecting physically impaired students is from the writer's belief that, physical disability can be easily perceived or identified relatively. Hence, PE teachers can support and encourage these students in PE regular practical classes according to their observable disabilities in order to improve their participation. If not, there may be pedagogical and other problems to effectively accommodate students with physical disabilities in all aspects of secondary school PE. Therefore, it may be crucial issue to reach the problems with this regard in order to create participatory PE practical classes in which all students could be involved and be beneficial.

1.2. Statement of the Problem

Every child is unique, differing from others intellectually, emotionally, socially, and physically. Most students are taught in regular classes, without the need for specific services, and the classroom teacher feels capable of meeting their instructional needs. Some students, however, deviate so greatly from "normal" limits that the regular classroom teacher must seek special help in dealing with their learning and behavioral problems (Cecil and Ann, 1989). Accordingly, children with orthopedic, visual and hearing impairments are some of these deviated groups from the "normal" limits that require special attention and assistance from the teacher and others during the PE practical classes in particular and in other subjects in general.

Butcher (1972), stated that physical education is an integral part of the total educational process which enhances and integrates the physical, social, and

psychological aspects of an individual's life through direct physical activity. Therefore, it is only through the least restrictive environment (LRE) and direct involvement that children with disabilities could better achieve such benefits from PE or any other components of the general education. To this effect the educational movements under taken with the aim of including students with disabilities into the mainstream classroom is firmly established in various countries. Studies suggest that among the various modes of educational deliveries for persons with disabilities, inclusive education is found to be ethically acceptable, pedagogically sound, psychologically commendable and cost effective in contrast with special school provisions (UNESCO, 1994). Hence, the approach enables educational structures, systems and methodologies to meet the needs of all children in the school.

As seen from the general trend, although most educators consider inclusive education to be sound for students with disabilities including those with orthopedic, visual, and hearing impairments, a number of influencing factors interfered with its effective implementation. This is also true to successfully accommodate these students in PE practical activities. For instance, a study done by Degefa (2001) magnified the following problems to involve students with disabilities in PE practical classes: teachers often perceive only the difference or impairment of the students rather than students' ability, they show reluctance to include student with disabilities, they also found it difficult to evaluate these students in the practical session of PE, insufficiency of materials especially designed to meet the needs of students with disabilities and lack of relevant training of PE teachers. Hence, these and other factors could affect the significant participation of the subject students in PE practical activities. For the purpose of reaching on the sound inclusion of students with physical disabilities in PE practical classes, therefore, systematic assessment in the area becomes considerably essential. Thus, bearing this in mind, the purpose of this study is to explore the pedagogical challenges and opportunities in inclusion of students with physical disabilities in regular practical classes particularly in secondary

schools of North Shoa Zone of Oromia Regional State through the following basic questions:

1. Are students with disabilities being involved in Physical Education regular practical classes?
2. What are the major factors that hinder the involvement of students with physical disabilities in Physical Education practical activities?
3. What pedagogical strategies should be used to significantly accommodate students with physical disabilities in Physical Education regular practical classes?

1.3. Objective of the Study

The overall objective of this study was to investigate the existing involvement of students with orthopedic, visual, and hearing impairments in PE regular practical classes and to identify opportunities provided and determinants of the same in secondary schools of North Shoa Zone of Oromia Regional State. In light with this, the study has the following specific objectives:

- To examine to what extent children with disabilities are involved in PE regular practical classes;
- To identify the level of awareness and attitude of children with disabilities toward the effect of physical education;
- To find out the attitude of PE teachers towards the inclusion of children with disabilities in practical session of PE;
- To explore the awareness level of stakeholders (teachers, school principals, parents and others) about the inclusion of students with disabilities in PE practical classes;
- 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 hinder the participation of children with disabilities in PE practical classes, and

- To suggest possible recommendations to improve the degree of involvement of these children in the PE practical session.

1.4. Significance of the Study

It is hoped that findings of this study would help the following instances.

1. Indicate the extent to which PE practical classes are open and conducive for children with disabilities in secondary schools.
2. 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.
3. Provide an insight into how students with disabilities feel about PE and how they are aware of its benefit.
4. Initiate teachers, school principals and others to give chance and encourage these children to be concerned in PE practical programs in schools.
5. Moreover, the findings will serve as a piece of reference to other researchers who are interested to undertake further study in the area and to contribute a little in order to enrich the existing literature gap in the field.

1.5. Delimitation of the Study

The dimension of this study is confined to ten secondary schools (grade 9-12) of North Shoa Zone of Oromia Regional State. Though 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 orthopedic, visual and hearing impairments in PE practical classes.

1.6. Limitation of the Study

The study would have include all zones of the region to reach upon the sound information at regional level. However, it is limited to North Shoa Zone of Oromia Regional State 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. Operational Definitions of words and 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.

Hearing Impairment: any hearing loss from mild to severe (a hearing problem) that adversely affect a student's educational performance.

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.

Multi-Disabilities: Disabilities for the sake of this paper, it refers to those students who have experienced more than one disability, for example, Orthopedic plus Visual, Hearing plus Visual etc.

Orthopedic Impairment: is a motor disability caused by an anomaly, disease or impairment by other condition (e.g. Cerebral palsy, spina bifida, muscular dystrophy, polio, clubfoot or traumatic injury) where the student requires specialized services in order to benefit from social and educational program.

Physical Disability: is the condition that interferes with child's ability to use his/her body for movement and educational performance. 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.

Visual Impairment: is a visually handicapped, even those with correction, adversely affects a student’s educational performance. The term includes those partially seeing and blind students.

CHAPTER TWO

Review of Related Literature

2.1. Historical Background and the Current International Trends and Policy Issue on Education for Students with Disabilities

Historically people with disabilities were often placed in hospitals, asylums or other institutions that provided little, if any, education. Special education programs are relatively recent origin. As with ordinary education, the education for children with disabilities was began with individual and charitable organization (Ainscow, M. 1994).

Government intervention followed at first in order to support voluntary efforts and finally to create a national framework in which public and voluntary agencies could act in partnership to see that all children receive a suitable education. Many of the current practices of special education have developed since the early 1960s. During the early parts of that period, only those with perceived handicap were categorized as disabled, and special education was provided for these small populations. In the later 1960s and early 1970s concern for children in ordinary schools who were perceived as working unsatisfactory progress began (Ibid). New ideas and trends gradually rose which were challenging the existing provision. For instance, as the result of the 1990 World Conference on Education for All: Meeting Basic Needs, the challenge of exclusion from education has been put on political agenda in many countries. This and other movements resulted in the enactment of PL 94-12.

The Education for All Handicapped Children Act (1975), now renamed as the Individuals with Disabilities Education Act (IDEA). This legislation mandated that all students with disabilities be provided with appropriate instruction in the *Least Restrictive Environment* (LRE) (Salend, S.J, 1994).

Accordingly the World Education Forum reaffirmed that education can play a key role in overcoming exclusion of the disabled and the strong international endorsement of the convention on the rights of person with disabilities adopted by the United Nation General Assembly in 2006, which signed by more than 100 countries, shown important shifts from a medical welfare perspective to human right one. As a result, ***inclusion policy*** recognized in many countries where children with special need education are taught in regular schools with various form of special support (Valentini, 2008).

However, there is a clear disparity between developed and developing countries in implementing this approach to meet the needs of disabled children. For example, in Europe the trend is clearly toward inclusive education supported by program for families, where as in Latin America and most parts of Asia and Sub-Sahara Africa financial constraints limit the coverage and extent of such program (Munoz and Villabos cited in Valentini, 2008).

In line with this World Commitment, Ethiopia introduced a new special needs education strategy in 2006, which is designed to foster inclusive schooling by training teachers to identify learning difficulties and impairments finding a means to facilitate active learning for all children and establishing support system. Moreover, the government has planned to expand special needs education built on the current existing system.

The MoE has also planned to increase output of teachers from training institution specialized in special needs education to ensure the quality of special needs education and to improve the awareness of educational officials at all level so as to make them to include the special needs education in the education sector planning and reporting. Furthermore, the cluster schools assigned as a center for Teachers Professional Development and special schools would as resource and support to provide adapted materials (MoE, 2006).

2.2. The Concept of Inclusive Education

During the last decade, there have been many changes in the education of children with disabilities. These changes include changes in attitude, methodology, the use of related concepts and like. These changes are not only relevant for the benefit and enrichment of children with impairment, but for the enrichment of all involved children, their families, teachers and head teachers, their school communities and possibly the community as a whole. The most important consequence of this change is recognition and appreciation of diversity. This again is resulting in efforts to bring back into the community all those who had been excluded by the vast majority because of being different (Skjorten, 2004).

Inclusive education means welcoming all children, without discrimination, into regular or general schools. By the change of attitude against differential treatment of education, differences in people will likely be seen in a positive perspective. It calls for a respect of difference and celebration of diversity. In deed, it is a focus on creating environments responsive to the differing developmental capacities, needs and potential of all children. Inclusive education means a shift in services from simply trying to fit the child into “normal settings”. It is a supplemental support for their disabilities or special needs and promotes the child’s overall development in optimal setting (Tirusew, 2005).

Therefore, the task becomes one of developing the school in response to a pupils’ diversity. This has to include a consideration of overall organization, curriculum and classroom practice, support for learning and staff development (Ainslow, 1997). According to Tirusew (2005), inclusive education implies that education is about learning to live and learn together. Central to the present thinking is the approach towards learning, which is termed “*inclusive learning*,” a move away from labeling the student and towards creating educational environments: concentrating on understanding better how people learn so that they can be better helped to learn, and seeing people with disabilities and/or learning difficulties first and for most as learners.

Thus, the need to work out the necessary modification and adaptations of educational materials, teaching methodologies, facilities, equipment and environmental conditions so that the child's specific educational needs can best be served is essential in an inclusive setting. The special support children with disabilities require to learn may range from minor modifications to major adaptations (Smith et.al., 1995).

Many factors affect and regulate the development of inclusion. Some of the determinant factors are the attitudes of the community towards children with impairments and inclusion, a limited understanding of the concept of impairment and a hardened resistance to change is the major barriers impeding inclusive education. The teachers' attitudes are seen as decisive factors for successful inclusion. Inclusion has been based on the assumption that teachers are willing to admit students with impairment in regular class and be responsible for meeting their needs (Tirussew, 1999).

2.2.1. The Shift to Inclusive Education

Inclusive education is a strategy aimed towards the goal of promoting an inclusive society, regardless of their ability and impairment (Rydbjerg, 2003). Although inclusive education generally refers to the inclusion of children with disabilities in regular education, most of the educators in all parts of the world recognizing as approach to education which meets the needs of diversity of learner that result in quality education for all. Low literacy rates and high dropout rates in many countries of the world are key indicator of the failure of the education models in use. Moreover, the education models in use have failed to address issues such as poverty, ethnic minorities, violence and abuse of rural children, child labour (World Bank, 2004).

Furthermore, the strategies used to achieve inclusive education for students with disabilities can benefit other with learning difficulties and as means to improve the quality of education for all children in the classroom. Inclusion is not just about placing students with disabilities in to mainstream classrooms. It recognizes the needs

of all children and demands trained teachers that facilitate an inclusive classroom which enables the entire learner to meet their needs.

2.2.2. Advantages of Inclusive Education for Students with Disabilities

An inclusive education is an instrument for promoting human rights and promoting and reinforcing principles spelled out by International Conventions and other key documents such as the 1994 Salamanca Declaration. Through research, it has been proven that children develop better physically, psychologically, and socially if they learn together with other children (Radda Barnen, 1995).

The general education classroom provides students with disabilities access to students without disabilities, access to curricula and textbooks to which most other students are exposed, access to subject content taught by subject specialists; access to instruction from a general education teachers whose training and experience are quite different from those of special education teachers. Moreover, classroom provides access to all of the stress and strains associated with the preparation for, taking of and passing and/or falling of the statewide assessments (Tirussew, 2005).

In inclusive settings students with disabilities are provided with the opportunity to be exposed and reciprocate to a broad range of social interaction behavior. These beneficial interactions can be characterized as proximal interactions (Sensory Contact), helping interactions (non-disabled students voluntarily providing direct assistance, promoting social and effective relationships), and reciprocal interactions (the disabled and the non-disabled are both occurring personal benefits from the relationships, like playing a game) (Stain Back and Stain Back, 1985). This dynamic transaction contributes a great deal to the holistic development of the child like, for example learning to perform skills across persons, places, materials, and language cues and establishing social and effective relationship. Furthermore students with disabilities can profit from learning basic educational tasks by observing non-disabled student peer models (Tirusew, 2005).

Inclusive education at the formative stage of development can do much to sweep away the barriers of traditional beliefs and misunderstanding that keep the persons with disabilities and the non-disabled parents apart (Booth, and Potts, 1987).

In general, non-disabled students who have had opportunities to interact with students with severe disabilities have more positive and accepting attitudes than those who have not had such opportunities. Such interactions can also reduce non-disabled students fear of students with disabilities and promote understanding and acceptance (Tirussew, 2005).

2.2.3. Requirements of Successful Inclusive Education for Students with Orthopedic, Visual, and Hearing Impairments

It is true that, legislation and regulations alone cannot implement inclusion effectively. In order to have successful inclusive education of students with orthopedic, visual, and hearing impairments, certain criteria have to be fulfilled. According to Skjorten (2004), successful inclusive education has to include the following attributes:

1. Change of heart and attitude.
2. Reorientation related to assessment, teaching methods and classroom management including to adjustment of the environment.
3. Redefinition of teachers' roles and reallocation of human resources.
4. Redefinition of the role of existing special schools; (could these schools for example gradually start serving as out reaching resource centers?).
5. Provision of professional assistance for teachers in the form of
 - A. Reorientation in teacher education so that new teacher can contribute to the process towards inclusion and related to the flexibility that is necessary.
 - B. In service reorientation and upgrading of teachers, and head teachers so that they too will be able to contribute to the process towards inclusion and relate to the flexibility that is necessary.
 - C. Itinerant services according to needs.

6. Establishment and improvement for further development of partnership between teachers and parents need mutual reorientation and upgrading.

Inclusion will also require a flexible educational system including flexible curriculum and examination system. Furthermore, it is important that one cannot develop national models for inclusion (Skjorten, 2004).

2.3. Disability and the Condition of Students with Physical Disabilities

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 (Miron, 1994). Several people live with various types of disabilities in the world.

In many cultures, people with disabilities find that their human dignity is impaired. They risk being hidden away, as though they were an inferior kind of human being. They also risk being oppressed, abused and exploited. Having a disabled child may even be regarded as a shameful as punishment from God. All these things mean that, in addition to his/her disability, the child with disability is also obliged to fight against people's prejudices and ignorance. Children with disabilities are often the most neglected group of all where children are concerned (Radda Barnen, 1999).

Attitudes about persons with disabilities vary from society to society in accordance with the particular socio-cultural, economic, political and religious dimensions. They also vary according to the different categories of disabling conditions and in most societies it is possible to note a "hierarchy of disabilities", where disabling conditions are ranked in terms of the public's degree of acceptance and dislike (Miron, 1994). Regardless of what cultural and traditional attitudes people may have disabilities and bodily impairments as naturally a part of human life as birth and death. Disabled people have existed at all times and in all cultures throughout the world (Radda Barnen, 1999).

The way in which we educate our children besides being influenced by the socio-economic and political realms is a reflection of our attitudes and beliefs. Segregating children on the basis of disabling conditions reflects the belief that these children are different; different in their needs and aspirations, and incapable of benefiting from that which is provided to “normal” children. It is this general system of beliefs that affects the diagnosis and treatment of persons with disabilities with in a country (Miron, 1994).

Even though there are diverse types of disabilities, this study is concentrated only on the orthopedic, visual, and hearing impairments which are easily perceived in the school.

2.3.1. Visual Impairment

A student with visual impairment has impairment in vision that, even with correction, adversely affects a child’s educational development. Visual impairment includes both partial sight and blindness (Ysseldyke, 2004, Salend, 1994). Students with severe visual impairments are usually identified before they enter the school, although some partially sighted students may not be identified until they reach school age, when visual demands increase (Ysseldyke, 2004).

Heredity is the major cause of visual impairment. Other factors include infectious diseases, poisoning, diabetes, tumors and prenatal complications. Aging has become a primary cause of blindness in the elderly (Salend, 1994).

2.3.2. Hearing Impairment

The manifestation of faulty hearing, whether due to a malfunction of physical apparatus or of perceptual processing are amazingly similar. Both types of problems result in inadequate assimilation of auditory information, and hence difficulties result in language and speech, (Bockminer, 1981 cited in Solomon, 2005). Many people are not aware of that there are two dimensions to the sense of hearing. First, the intensity, or loudness with which sound is received, and second, the quality, or clarity with

which sound is received. Difficulties concerning only the loudness factor are due to conductive losses and can usually be helped with the use of hearing aids. Difficulties with clarity, however, are due to sensory neural losses. Such losses are usually caused by damage to nerve fibers in the inner ear, (Allen, 1989 cited in Solomon, 2005). According to Kirk (1962), a hearing impaired person is considered to be deaf if the sense of hearing is not functional for the ordinary purposes of life, or hard of hearing when the sense of hearing is defective but functional, with or without a hearing aid (Ibid).

The cause of hearing impairment can be heredity or environmental factors. Total deafness, which is rare, is usually congenital. Trybus, (1985) cited in Salend, (1994) identified the primary causes of hearing impairment as hereditary, material rubulla, prenatal and perinatal complications, meningitis and childhood diseases and injuries.

2.3.3. Orthopedic Impairment

As noted in Salend (1994), two types of physical disabilities are recognized by the United States department of education (1977); *Orthopedically impaired* and *other health impaired*. Orthopedic impairment on which this study is concentrated is defined as having the following; A sever orthopedic impairment which adversely affects a child's educational performance, (which includes impairment caused by congenital anomaly (e.g., clubfoot, absence of some member etc), impairments caused by diseases e.g., poliomyelitis, bone tuberculosis, etc), and impairments from other causes (e.g., cerebral palsy, spinabifidia, amputations, and fractures of bone which cause contracture (USOE, 1977 in Salend, 1994).

2.4. Physical Education

Among the many definitions given by scholars, Freeman (1972) defines physical education as "Physical Education is the sum of man's physical activities selected as to kind, and conducted as to outcomes". Freeman's definition sets on consideration of the fundamental question whether educating only the physical aspect of the body is

sufficient to define the field. In view of the fundamental concept which puts body and mind to be two sides of a coin, physical education for the physical well-being of the human organism as the union of mind and body-where a healthy physical status is intimately linked to bright mind setting. Thus, physical education aims at developing the human person with a combination of a healthy mind and body as indivisible whole-through physical activities. With this view operative, physical education has concern for and with emotional responses, personal relationships, group behaviors, mental learning and other intellectual, social, emotional and aesthetic outcomes.

Freeman is stressing the point that even though physical education seeks to educate people through physical means by working with physical activities, it is also concerned with educational results which are not entirely physical. The goal of physical education is to influence all areas of educational development, including the mental and social growth of the students. While the body is being improved physically, the mind should be learning and expanding, and there should be some social development such as learning to work with others.

Furthermore, Wuest and Lombardo (1994) stated that “physical education is a learning process designed to foster the development of motor skills, health-related fitness, knowledge, and attitudes relative to physical activity through a series of carefully planned and conducted experiences. The learning environment is ought to be thoughtfully structured to enhance the overall development of each student within the three learning domains-psychomotor, cognitive and affective. These learning experiences are helping students understand how humans move and execute movements safely, efficiently, and effectively. These experiences are conducted in such a way as to promote positive feelings toward oneself that physical activity can make to one’s quality of life.

As cited in Wuest and Lombardo, Physical Education is an integral part of the total educational curriculum. It is the area of the school curriculum that teaches motor skills and an understanding of human movement and provides opportunities to

facilitate their development. Furthermore, physical education when properly planned and taught can support learning across the curriculum; for example, physical education can integrate information about anatomy and physiology as well as nutrition which is in science and health classes. Therefore, physical education is an essential component of any curriculum designed to educate the whole person.

Finally, although the means of the educational methods that is the process by which the student gains these benefits is physical, the benefits for the students include improvements or changes in such non-physical areas within the spectrum of educational development as intellectual, social, and aesthetic growth.

2.4.1. Goals of Physical Education

For many years professionals have set forth many purposes for secondary school physical education. As cited in Wuest and Lombardo (Ibid) the goals of physical education relate to the student development in three interrelated domains- psychomotor, cognitive, and affective:

- A. Psychomotor Development:* refers to the acquisition and refinement of motor skills essential for every day activities (for example, posture or lifting objects) for movement in a variety of physical activities, such as dance, athletics, sport or outdoor pursuits are important outcomes associated with this domain.
- B. Cognitive Development:* refers to acquisition of knowledge outcome. Development of knowledge encompasses the learning of rules, strategies, and safety considerations for various physical activities. Problem-solving, critical thinking, and analytical skills are also important outcomes to be achieved. Physical education teachers must provide students with guidance and experiences that will help them understand the relationship between movement concepts (time, space, relationship, and effort) principles and the performance of motor skills. Teaching for transfer of knowledge and skills from one situation to another is also important; that is to say, teachers must help students make the connection between skills and knowledge previously learned and new learning. With regard to skills students should be able to

identify key elements of the skill, analyze their performances; and prescribe necessary changes to enhance the performances; this is essential to promoting lifelong learning in physical education.

C. *Psychosocial and Emotional Development:* of moral reasoning, and formulation of values, interests, and attitudes are encompassed within the affective domain. Development in this domain should not be left to chance but actively sought through carefully planned approaches designed to promote growth in this area. Physical education has the potential to develop such desirable characteristics as acceptance, and appreciation of one's effort and abilities as well as those of other students.

Explaining the role of physical education within the context of total educational experience, Bao (1989) stress that the physical education experience should relate to the total educational process and to each person's whole life. If the physical education experience makes no contribution to the total educational experiences, then, the proper function expected to a true physical education program is deemed not to have been fulfilled.

As part of the total education of the students, the curriculum in physical education should be congruent with educational philosophy of the school and meaningfully contribute to schools educational goals. This is also supported by Wuest and Lombardo who stated that contemporary education has many aims. One of its primary purposes is to provide experiences that will help all individuals develop to their fullest potential, regardless of their ability, race, sex, religions, or economic status. This purpose typically encompasses development in the three educational domains helping each individual attain a high level of health and wellbeing. Another goal is to prepare individuals for life. Schools are shouldered with responsibility of preparing each individual to function as an effective, contributing member of society, both socially and vocationally. If education is understood as a tool for the development of the total person, of the individual, the unique contribution of physical education to this endeavor cannot be underestimated. Physical education is the area of school

discipline that promotes the development of motor skills and fitness. The contribution of physical education to psychomotor development is unparalleled with any other curricular area.

2.4.2. Physical Education: An Integral Part of General Education

Physical education is the integral part of the total educational process which enhances and integrates that physical, social, and psychological aspect of an individual's life, through directed physical activity (Arnold, 1976).

Very often the natural relationship between general education and physical education is forgotten, with the result that the two exist physically together but functionally apart. This has resulted in reducing the scope of the school program in two respects. Firstly the educational function of physical education has been neglected and secondly, the physical functions of education are not recognized. These two are really complementary to each other and have to function together (Festle, 1996).

Arnold (1976) also views that through a well directed physical education program students develop skills for the correct use of leisure time by undertaking activities which are conducive to healthy living social development and a sense of civic responsibility.

Bucher (1972) cited in Ram and et.al., (1996:45) defines physical education as:

An integral part of the total education process, a field of endeavour that has as its aim the development of physically, mentally, emotionally, and socially fit citizens through the medium of physical activities that have been selected with a view to realize these outcomes.

The above definition depicts that physical education is a process which utilizes activities that are inherent in each individual to develop a person organically, neuro-muscularly, intellectually, and emotionally. These outcomes are realized whenever physical education activities are conducted in such places as the playground, gymnasium and swimming pool.

2.4.2.1. Relationship with Education

Kamlesh and Sangral (1997) states that the relationship between physical education and general education provides opportunities for exchange of views between the physical education teacher and the subject teacher about the abilities, interests, limitation and scope of each individual student and his/her participation in the school program. In this way, good physical education teacher ascertains how well participation performs the necessary motor skills before permitting him/her to take part in physical activities.

The same authors explicitly elaborated that physical education has been accepted as an essential part of general education and no educational authority, state or organization questions the justification or need for it. But still there is a considerable confusion in interpreting the scope and the nature of a physical education program and its academic relationship with general education or the contribution of general education to physical education.

Kamlesh and Sangral (1997) states that physical education program is nothing but an application of sound philosophical, educational, psychological, physiological, anatomical and biological principles. The physical educator should consider psycho-physical needs and problems of boys and girls and fit the program to suit the children instead of trying to adapt everybody and girl to the program. Rigid syllabus has no place in physical education except as guidelines or outlines which can be altered or even completely dropped according to various factors like climate, time, environment, type of groups, purpose of activity, and so on. Therefore, the relationship between physical education and education is natural. It is a fact that we cannot conceive of physical education without educational value as it cannot exist in educational vacuum.

2.4.2.2. Integration in Physical Education

For centuries, the ideas of a separate mind and body influenced education and the school practice which led to plan for training the mind disregarding the body. But

today, the educational orientation has changed and physical education is conducted as a real part of the entire educational process. The basic facts of integration of mind and body, ideas and actions, knowledge and application have taken place (Arnold, 1976).

The prime responsibility of physical education is to conceive of its work as related to all the reactions that participants experiences, to be concerned for interests, moods, manners, morals, habits, and ideas as well as strength, skill, agility, speed, safety and endurance. The whole person participates: the whole person must be served (Ibid).

In line with this idea, Butcher, (1972) cited in Ram and et.al., (1996) states:

Physical education and health not only affect social development but emotional development as well. Games provide release from tension after long periods of study; furthermore, achievement in physical activities give students a sense of provide which pays dividends in emotional satisfaction and well-being.

2.4.2.3. Educational Value of Co-curricular Physical Activities

Ram and et.al., (1996) elaborates in terms of pupils interest, those co-curriculum activities should be encouraged which will give the participants an opportunity to develop habits of cooperation, fair play and good citizenship. They provided opportunities for training in leadership and the wise use of leisure time.

They further discussed the important thing that such co-curricular activities should be interrelated and integrated, with regular academic activities so that constructive attitudes of responsibility, initiative and pride in accomplishment carry over from one activity to the other.

Moreover, one more co-curricular activity is that it becomes the basis of occupational interest and occupational selection. There are many examples of students that wish below average academic achievement but who successfully participate in sports activities and develop interest in health education as their occupation. Thus, interest and encouragement develop through co-curricular activities influence the life patterns of the students.

Like Siedentop (1998) and other experts in the field of education and physical education have come to a common agreement that physical education has to achieve the status of academic discipline since it is an integral part of the total education process.

Based on the above concept, one can remark that, the educative value of any co-curricular activity depends on the type of activity itself, abilities and limitations of participants, nature of the physical education teacher who is the charge of the physical education program, the large society in which the institute is located and the objectives of the institute.

2.5. The General Concept and Development of Adapted Physical Education/Physical Education for Children with Disabilities

Physical education, as generally organized is not designed for pupils with disabilities. If such a strong case for physical education can be built because of its contribution to the development of youth, can not a stronger case be built for a program of physical education adapted to the needs of the handicapped? Surely, there needs are greater and they stand to gain more from guided developmental and sports experiences (Dunn and Fait, 1989).

Adapted physical education has developed from the early corrective classes that were established specifically for those with disabilities. These authors stated that, because of World I and II, there were medical and surgical advances that increased the survival rate of many individuals.

Many of those who survived were left with physical disabilities. At this time physical activity including sports become a major technique to help in the physical and psychological rehabilitation.

About the same period, corrective physical education classes were started in schools to ameliorate postural deviations. The popularity of corrective classes diminished

during the late 1940s and these began to be replaced by adapted physical education classes where the focus was on games and sports to meet the needs of students who were disabled. As yet little consideration was given to the idea that handicapped students could be taught to play modified forms of sports or games.

In the 1940s, fundamental changes were initiated in physical education for handicapped students in some universities and colleges. Recognition of the value of play as an educational tool to implement social, mental, and physical development, it becomes the philosophical basis of course offering to the handicapped. During the 1970s and 1980s, *adapted physical education* programs grew in number and quality. Their expansion and change paralleled growth and change in special education itself (Cratty et.al., 1989).

Nevertheless, adapted physical activity does not categorize people as disabled or non-disabled, as do eligibility procedures for special education placement. Instead, it analyzes individual differences associated with problems in the psychomotor domain (Sherrill, 1993).

Adapted physical education differs from regular physical education in that it has a multi-disciplinary approach to individual program planning. It covers an age spectrum from early childhood to adulthood, has educational accountability through the Individualized Educational Planning (IEP) and emphasizes cooperative service among the school community, and the home to enhance a handicapped person's capabilities (Reynolds & Mann, 1987).

Objectives of adapted physical education programs vary from program to program depending on population characteristics, institutional expertise, and equipment. Among the commonly accepted objectives of most programs are to provide students with opportunities to learn about and participate in a number of appropriate recreational leisure time activities (Sherrill, 1985).

In emphasize to the above statement, Resnick (1971) has also stated that:

As the blind child moves out in the physical environment and takes part in many activities, he/she begins to reflect new attitudes toward himself/herself and others. Challenged by opportunities for self-reliance and responsibility, and motivated by groups' acceptance and the exhilaration of increased participation in life, he/she begins to acquire a more constructive self-evaluation and to achieve more satisfying relationships with others.

Another important characteristics of adapted physical education is that emphasize is placed on engaging in physical activity rather than participating in a sedentary alternative to physical activity (Winnick, 1990). Auxter, Pyfer & Huetting (1993), and Seaman & Depauw (1989), contended that the curricula of adapted physical activity is like that of regular physical education but the procedures and methods for delivery of instruction are altered to meet the needs of students with movement problems.

2.5.1. The Current Status of Adapted Physical Education in the World

According to Dunn & Fait (1989), adapted physical education has developed from the early corrective classes that were established specifically for those with disabilities. Gradually over the years following World War I, the practice grew of assessing handicapped students to corrective courses in order to protect their conditions from possible aggravation. As yet, little consideration was given to the idea that handicapped students could be taught to play modified forms of sports and games. Accordingly, Auxter, Pyfer & Huetting (1997) stated that, from a national perspective, physical education for students with disabilities is still inadequate. Studies done in different states of U.S.A (United States of America) indicate that physical education for students with disabilities remain a woefully neglected and underdeveloped area of public school programming. One reason students with disabilities are not receiving adequate instruction in physical education is because they are inappropriately placed.

By law, children with disabilities should be placed in the most appropriate, least restrictive setting that meets their needs. The regular class is the desirable setting; yet it does not constitute the least restrictive environment for all individuals with disabilities. Frequently students with disabilities are inappropriately placed in the regular physical education class. The integration of students with disabilities into regular physical education classes is almost exclusively by administrative decree (Ibid).

No doubt that the condition in Ethiopia is more serious than that of U.S.A because of the different developmental level of the two countries. According to the research done by Degefa (2001), the involvement of children with disabilities in general and blind students in particular is negligible in regular practical classes of physical education.

2.5.2. Benefits of Adapted Physical Education for Students with Disabilities

The value of physical exercise on the human body is a fact that has been backed by medical evidence. In today's world, science has brought a better understanding about how the human body functions and with this understanding, greater care of the body is seen as one way in which to improve the quality of life (IOC, 1996).

An appropriate level of fitness for an individual may lead to a more confident outlook, greater emotional stability, and better mental health (Dauer & Pangrazi, 1979). Physical education, then, is education of, by and through human movement. It is that phase of general education which contributes to the total growth and development of the child, primarily through selected movement experiences.

As stated by Scholl (1986), a sound physical education program for the students with disabilities can develop the physical fitness and motor skills necessary for activities of daily living and orientation and mobility, a more positive self-concept and sense of personal worth, and sport skills. Moreover, the contribution of physical education for students with disabilities, in general and for students with Orthopedic, visual and

hearing impairment in particular is clarified by Auxter, Pyfer, & Huetting (1997) as follows:

- ✚ It develops recreational motor skills for independent functioning in the community;
- ✚ It develops physical fitness for maintenance of health;
- ✚ It improves *ambulatory skills* to master mobility in domestic and community environment;
- ✚ It improves physical and motor pre-requisites to self help skills required for independent living;
- ✚ It develops physical and motor prerequisites to vocational skills required for independent living;
- ✚ It develops pre-requisite motor skills necessary for participation in self-fulfilling leisure, physical, and social activity.

It has long been argued that participation in sports develops the social characteristics of participants. The above authors underlined that, participation alone may not benefit individuals with disabilities: however, when the conditions of participation are well-controlled (e.g., appropriate activities are offered at the ability level of the learner) and environments are designed that include a carefully structured modeling process, social development can be fostered through physical and sport activity.

2.6. Accommodating Students with Disabilities in the Regular Physical Education Classes

Many argue that teaching children with heterogeneous learning characteristics is impractical; however, growing number of educators take exception to that position. Auxter, Pyfer & Huetting (1997) in their book which is called “Principles and Methods of Adapted Physical Education and Recreation” pointed out that, successful teaching of individuals with disabilities in regular classes requires teaching skills that enable the accommodation of heterogeneous groups through individualization of instruction. Adequate support personnel are frequently necessary when instruction is

individualized. In addition, it requires teachers who can modify rules, environments, and task to promote meaningful play among students with and without disabilities.

Progress of children advancing on a continuum of least restrictive environments requires:

1. Periodic review of educational progress.
2. Frequent assessment of what least restrictive environment means for a particular child at a particular time, and
3. Possible modifications in the type of delivery of services that may produce optimum progress in the future.

For these authors the following crucial points should be considered in accommodating students with disabilities in physical education classes.

Most Appropriate Placement

Children with disabilities should be placed in settings that most appropriately meet their physical education needs. Clearly, these children should not be placed in regular classes if it is not in their best interest.

Appropriate placement requires consideration of several variables, such as the type of curriculum in the regular program, characteristics of the regular class teacher, the nature of the activity the child is to perform, and available support services.

Needs of the Child

Children with disabilities have physical, social, and emotional needs that are to be met in physical education class. To accomplish this, the following four conditions should be met:

1. The instructional level of activity commensurate with the ability level of the child. Some form of individualized instruction should be provided.
2. Activities should be modified to accommodate individual differences in group games.
3. The social environment should be such that it can promote interaction.
4. Activities should enable participation rather than spectatorship.

Teacher Qualities

The characteristics of classes that restrict individual liberties for free association with peers vary. Teachers may possess different skills for accommodation of individual differences when teaching specific content. Teachers' attitudes toward acceptance of all children in their class, their ability to accommodate children with disabilities, their knowledge of behavior management techniques, and the teaching style they use are considerations for appropriate placement.

Curriculum

Some activities enable accommodation of differences to a greater extent than others. Individual sport skills such as tumbling and gymnastics do not depend on the performance or ability of others. Skill development in sports is not particularly difficult to individualize in a regular physical education class. The application of these sport skills in competition is much more difficult. The nature of the activity and the ability of the teacher to modify activities in order to include students with a wide range of ability levels are important variables to consider. All children are entitled to a learning environment where they may participate successfully and safely. To this end, in order to create effective inclusive physical education classes deep knowledge about the strategies is decisive.

2.6.1. The Physical Activity Program and Teaching Strategies for Students with Disabilities

Each child with a disability has unique abilities and unique needs. Hence, it is important to address this uniqueness through appropriate contents and teaching strategies. In line with this, Auxter, Pyfer and Huetting (1997) specified significant contents and teaching methodologies for diverse types of disabilities. However, for the purpose of this study only orthopedic, visual and hearing impairments are the focusing points. Therefore, in the following section, characteristics of each impairment, the required physical activities, and suitable teaching strategies will be stressed.

2.6.1.1. The Physical Activity Program and Specific Inclusive Strategies for Orthopedically Impaired Students

The term arthritis is derived from the Greek roots: arthro-, meaning joint, and- itis, meaning inflammation. Major contributors could be infection, hereditary factors, environmental stress, dietary deficiencies, trauma, and organic or emotional disturbances.

In most cases arthritis is progressive, gradually resulting in general fatigue, weight loss, and muscular stiffness. Joint impairment is symmetrical and characteristically, the small joints of the hands and feet are affected in the earliest stages. According to these authors, arthritis has three common forms which are Rheumatoid, Osteoarthritis, and Ankylosing Spondylitis.

Rheumatoid Arthritis: the most significant physical sign of this impairment is the thickening of the synovial tissue in joints that are actively involved (inflamed) inflamed joints are sensitive to the touch. Individuals with rheumatoid arthritis are stiff for an hour or so after rising in the morning or after a period of inactivity.

Osteoarthritis: the second most frequent type of arthritis is a disorder of the hyaline cartilage primarily in the weight-bearing joints. It is a result of mechanical destruction of the coverings of the bone at the joints because of trauma or repeated use. Initially the condition is non-inflammatory, and it impacts only one or a few joints. Pain is the earliest symptom, and it increases initially with exercise.

Ankylosing Spondylitis: affects the axial skeleton and large peripheral joints of the body and is most prevalent in males. Common symptoms are current back pain, particularly at night, and early morning stiffness that is relieved by activity.

Concerning the physical activity program and teaching strategies, they stated that, physical exercise is critical to reduce pain and increase function. The exercise required by orthopedically impaired students fall into three major categories: exercises to improve and maintain range of motion, exercises that strengthen muscles

that surround and support affected joints, and aerobic exercises to improve cardiovascular endurance. The physical educator should encourage gradual or static stretching, isometric muscle contraction, and reduced weight-bearing aerobic exercise daily.

Moreover, maintenance of normal joint range of movement is of prime importance for establishing a functional joint. Stretching may first be employed passively; however, active stretching is of greater benefit because muscle tone is maintained in the process. Joints should be moved through pain-free range of motion several times daily. Finally, these authors explained that, an individual with arthritis may need rest periods during the day. These should be combined with a well planned exercise program. Activity should never increase pain or so tire an individual that normal recovery is not obtained by the next day. Therefore, physical education teachers should consider all these important points in their inclusive practical classes in order to help students with orthopedic impairments properly.

2.6.1.2. The Physical Activity Program and Specific Inclusive Strategies for Visually Impaired Students

As stated by the above authors, there are varying degrees of blindness. Students with loss of vision are, for educational purposes, classified as blind (those who are educated through channels other than visual) or partially sighted (those who are able to be educated, with special aids, through the medium of vision, with consideration given to the useful vision they retain).

The underlying causes for visual loss are existing conditions, structural anomalies, or inefficient extra-ocular muscle control. Existing conditions impact the integrity of the visual impulses either in the eye, on the optic nerve, or in the visual cortex. These include diabetes, accidents and injuries, poisoning, tumors, excessive oxygen at birth, and parental influences such as rubella and syphilis. Structural anomalies include deviations of the eye structure. Functional causes that compromise visual efficiency are extra-ocular muscle imbalances caused by postural deviations, poor reading

habits, and/or visual acuity problems. Furthermore, they divide visual disorders into two basic types: (1) congenital, or present at birth, and (2) adventitious, acquired after birth. Vision loss has serious implications for the general development of motor, academic, intellectual psychological and social characteristics.

With regard to physical education program and teaching strategies for significant inclusion, Auxter, Pyfer and Huetting expressed that, loss of vision, by itself, is not a limiting condition for physical exercise. Therefore, a considerable amount of developmental exercise of muscular strength and endurance can be administered to such students.

It is obvious that the effective physical education teacher is one who respects all students regardless of their ability level, is a skilled observer of motor performance, recognize and accommodates for individual differences, and uses teaching methods and curricular appropriate for the students he/she teach. Hence, the teacher has to know that, the student who has visual limitations must depend on receiving information, through sensory media other than vision during physical activity.

For instance, the correct feel of the movement can be communicated through manual guidance method administered by an instructor or another student. Also, because the child with visual limitations has little or not understating of spatial concepts such as location, position, direction, and distance, skin and muscular sensations that arise when the student is moved through the activity area provide the information needed to participate.

Finally, for effective inclusive instruction, the physical education program should include adaptation of the general program of activities, when needed; additional or specialized activities, depending on the needs of the child and special equipment, if needed.

2.6.1.3. The Physical Activity Program and Specific Inclusive Strategies for Students with Hearing Impairment

According to The Education of the Handicapped Act cited in Auxter, Pyfer & Huetting (1997):

“Deaf” means a hearing impairment which is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification, which adversely affects educational performance ...” “Hard-of-hearing” means a hearing impairment whether permanent or fluctuating, which adversely affect a child’s educational performance but which is not included under deaf.

Based on the time of onset, deafness is grouped into two distinct classes. They are the *congenitally* deaf and the *adventitiously* deaf. Congenitally deaf persons are born deaf; adventitiously deaf persons experience hearing loss after birth.

The physical education program for students with hearing impairment should consider the differences between persons who are deaf or hard-of- hearing based on the ways they respond to stimuli. For example, persons, with *tinnitus* (ringing in the ears) are highly sensitive to noise and vibration and may not perform well in a noisy facility such as the gymnasium. On the other hand, deaf children with impaired semi-circular canals, which affect balance, should not climb to high places because an important concern for this population is balance.

In the inclusive classes of physical education, the teacher who works with deaf and hard-of-hearing students must do everything possible to ensure effective communication. In line with this, Ling cited in Auxter, Pyfer and Huetting (1997), no single method can meet the individual needs of all children with hearing disorders, and whenever possible a total communication system should be used. Hence, to encourage maximum participation, the skills and attitudes of the instructor are important.

2.6.2. Assessment in Inclusive Physical Education Classes

As stated by Auxter, Pyfer, and Huetting (1997) a critical component of an effective curriculum is a means for determining at what levels students are functioning, the

types of interventions needed to gain full benefits from their school experiences, their progress toward mastery of the school curriculum and validation that what has been learned has application in the society.

They also advocated that, assessment is an inseparable part of the students' ongoing educational program, and it is particularly critical for students with disabilities. Hence, they underlined that the teacher in the inclusive classes should know the purposes of assessment and types of assessment match to the purposes.

According to these authors, assessment of students with disabilities in educational settings has at least five purposes:

1. To identify those who might be experiencing developmental delays.
2. To diagnose the nature of the student's problem or delay.
3. To provide information to use in developing the Individual Education Program (IEP) and in determining appropriate placement.
4. To develop instruction specific to the students special needs.
5. To evaluate student progress.

Moreover, the purpose of the assessment will dictate the type of instrument selected and the standards the instrument must meet. The more critical the decisions that are made from the assessment, the more rigorous the requirements for the instrument the evaluator will use.

2.6.2.1. Grading (Marking) Students with Disabilities in an Inclusive Setting

A grade in any subject should promote educational goals and should reflect 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 (Auxter, Pyfer and Huetting, 1997). As to them, the complexity of grading physical education classes is magnified when an attempt is made to evaluate the performance of students with disabilities. So that, students are graded on the basis of how well they meet their *IEP* objectives, a student with poor

posture, a student with cardiac disorder, an obese student, and a student who has just had surgery can all be properly evaluated for their grades in the class.

They stated that, the following criteria might be applied to students to determine how well they have met objectives in the adapted physical education class.

1. **Performance:** The standard of performance in reference to individual limitations, such as vigorous work on specific activities and posture exercise for obese students, or control of the amount and intensity of work for cardiac and postoperative students.
2. **Persistence:** Accomplishment of individual performance objectives determined in the Individual Physical Education Program (IPEP) suggestions for recording and computing the grade are as follows:
 - I. 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).
 - II. Numerical ratings (recorded on the exercise card and in the role book or on a class spreadsheet) can be given to the student; in this way the student and the instructor are always aware of the students' progress toward stated behavioral objectives.
 - III. The numerical grades can be averaged and then should be considered, along with other factors that may influence the final grade (knowledge examinations and health factors, if they are considered), to determine the final mark for the semester.
 - IV. Objective measurements should be used to test skill and knowledge.

2.7. Attitudes of Teachers and Students with Orthopedic, Visual, and Hearing Disabilities towards Inclusive Physical Education

2.7.1. Teachers' Attitude

Although the issue of inclusive education and its implications for education appears to be debatable during the past few years, societies have become increasingly

concerned with ensuring the educational right of all children irrespective of the severity of their disability. As a result, learning of students with orthopedic, visual and hearing impairments in the regular educational setting as ordinary class students have become the concern of educators, governments and the society at large.

Mesfin (2006) noted that, although organization, financing, regulations, teacher training and so on can play their own part to facilitate inclusive education, the placement of students with special needs in regular settings will remain problematic unless teachers activity support the effect to achieve effective inclusive school practice.

Sharing the same view, Schulze et.al., (1991) also affirmed “Teacher attitudes have been identified as being crucial to the success of any main-streaming program”. They further declared the teacher attitudes “not only set the tone for the relationship between teachers and handicapped students, but they also substantially influence the attitudes of non-handicapped classmates.” Additionally it is noted that the attitudes and knowledge of teachers concerning children with handicaps “are highly influential in determining the social, intellectual and emotional adjustment of these children” (Tibebu, 1995).

Some research findings have indicated that regular education teachers are becoming more positive towards inclusive education. In some cases it has been reported that some regular educators have displayed: “an enthusiastic professional dedication to the development and implementation of inclusive school practices” (Padeliadu & Lampropoulou, 1997).

In the Ethiopian context, research conducted concerning attitudes of teachers and students towards inclusive education of orthopedic, visual and hearing impaired students appears to be very scarce. The study conducted by Tibebu (1995) cited by Tesfaye (2004), revealed that the special and regular teachers have a means below the neutral value, thereby indicating their negative attitudes towards learning of children with disabilities in regular class.

The global trend towards the integration of students with different disability types in to the regular classrooms appears to be favoured positively. This help to secure psychosocial and educational benefits to children with special needs.

2.7.2. Students' Attitude

It is suggested that inclusive education experience will be more effective and enable handicapped students develop a positive feeling about their personal values if there peers in school socially accepted them (Tirusew, 2000).

However, recent evidences suggest that, attitude of students with disabilities towards regular class seem to be very limited. For instance, a research conducted by Jones (1985) as cited by Bench (1992) indicated that the attempt of hearing impaired children "at social interaction are rejected relatively often by the potential hearing peers". Another observer has also noted that handicapped students are frequently rejected and alienated in regular class setting partly by their "normal" peers (Schulze, et.al., 1991). On some instances, possibly, there can be negative reactions of the environment in the social interaction, which may pre-dispose students with disabilities develop negative attitude towards inclusive education. Hence, making the environment not rejecting type and creating initiative atmosphere is crucial to help the students to generate positive attitude which is significant to enhance the educational condition of students with disabilities in the inclusive settings.

2.8. An Attributes of Physical Education Teachers in Inclusive Physical Education Classes

As the study done by Dunn & Fait (1989), the disadvantaged have had fewer opportunities to enjoy success or excel than others of the general populace. By providing planned activities yielding high success rates, the individual will become more self-confident and develop a can do attitude (NFEAS, 1998-99). In order to provide the kind of learning situation that makes desired results possible, the teacher needs knowledge and training as well as certain special qualities of character and

personality. As noted by Hornby & Tylor (1995), leaders in the field of education agreed on the following points as to what qualities are essential for successful teaching.

The teachers' professional equipment, knowledge of the child and society, the purpose, methods, materials and outcomes of education are some of the important qualities serving as a starting point without which no one can hope to be successful in teaching.

A teacher of students with disability must possess certain attributes which are required to promote the learning of students with special needs in the regular classes. Supporting this idea Dunn & Fait (1989) elaborated that, many of the basic techniques that all good teachers of physical education use can be applied successfully in teaching the special population.

In line with this, they suggest that: a thorough knowledge of sport and game skills, a sound understanding of the nature of the human body and its response to exercise, training in methods of teaching and the psychology of learning, including motor learning are some of the important requirements of inclusive physical educator.

Moreover, Auxter, Pyfer & Huetting (1997) specified the major roles of adapted physical educator as follows:

Special Roles of the Adapted Physical Educator

1. Assess/evaluate learners with disabilities.
2. Provide diagnostic/testing information for other educators.
3. Develop an individually designed educational program to meet each student's unique needs.
4. Modify activities to meet each student's unique needs.
5. Develop specific behavior management plans.
6. Coordinate instruction in regular education and special education settings.
7. Provide input regarding grading and retention or promotion.
8. Plan for transfer of skills from the special education environment to the general education setting.

9. Direct small-group or individual instruction in general education classes.
10. Team teaching in regular education classes.
11. Direct pre-teaching and post-teaching, experiences to prepare for and review material.
12. communicate with parents of students with disabilities

To this end, special attention should be given by physical educators towards students with special needs to ensure that they participate in programs which help to improve their physical, mental, social, and psychological conditions.

2.9. Some Major Factors Influencing the Involvement of Students with Disabilities in Physical Education Practical Classes

2.9.1. Lack of Awareness

In order to overcome the problem of stigmatization, one definite solution is to make the responsible groups aware of the benefits of inclusive physical education to the learner with special needs. However, in most cases due to lack of understanding about inclusive education these opportunities have given less consideration or totally forgotten. Furthermore, some consider the provision of special education for students with disabilities as a humanitarian's activity. With this regard, the provision of special need education in Ethiopia is mainly carried out by NGOs (Tirussew, 2005). Hence, in order to improve the inclusion of students with disabilities in physical education practical classes the awareness creation should include teachers, school administration, parents, other students, official educational experts and others (Tirussew, 2005).

2.9.2. Previous Experience

Inclusive education means welcoming all children, without discrimination, into regular or general school. It is a supplemental support for disabilities or special needs and promotes the child's overall development in optimal setting (Tirussew, 2005). However, the inclusion of students with disabilities in physical education practical

classes seems inadequate. They have poor experience in the previous classes concerning their involvement in inclusive physical education. Supporting this view Buel (1982) cited in Degefa (2001) stated that, it is common practice to exclude blind students, even those with useful visions, from physical education classes, or to over protect them during physical instruction insisting that they keep score or sit on the bench while their sighted peers engage in vigorous exercise.

Among the major reasons, for the insignificant experience of these students in inclusive physical education are may be mis-conception of teachers and students themselves. The teachers' attitudes are seen as decisive factors for successful inclusion. Inclusion has been based on the assumption that teachers are willing to admit students with impairment in regular classes and be responsible for meeting their needs (Tirusew, 1999). On the other hand, students with disabilities due to various discouraging factors might have less or no interest to be part of inclusive physical education.

2.9.3. Lack of Parents and Community Involvement

Carpenter and Morris (2001) revealed that, the education of children with special educational needs could not be achieved without active participation of parents as a wide range of community services.

According to UNESCO (2003), the involvement of families and local community in the education of children with disabilities is essential in addressing the special needs of these students.

This indicates that the process of inclusive education is not only the responsibility of a teacher and the school. Though encouraging marginalized group to become involved can be difficult, the involvement of parent in education is vital. Therefore, parents due to their closer contact to their students with disabilities have access to encourage and motivate these students to be active participants in physical education practical classes and being beneficial.

2.9.4. Teachers and Principals Competence

The development of inclusive education relies heavily up on teaching staff within the system, especially, in developing countries like Ethiopia, where the financial resource for equipment and materials are limited. Therefore, the training of the actors in schools is crucial for creating positive foundation for inclusive education. Furthermore, poorly trained and unqualified teachers, lack of professional support and resource are also result in poor qualities of education (Carpenter and Morris, 2001).

It is clearly understand that the effective teaching-learning process of inclusive education demands trained teachers and principals and education office experts who are equipped with skills enables them to deal with the unique characteristics and needs of diversity of learner.

2.9.5. The Nature of Curriculum

According to Fullan (1996), it is the standard school curriculum that possesses problems for the student in the categories of learning disability, behaviour disorders, and mild mental retardation. General education curriculum is problematic for student with special needs education because; it fails to meet the needs of diversity of learners and inflexible to accommodate the real and fluid nature of student learning. Bizuneh (2008) stated that, the apparent goal of inclusive education is to develop the skills of children with disabilities through appropriate curriculum. Thus, teaching students with disabilities without a well-differentiated curriculum would alienate them from the learning activities. To this end, Ashdown and Carpenter (2001) contended that students with disabilities need strategies so as to ensure their participation in the curriculum and it should comprise all learning and other experience based on the modified curriculum.

2.9.6. Lack of Assessment and Identification

Assessment in teaching-learning process is very important to identify an individual child's problem and to follow the progress and improvement in learning activities. It

also examines not only to educational needs but also the effectiveness of the program. According to Lewis (2001), assessment should be an integral part of teaching and learning process for all learners. Hence, assessment and identification are not simply task; it demands a team consist of child's teachers, a school psychologist, principals, the child's parents or guardian and other specialists who may be required (Bizuneh, 2008). Thus, it is important that students with disabilities should be identified and provided with appropriate help in the inclusive education settings. However, the Ethiopian education system seems fail to obtain adequate trained teachers and administrators who have skill and training how to handle disability issue (Tirussew, 2005).

2.9.7. Lack of Appropriate School Facilities

The environment of school is crucial for it to become an inclusive center of education. According to the survey conducted by UNESCO (2003), lack of physically conducive environment in schools affect students with disabilities to participate actively in the teaching-learning process. Similarly inclusive physical education classes require several equipments in order to involve students with disabilities effectively.

Furthermore, Nielsen (1997) explained that the furniture and equipment of the class may need to be changed to accommodate students with disabilities. Because the absence of conducive school environment and equipment affect the self-esteem and the interest of these students toward inclusive physical education.

CHAPTER THREE

Research Design and Methodology

3.1 Research Design

The intention of this study was to collect empirical data on the existing involvement, challenges and opportunities of students with physical disabilities in PE regular practical classes. In order to meet this purpose, mixed approaches (qualitative and quantitative approaches) were employed to investigate a contemporary phenomenon within the real life context of these students. The research was conducted through in-depth analysis of the condition of students with orthopedic, visual, and hearing impairments in secondary schools (grade 9-12) of North Shoa Zone of Oromia Regional State.

3.2. Population and Sampling Techniques

Currently there are about 16 secondary (grade 9-12) schools in North Shoa Zone of Oromia Regional State and the research was conducted in 10 randomly selected secondary schools which are 62.5% of the total population.

The target population of the study was students who had experienced Orthopedic, Visual and Hearing impairments and attending their education in these regular schools in 2009/10 academic year. PE teachers, school principals, woreda and zone educational experts as well as regional curriculum expert have been also included in the sample population.

The primary consideration in sample selection for the study was to include an adequate number of respondents to perform meaningful data analysis. Therefore, different approaches were used to draw representative sample size of the target population. Hence, purposive sampling method has been employed to select the whole subjects of the study which were students with disabilities, PE teachers, school principals, woreda and zone educational experts as well as regional curriculum

expert. Thus, 94 students, 14 PE teachers, 10 school principals, 2 woreda and 2 zone educational experts and 1 regional curriculum expert were selected. Therefore, a total of 123 subjects have been involved in this study.

3.3. Source of Data

Source of data collection consisted of primary and secondary sources including relevant literature, observation, and responses to questionnaires and interviews.

3.4. Data Collection Instruments

In order to obtain pertinent information for the study, it is important to use various data gathering tools. Accordingly, questionnaire, interview, and observation have been employed in this study.

Questionnaire

The questionnaire comprised of issues related to the basic questions will be prepared for students with orthopedic, visual and hearing impairments and PE teachers in order to secure relevant information. Respondent students in this study will be speakers of Amharic and Afan Oromo languages. Therefore, the questionnaire having both close and open-ended items will be translated in to both languages and later edited by language experts. Doing so is very important for it enables the respondents to easily understand the questions and express their idea comfortably.

Interview

The response rate and flexibility in face-to-face interview is to high too extract further information. Hence, structured interview guides will be prepared for school principals, woreda, zone, and region educational experts. Whereas semi-structured interview guide was presented for selected students with multi-disabilities in order to

substantiate and crosscheck the responses made by the target students and PE teachers through questionnaires.

Observation

Observation of the real condition is very important in the study in order to confirm information obtained from other data collection instruments and for the aim of cross-checking the responses with the existing reality. Therefore, an appropriate observation checklist was prepared in order to see issues like instructional conditions, requirements of PE practical field situations, interactions of the target students with their teachers, and other students etc.

3.5 Data Gathering Procedures

The main data gathering tools for this study were questionnaire, interview guide, and observation checklist which were developed by the researcher on the basis of related literature and leading questions. Then, the two sets of questionnaires (students' and teachers' questionnaires) were distributed among 12 students with physical disabilities and 3 PE teachers in Fitch Town Administration for the purpose of **pilot test** so as to refine the instruments based on the comments and suggestions obtained. Hence, some necessary amendments on spelling errors, ambiguous statements, redundant words, difficult concept, and flow of interview questions were improved. And then, the necessary official contact was made with the Zone Education Bureau to get permission and to adjust time for interview. Hence, letter was written to the sample Woreda Education Offices so that the officials co-operate in the process of data collection from sample Woreda Education Offices and Secondary Schools. After that, the researcher distributed a total of 108 questionnaires which means 94 for the students with orthopedic, visual, and hearing impairments and 14 for physical education teachers and all were filled properly and collected. Physical education practical class observation was made in all of the 10 sample schools that means one period in each based on the prepared checklist. Similarly, interview was conducted with 2 students who have multiple disabilities, 10 school principals, 2 woreda educational experts, 2 zone educational experts and 1 regional curriculum expert with

the help of structured and semi-structured interview guides prepared. The data gathered from the respondents in Afan Oromo and Amharic languages was translated to English language. Finally, the data collected through questionnaires has been coded, tallied, and tabulated and prepared for the analysis purpose.

3.6. Data Analysis

This study used both qualitative and quantitative research approaches. Therefore, the data obtained through the sets of questionnaires was analyzed quantitatively. For quantitative analysis, frequency distribution, percentage, and mean were employed. The data collected through interview and observations were analyzed qualitatively to substantiate the quantitative analysis.

3.7. Organization of the Report

The final research paper will be organized into five chapters. The first chapter will dwell on introduction, and consists of background of the research, statement of the problem, significance, scope and limitation of the study. The second chapter will deal with review of related literature pertinent to the research; the third chapter will cover research methodology, which includes research design, sample size, sampling technique, and data collection instruments and data analysis method. While the fourth chapter will dwell on research results and discussions, the fifth chapter will summarize the research and highlight the way forward. References and annex, which include questionnaire, checklists, glossary and other related materials, will be part of the document.

Table 1: Research Settings and Participants of the Study

No	Involved groups	Research Instruments used	Respondents		
			M	F	T
1	Students with orthopedic, visual and hearing impairments	<i>Questionnaire</i> Appendix – I	51	43	94
2	Physical Education Teachers	<i>Questionnaire</i> Appendix – II	13	1	14
3	Students with multi-disabilities	<i>Interview</i> Appendix – III	2*	-	2*
4	School principals	<i>Interview</i> Appendix – IV	10	-	10
5	Woreda and zone education bureau experts	<i>Interview</i> Appendix – V	4	-	4
6	Regional education bureau expert	<i>Interview</i> Appendix – VI	1	-	1
7	-	<i>Observation</i> Appendix- VII	-	-	-
	Total		79	44	123

* They are found within the total 94 students

CHAPTER FOUR

Analysis and Interpretation of Data

This part of the study deals with presenting, analyzing and discussing the data collocated through questionnaires, interview and observation from sources. Furthermore, the main findings of the study are presented with the help of Tables followed by descriptive statements for analysis.

4.1. Analysis of Findings Obtained From Students with Physical Disabilities through Questionnaires

4.1.1. Background Information of Students with Orthopedic, Visual and Hearing Impairments

Table 2(A): A Prevalence and Sex in Sample Schools

No	School	Sex			
		M	F	Total	%
1	Gahatsion	4	9	13	13.83
2	Tulumilki	-	1	1	1.06
3	Gebreguracha	5	10	15	15.96
4	Degem	5	6	11	11.7
5	Abdisa Aga	11	2	13	13.83
6	Fitche	11	8	19	20.21
7	Debretsizie	6	3	9	9.57
8	Muketuri	8	1	9	9.57
9	Hidebu abote	-	2	2	2.13
10	Gullele	1	1	2	2.13
	Total	51	43	94	100

Table 2(B): Disability Conditions of the students

No	Disability Type	M	%	F	%	Total	%
1	Orthopedic	42	44.68	37	39.36	79	84.04
2	Visual	3	3.19	3	3.19	6	6.38
3	Hearing	3	3.19	3	3.19	6	6.38
4	Orthopedic & Visual	1	1.06	-	-	1	1.06
5	Orthopedic & Hearing	2	2.12	-	-	2	2.12
	Total	51	54.26	43	45.74	94	100

As indicated in the Table 2(A), the prevalence of students with orthopedic, visual and hearing impairments in all the 10 sample schools was 94. Out of this figure 51(54.26%) were males and 43(45.74%) were females. Interm of their distribution in each school, the highest number 19(20.21%) of these students were found in Fitch secondary and preparatory school whereas the least number 1(1.06%) of them were found in Tulu Milki Secondary School.

One can observe from Table 2(B) that majority 79(84.04%) of these students were students with Orthopedic impairments whereas students with visual and hearing impairments have found equal that is 6(6.38%) each. On the other hand, 2(2.12%) and 1(1.06%) of the total students have multi-disabilities which means orthopedic plus visual and orthopedic plus hearing impairments respectively. From this data it is possible to say that orthopedic impairment is the very common disability among the students in North Shoa Zone of Oromia Regional State.

Table 3: Age and Grade Level of the Respondent Students

Age								Grade									
14-18		19-23		24 & above		Total		9		10		11		12		Total	
No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
53	56.83	38	40.42	3	3.19	94	100	47	50	20	21.27	17	18.08	10	10.63	94	100

According to Table 3, 53 (56.38%) and 38 (40.42%) of the students with Orthopedic, visual and hearing impairments were found in the age between 14-18 and 19-23 years old respectively. However, majority of them were found in between the range of 14-18 years old.

With regard to their grade level, out of the total 94 students, 47(50%), 20 (21.27%), 17 (18.08%) and 10 (10.63%) were students of grade 9, 10, 11 and 12 respectively. Hence, most of them are found in grade 9 and only 10 of them were grade 12 students.

4.1.2. Practice in PE Practical Classes as Perceived by Students with Disabilities

Table 4: *Previous and Present Practices in PE Practical Classes*

No	Item	Responses	
		No	%
1	Students with disabilities have better experience or participation in PE practical activities in the lower grades prior to high school		
	• Strongly agree	11	11.7
	• Agree	5	5.32
	• Undecided	-	-
	• Disagree	4	4.25
	• Strongly Disagree	74	78.72
	Total	94	100
2	Students with disabilities are significantly involving in PE practical classes in secondary education		
	• Strongly agree	1	1.06
	• Agree	1	1.06
	• Undecided	-	-
	• Disagree	17	18.08
	• Strongly Disagree	75	79.78
	Total	94	100

As shown in item 1 of Table 4, 74(78.72%) of students with disabilities indicated their strong disagreement concerning their previous experience in PE practical activities before secondary school and only 11(11.7%) of them had better involvement during their primary education. This implies that, the practice of the concerned students in the practical aspects of the subject is negligible. As a result, these individuals come to the next level of education with poor experience and awareness about PE and this again has its own impact on their further education in general. Supporting this idea, Bishop (1994) stated that, the pre-school and primary school is the time when many children attempt and develop fundamental motor patterns. However, in cases of the study group, this crucial period of introducing PE to children with disabilities seem to be forgotten in the sample schools.

Regarding item 2 of Table 4, the majority 75(79.78%) of the respondent students replied strongly disagree concerning their existing practice in PE practical classes in secondary school. The result show that these students lack opportunity to be engaged in this part of education.

4.1.3. Opportunities and Challenges of Inclusion in PE Practical Classes as Perceived by Students with Disabilities

In the following part, the subjects asked to indicate their responses on a five point scale ranging from strongly agree to strongly disagree. Strongly agree was given 5 points and strongly disagree was given 1 point. The response undecided was given 3 points. The responses given by all the subjects was added and divided to the number of subjects to get the mean. The average mean is 3. The mean values are interpreted throughout the text as follows:

Key:

<i>Rating Scales</i>	<i>Interpretation</i>
<i>SA</i>	<i>Strongly Agree</i>
<i>A</i>	<i>Agree</i>
<i>U</i>	<i>Undecided</i>
<i>D</i>	<i>Disagree</i>
<i>SD</i>	<i>Strongly Disagree</i>
Σ	<i>Summation</i>
<i>M</i>	<i>Mean</i>

<i>Mean</i>	<i>Interpretation</i>
<i>4.00 and above</i>	<i>Very strong</i>
<i>3.5 to 3.99</i>	<i>Strong</i>
<i>3.00 – 3.49</i>	<i>Moderate</i>
<i>2.00- 2.99</i>	<i>Low</i>
<i>1.00 – 1.99</i>	<i>Very Low</i>

Table 5: *Views on Teachers' Competence*

No	Item	Rating Scales					Σ	M	
			SA	A	U	D			SD
			5	4	3	2			1
3	Teachers support and encourage students with disabilities to participate in PE practical classes	<i>f</i>	4	4	-	6	80	94	1.36
		%	4.25	4.25	-	6.38	85.1	100	
4	Teachers modify PE practical activities in order to meet the special needs of students with disabilities	<i>f</i>	1	4	-	7	82	94	1.24
		%	1.06	4.25	-	7.44	87.23	100	
5	There is willingness of teachers to help students with disabilities personally in order to make them active participants in PE activities	<i>f</i>	2	4	2	6	80	94	1.31
		%	2.12	4.25	2.12	6.38	85.1	100	
6	Teachers explain and demonstrate practical lessons of PE from simple to complex so that SWD can catch up and imitate easily	<i>f</i>	4	3	-	10	77	94	1.37
		%	4.25	3.19	-	10.63	81.91	100	
7	Effort is made by teachers to encourage cooperation and friendship among SWD and SWOD in PE in order to help one another	<i>f</i>	7	6	3	9	69	94	1.64
		%	7.44	6.38	3.19	9.57	73.4	100	
8	SWD have possibility to ask and communicate with their teachers during practical session of PE	<i>f</i>	2	3	-	17	72	94	1.46
		%	2.12	3.19	-	18.08	76.59	100	

As we understand from item 3 of Table 5, teachers' competence in inclusive physical education is very low. For instance 80(85.1%) of SWD confirmed that, teachers have never support and encourage them to be involved in PE practical activities.

However, providing special support and encouragement enables students with disabilities as well as those without to feel that he/she is an important part of the

whole group. Regarding item 4 of the same Table, the majority 82(87.23%) of these students replied that teachers did not try to modify PE activities by using different techniques in order to create conducive inclusive environment. While, Salend (1994) advocated that a variety of techniques exist for adapting the learning environment to promote the optimal performance of main-streamed students, the selection of an appropriate modification will depend on several factors, including the students' learning needs and the teachers' instructional styles.

Concerning item 5 and 6 of Table 7, which are about the willingness and the methodology of teachers, most of the respondent students, 80(85.1%) and 77(81.91%) respectively replied their strong disagreement. This implies that, teachers have never shown interest to teach SWD and never try to implement inclusive education effectively. Moreover, the teaching methods which are chosen by teachers have never been convenient.

Explaining lessons from simple to complex, easy to difficult, known to unknown are some techniques in obtaining involvement and participation of the learners in teaching-learning process. However, students of the sample schools perceived the teachers' willingness and ability to employ this style as discouraging.

With regard to teacher-student communication in practical classes of PE, 72(76.59%) and 17(18.08%) of the subjects chose strongly disagree and disagree respectively for indicating lack of effective communication between teachers and SWD in PE practical classes. The observation done at the sample schools during PE practical classes also confirmed the same result. Similarly, the study conducted by West (1997) identified that teacher as the main barriers for inclusive education. Hundert (1982) cited in Salend (1994) advocated the need of communication in inclusive education as "successful main-streaming depends on an ongoing process of good communication and cooperation." Mean values of the items from 3-8 in Table 5 above are also 1.36, 1.24, 1.31, 1.37, 1.64, and 1.46 respectively. Therefore, from the above results one

can judge that teachers' competence to help SWD is very low in the sample schools that means in all of the cases it is below average (3).

Therefore changing the attitudes of teachers who are major parts of the process is crucial to improve the participation rate of students with disabilities in practical classes of PE.

Table 6: *Assessment Techniques used by PE teachers*

No	Item	Rating Scales											
		SA		A		U		D		SD		Total	
		No	%	No	%	No	%	No	%	No	%	No	%
9	Evaluation mechanism used by teachers consider disability of students in practical classes of PE	1	1.06	3	3.19	1	1.06	8	8.51	81	86.17	94	100
10	Students with disabilities did not involved in the practical examination of PE	51	54.25	10	10.63	2	2.12	4	4.25	27	28.72	94	100
11	Result of students with disabilities in PE is proportional with result of students with non-disabilities	5	5.31	2	2.12	2	2.12	3	3.19	82	87.23	94	100

As indicated in item 9 of Table 6, majority of the students 81 (86.17%) of them replied that the evaluation mechanisms used by PE teachers did not consider the special needs of SWD in PE. Similarly in item 10 of the same Table 51(54.25%) and 10 (10.63%) of these students replied strongly agree and agree respectively concerning their rejection from the practical tests of PE. Regarding item 11 of Table 6, all most all of the respondents students 82(87.23%) indicated that their result in this subject is not proportional with that of the 'normal' students. Hence, from the above result one can observe that teachers in the sample schools did not use pertinent evaluation methods which consider the disabilities of these students and other wise they totally excluded SWD from the practical tests of the subject. As a result of this SWD achieve poor results. However, isolation in the process of inclusion is contradictory and it might be the major reason for several psycho-social problems and

poor achievement. With this regard, Auxter, Pyfer and Huetting (1997) advocated that, assessment is an inseparable part of the students' ongoing educational program, and it is particularly critical for students with disabilities. Hence, they underlined that the teacher in the inclusive classes should know the purposes of assessment and types of assessment match to the purposes.

Table 7: *Relevance of Curriculum and Availability of PE facilities in the Sample Schools*

No	Item	Responses	
		No	%
12	Secondary school PE textbooks have the necessary guidelines to help students with disabilities in practical activities of the subject		
	• Strongly agree	1	1.06
	• Agree	2	2.12
	• Undecided	-	-
	• Disagree	3	3.19
	• Strongly Disagree	88	93.61
	Total	94	100
13	There are available PE facilities for students with disabilities in the school		
	• Strongly agree	-	-
	• Agree	1	1.06
	• Undecided	-	-
	• Disagree	5	5.31
	• Strongly Disagree	88	93.61
	Total	94	100

Regarding item 12 and 13 of Table 7, most of the respondent students 88(93.61%) chosen strongly disagree concerning the relevance of secondary schools PE textbooks as well as the availability of required facilities. However it is obvious that, adequacy of curriculum materials and availability of required instructional facilities promotes the students' achievement and at the same time contribute to the effective inclusion process. Supporting this view, ETP (1994) confirmed that "inadequate facilities, insufficient training of teachers, over-crowded classes, shortage of books and other teaching materials all indicate the low quality of education provided."

Table 8: Support and Encouragement from Educational Officials

No	Item	Rating Scales					Σ	M	
		SA	A	U	D	SD			
		5	4	3	2	1			
14	Effort is made by school administrators to follow the participation and evaluation systems of students with disabilities in PE inclusion practical classes	f	1	-	1	5	87	94	1.11
		%	1.06	-	1.06	5.31	92.5	100	
15	Zone and woreda educational experts provide professional assistance for teachers, principals and students in the school to create effective inclusion in PE practical classes	f	1	-	-	2	91	94	1.06
		%	1.06	-	-	2.12	96.8	100	

The school principal must be a very progressive sort of person. According to Hegarty et.al., (1988) cited in Fekede (2005), the head must be an all rounded person in looking the problems and needs of children. This implies that, if an integration program for students with physical disabilities is to be successful, the head of the school must have a positive attitude towards integration. However, the data for item14 above indicate that 87 (92.5%) of the respondents strongly disagreed the effort and the commitment done by school administration for the effective involvement of students with physical disabilities in regular PE practical classes in the sample schools. The mean value (1.11) of this item which is far from the average (3) also informed us that the negligible attention given for the special interest of the subjects in inclusive settings by the school administration.

Similarly, as indicated in item 15 of Table 8, all most all 91 (96.8%) of these students shown their strong disagreement again concerning the professional support provided for teachers, principals, and the SWD aiming at creating initiative and significant inclusion in PE classes in the sample schools. The mean value of this item (1.06) is also below the average (3). Thus the school society particularly teachers and principals did not offered sufficient professional supports from the experts who might be better than them in terms of skills and knowledge. Anderson (1992) as cited in Bizuneh (2008) further stated that, absence of professional supports provided in

various form may affect teachers' performances, which could be crucial for provision of quality education.

4.1.4. Opinion of Students with Disabilities towards Inclusiveness of PE Practical Classes

Table 9: *Self-perception of SWD about their Own Capability for PE Activities*

No	Item	Rating Scales											
		SA		A		U		D		SD		Total	
		No	%	No	%	No	%	No	%	No	%	No	%
16	It is difficult and boring to participate in practical activities of PE for SWD because of impairment	5	5.31	2	2.12	-	-	19	20.21	68	72.34	94	100
17	My disability does not prevent me from doing adapted PE practical activities	59	62.76	19	20.21	1	1.06	5	5.31	10	10.63	94	100

Self-perception is one of core element in effective teaching-learning process. With this regard, the data from item 16 of Table 9 indicated that majority 68(72.34%) of the respondents shown their disagreement for the issue that reflect the difficulty and boring nature of PE practical activities to them. In the same manner, 59(62.76%) and 19(20.21%) totally 78(82.9%) of SWD responded for item 17 as their disability never prevent them to perform adapted practical activities of PE. From this it can be concluded that if opportunities are provided and if they are encouraged and supported, they have self initiation to be involved in inclusive settings of PE. Therefore, the issue should be considered as educational right of an individual and be facilitated for accommodation.

Table 10: Benefits of PE as Perceived by SWD

No	Item		Rating Scales					Σ	M
			SA 5	A 4	U 3	D 2	SD 1		
18	PE has equal contribution for both SWD and SWOD	<i>f</i>	53	15	-	7	19	94	3.8
		%	56.38	15.95	-	7.44	20.21	100	
19	PE can improve the health condition of students with disabilities	<i>f</i>	74	8	3	-	9	94	3.93
		%	78.72	8.51	3.19	-	9.57	100	
20	Students with disabilities can develop self confidence through PE activities	<i>f</i>	75	13	-	2	4	94	4.62
		%	79.78	13.82	-	2.12	4.25	100	
21	Students with disabilities have basic knowledge about the importance of PE for their physical, mental, psychological and social development	<i>f</i>	59	17	1	8	9	94	4.15
		%	62.76	18.08	1.06	8.51	9.57	100	

Regarding to the perception of SWD about the benefit of PE to them, 53(56.38%) and 15 (15.95%) of the respondents indicate their agreement in different scales of rating. From the result obtained, it is possible to know their perception concerning the equal benefit of PE activities for a human being without isolation based on different circumstances including disability conditions. Similarly, the achieved mean (3.8) show their strong agreement because it is above average. Supporting this concept, Wuest and Lombardo (1994) stated that, the primary purpose of any education is to provide experiences that will help all individuals develop to their fullest potential, regardless of their ability, race, sex, religions, or economic status.

Perception of SWD towards physical activities in relation with their health and its contribution to the development of their self-confidence is very important. Accordingly for item 19 and 20 of the same Table, 74(78.72%) and 75(79.78%) of the subjects strongly agreed and believed that PE can promote their health condition and their self-confidence. Only few of these students are hesitating and disagreed with this fact. This shows that, the issue was given emphasis by SWD. The mean values of these items which are 3.93 and 4.62 also confirmed that the positive perception that SWD have for PE.

For item 21 of this Table which is about the basic concept of the students regarding the physical, mental, psychological and social benefit of PE 59(62.76%) and 17(18.08%) of the students replied strongly agree and agree respectively. Whereas, 9(9.57%) and 8(8.51%) chosen strongly disagree and disagree respectively. However, the mean of this item that is (4.15) indicated that the better concept of PE among the students with disabilities.

It is undeniable that previous awareness of learners toward a given subject or education in general contributes more in the teaching-learning process. However, eventhough SWD have important concepts about the significance of the subject, there is no initiating inclusive atmosphere of PE in the sample schools as observed from the former findings of this part. Accordingly Auxer & et.al., (1997) stated that, physical education for disabilities is still inadequate.

Table 11: *Interests of SWD toward PE Inclusive Classes as Perceived by Themselves*

No	Item	Rating Scales					Σ	M	
		SA 5	A 4	U 3	D 2	SD 1			
22	SWD are not interested to be involved in PE practical classes except in the theoretical classes	f	6	4	0	15	69	94	1.54
		%	6.38	4.25	-	15.95	73.4	100	
23	Lack of interest on the subject made SWD to be not involved in PE practical classes	f	0	3	4	5	82	94	1.23
		%	-	3.19	4.25	5.31	87.23	100	
24	SWOD are not interested to learn with SWD in the regular practical classes of PE	f	10	4	4	3	73	94	1.67
		%	10.63	4.25	4.25	3.19	77.65	100	

Students' interest is the determinant factor to achieve the educational goal desired. Hence, to assess interest of SWD toward PE practical classes, three items were developed and responded by the students themselves as follows. With regard to item 22 of Table 11, majority 69(73.14%) and 15 (15.95%) of the respondents chosen strongly disagree and disagree respectively which means about 84(89.36%) were described their disagreement to the problem that shows their lack of interest to participate in practical sessions of PE. Concerning item 23 of the same Table which

reflects their lack of interest totally to PE, almost all 82(87.23%) of the subjects confirmed their disagreement. Similarly, for the last item which express lack of interest to be involved in PE practical classes, majority 76(80.85%) of the respondents described again their disagreement. Thus, the results confirmed that these students have initiating interest to PE as well as its practical classes. The mean values of these items 1.54, 1.23 and 1.67 which are below average also indicate the same thing that means their disagreement. However, it seems there is lack of encouragement provided to such egger students in the part of the responsible bodies in the school to mix them with the advantageous groups and be benefited. Moreover the condition observed in the sample schools is contradictory to the concept of inclusion. According to Tirussew (2005), inclusive education means well coming all children, without discrimination in to regular or general school, it is a supplemental support for disabilities or special needs and promotes the child’s overall development in optimal setting.

Table 12: *Outlooks of PE teachers, SWOD, and Parents toward the Participation of SWD in PE Practical Classes as Perceived by SWD*

No	Item	Rating Scales					Σ	M	
		SA	A	U	D	SD			
		5	4	3	2	1			
25	Teachers and students with non-disabilities have positive perception toward SWD in PE practical classes	f	22	12	2	14	44	94	2.51
		%	23.4	12.76	2.12	14.89	46.80	100	
26	Teachers think that SWD should learn with SWOD in the regular PE practical session	f	30	7	10	10	37	94	2.81
		%	31.91	7.44	10.63	10.63	39.36	100	
27	Parents believe the ability of students with disabilities and they provide them moral and material support to be involved in PE practical activities	f	13	9	1	6	65	94	1.92
		%	13.82	9.57	1.06	6.38	69.14	100	

Positive outlooks of those who have close relation toward the SWD and their learning conditions play a vital role in the multi-lateral development of those who require special attention. Teachers, SWOD and parents are therefore, more close to these

students than any other body in the process. Thus, the following three items are about the level of perceptions of these determinants as perceived by the students with physical disabilities.

Accordingly, for item 25 of Table 12, 44 (46.80%) and 14 (14.89%) totally 58(61.70%) of the subjects disagreed with the content that magnified the positive attitude of teachers and SWOD to SWD in PE practical classes. On the other hand, 22 (23.4%) and 12 (12.76%) totally 34(36.17%) of them agreed with the absence of the problem in item 25 and 2 (2.12%) of these students cannot decide the presence or the absence of the stated problem.

Similarly for item 26 of the same Table, 37 (39.36%) and 10 (10.63%) totally 47(50%) were disagreed with the idea provided. While, 30 (31.91%) and 7 (7.44%), totally 37 (39.36%) of them agreed on the positive thinking that teachers may reflect to the involvement of these students in the regular PE practical classes. Further, 10 (10.63%) of them were not from both sides but they responded as they can not decide on this issue.

With regard to moral and support from parents, 65(69.14%) and 6 (6.38%) totally 71 (75.53%) of the respondents disagreed while, 13 (13.82%) and 9 (9.57%) totally 22 (23.40%) of them agreed with the concept of this item which is about the moral and material support to SWD from their parents that help them for being active participants of PE practical classes. The above results confirmed that, low attention is given for the involvement of these students in PE practical classes from teachers, SWOD and parents. The observed mean values of the 3 items 2.51, 2.81 and 1.92 respectively are below average which means low and very low. Thus it can be easily determined that teachers and peer groups have inconvenient perception toward these students in the regular practical classes of PE.

With this regard several writers revealed that the significance of positive outlook of teachers and non-disabled students for the SWD in inclusive education. For instance, Schulze et.al., (1991) affirmed that “Teacher attitudes have been identified as being

crucial to the success of main-streaming program”. They further declared the teacher attitudes “not only set the tone for the relationship between teachers and handicapped students, but also substantially influence the attitudes of non-handicapped classmates”. Additionally, it is noted that the attitudes and knowledge of teachers concerning children with handicaps are highly influential in determining the social, intellectual and emotional adjustment of these children (Tibebu, 1995). The involvement of parents in the raised issues is also considered as the very decisive factor. In line with this, Carpenter and Morris (2001) stated that, the education of children with disabilities could not be achieved without the active participation of parents as a wide range of community services.

Table 13: *Psycho-social Challenges in Inclusive PE as Perceived by SWD*

No	Item	Rating Scales					Σ	M	
		SA	A	U	D	SD			
		5	4	3	2	1			
28	I faced several psychological problems because of my disability in PE practical classes	f	67	13	-	3	11	94	4.29
		%	71.27	13.82	-	3.19	11.7	100	
29	Isolation from PE practical classes decrease the social interaction skill of students with disabilities	f	61	15	2	7	9	94	4.19
		%	64.89	15.95	2.12	7.44	9.57	100	

In the participatory educational setting students with orthopedic, visual and hearing impairment provided with the opportunity to be exposed and reciprocate to a broad range of social interaction behavior. To this effect, Tirussew (1999) stated that in inclusive education, not only students with disabilities but also those who are involved in the teaching-learning process (teachers, students with non-disabilities and school administrators) can achieve psychological, social and educational benefits. However, as the data obtained from the sample schools in Table 13 above, the student respondents emphasize that their exclusion from PE practical activities affect their psycho-social conditions.

For instance, for item 29 which elaborates the psychological problems faced by the SWD due to their inability to be involved in PE programs, majority of students

67(71.27%) and 13 (13.82%) which means totally 80(85.10%) of the total respondents shown their agreement in different degree that means strongly agree and agree respectively.

Similarly, for item 30 of the same Table which emphasized the poor social interaction skill of SWD because of their isolation from PE practical classes, totally 76(80.85%) of the respondents indicated their agreement. In addition the mean values of the items 4.29 and 4.19 confirmed that the problems are very strong.

In response to the open-ended question which required students with orthopedic, visual and hearing impairments to mention the strategies which help to overcome the above multi-lateral challenges, they suggested the following solutions.

- ✦ The outlooks of teachers, SWD, SWOD and school principals should be improved through continuous awareness creation programs;
- ✦ Related training should be provided for teachers;
- ✦ Support and encouragement from teachers, SWOD and school administration should be given to crate effective inclusion in PE practical classes;
- ✦ Teachers should be able to modify activities based on our special needs;
- ✦ Educational officials of the zone and woreda should be provide professional support for those who participate in the inclusive education in the school;
- ✦ Teachers should use different techniques of implementation and assessment in PE that can meet the special needs of students;
- ✦ Instructional materials like textbooks and teachers' guides should be modified and accommodate adapted contents as well as methodologies for meaningful inclusion in PE;
- ✦ The required facilities for the inclusive PE should be available in the schools, and
- ✦ Parents should also be involved in the process of inclusion.

4.2. Analysis of Findings Obtained from Teachers, School Principals, Woreda, Zone and Regional Education Bureau Experts

4.2.1. Background Information of Teachers, School Principals, Woreda, Zone and Regional Education Bureau Experts

Table 14: *Sex, Age, Qualification, Specialization and Service Years of Respondent Teachers*

No	Item	Respondents	
		No	%
I	Sex		
	Male	13	92.85
	Female	1	7.14
	Total	14	100
II	Age		
	20-24	2	14.28
	25-29	6	42.85
	30-34	4	28.57
	35 and above	2	14.28
	Total	14	100
III	Qualification		
	Diploma	6	42.85
	Degree	8	57.14
	Other	-	-
	Total	14	100
IV	Specialization		
	HPE	13	92.85
	Other	1	7.14
	Total	14	100
V	Service Years		
	1-5	8	57.14
	6-10	1	7.14
	11-15	1	7.14
	16 and above	4	28.57
	Total	14	100

As shown in Table 4, majority 13 (92.85%) of the physical education teachers in the sample schools were males and only 1 (7.14%) of them was female. Regarding to the age of the respondents 6 (42.85%) of the teachers were found in between the age of 25-29 years old and 4 (28.57%) were found in between 30-34 years old. The rest 2

(14.28%) and also 2 (14.28%) were found in the range of 20-24 and 16 and above years old respectively.

Concerning their qualification, the majority 8 (57.1%) of the teachers were degree holders, while 6 (42.85%) of them were diploma holders. Almost all 13 (92.85%) of the respondent teachers were specialized in the field of HPE and only 1 (7.14%) of them was in the field of Aesthetics education. In the case of experience of respondents, the majority 8 (57.14%) of them have below 6 years experience and 4 (28.57%) of the teachers have 16 and above service years. In general, more than half of the respondent teachers have above three years of experience. Thus, it was assumed that they have helpful experience for this study.

Table 15: Sex, Qualification and Service Years of School Principals, Woreda, Zone and Regional Education Bureau Respondents

No	Item	Principals		Woreda Education Bureau Experts		Zone Education Bureau Experts		Regional Education Bureau Experts		Total	
		No	%	No	%	No	%	No	%	No	%
I	Sex										
	Male	10	66.6	2	13.3	2	13.3	1	6.6	15	100
	Female	-	-	-	-	-	-	-	-	-	-
	Total	10	6.6	2	13.3	2	13.3	1	6.6	15	100
II	Qualification										
	Diploma	-	-	-	-	-	-	-	-	-	-
	Degree	10	66.6	2	13.3	2	13.3	-	-	14	93.3
	Other	-	-	-	-	-	-	1	6.6	1	6.6
	Total	10	66.6	2	13.3	2	13.3	1	6.6	15	100
III	Service Years										
	1-5	2	13.3	-	-	-	-	-	-	2	13.3
	6-10	8	53.3	-	-	-	-	-	-	8	53.3
	11-15	-	-	-	-	-	-	-	-	-	-
	16 & above	-	-	2	13.3	2	13.3	1	6.6	5	33.2
	Total	10	66.6	2	13.3	2	13.3	1	6.6	15	100

As shown in the Table 15, all that means 15 (100%) of the respondents were males. Concerning their qualification, 14 (93.3%) and 1 (6.6%) of them were first degree and second degree holders respectively. Finally, regarding their experience 5 (33.2%) of the respondents have 16 and above years of service and 8 (53.3%) of them have

between 6-10 and only 2 (13.3%) of them have between 1-5 years of service respectively. In general 13 (86.66%) of the respondents have 6 and above years of service. Thus, majority of the respondents could provide pertinent information that would be helpful to achieve significant findings.

4.2.2. Analysis of Findings Obtained from Teachers through Questionnaire

4.2.2.1. Opportunities in PE Practical Classes as Perceived by Teachers

Table 16: *Opportunities in PE Practical Classes for Students with Physical Disabilities*

No	Item	Respondents											
		Very high		High		Medium		Low		Very Low		Total	
		No	%	No	%	No	%	No	%	No	%	No	%
1	How is your experience in inclusive PE practical classes?	1	7.14	2	14.28	-	-	5	35.71	6	42.85	14	100
2	How is your interest to involve students with disabilities in PE regular practical classes?	7	50	4	28.57	1	7.14	1	7.14	1	7.14	14	100
3	To what extent students with disabilities participate in your PE regular practical classes?	2	14.28	2	14.28	2	14.28	2	14.28	6	42.85	14	100
4	How do you see the result of students with disabilities in PE compared with students with non-disabilities in your class?	1	7.14	1	7.14	7	50	4	28.57	1	7.14	14	100
5	How is the effort made by the school management to promote the inclusion of students with disabilities in PE practical classes?	-	-	-	-	4	28.57	-	-	10	71.42	14	100

The findings from Table 16 for item 1 indicates that, 6 (42.85%) and 5 (35.71%) of the teachers responded very low and low respectively. On the other hand, 2 (14.28%) of them replied as they have high experience and 1 (7.14%) has very high. This implies that, majority of the teachers in the sample schools lack an appropriate

experience to involve students with disabilities in PE practical classes. However, it is undeniable that the development of inclusive education relies heavily upon the teachers. Moreover, where there is scarcity of related experience to create meaningful inclusion classes among teachers, it may be difficult to achieve the desired educational outcome.

As indicated in the literature part of this paper, teachers should develop skill and experience for effective inclusive education through adequate training. In line with this, Carpenter & Morris (2001) confirmed that “the training of the actors in schools is crucial for creating positive foundation for inclusive education.”

Concerning item two of Table 16, which is stated to identify teachers’ interest to accommodate students with physical disabilities in PE practical classes, most of them 7 (50%) replied as they have very high interest and 4 (28.57%) of them have high interest to involve these students in the regular PE practical classes.

Interest and attitude of all who are involved in any educational setting have great significance for the system in order to reach the desired goal. Accordingly, Auxter, Pyfer and Huetting (1997) pointed out that, teachers’ attitudes toward acceptance of all children in their class are the major element of teaching-learning process. Moreover, their ability to accommodate children with disabilities, their knowledge of behavior management techniques, and the teaching style they use are considerations for appropriate placement. Sharing the same view, Schulze et.al., (1991) also affirmed, “Teachers attitudes have been identified as being crucial to the success of any main-streaming program.”

The third item of Table 16 is about the level of the existing participation of students with orthopedic, visual, and hearing impairments in the PE practical periods. Hence, 6 (42.85%) and 2 (14.28%) of the teachers responded that their participation is very low and low respectively. In contrast to this, 2 (14.28%) and again 2 (14.28%) replied that the level of their participation is very high and high respectively. Only 2 (14.28%) have medium participation. However, it can be observed from the result that the

involvement of these students in the PE practical classes is insignificant. The subject students also confirmed the same way that their participation is almost negligible. Therefore, it is possible to say that the opportunity given for these students to be part of the practical session of PE is discouraging. As a principle, inclusion has been based on the assumption that teachers are willing to admit students with impairment in regular class and be responsible for meeting their needs (Tirusew, 1999). It means welcoming all children, without discrimination, in to regular or general schools. Furthermore, inclusive education calls for a respect of difference and celebration of diversity (Ibid).

Regarding the assessment strategies and the result of students in PE, majority of the subject teachers 7(50%) indicated that their result is medium besides 4 (28.57%) and 1 (7.14%) of the respondents answered low and very low respectively. The data obtained informed us that the result scored by students with orthopedic, visual and hearing impairments is found in between medium and very low. Similarly student respondents also affirmed that their result in PE is very low. Moreover, the interview conducted with students who have multi-disabilities indicated that:

... we did not totally involved in the practical tests of PE through out our previous school history and now in secondary school. As a result our result is very low and we are out of the competition for rank.

According to, Auxter and et.al., assessment is an inseparable part of the students ongoing educational program, and it is particularly critical for students with disabilities. Hence, they underlined that the teacher in order to involve these students in any regular class should know the purposes of assessment and types of assessment match to the purposes. As to them, the complexity of grading physical education classes is magnified when an attempt is made to evaluate the performance of students with disabilities. So that students are graded on the basis of how well they meet their individual educational performance objectives.

With regard to the effort made by the school management to promote the involvement of these students in PE practical classes, majority of the respondents 10 (71.42%) and

4 (28.57%) replied very low and medium respectively. This shows that administration of the sample schools did not give due attention toward the provision of equal access of PE for all students. This is due to low awareness about disabled and disabilities, since school principals have no short-term or long-term training on inclusive education. Moreover, the interview held with school principals indicated that lack of related training as the major problem in the area. All of the interviewees agreed that there was lack of awareness about students with disabilities and their activities in PE. However, the head is in a key position to foster new development within school in the way of negotiating outside agencies, allocating resources internally, shaping staff attitudes and generally facilitating its growth in the early days. The head needs to be a very progressive sort of person. The head must be an all rounded person in looking the problems and needs of children (Hegarty et.al., 1988).

Ministry of education (2006), also forwarded similar idea stressing on the importance of awareness creation for school principals, boards, parent-teacher associations and communities around the school. Therefore, the foregoing discussions reveal that lack of training and awareness is still the major problem concerning students with physical disabilities and their participation in PE.

Table 17: *Effort made by Teachers, Woreda, and Zone Education Bureau Experts to Effectively Include Students with Physical Disabilities in PE Practical Classes*

No	Item	Respondents						Total	
		Yes		No		Some times		No	%
		No	%	No	%	No	%		
6	Have you tried to modify practical activities of PE in order to meet the special needs of SWD?	2	14.28	10	71.42	2	14.28	14	100
7	Do you evaluate students with disabilities in the practical session of PE with other students?	1	7.14	11	78.57	2	14.28	14	100
8	Is there professional support from educational experts of the zone and woreda for teachers and principals to promote the inclusion of SWD in PE practical classes?	-	-	13	92.8	1	7.14	14	100

Concerning the modification of instruction made by teachers according to the needs and disabilities of the students. Thus, 10 (71.42%) and 2 (14.28%) of the respondents replied 'no' and 'sometimes' respectively, while 2 (14.28%) of them responded 'yes'. This implies the inefficient competence of teachers for the improvement of inclusion in PE. However, Salend (1994) advocated that, while a variety of techniques exist for adapting the learning environment to promote the optimal performance of mainstreamed students, the selection of an appropriate modification will depend on several factors, including the students' learning needs and the teachers' instructional styles.

Regarding to item 7 of Table 17, that reflects whether students with disabilities involved in the practical tests of PE or not, majority of the subject teachers 11 (78.57%) and 2 (14.28%) replied that 'no' and 'sometimes' respectively. One can simply understand from the data that students with orthopedic, visual and hearing impairments were rejected from practical tests of PE. This is due to their rejection primarily from the regular practical classes. In the previous analysis part, student respondents confirmed the same thing that they are almost out of the inclusive PE practical classes as well as the practical assessment processes.

Furthermore, they underlined that, being out of this session of education decrease their result and they can not compete for rank with others. The actual observation result of the researcher showed that students with disabilities were almost out of PE practical classes and tests. As Tirusew (2005) says, inclusive education requires a flexible educational system including flexible curriculum, facilities, or other aspects of the setting. Moreover, Skjorten (2004) suggested that, for successful inclusive education, reorientation related to assessment, teaching methods and classroom management (including adjustment of the environment) must be carefully weighted before implementation.

In the case of professional support provided from the zone and woreda educational experts to principals and teachers in order to create successful inclusion of SWD in PE practical classes, almost all 13 (92.8%) of the respondent teachers pointed out that

the absence of professional support from zone and woreda educational experts. Further, the interview conducted with principals of the sample schools confirmed that support and encouragement given by experts is not specifically directed to inclusion in PE. As to them, the support provided from those officials was toward the general teaching-learning process. Hence, specific consideration was not given to inclusive education. Supporting this idea, one expert from woreda education bureau explained as follows:

... Even though currently the government tries to change the situation of inclusive education by giving workshops to create awareness among some stakeholders, still there is no more change as required, because the awareness creation given was not adequate and continuous .

4.2.2.2. Challenges of Effective Inclusion in PE Practical Classes as Perceived by Teachers

Table 18: *Factors Affecting the Participation of Students with Physical Disabilities in the Practical Aspects of PE*

No	Item	Rating Scales											
		SA		A		U		D		SD		Total	
		No	%	No	%	No	%	No	%	No	%	No	%
1	Lack of relevant training of teachers	9	64.28	4	28.57	-	-	-	-	1	7.14	14	100
2	Low level of awareness of SWD about PE and its benefits	8	57.14	4	28.57	-	-	1	7.14	1	7.14	14	100
3	Lack of interest of SWD for PE and field activities	3	21.42	4	28.57	-	-	4	28.57	3	21.42	14	100
4	Impairments of the students	5	35.71	5	35.71	1	7.14	1	7.14	2	28.57	14	100
5	Large class size	10	71.42	4	28.57	-	-	-	-	-	-	-	-
6	Poor experience of SWD concerning PE in the lower grades	9	64.28	3	21.42	-	-	1	7.14	1	7.14	14	100
7	Lack of conducive school environment	6	42.85	2	14.42	-	-	4	28.57	2	14.42	14	100
8	Low level of awareness of SWOD and parents	8	57.14	4	28.57	-	-	2	14.42	-	-	14	100
9	Lack of relevant curriculum materials of PE	10	71.42	4	28.57	-	-	-	-	-	-	14	100
10	Shortage of PE equipments	11	78.57	3	21.42	-	-	-	-	-	-	14	100
11	Lack of interaction of SWD and other students	5	35.71	5	35.71	-	-	3	21.42	1	7.14	14	100
12	Psychological problems of SWD	10	71.42	4	28.57	-	-	-	-	-	-	14	100

As observed from Table 18, which has supposed challenges of inclusion in PE, it can be observed that 9 (64.28%) and 4 (28.57%) out of 14 teachers replied strongly agree and agree for the issue that reflects lack of training of teachers as a barrier for inclusion in PE. It is undeniable that efficient training is vital for the successful implementation of inclusion in PE. But, this data give clue that teachers lack adequate training to create participatory inclusive classes particularly in the field activities of PE.

However, in order to provide the kind of learning situation that makes desired results possible, the teacher needs knowledge and training as well as certain special qualities of character and personality. As noted by Horn and Tylor (1995), leaders in the field of education agreed on the following points as what qualities are essential for successful teaching.

The teachers' professional equipment, knowledge of the child and society, the purpose, methods, materials and outcomes of education are some of the important qualities serving as a starting point without which no one can hope to be successful in teaching.

With regard to significant awareness among students with orthopedic, visual, and hearing impairments as one of the hindering factors of inclusion in PE, 8(57.14%) and 4 (28.57%) of the teachers answered strongly agree and agree. This means majority of the teachers agreed that awareness of SWD is one of the main challenges for effective inclusion in PE. Hence, in order to improve the inclusion of students with disabilities, the awareness creation strategies should be structured. According to Tirussew (2005), the awareness creation process should include teachers, school administration, parents, other students, official educational experts, students with disabilities themselves and others.

Concerning item 3 of Table 18, half of the teacher respondents 7 (50%) agreed and half of them disagreed with the concept that magnified lack of interest of SWD for PE and its practical activities as another challenge for inclusion in PE. However, in the previous analysis part of this study, majority 84 (89.36%) of student respondents confirmed that they have interest to participate in all aspects of PE. Thus, it is

possible to conclude that, there is a contradiction of idea between students and teachers on the issue of item 3.

In any educational setting, interest of the participants can influence the success of the process. Therefore, this implies that, special consideration should be given to improve students' interest towards PE by preparing activities according to age, sex, interest and ability of the students with disabilities. Further, activities should be attractive and enjoyable. To this end, Ram and et.al., (1996) elaborates that, activities should be encouraged which will give the participants an opportunity to construct interest and attitude.

For item 4 that presented disability of students as one of the hindering factor to inclusion in PE, 10 (71.42%) of the subject teachers shown their agreement, 3 (21.42%) shown their disagreement and 1 (7.14%) can not decide. The result indicates that most of the teachers accept disability of students as unabling condition particularly in PE activities. Thus, it can be deduced that, teachers have low perception and awareness towards disability. Moreover, the concept of inclusion is also completely opposite to such a discouraging outlook of teachers. Inline to this, inclusive education is a strategy aimed towards the goal of promoting an inclusive society, regardless of their ability and impairment (Rydbjerg, 2003). Moreover, Sherrill (1993) emphasized that, physical activity does not categorize people as disabled or non-disabled, as do eligibility procedures for special education placement. Instead, it analyzes individual differences associated with problems in the psychomotor domain.

The other supposed challenge for inclusion is poor experience or background of SWD in PE field activities. Hence, 9 (64.28%) and 3 (21.42%) of the subjects replied strongly agree and agree respectively. From the result one can easily conclude that the implementation of PE prior to secondary schools is also unsatisfactory and that is why these students are joining their secondary education with poor background of PE activities.

Besides, the results from student's questionnaire and interview of two students with multi-disabilities can also be evidence for their poor experience of PE in lower grades. In the interview, the two students with multi-disabilities argued that:

... throughout our school life we are out of PE field activities, and even we think as PE practical activities do not concern us.

Therefore, it is this isolation from the beginning that made SWD lack the proper previous knowledge and skill of PE. Concerning this issue, recent evidences suggest the same thing. For instance, a research conducted by Schulze, et.al., (1991) indicated that a handicapped students are frequently rejected and alienated in regular class settings. Thus, background of students with disabilities towards regular PE classes seems to be very limited.

Item 7 is another suggested influential factor for effective inclusive PE which is about lack of conducive school environment. Hence, 6 (42.85%) and 2 (14.42%) of the respondents replied strongly agree and agree respectively, on the other hand, 4 (28.57%) and 2 (14.42%) replied disagree and strongly disagree respectively. However, the problem exists as it can be observed from the result. In addition, the observation in all the sample schools by the researcher also affirmed that some of the schools' environment was found not conducive. It is obvious that, for effective curriculum implementation the physical environment of the school should be convenient. Schools are important socializing agents which shape the future aspiration by developing social, moral, intellectual, physical and emotional development of students. In contrary, schools also can affect the participation of SWD in PE activities. School environment involve different sport fields which are free from obstacles, access of water and the like.

According to the survey conducted by UNESCO (2003), lack of physically conducive environment in school affects students with disabilities to participate actively in the teaching-learning process.

Moreover, Hegarty et.al., (1988) describes, this topic is important not merely because the physical appointments of the school are often critical to integration but because of the links between the physical environment of the school and the educational needs it is to serve. Therefore, what we understand from the above statements is that the effective inclusion in PE can be influenced by physical environment of the school. Thus, schools should be as much as possible initiative type and be free of hindrances to maximize integration of SWD in PE field activities.

Item 8 of Table 18 is about the low level of awareness of students with non-disabilities and parents as the main challenge for significant inclusion in PE. Hence, 8 (57.14%) and 4 (28.57%) of the teachers replied strongly agree and agree respectively. Only 2 (14.42%) of the total teachers disagree with the given issue. The result confirmed that non-disabled peer groups and parents lack the required awareness toward the SWD and their instructional needs in PE practical activities. However, in any inclusive education setting the role of peer groups and parents is the most decisive factor. In line to this, Tirussew (2000) stated, it is suggested that inclusive education experience will be more effective and enable handicapped students develop a positive feeling about their personal values if there peers in school socially accept them. Another observer has also noted that the attempt of hearing impaired students “at school interaction are rejected relatively often by the potential hearing peers” (Jones, 1985) as cited by (Bench, 1992).

Moreover, Carpenter and Morris (2001) revealed that, the education of children with special education needs could not be achieved without active participation of parents as a wide range of community services. To this end, teachers, and school administration should design awareness creation strategies among parents and the school community in general in order to facilitate support and encouragement for SWD and to increase their social interaction skill in the inclusive educational settings like in participatory practical classes of PE.

With regard to item 9 which states lack of relevant curriculum materials as one of the determinant factor to inclusion in PE, all of the respondent teachers 14 (100%) show their agreement. The result from the open-ended question is also advocated the same thing that curriculum materials like textbooks, teachers' guides, and syllabus of PE for the secondary schools do not have important information which help teachers to create participatory practical classes of PE in the school. Thus, it must be known that, teaching students with disabilities without a well-differentiated curriculum would alienate them from the learning activities. Hence, general education curriculum is problematic for students with special instructional needs since it fails to meet the needs of diversity of learners and inflexible to accommodate the real and fluid nature of student learning. According to Fullan (1996), it is the standard curriculum that poses problems for the student in the categories of learning disability. To this end, Ashdown and Carpenter (2001) contended that, students with disabilities need strategies so as to ensure their participation in the curriculum and it should comprise all learning and other experience based on the modified curriculum.

Shortage of PE equipments in the school (item 10) is also another assumed problem for inclusive PE. Thus, all of the teachers 14 (100%) responded that strongly agree. The result informed that the scarcity of necessary PE equipments to implement the curriculum in the sample schools. Hence, it can be concluded that the implementation of PE in the sample schools is may be unsatisfactory because of the shortage of required equipments and this condition can greatly affect SWD. Similarly, all of the interviewed sample schools principals pointed out that the presence of the problem indicated. To this end, Nielsen (1997) explained that the furniture and equipment of the class may need to be changed to accommodate students with disabilities. As a result, the absence of suitable school environment and equipment affect the self-esteem and the interest of these students toward their involvement in inclusive physical education practical classes.

Concerning item 11 which is about lack of proper interaction among SWD and SWOD, 10 (71.42%) of the subject teachers shown their agreement and only 4 (28.57%) of them indicated their disagreement. Hence, majority of the participant teachers believe that peer interaction in the school can influence the whole development of the individual. In line with this, the result of the open-ended question reflected that SWD in most cases have poor interaction with SWOD and other school communities. This in adverse have its own impact in their learning in general and in PE practical classes in particular. Therefore, in order to enhance the cooperation among SWD and the whole school community, teachers and the school administration should play a catalyst role. Supporting this view, Gearheart (1996) declares that teachers have a potential to greatly enhance or seriously limit their students' feelings of self worth, achievement, and behavior. Salend (1994) also stated that, providing students with the opportunity to discuss issues related to students with disabilities, peer tutoring and visit to special education classes can promote a greater understanding of disability and provide opportunities for friendship.

The last item of Table 18 has psychological problems of SWD as the other challenging factor to implement sound participatory physical education practical classes. For this question all of the respondent teachers 14 (100%) emphasized that psychological problem as one of the main hindering factor of inclusion in PE. The response from the students questionnaire in the previous part as well as the interview response with two students who have multi-disabilities also confirmed that SWD due to their own psychological problem do not interested to be involved in PE practical activities. In most cases the psychological problems that the SWD faced are as a result of lack of relevant communication among SWD and the school community. According to Meadow (1984), the psychosocial development in the general population depends heavily on communication. In addition, Moores (1996) said that, if the students do not communicate well, they fall obtained academically, lose confidence, or do not relate freely with their peers.

Generally, in order to alleviate psychological problems like inferiority complex, isolation and others, teachers with the school community and parents should design intervention strategies so that SWD could develop the skill of social interaction and could be active participants of any co-curricular activities in the school including PE practical activities.

4.2.2.3. Teachers Opinion toward Inclusion in PE Practical Classes

Teacher's positive outlook for any new strategy is the most dominant element in order to achieve the targeted goal of education since the teacher is the most responsible body of application process. The following Table summarized teachers' opinion toward inclusion in PE practical classes.

Table 19: PE Teachers' Outlook about Inclusion in PE Practical Classes

No	Item	Respondents						Total	
		Yes		No		Undecided		No	%
		No	%	No	%	No	%		
1	Do you believe that students with disabilities have a right to learn all aspects of PE with their non-disabled peers?	14	100	-	-	-	-	14	100
2	In your opinion, do students with disabilities benefited physically, mentally, psychologically, and socially from practical aspects of PE?	13	92.8	1	7.14	-	-	14	100
3	Do you think that creating inclusive PE practical classes is only the responsibility of teachers	6	42.8	6	42.8	2	14.28	14	100
4	Do you believe that inadequate inclusion in PE practical classes will adversely affect the learning condition of SWD in the teaching-learning process?	11	78.5	2	14.28	1	7.14	14	100

Regarding the right of SWD to learn both aspects of PE (practical and theory) all 14 (100%) of the subject teachers responded 'yes'. From the result one can be sure that all PE teachers of the sample schools understand the right of SWD to learn all components of general education without exemption. This idea can be realized by the

following legislations. For instance, the government of Ethiopia gives greater attention to the expansion of educational opportunities to children with special needs education. Moreover, the convention on the rights of children with disabilities (1989), which is already accepted by Ethiopia, has also recognized the right of children to free basic education and equal access to education for all including those with special education needs. Similarly the Ethiopian constitution realizes the provision of equal access to education and necessary assistance to people with disabilities and other disadvantaged groups. To this end, according to the standard rules on equalization of person with disabilities (1993), children with special needs education demands appropriate, adequate and accessible support services such as access to equal enrollment, access to trained teachers and conducive school environment with necessary resources. However, regular schools of North Shoa Zone of Oromia are reluctant to provide all the components of general education equally both for SWD and SWOD. This can be realized by the findings obtained in the previous analysis part of this study concerning the provision of inclusion in PE practical classes in the zone. This is due to lack of appropriate awareness of the concerned personalities especially teachers and principals.

In the case of item 2 of Table 19, that ask teachers' opinion whether SWD benefited from PE practical activities or not, almost all which means 13 (92.8%) of the subject teachers replied 'yes' and only 1 (7.14%) of them responded 'no'. Hence, it is possible to deduce that teachers believe on the equal significance of PE for all without considering ability or disability of individuals. Supporting this view of teachers, Sherrill (1993) clarified that, physical activity does not categorize people as disabled or non-disabled, as do eligibility procedures for special education placement. Instead, it analyzes individual differences associated with problems in the psychomotor domain. Similarly, Wuest and Lombardo stated that, the primary purpose of physical education is to provide experiences that will help all individuals develop to their fullest potential, regardless of their ability, race, sex, religions, or economic status. This purpose typically encompasses development in the three educational domains

(psychomotor, cognitive and affective) helping each individual attain a high level of health and well-being.

For item 3 of Table 19 which tried to identify the responsible body to create conducive inclusion in PE practical classes in the school, 6 (42.8%) of the teachers said 'yes' and 6 (42.8%) of them said 'no'. On the other hand 2 (14.28%) of the respondents cannot decide to say yes or no. Though the result obtained seems difficult to conclude, there could not be any educational curriculum that can significantly employed by single individual or group. Hence, it is possible to say effective implementation of a given curriculum requires the purposeful involvement of all stakeholders. For instance, Fekede (2005) emphasized that, in order for educational program to be implemented successfully and effectively schools require a good cooperation and management who can see things from different dimension. Even the best designed curriculum with best teachers brings about nothing if good leadership and cooperative work do not support it. Furthermore, to magnify the responsibility of parents and community as a whole, Carpenter and Morris (2001) advocated that the education of children with special educational needs could not be achieved without active participation of parents as a wide range of community services. This indicates that the process of creating significant inclusion in PE is not only the responsibility of the teacher and the school.

Concerning item 4 of Table 19 which is proposed to know the teachers' outlook if inadequate inclusion in PE can affect the learning condition of SWD or not, 11 (78.5%), 2 (14.28%) and 1 (7.14%) of the respondents replied 'yes', 'no' and 'undecided' respectively. Thus, the implication is that, most of the teachers believe the negative impact of inadequate inclusive PE for the total learning conditions of SWD in the teaching-learning process. The previous results of this study implied that the level of participation of SWD in inclusive PE settings is insignificantly done. Their participation is negligible or otherwise they are totally rejected from the process. Hence, it can be deduced that discrimination of an individual or a group from the on going school activities has negative impact on the isolated individual or group.

Such a condition could be the major cause for psychological problems like inferiority complex, lack of self-esteem, lack of confidence and the like. Therefore, such internal problems of the students can seriously affect the learning conditions of the target groups without exaggeration. Instead it helps to develop negative attitude towards inclusive education in general. Assisting this idea, Schulze, et.al., (1991) dedicated that, handicapped students are frequently rejected and alienated in regular class setting partly by the “normal” peers. Further, on some instances, possibly, there can be negative reactions of the environment in the social interaction, which may predispose students with disabilities develop negative attitude towards inclusive education. To this end, making the environment not a rejecting type and creating initiative atmosphere is crucial to help the students to generate positive attitude which is significant to enhance the educational condition of students with orthopedic, visual and hearing impairments in the inclusive PE settings.

4.2.2.4. Teachers’ Responses to the Open-ended Questions

The last portion to this questionnaire has two open-ended questions. Redundant opinions are summarized in one statement.

The open ended questions focused on:

1. What other problems have you faced while you are teaching students with disabilities in your regular PE practical classes?

In response to this question, most teachers suggested that, SWD do not show their interest to be a part of inclusive PE practical classes. Even, they cry, shy, hide themselves, feel inferior and are too much depressed. Even though we are interested to help them, it is too difficult to convince them because of their long duration psychological problem resulting from their disabilities. Some teachers indicated that, they faced difficulty concerning the evaluation of these students in the subject, so that they evaluate these students only in the theoretical aspects of PE. These teachers believe that in most cases the result of SWD is low in relation to that of SWOD since they are not involved in the continuous practical tests of the subject. On the other hand two respondent teachers underlined that, we are interested to involve these

students in PE inclusive practical classes. But we don't know how and we are afraid of the risk after injury if it may happen. In addition some teachers raised shortage of time and large class. As problems they faced in inclusive PE.

From the above responses, it is possible to conclude that there is no planned and coordinated structure in the sample schools in order to bring these students to inclusive PE settings. The existing practice seems simply accepting the problem rather than searching for the solution.

2. What strategies do you suggest to overcome these problems and to create effective inclusive settings?

Responding to this question, teachers suggested the following solutions:

- ❖ Teacher should be provided significant training of inclusive PE;
- ❖ All the stakeholders should develop positive attitude toward SWD and inclusive PE so that serious awareness creation program should be structured;
- ❖ Adequate teaching materials like texts and guidelines should be prepared having different adapted physical activities and methodologies;
- ❖ Schools should try to fulfill the required equipments for the process of inclusion in PE program;
- ❖ Structure of cooperative work among the stakeholders should be designed for effective inclusive PE at school level and for it being affective short-term and long-term training should be given for the stakeholders;
- ❖ If possible assigning special needs education experts at least at zone level;
- ❖ Parents should be aware of the disability of their children and encourage them to be involved in PE practical classes;
- ❖ The school administration should always follow the implementation of inclusion in PE and solve problems encountered;
- ❖ Educational experts from woreda and zone should provide continuous professional support to schools for sound inclusion in PE program, and

- ❖ The time allotted to cover the PE contents in secondary school and large class-size is other affecting factors. Therefore, consideration should be given.

4.2.3 Analysis of Findings Obtained Through Interview

4.2.3.1. Interview Report Obtained From School Principals, Woreda, and Zone Education Bureau Experts

The student researcher conducted structured interview in face to face manner with school principals, woreda and zone education bureau experts in different time and place in order to get additional information about the existing practice and challenges of SWD in PE practical classes. Thus, the responses from the subjects summarized and presented in the following way.

- Primarily all the interviewees agreed the presence of students with orthopedic, visual and hearing impairments in the sample secondary schools in different distribution but they were unable to specify the accurate data of SWD in their school, woreda, and zone respectively, even for visible or easily identified disabilities like orthopedic, visual, and hearing impairments;
- Concerning their awareness about the present condition of inclusion in PE practical classes, most of the 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. The rest principals informed that, SWD are accommodated in the school and attend all subjects of the general education together with SWOD in the system which is known as inclusive education. They generalize their response as their awareness concerning the implementation of the specific subjects like PE is low;

For the same question woreda and zone educational experts replied the same thing with that of the principals. But they underlined that, helping SWD in any inclusive setting is more of the responsibility of the teacher since he/she has closer relation to the victims than any other body. They added that, this means not excluding school principals from the system of inclusive education, because they are responsible to encourage and follow the on going process and solve problems if existed;

- The respondents also asked their belief about whether PE contributes for SWD or not. All of them reported that no doubt, all subjects have equal contribution for all students disabled or non-disabled;
- Concerning the support provided from principals to teachers as well as form educational officials to principals in order to make inclusive PE classes effective, most principals responded that, support is given from the school to the departments. But they claimed that their support is not specifically addressed inclusive PE practical classes;

Woreda and zone education bureau experts have also the same idea regarding this question. They affirmed that their professional support and encouragement is not particularly focused on PE inclusive practical classes. Therefore all the respondents agreed on the common point that there is no special support and encouragement from any of the two to promote the involvements of SWD in PE practical activities;

- When asked whether teachers have positive attitude toward the participation of SWD in PE or not, most principals replied that, normally teachers have positive attitude to their students and their subject in the normal and peaceful atmosphere;
- Regarding to the adequacy of the teachers' training, both groups that means principals and educational officials replied that, regular school teachers are trained effectively and qualified to each specific subjects in regular schools. The respondents can not be sure about the teachers' capacity to run inclusive

education effectively. This means that they hesitate the adequacy of teachers training if it fits inclusion in PE.;

- With regard to evaluation mechanisms applied by teachers particularly in practical session of PE, some of the principals informed that, they do not see assessment of PE separately from other subjects. On the other hand, some of them reflected the idea that SWD are evaluated only in the theoretical class tests, but not in the practical tests because of their disability. This result implies that the lack of common knowledge of the sample school principals about inclusion in PE which may be resulted from low level of awareness;
- When asked about the availability and adequacy of the required equipments for PE, all the respondents indicated PE equipments are not available in all most all the sample schools, this is due to shortage of budget. Regarding the adequacy of the in hand equipments, they responded that they can not decide, because this is up to the teacher to evaluate and justify relevance of the equipments;
- The student researcher asked all of the subjects whether exclusion of SWD from the practical session of PE affect them or not, all the subjects said that, inclusive education has the concept that is providing equal opportunities to all of the students with out discrimination, hence, if this students will rejected from the system they may be affected psychologically and develop negative attitude toward the subject;
- A question is raised to the respondents to mention the main challenges to accommodate SWD in PE practical classes. Thus, they suggested that there could be several problems in a given process, however the major ones are the following:
 - low level of awareness of all stakeholders;
 - teachers' capacity for inclusion
 - teachers' attitude towards inclusive education;
 - interest of the SWD themselves;

- previous background of SWD in PE;
- inadequate curriculum;
- shortage of required equipments;
- lack of professional support and encouragement and
- lack of identification and pertinent data of SWD in the school.

Finally, principals woreda and zone educational experts were asked to justify strategies to overcome the problems related to participatory PE practical classes and they pointed out the following:

- Designing the continuous awareness creation mechanism for teachers, peer groups, school administration, parents, educational officials;
- Provision of relevant training to teachers that help them to function effectively in the inclusive education settings;
- Promoting teachers attitude towards inclusive PE by seminars, workshops, visiting programs etc;
- Encourage and provide special support for SWD in order to develop interest towards inclusive PE;
- Inclusive PE should be start from the beginning. Hence, KG and primary school curriculum should include the issue of inclusive education;
- Secondary school PE curriculum should accommodate significant adapted contents and methodologies of inclusive PE;
- Planned and programmed professional support and continuous follow-up should be done by woreda and zone educational officials;
- Assessment and identification of SWD help to know their accurate data and status of their disability. Hence, the school can be prepare its plan based on the pertinent information.

4.2.3.2. Interview Report Obtained from Oromia Regional State Education Bureau Curriculum Expert

The interview conducted with Oromia Regional State Education Bureau Curriculum Expert is presented as follows:

- ✚ Hence, the first question raised to him was about whether there are special needs education experts in their office or not, he responded that previously (before the application of BPR) there were special needs education experts, but currently we have no such professionals;
- ✚ Concerning their awareness towards the ongoing inclusive education particularly about inclusive PE in secondary schools, the expert replied that, “as a regional education bureau expert, I know that inclusive educational system is undergoing currently to help SWD within the regular education setting but I do not have enough awareness what is going on specifically in PE inclusive classes.” Further, he noted that the responsibility of preparing instructional materials (syllabus, teachers’ guides and textbooks etc), for secondary schools is of MoE at national level. Therefore the duty of the regional education bureau is simply following the total teaching-learning process particularly in secondary school level;
- ✚ When asked if there is professional support and encouragement from regional level to enhance the implication of inclusive education particularly in subjects like PE and other co-curricular activities, he replied that there is no specific support rather than following the whole educational activities in the region.
- ✚ The other question raised to him was that to explain the strong and weak points of implementation of PE in secondary schools of the region. Then he responded as, the strong point is including SWD in the regular education system as a policy rather than helping them in special conditions and he did not describe other strong and weak sides of inclusive education in general since he has no deep information concerning the system particularly about PE and SWD;

✚ For the major factors that can hinder the provision of inclusive PE in secondary schools, he contended the following points:

- lack of awareness about inclusive education among the whole stakeholders (parents, SWOD, teachers, principals, educational officials etc.);
- lack of responsible special needs education (inclusive education) experts at all level, that is from woreda to region education bureau;
- adequacy of teachers' training and instructional materials;
- lack of continuous professional assessment, support and encouragement;
- availability and adequacy of the required equipments and facilities;
- lack of competency and commitment of teachers and school principals.

4.2.3.3. Unstructured Interview Report from Students with Multi-disabilities

Unstructured interview was held with two students who have multi-disabilities at different time and place and their responses are summarized as follows:

- ✚ Primarily they were asked their pervious 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 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 over materials of participant students under shadow up to the class end;
- ✚ They were asked again about the teachers' attitude and commitment to encourage 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.

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 among teachers to help SWD;
- in adequate curriculum materials which did not include a single content and strategy about how SWD could be able to involved in PE practical classes;
- lack of support and concentration from school administration, and
- trained teachers who can modify activities to address the special needs of SWD.

They recommended possible solutions to solve the problem as follows:

- structuring awareness creation program to all the concerned;
- curriculum modification as well as relevant teachers training and
- continuous support and concentration of the school administration and others.

4.2.4. Analysis and Interpretation of Observation of PE Practical Classes

Table 20: Table Showing the Summarized Observation of PE Practical Classes in the 10 Sample Schools

No	Item	Excellent	Very good	Good	Poor
1	Willingness of the teacher to encourage and support students with disabilities as individuals				√
2	Participation of SWD in PE practical activities				√
3	Methodology of the teacher to make easy PE practical activities for SWD				√
4	Special help and praise of the teacher for SWD in PE practical classes				√
5	Interaction of SWD with their teacher and SWOD			√	
6	Suitability of the school environment, instructional materials and facilities			√	

NB. The result obtained is not for a single school. It is the summarized result of the 10 sample schools

As it was mentioned in the methodology section, PE practical class observation was conducted for 10 periods that means for one period in each sample school. The observation checklist involved more of the teachers' duty and the adequacy of the school environment, instructional materials and facilities to effectively run PE practical classes. However, as indicated in Table 20, willingness of the teachers' to accommodate and to provide special help to these students in PE practical activities, the condition of interaction of SWD with their teachers and SWD as well as the conduciveness of the school interms of the required instructional facilities was found not satisfactory or poor in general. Therefore, it is difficult to think about effective inclusion in PE where there are these shortcomings in the process. Finally, several writers advocated that inclusive education by its nature requires various attributes to be successful. However, among these requirements positive attitude of the stakeholders is given priority. In line with this, Skjorten (2004) argued that, successful inclusive education requires change of heart and attitude.

CHAPTER FIVE

Summary, Conclusion and Recommendation

5.1. Summary

The main focus of this study was to investigate the existing practice as well as pedagogical challenges and opportunities of students with orthopedic, visual and hearing impairments in PE practical classes in secondary schools of North Shoa Zone of Oromia Regional State.

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 PE practical classes to the above mentioned students in the Zone.

In order to carry out the study, qualitative and quantitative approaches were adopted. To collect the required information different data gathering instruments such as questionnaire, interview and field practical observation were used.

The sample population included students with orthopedic, visual, and hearing impairments, physical education teachers, school principals, woreda, zone and regional state education bureau experts. The data secured through questionnaire was handled by using statistics such as frequency, percentage, and mean whereas that of interview and practical field observation was described by using narrative approach. Finally, the study has come up with the following findings:

A. Practice of Students with Disabilities in PE Practical Classes

- ✚ The previous (before secondary school) experience of SWD in PE regular practical classes was very low;
- ✚ Similarly, in their secondary school life SWD do not have significant involvement in the practical session of PE;

B. Opportunities Provided

- ✚ Provision of equal right for SWD to attend their education in the regular education settings;
- ✚ The number of students with disabilities (orthopedic, visual and hearing impairments) in the regular education setting is not negligible;
- ✚ The support and encouragement provided by PE teachers to students with physical disabilities was found discouraging;
- ✚ Teachers' capacity to modify PE practical activities in order to meet the special needs of SWD was found very low;
- ✚ Competence and willingness of teachers' to provide access for SWD in order to participate in the practical session of PE was found very low;
- ✚ Teachers do not use various methodologies to make the practical activities simple to students with disabilities in PE classes;
- ✚ Teachers' effort to create friendship among students with disabilities and students without disabilities is very low;
- ✚ Teachers do not provide opportunity for students with disabilities to ask and communicate;
- ✚ Adequacy of teachers training was serious problem in the sample schools, which in turn affect the access of students with disabilities to be participant in the practical session of PE;
- ✚ Shortage of relevant facilities to create effective inclusive PE classes;
- ✚ Lack of appropriate instructional materials like textbooks, teachers' guides etc. for inclusive PE;
- ✚ Lack of support from school administration to provide access for SWD in PE practical classes, and
- ✚ Effort made by woreda and zone education bureau officials to improve the status of inclusive PE in the sample schools was found negligible.

C. Awareness

- ✚ The awareness of SWD in sample secondary schools of North Shoa Zone of Oromia Regional State about PE was very high. The majority of these students have better awareness about the advantage of PE to them;
- ✚ School principals as well as woreda and zone education bureau experts believe the benefit of PE practical activities for SWD. However, their awareness concerning the involvement of students with physical disabilities in PE practical classes was very low. The majority of these groups have no adequate information about what is going on in PE practical classes;
- ✚ Students without disabilities due to lack of awareness, were seen reluctant to support SWD to participate in PE practical classes, and
- ✚ Parents of students with disabilities are unaware of the educational condition of their children in PE activities.

D. Outlooks

Teachers' and students' perception toward a given subject is the determinant factor to achieve the desired educational goal. Hence, the finding obtained indicated that:

- ✚ Majority of the respondent students have positive outlook towards PE and its practical activities;
- ✚ Students without disabilities have positive outlook to learn with SWD in PE practical classes, and
- ✚ PE teachers' have interest to involve SWD in the practical activities. But their poor experience and training in inclusive PE hindered them.

E. The Major Factors Affecting the Participation of Students with Disabilities in PE Practical Activities

The major factors hindering the involvement of students with orthopedic, visual, and hearing impairments in PE practical activities in the sample schools were identified as follows:

- ✦ Lack of teachers' support and encouragement for students with disabilities in PE practical classes;
- ✦ Inadequate training and poor experience of teachers of physical education;
- ✦ Competence and willingness of teachers to modify activities, to use different teaching strategies and evaluation mechanisms in PE practical classes was found very low;
- ✦ Lack of relevant curriculum materials like textbooks, teachers' guides etc. for SWD;
- ✦ Lack of support and consideration from school administration;
- ✦ Shortage of available and adequate equipment and facilities in the sample schools;
- ✦ Lack of professional support from woreda and zone education bureau officers to schools in order to promote inclusive PE;
- ✦ Poor PE experience of SWD in their lower grade education;
- ✦ Low level of awareness of stakeholders (school principals, parents as well as woreda, zone, and regional education bureau experts) about the existing practice in PE practical classes;
- ✦ Lack of proper support from SWOD to SWD in PE practical classes;
- ✦ Lack of interaction and cooperation of SWD with their teachers and SWOD in PE practical activities;
- ✦ Lack of self-confidence and psychological problems like inferiority complex and isolation of themselves from school co-curricular activities, and
- ✦ Absence of appropriate methods for identification and assessment of SWD in order to address their special instructional needs.

F. Strategies to Improve the Involvement of SWD in PE Practical Activities

The findings revealed that students with orthopedic, visual, and hearing impairments were found out of the practical activities of PE in the sample schools. This implies

that, improving access of inclusive education for SWD is still critical issue that demands great efforts to achieve the desired goal of inclusive education. To this effect following strategies were suggested:

- ✚ Improving the awareness level of teachers, SWOD, principals, parents, educational experts, and decision makers to be involved and play their own role in the inclusive educational system;
- ✚ Related training should be offered to PE teachers in order to improve the implementation of inclusive PE in secondary schools;
- ✚ Providing professional support to schools from educational experts at different level to create inclusive PE education;
- ✚ School administration should give consideration and support to the process of inclusive PE in the school;
- ✚ Teachers and SWOD should encourage and help SWD to be involved in PE activities and being benefited;
- ✚ Curriculum materials of secondary school should accommodate various adapted PE activities and methodologies for effective implementation;
- ✚ The required equipment and facilities for inclusive PE should be fulfilled in the school, and
- ✚ Structuring a system of assessment and identification in order to have pertinent data of SWD to address their special needs in the process of inclusive PE.

5.2. Conclusion

Physical education is the integral part of the total educational activities which enhances and integrates the mental, physical, social, and psychological aspects of an individual's life through directed and selected physical activities. Therefore, one has to understand that physical education plays a great role in the society, specially for SWD if efficiently and effectively practiced.

As seen from the general trend, although most educators consider inclusive education to be ethically, morally, and pedagogically sound for students with disabilities, a number of obstacles have interfered with its wide spread implementation. As a result, SWD denied access to inclusive education. Similarly, significant number of students with orthopedic, visual, and hearing impairments lack access to participate in physical education practical exercises in the school.

Therefore, the focus of this study was to identify the existing practice of SWD in PE practical classes along with challenges and opportunities in the process. In addition, it is aimed at forwarding possible solutions to improve the involvement of students with orthopedic, visual, and hearing impairments in PE practical activities. 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. However this study revealed that teachers, principals, SWOD, parents and educational officers at different level had less awareness about the right of SWD to be involved in physical education practical classes. Particularly, teachers and principals were found reluctant to the issue raised;
- ❖ Learners' interest and outlook is considered as one of the determinant factors in a sound implementation of a given curriculum. In this study it was found that almost all of the subject students have favourable interest towards PE theoretical and practical sessions in general. Though PE is much favoured by students with orthopedic, visual, and hearing impairments, it is noted that, they were totally excluded from the practical activities of this subject;
- ❖ Furthermore, inclusive education can play a crucial role in advancing better academic performance for students with disabilities including those with orthopedic, visual, and hearing impairments, as they will do better when they sense that they are accepted and valued by their teachers and 'normal' peers. Hence, from the result of this study teachers and SWOD reflect their positive outlook with regard to students with disabilities and their participation in PE practical classes;

- ❖ It is undeniable fact that positive outlook of teachers can enhance the achievement of any new strategy in any educational system. However, positive outlook without related knowledge and skill is not the end in the process. In this study, teachers found complaining that the current teacher-training curriculum does not include certain skills, which enable teachers to facilitate appropriate inclusive classes of PE;
- ❖ Similarly, relevant curriculum materials (syllabus, teachers' guides, student textbooks, etc...) could accelerate the fulfillment of inclusion strategy at any level of education. However, physical education curriculum materials were found irrelevant in this study;
- ❖ Along with adequate curriculum, required equipments and facilities are resources that can assist a teacher in bringing about an intended behavioral change in inclusive education setting. In this regard, the study pointed out that there was shortage of important equipment and facilities to accommodate the target students in PE practical students in the sample schools;
- ❖ The implementation of a given curriculum is not a responsibility of a single individual or group. Hence, the process of inclusive education requires the cooperative activity of different stakeholders. However, in this study school principals as well as education bureau officers from woreda to regional state did not provide their support and encouragement to generate effective inclusion in PE practical classes;
- ❖ Parents give less importance to the education of their children with disabilities and have low expectation to their performance particularly in PE practical activities from the sense of over protection. In line to this, parents' encouragement and support for their children with disabilities was found low in this study;
- ❖ Psychological and social factors greatly influence to run smoothly and effectively the instructional process towards the desired objective. As it is received by the study, the sample students with orthopedic, visual, and hearing

impairments appear to 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 educational performance, and

- ❖ Finally, lack of proper information on the number and status of students with disabilities is also found a challenging factor for effective inclusive education. Therefore, to create inclusive PE in the sample schools of the zone changing the prevailing conditions is essential.

5.3. Recommendations

Based on the findings and conclusion of the study, the following recommendations were forwarded to be taken by the government, schools, and teachers.

I. Measures to be taken by the government

- Indeed, the new program of ministry of education designed to overhaul teacher education, teacher-training colleges are required to give future teacher a course in Inclusive Education, but there appears to be lack of clarity and specification. Thus, there must be clearly stated guidelines to provide inclusive education to children with different types of disability. Legislation, educational policy, and teacher training programs also need to be progressively updated to realize inclusive education as an educational modality;
- The current teacher-training curriculum does not include certain skills, which enable teachers to facilitate the inclusive classes. Thus, the (MoE) should modify the teacher training curriculum so as to reflect the necessary competencies needed by teachers who are to take a leadership role in order to facilitate the development of inclusive schooling. Hence, the government has to provide long-term and short-term trainings at regional and central level for teachers who are teaching in inclusive school;

- The success of an inclusive school system, which serves all children, depends on a flexible and relevant curriculum that can be adapted to the needs of each learner. All learners can not reach the same level of competence, and do not progress at the same pace. Thus the curriculum designers should give a special consideration to make the curriculum flexible in that, modification, substitution, exemption as well as compensations are entertained to accommodate the diverse needs of students in inclusive school system;
- Awareness creation system should be designed and provided to regional, zonal and woreda educational officers and to school principals in order to activate stakeholders for the success of inclusive education, and
- The government has to allocate budget specifically for fulfilling the materials needed by students with disabilities in collaboration with domestic and international non-governmental organizations.

II. Measures to be taken at school level

- The school should create awareness among the school community (teachers, SWD, SWOD etc) and parents. This would help the school community to develop positive attitude toward SWD and inclusive education;
- The school has to build consensus, through continuous discussion on the issues with all stakeholders;
- 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 utilize relevant instructional materials which are locally made to promote the teaching-learning process in field activities;
- Scarcity of sport materials and sport fields discourage students in general and students with orthopedic, visual and hearing impairments in particular. Therefore, school should devise mechanism to fulfill the required facilities, and

- Most of the schools in the zone have problems of keeping records particularly data for students with disabilities. Thus, schools should give attention and record the data of these students in number and type of disability in order to address, their special needs in inclusive education.

II. Measures to be taken by teachers

- Teachers have to be well aware of students with orthopedic, visual and hearing impairments so that they can have a better understanding and positive attitude to promote inclusive PE;
- Indeed, teachers could encounter practical problems, while teaching in inclusive classes. Thus, teachers should be innovative, flexible, creative, ready to learn from the learners 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 orthopedic, visual, and hearing impairments in physical education, and
- PE textbooks are found not suitable for students with orthopedic, visual, and hearing impairments 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.

Bibliography

- Ainscow, M. (1994). **Special Needs in the Classroom: A Teacher Education Guide**. Paris: UNESCO.
- Arnold, P. (1976). **Physical Education and Personality Development**. London: Heinemann Educational Books Ltd.
- Ashdown, R. and Carpenter, B. (2000). **Enabling Access**: In Carpenter, et.al., London: David Fulton Publisher.
- Auxter, D., Pyfer, J., & Huetting, C. (1997). **Adapted Physical Education and Recreation**. London: Mosby.
- Bao, K. Salia. (1989). **Curriculum Development and African Culture**. Great Britain: Hooder and Stoughton.
- Bench, R.J. (1992). **Communication Skills in Hearing Impaired Children**. London: Whurr Publishing.
- Best, J. (1989). **Research in Education**. New Jersey: Prentice-Hall.
- Bishop, P. (1994). **Adapted Physical Education, A Comprehensive Resource Manual of Definition, Assessment, Programming and Future Predictions** (3rd. ed.). Kearney Educational Systems Association Inc.
- Bizuneh Kebu (2008). **Status of Special Needs Education: The Case of Arsi Zone Primary Schools**. (Unpublished).
- Booth T. and Potts P. (1987). **Interesting Special Education**. New York: Basil Black well.
- Carpenter, B. and Morris, D. (2001). **Perspective on Nation Curriculum**: In Carpenter et.al., **Enabling Access**. London: David Fulton Publisher.
- Cecil, D.M. & Ann, R.M. (1989). **Teaching Students with Learning Problems**. New York: Macmillan Publishing Company.

- Cratty, B.J., Peterson, C. Harris, J. & Schoner, R. (1989). The Development of Perceptual Motor Abilities in Blind Children and Adolescents. **The New Outlook for Blind. V. 62. Number 4.** New York.
- Dauer, V.P. & Pangrazi, R. P. (1979). **Dynamic Physical Education for Elementary School Children.** Minneapolis: Burgres Publishing Company.
- Degefa Abdi (2001). The Attitudes of Students with Visual Impairments towards Physical Education: The Case of Sebeta and Boko Schools for the Blinds in West Shoa Zone of Oromia Regional State. (Unpublished).
- Dunn, J & Faith, H. (1989). **Special Physical Education: Adapted, Individualized, Developmental.** Doboqe: WMC Brown Publishers.
- Fekede Eshete (2005). The Trend of Female Students Participation in Physical Education Activities: The Case of Sidama Zone Secondary Schools in SNNPR. (Unpublished).
- Festle, Joe Mary (1996). **Play Nice: Politics and Apologies in Women's Sports.** U.S.A: Columbia University Press.
- Freeman, W.H. (1972). **Physical Education and Sport in Changing Society.** India: Burgess Publishing Company.
- Fulan, M. (1996). **Curriculum Trends, Special Education, and Reform: Refocusing the Conversation.** Columbia University, Teacher College Press.
- Gearheart, B.R. Weishahn, M.W., & Gearheart, C.J. (1996). **The Exceptional Students in the Regular Classroom.** 6th ed. Prentice Hall. Inc. A Simon Schuster Company, Englewood Cliffs, New Jersey.
- Hegarty, and Pocklington, with Lucas, (1988). **Education pupils with Special Needs in the Ordinary School** 4th ed. Great Britain, NFER-NELSON Publishing Company.
- Hornby, G. David, G. & Tylor, R. (1995). **The Special Educators' Handbook: A Guide for Vision Testing.** New York: Routledge.

- Horne, M.D. (1985). **Attitudes Towards Handicapped Students: Professionals and Parent Reactions.** Hillsdale, NJ: Lawrence Erlbaum Associates.
- IOC (1996). **The Olympic Movement and the Mass Media.** Lausanne: **Publications of the International Olympic Committee.**
- Johnson, P. (1969). **Physical Education for Blind Children in Public Elementary Schools.** *The New Outlook for the Blind.* V. 63. Number 9. New York.
- Kamlesh, M. and Sangral M. (1997). **Principles and History of Physical Education.** India: Parkash Brothers Luna Press.
- Lewis (2001). **Assessment:** In Carpenter, et.al., *Enabling Access* (2nd ed.). London: David Fulton Publisher.
- Meadow, K.P.(1984). **Deafness and Child Development.** Beerkeley, CA: University of California press.
- Mesfin Abebe (2006). *Psychological and Educational Challenges of Students with Hearing Impairments in Inclusive with Reference to Awassa School for the Deaf.* (Unpublished).
- Ministry of Education (MoE), (1994). **Transitional Government of Ethiopia, Education and training Policy.** Addis Ababa EMPDA.
- Miron, G. (1994). *Special Needs Education in Nicaragua. A Study Prevalence of Children with Disabilities in Primary Schools and Factors Affecting their Successful Participation.* Gotab, Stokehole: Annual Report.
- Mittler, P. (2000). **Working Towards Inclusive Education. Social Contexts.** London David Fulton Publishers.
- MoE (2006). **Special Needs Education Program Strategy: *Emphasizing Inclusive Education to Meet the UPEC and EFA Goals.*** Addis Ababa: Master Printing Press.

- MOLSA (1999). **National Program of Action for Rehabilitation of Persons with Disabilities**. Addis Ababa. Ministry of Labour and Social Affairs.
- NFEAS (1998). National Forum of Educational Administration and Supervision Journal. Volume 16. Number 1. Los Angeles.
- Nielsen, L.B. (1997). **The Exceptional Child in the Regular Classroom: An Educator's Guide**. California: Crow in Press, Inc.
- Padeliadu, S. & Lampropoulou, V. (1997). Attitudes of Special and Regular Education Teachers School Integration. **European Journal of Special Needs Education**. Vol. 12, No.3, P. 173-183.
- Radda Barnen (1999). **Everyone has the Right to Grow and Bloosoom**. Learning about Children with Disabilities. Alfa print.
- Ram, N. Paromeswara and Krishnamurthy (1996). **Educational Dimensions of Physical Education**. New Delhi: Sterling Publisher PVT. LTD.
- Resnick, R. (1971). Recreation: A Gateway to Seeing World. **The New Outlook for the Blind**. Volume 65. Number 9. New York: American Foundation for the Blind. Inc.
- Reynolds, C.R. & Mann, L. (1987). **Encyclopedia of Special Education**. A Reference for the Education of the Handicapped and Other Exceptional Children and Adults. New York: John Wily and Sons.
- Rydbjerg C.A. (2003). **Inclusive Education-Early Lesson Learned from General**. USA- Washington.
- Salend, S.J. (1994). **Effective Mainstreaming: Creating Inclusive Classroom**. (2nd ed). Englewood Cliffs, N.J Merrill/Prentice Hall.
- Scholl, G.T. (1986). **Foundations of Education for the Blind and Visually Handicapped Children and Youth**. Theory and Practice. New York: American Foundation for the Blind, Inc.

- Schulz, J., Carpenter, C. and Turnbull, A. (1991). **Mainstreaming Exceptional Students.** A guide for classroom teachers. Third edition. Boston: Allyn and Bacon.
- Seaman, J. & Depauw, K. (1989). **The New Adapted Physical Education.** A Developmental Approach (2nd ed.). California: Mayfield Publishing Co.
- Seyoum Tefera and Ayalew Shibeshi. (1989). **Fundamentals of Educational Research: For Students and Beginning Researchers.** Addis Ababa: AAU Printing Press.
- Sharon, V. and et.al., (1996). **Teaching Mainstreamed, Diverse and at Risk Students.** Boston: Ally and Bacon.
- Sherrill, C. (1993). **Adapted Physical Activity, Recreation, and Sport Cross Disciplinary and Life Span** (4th ed.). Madison: Brown & Benchmark Publishers.
- Siedentop, Darly (1998). **Introduction to Physical Education.** Fitness and Sport 3rd ed. By Mayfield Publishing Company London.
- Skjorten, M. D. (2004). Towards Inclusion and Enrichment Article in Johnson, Berit and Skojorten, Miriam D. (ed.), *Special Needs Education: Introduction*, Oslo, Unpublished.
- Smith, D.D., & Luckasson, R. (1995). **Introduction to Special Education.** Teaching in an Age of Challenge. Boston: Allyn & Bacon.
- Solomon Sebro (2005). Educational Challenges of the Hearing Impaired Children: The Case of Two Selected Special Schools in the SNNPR State). (Unpublished).
- Stainback, W. and Stainback, S. (1990). **Support Networks for Inclusive Schooling.** Baltimore: Paul H. Brookes.

- Tesfaye Basha (2004). Attitudes of Teachers & Students Regarding the Integration of Hearing Impaired Students in to Regular Classes. AAU: Unpublished MA Thesis.
- Tibebu Bogale (1995). **Meanings Attached to Disability Attitudes towards Disabled, and Attitudes towards Integration.** Jyvaskyla Studies in Education, Psychology and Social Research 118.
- Tirussew, T. (1999). Inclusion of Children with Disabilities in Regular Schools: Challenges and Opportunities. **The Ethiopian Journal of Education.** Vol. XIX No. 1 P. 29-58.
- Tirussew, T. (2000). **Human Disabilities: Developmental, Educational and Psychological Implications.** Addis Ababa: AAU Press.
- Tirussew, T. (2005). **Disabilities in Ethiopia: Issue, Insights and Implementation:** Addis Ababa. AAU Press.
- UN (1989). **The Convention of the Rights of the child.** Geneva, UN
- UN (1993). **The Standard Rules on the Equalization of opportunities for persons with disabilities.** Geneva, UN.
- UN (2006). **United Nation General Assembly.** Geneva, UN.
- UNESCO (1994). **World Conference on Special Needs Education: Access and Quality.** Salamanca, Spain, 7-10 June 1994 Final Report.
- UNESCO (1990). **World Declaration for All.** Paris.
- UNESCO (2003). **Open File on Inclusive Education: Support Materials for Manager and Administrators.** France. UNESCO.
- Valentini, A. (2008). **Education for All: Will We Make it?** UNESCO, Paris.
- West, R. (1997). Examination in Central and Eastern Europe. Newsletter of the Association of Teachers of English of the Czech Republic.
- Winnick, J.P. (1995). **Adapted Physical Education and Sport.** New York: Human Kinetics.

- World Bank (2004). **Inclusive Education: An EFA Strategy for A Children.** Retrieved on January 23, 2010, from World Bank Website: <http://www.worldbank.org/education.pdf/inclusiveedu.efa-strategy-for-children.pdf>.
- Wuest, D. and Lombardo, L. (1994). **Curriculum and Instruction: The Secondary School Physical Education Experience.** USA Maple-Vail Book Manufacturing Group.
- Ysseldyke, J.E. and Algozzine, B. (1995). **Special Education: A Practical Approach for Teachers.** Boston: Houghton Mifflin Company.
- Yssldyke, J.E and Salvia, J. (2004). **Assessment in Special and Inclusive Education.** Houghton Mifflin.

APPENDIX- I

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF EDUCATION

DEPARTMENT OF CURRICULUM AND TEACHERS
PROFESSIONAL DEVELOPMENT STUDIES

Dear Respondents!

This questionnaire is designed to collect data for the study aimed to assess the existing involvement, as well as pedagogical challenges and opportunities of students with disabilities in Physical Education (PE) regular practical classes in secondary schools of North Shoa Zone of Oromia. The data collected using this questionnaire is to be used only for academic purpose and all information gathered from the respondents will be helpful to get pertinent findings and to forward timely and sound recommendation. Your responses are confidential and are not used for any other purpose rather than this study. Therefore, in order to obtain relevant and reliable information that would contribute to the success of this study, I kindly request your cooperation to answer all the questions frankly as you fell.

Tank you in advance!

QUESTIONNAIRE TO BE FILLED BY STUDENTS WITH DISABILITIES

PART I. General Information

1. Location: Zone _____ Woreda _____
2. School _____
3. Sex: Male Female
4. Age: A. 14-18 B. 19-23 C. 24 & above
5. Grade _____
6. Type of Disability: Visual Hearing Orthopedic

PART II. The following are items about opportunities and challenges to involve student with disabilities in the practical classes of PE. Please, indicate the extent to which you agree or disagree by putting the sign “✓” in one of the five boxes to the right of each item.

- N.B. ‘PE’ stands for Physical Education

No.	Item	Rating scales				
		Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1	Students with disabilities have better experience or participation in PE practical activities in the lower grades					
2	Students with disabilities are significantly involving in PE practical activities in secondary school education					
3	Teachers support and encourage students with disabilities to participate in inclusive (PE) practical classes					
4	Teachers modify PE practical activities in order to meet the special needs of students with disabilities					
5	There is willingness of teachers to help students with disabilities personally in order to make them active participants of PE practical classes					
6	Teachers explain and demonstrate practical lessons of PE from simple to complex so that students with disabilities can catch up and imitate easily					
7	Effort is made by teachers to encourage cooperation and friendship among disabled and non- disabled students in PE in order to help one another					
8	Students with disabilities have no possibility to ask and communicate with their teachers during practical session of PE					
9	Evaluation mechanisms used by teachers consider disability of students in practical classes of PE					
10	Result of students with disabilities in PE is proportional with result of students					

	with non-disabilities					
11	Students with disabilities did not involved in the practical examinations of PE					
12	Secondary school PE text books have the necessary guidelines to help students with disabilities in practical activities of the subject					
13	There are available PE facilities for students with disabilities in the school					
14	Effort is made by school administrators to follow the participation and evaluation systems of students with disabilities in PE practical classes					
15	Zone and woreda educational experts provide professional assistance for teachers to create effective inclusion in PE practical classes					

PART III. Opinion of Students with Disabilities towards PE Practical Classes

16	It is difficult and boring to participate in practical activities of PE for students with disabilities because of impairments					
17	PE has equal contribution for both students with disabilities and with non-disabilities					
18	PE can improve the health condition of students with disabilities					
19	Students with disabilities can develop self confidence through PE activities					
20	Students with disabilities have basic knowledge about the importance of PE for their physical, mental, psychological and social development					
21	Students with disabilities are not interested to be involved in PE practical classes except in the theoretical classes					
22	Lack of interest on the subject made students with disabilities to be not involved in PE practical classes					
23	Non-disabled students are not interested to learn with disabled students in the regular practical classes of PE					
24	Teachers and students with non-disabilities have positive precipitation toward students with disabilities in PE practical classes					
25	Teachers think that disabled students should learn with their non-disabled peers in the regular PE practical session					
26	Parents believe the ability of students with disabilities and they provide them moral and material support to be involved in PE practical activities					
27	My disability doesn't prevent me from doing adapted PE practical activities					
28	I have several psychological problems because of my disability since I can't participate in PE classes equally with others					
29	Isolation from PE practical classes decrease the social interaction skill of students with disabilities					

PART IV. Open- ended items

1. In your opinion, what strategies should be used in order to create effective inclusive PE practical activities?

Thank you!

APPENDIX -II

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF EDUCATION
DEPARTMENT OF CURRICULUM AND TEACHERS
PROFESSIONAL DEVELOPMENT STUDIES

Dear Respondents!

This questionnaire is designed to collect data for the study aimed to assess the existing involvement, as well as pedagogical challenges and opportunities of students with disabilities in Physical Education (PE) regular practical classes in secondary schools of North Shoa Zone of Oromia. The data collected using this questionnaire is to be used only for academic purpose and all information gathered from the respondents will be helpful to get pertinent findings and to forward timely and sound recommendation. Your responses are confidential and are not used for any other purpose rather than this study. Therefore, in order to obtain relevant and reliable information that would contribute to the success of this study, I kindly request your cooperation to answer all the questions frankly as you fell.

Thank you in advance!

QUESTIONNAIRE TO BE FILLED BY TEACHERS

PART I. General Information

1. Zone _____ Woreda _____
2. Name of the school _____
3. Sex: Male Female
4. Age: A. 20-24 B. 25-29
C. 30-34 D. 35-39 E. Above 39
5. Qualification: A. Diploma B. Degree C. other
6. Field of specialization _____
7. Teaching experience _____ years.

PART II. The following are issues about the existing participation (inclusion) of students with disabilities in physical education practical classes. Please, put “✓” mark in the boxes that corresponds to your choice and give your reasons on the space provided.

- **N.B.** ‘PE’ stands for Physical Education

1. How is your experience in inclusive PE practical classes?
A. Very high B. High C. Medium D. Low E. Very low

2. If your answer for question number 1 is ‘low’ or ‘very low’, please mention the major reasons.

3. How is your interest to involve students with disabilities in PE regular practical classes? A. Very high B. High C. Medium
D. Low E. Very low

4. If your answer for question 3 is ‘low’ or ‘very low’, please indicate the major reasons.

5. To what extent students with disabilities participate in your PE regular practical classes?

A. Very high B. High C. Medium D. Low E. Very low

6. If your answer for question number 5 is 'low' or 'very low', would you please mention the major reasons?

7. Have you tried to modify practical activities of PE in order to meet the special needs of students with disabilities?

A. Yes B. No C. Sometimes

8. If your answer for question number 7 is 'No' or 'sometimes', please explain the reason.

Do you evaluate students with disabilities in the practical session of PE with other students?

A. Yes B. No C. Sometimes

9. If your answer for question number 9 is 'Yes', please explain how?

If your answer for question number 9 is 'No' or 'Sometimes', please indicate your mechanisms to evaluate them?

10. How do you see the result of students with disabilities in PE compared with students with non-disabilities in your school?

A. Very high B. High C. Medium D. Low E. Very low

11. If your answer for the above question is 'low' or 'very low', please mention some of the major reasons

12. How is the effort made by school management to promote the inclusion of students with disabilities in PE practical classes?

A. Very high B. High C. Medium

D. Low E. Very low

13. If your answer for question number 12 is 'very high' or 'high', please mention some of the efforts made

14. Is there professional support from special need education expert of the zone and Woreda for teachers and principals to promote the inclusion of student with disabilities in PE practical classes?

A. Yes B. No C. Sometimes

15. If your answer for question number 14 is 'yes', please mention the major efforts made.

PART III. The following are assumed **challenges** to involve students with disabilities in PE practical classes. Please, indicate the level of your agreement or disagreement in putting “✓” mark in one of the five boxes to the right of each item.

No	Item	Rating scales				
		Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1	Lack of relevant training is a barrier for me to create inclusion in PE practical classes					
2	Low level of awareness of students with disabilities about PE and its benefit is a barrier for me to involve them in PE practical activities					
3	Students with disabilities do not have interest to PE in general and its practical activities in particular					
4	It is difficult to involve students with disabilities in PE practical classes because of their impairment					
5	The number of students in the class is a barrier for me to help and encourage students with disabilities personally in the practical session of PE					
6	Their poor experience of PE in the lower grades effecting me to create effective inclusive classes					
7	The school environment is not conducive to involve students with disabilities in PE practical classes effectively					
8	Low awareness level of parents and students with non-disabilities discourage students with disabilities to participate in PE practical classes					
9	Lack of relevant curriculum materials of PE for students with disabilities is a barrier for me to create inclusion in PE practical classes					
10	Shortage of PE equipments is hindering me to include students with disabilities in PE practical activities					
11	Lack of interaction of students with disabilities and other students affect their participation in PE practical classes					
12	Psychological problems like inferiority complex are the major factors affecting their participation in PE practical classes.					

PART IV. The following are issues about your **opinion** regarding the inclusive PE practical classes. Please, give your opinion on the space provided.

1. Do you believe that students with disabilities have a right to learn all aspects of PE with their non-disabled peers?

A. Yes B. No C. I can't decide

2. What ever your answer is for the above question, please explain why?

3. In your opinion, do students with disabilities benefited physically, mentally, psychologically and socially form practical aspects of PE?

A. Yes B. No C. Undecided

4. If your answer for the above question is 'No', please indicate why?

o

5. Do you think that creating inclusion in PE practical classes is only the responsibility of teachers?

A. Yes B. No C. I can't decide

6. If your answer for question number 5 is 'No' please mention the major reasons.

7. Do you believe that, inadequate inclusion in PE practical classes will adversely affect the learning condition of SWD in teaching-learning process?

A. Yes B. No C. I can't decide

8. If your answer for the above question is 'Yes', please give your reason

9. What other problems have you faced while you are teaching students with disabilities in your regular PE practical classes?

- What is your suggestion to solve the problems in inclusive PE in order to create effective inclusive settings?

10. What strategies do you suggest to overcome these problems and to create effective inclusive PE settings?

Thank you!

Appendix-III

Interview guide for secondary school principals

- **N.B.** 'PE' stands for physical education
1. Are there students with visual, hearing and orthopedic impairments in your school?
 2. Do you have enough awareness about the inclusive PE practical classes in your school?
 3. Do you believe that PE contributes for students with disabilities in their school life and latter?
 4. Is there necessary support from the school administration or woreda and zone educational officials for the effective involvement of students with disabilities in PE practical classes?
 5. How do you see teachers' attitude towards inclusive PE practical classes?
 6. Do you think that PE teachers have adequate training of inclusive education to address the special needs of students with disabilities in their practical classes?
 7. Do you follow the evaluation mechanisms used by PE teachers and the student's result particularly in the practical session of PE in your school?
 8. Is there professional support from woreda or zone education bureau experts about the inclusive PE practical classes?
 9. Do you think that exclusion of students from PE regular practical classes and other co-curricular activities in the school affect them? How?
 10. How do you see the availability and adequacy of equipments for inclusive PE in your school?
 11. In your opinion, what are the major challenges that hinder the significant inclusive PE practical classes in your school?
 12. What strategies should be used to solve these problems?

Thank you!

Appendix-IV

Interview guide for woreda and zone education bureau experts

N.B. 'PE' stands for Physical Education

1. Do you think that students with disabilities are found in secondary schools of your woreda/zone?
2. Do you have enough information about the existing inclusion of students with disabilities in PE practical classes in secondary schools of your woreda/zone?
3. Do you believe that PE practical activities contribute for students with disabilities?
4. Does your office provide professional support for secondary schools about the inclusive PE practical classes in order to address the special needs of students with disabilities?
5. Do you think that equipments for inclusive PE available and consider the special needs of SWD?
6. How do you suggest the capacity and commitment of teachers to adapt (modify) PE activities for the purpose of inclusion of students with disabilities?
7. Do you follow the implementation of secondary school PE instructional materials? Then, how do you see the involvement of students with disabilities in PE practical classes?
8. In your opinion, what will happen to students with disabilities due to their exclusion from PE practical classes and other co-curricular activities in their school life?
9. In your opinion, what are the major factors that hinder the provision of PE practical activities to students with disabilities in the secondary schools?
10. What strategies should be used to solve the problems in order to address PE practical activities effectively for students with disabilities?

Thank you!

Appendix- V

Interview Guide for Oromia Region Education Bureau Curriculum Experts

• **N.B.** 'PE' stands for Physical Education

1. Are there special need education experts in your office?
2. How is your awareness towards the undergoing inclusive education in general and inclusive in PE practical classes in particular in secondary schools?
3. Is there professional support and encouragement from your office to promote inclusive PE in order to address the special needs of SWD?
4. In your opinion what are the strong and weak points of PE in secondary schools of the region?
5. What do you think are the major factors that hinder the provision of inclusive PE?
6. What strategies to do you suggest to solve the problems encountered in the implementation of inclusive PE?

Thank you!

Interview guide for students with multi-disabilities

- **N.B. “PE”** stands for physical education
- 1. How is your experience concerning PE regular practical classes in your school life?
- 2. Do you really participate in PE regular practical classes currently?
- 3. Are you interested to be involved in PE practical activities with your friends?
- 4. What problems do you face due to your exclusion from PE practical classes in the school?
- 5. How do you see teachers’ commitment to encourage you to be involved in PE practical activities?
- 6. How do you see the adequacy of PE instructional materials and equipments for students with disabilities?
- 7. How is evaluation and your result in PE?
- 8. In your opinion what are the major challenges that protect you to be involved in PE practical activities?
- 9. In your opinion, what strategies are better to create effective inclusive practical classes of PE in the school?

Thank you!

Appendix- VII

Observation Check List

N.B. Excellent = 4

Very good = 3

Good = 2

Poor = 1

Name of the school _____

Region _____ Zone _____ Woreda _____

Subject _____ Grade _____

Number of class observed _____ Date _____

No	Activities	4	3	2	1
1	Willingness of the teacher to encourage and support students with disabilities as individuals				
2	Participation of students with disabilities in PE practical classes				
3	Methodology of the teacher to make easy PE practical activities for students with disabilities				
4	Special help and praise of the teacher for students with disabilities in PE practical classes				
5	Interaction of students with disabilities with their teacher and other students				
6	Suitability of the school environment, instructional materials and individual sport wearing for students with disabilities				

Appendix I

UNIVARSIITII FINFINNEETTI MANA BARUMSAA QU'ANNOO FI QORANNOO DIGRII 2FFAA (GRADUATE STUDIES)

KOOLLEJJII BARNOOTAA

MUUMMEE SIRNA BARNOOTAA FI QU'ANNOO FI QORANNOO GUDDINA OGUMMAA BARSIIISOTAA.

- Kabajamoo Deebii Kennitoota !

Gafileen kun kan qophaa'an Manneen Barnootaa Sad. 2ffaa (Kuttaa 9 -12) Goodina Shawaa Kaabaa keessatti barattooni hubama qaamaa qaban hirmaannaa isaan sochiilee barnoota G .J.Q irratti qabaniifi rakkoolee jiran ilaalchisee odeeffannoo barbaachiisaa ta'e funaanuuf akkasumas yaada furmaataa hirmaannaa barattoota kaan foyeesuu danda'u lafa kaa'uufi . Odeeffannoon gaafilee kana irratti hundaa'uudhaan isin irraa funaanamu kun faayidaa qu'annoo fi qorannoo kanaatiif qofa kan oolu yammuu ta'u bu'aan qo'annoo kanaa amansiisaa akka ta'uu fi yaada furmaataa hojiirra ooluu danda'u teechisuuf gargaara. Deebileen keessan iccitiin isaanii kan eegamee fi qo'annoo kanaan ala dhimma birootiif kan hin oolledha.Kanaafuu odeeffannoo qabatamaa fi barbaachisummaa qabu kan milkaa'ina qo'annoo kanaatiif gumaacha gaarii ta'uu danda'u argachuuf deebii keessan kan ifaafii bilisa ta'e akka naaf laattan kabajaan isin gaafadha.

Galatoomaa !

GAAFILEE BARATTOOTA HUBAMA QAAMAA QABANIIN DEEBIFAMAN.

KUTAA I. Odeeffannoo Waliigalaa.

1. Goodina _____ Aanaa _____
2. Mana Barumsaa _____
3. Saala : Dhiira Dhalaa
4. Umrii: A. 14 -18 B. 19 -23 . 24 fi isaa ol
5. Kutaa _____
6. Gosa hubama qaamaa : -
 - Jaamina Ijaa-----
 - Hir'ina Dhageetii-----
 - Hubama Harkaa , Miilaa,
Lafee duguguuruu fi k.k.f-----

KUTAA II. Gaafileen armaan gaadii carraa hirmaannaa barattoonnii hubama qaamaa qaban sochiilee barnoota G . J . Q irratti qabanii fi rakkolee Hirmaana isaanitif gufuu ta'an kan ilaallatanii dha. Kanaafuu sadarkaa dhimmoota dhiyaatan ittiin deeggartu ykn falmitu sanduuqota gaafilee fulduratti argaman kan filannoo sadarkaa walii galtee ykn falmii keetii ibsan shaman keessaa kan filatte tokko keessatti mallatto “ X “ gochuudhaan ibsi.

- **Yadachiisaa !** G.J.Q. jechuun Guddinaaf Jabeenya Qaamaa jechudha.

S.W : Sirritti Waliigala.

W : Waliigala.

MH : Murteessuu Hin danda'u

WH: Walii Hingaluu.

GWH: Gonkumaa Walii Hingalu

Lakk	Gaafilee	Sadarkaalee Waliigaltee ykn Falmii				
		SW	W	MH	WH	GWH
1	Barattoonni hubama qaamaa qaban kutaalee darban keessatti muuxannoo fi hirmaanaa sochiilee G.J.Q gaarii qabu.					
2	Barattoonii hubama qaamaa qaban keessattuu mana barumsaa sad. 2 ^{ffaa} keessatti hirmaanaa sochiilee G.J.Q. baay'ee gaarii ta'e qabu.					
3	Barattoonni hubama qaamaa qaban akka sochiilee barnoota G.J.Q irratti haalaan hirmaatan kakaasii fi deeggarsi ni godhamaaf.					
4	Barsiisotni sochiilee barnoota G.J.Q fooyyessanii (salphisanii) dhiyeessuudhaan akka fedhiin addaa barattoota hubama qaamaa qabanii guuttamu ni taasisu.					
5	Barattoota hubama qaamaa qaban sochiilee barnoota G.J.Q irratti siaayinaan akka hirmaatan gochuuf barsiisotni fedhii fi kaka'umsa ni agarsiisu.					
6	Barsiisootni Sochiilee barnoota G.J.Q salphaa irra gara cimaatti mijeessanii waan barsiisaniif barattoonni hubama qaamaa qaban rakkoo malee hirmaachuu ykn hojjechuu danda'u .					
7	Walitti dhufeenyii fi walgargaarsi barattoota hubama qaamaa qabanii fi kan hinqabane akka cimu qochuuf barsiistoonni gahee guddaa taphachaa jiru.					
8	Barattoonii hubama qaamaa qaban yeroo barnootni sochiilee G.J.Q kennamu carraa barsiisaa isaanii gaafii gaafachuu fi yaada wal jijjiiruu hin qaban.					
9	Qormaatni /Madaallin Sochiilee barnoota G.J.Q barsiisotaan kennaman kan hubama qaamaa barattootaa giddugala godhatanii fi kan fedhii addaa isaanii irratti xiyyeeffataniidha.					
10	Qabxiin / firiin / barnoota G.J.Q barattoota hubama qaamaa qabanii fi hin qabnee kan walmadaaluu dha.					

11	Barattoonni hubama qaamaa qaban qormaata / Madaalii / Sochiilee barnoota G.J.Q irratti gonkumaa hin hirmaatan.				
12	Kitaabileen barnoota G. J.Q kan Sad. 2ffaa (kutaa 9 -12) qabiyyeewwan barattoota hubama qaamaa qaban gargaaruu fi hirmaachisuuf nama dandeechisan of keessaa qabu.				
13	Barattoota hubama qaamaa qaban sochiilee barnoota G . J .Q haalaan barsiisuuf kan gargaaran meeshaaleen adda addaa mana barumsaa keessatti haala gahaa ta'een argamu.				
14	Qaamni bulchiinsa / hooggansa / mana barumsaa haala hirmaannaa fi qormaata barnoota G . J . Q barattoota hubama qaamaa qabani garatti hordofu.				
15	Ekispartoonni biroo barnoota Aanaa fi Godinaa barsiisota G . J . Q sad. 2 ^{ffaa} tiif haala barnoota G . J . Q hunda hirmaachisuu danda'u ittiin uuman ilaalchisee gargaarsa ogummaa ni kennu.				
➤	KUTAA III. GAAFIILEE ILAALCHAA (OPINION ITEMS)				
16	Barattoota hubama qaamaa qabaniif sochiilee barnoota G . J . Q irratti hirmaachuun baay'ee ulfaataa fi ifachiisaa dha.				
17	Barnootni G . J . Q barattoota hubama qaamaa qabanis ta'ee kan hin qabne wal – qixa fayyada.				
18	Barnootni G . J . Q haala fayyaa barattoota hubama qaamaa qabani ni fooyyessa.				
19	Barattoonni hubama qaamaa qaban sochiilee barnoota G . J . Q keessatti haala garii ta'een kan hirmaatan yoo ta'e dandeettiin ofitti amanummaa isaanii ni dabala.				
20	Barattoonni hubama qaamaa qaban barnootni G . J . Q dagaagina sammuu, qaamaa fi hawaasummaa isaaniitif gumaacha guddaa qabaachuu isaa ilaalchisee beekumsa bu'uuraa ni qabu.				
21	Barattoonni hubama qaamaa qaban barnoota G . J . Q kutaa keessatti malee dirree irratti barachuuf fedhii hin qaban.				
22	Barattooni hubama qaamaa qaban walumaa galatti jibba barnoota G . J . Q tiif qaban irraa kan ka'e dalagaalee sochii qaamaa irratti				

	hirmaachuu hin fedhan.					
23	Barattoonni hubama qaamaa qaban barattoota hubama qaamaa hin qabnee waliin sochiilee barnoota G . J . Q barachuu / hojjechuu hin fedhan.					
24	Barsiisotni G . J . Q fi barattoonni hubama qaamaa hin qabne barattoota hubama qaamaa qabaniif ilaalcha gaarii hin qaban.					
25	Barsiisotni G . J . Q Barattoonni hubama qaamaa qabani fi kan hin qabne barnoota G . J . Q waliin barachuu hin qaban jedhanii yaadu.					
26	Maatiin / warri / barattoota hubama qaama qabani dandeettii ijoolleen isaanii barnoota G . J . Q irratti qaban waan amananiifuu barattoota kanaaf gargaarsa hamilee fi meeshaalee adda addaa haala gaariin taasisu.					
27	Hubamni qaamaa kootii akkan sochiilee barnoota G . J . Q irratti hin hirmaanne gonkumaa nandhorku.					
28	Sababii hubama qaama kootiitin sochiilee barnoota G . J . Q irratti hirmaachuu waanan hin dandeenyeefuu gadaantummaan natti dhagahama.					
29	Barattoota hubama qaamaa qaban sochiilee barnoota G . J . Q irratti akka hin hirmaanne gochuun dandeettii walittidhufeenya gaarii uumuu isaanii ni miidha.					

KUTAA IV Gaafilee armaan gadiitiif yaada kee ibsi.

I. Hirmaannaa barattoonii hubama qaamaa qabaan sochiilee barnoota

G . J . Q irratti qaban fooyyessuu fi cimsuuf tooftaalee (Strategies) ni fayyadu jettee yaaddu ibsi.

APPENDIX I

አዲስ አበባ ዩኒቨርሲቲ

የድህረ ምረቃ ትምህርት ፕሮግራም

በትምህርት ፋኩሊቲ

የካሪኩለምና የመምህራን ሙያ ማሻሻያ ጥናት ትምህርት ክፍል ውድ ተጠያቂዎች!

ይህ መጠይቅ የተዘጋጀው በሰሜን ሸዋ ዞን በሚገኙ 2ኛ ደረጃ (ከ9ኛ - 12ኛ ክፍል) ትምህርት ቤቶች ውስጥ ያሉ የአካል ጉዳተኛ ተማሪዎች በሰውነት ማጎልመሻ ትምህርት እንቅስቃሴዎች ላይ ስላላቸው ተሳትፎ እና ተሳትፎአቸውን የሚገቱ ችግሮችን ለይቶ ለማወቅ እንዲሁም አስፈላጊ የሆኑ የመፍትሔ ሃሳቦችን ለሚመለከታቸው ክፍሎች ለመጠቀም ለሚደረገው ጥናት የሚረዱ መረጃዎችን ለመሰብሰብ ነው ። ይህን መጠይቅ በመጠቀም የሚገኙ መረጃዎች በሙሉ የሚያገለግሉት ለትምህርት ሥራ ብቻ ሲሆን ከተጠያቂዎች የሚገኙ መረጃዎች ከዚህ ጥናት ትክክለኛ እና ወደ ሥራ ሊተረጎም የሚችል ውጤትና ድምዳሜ ለማግኘት ከፍተኛ አስታውጦ አላቸው። ከተጠያቂዎች የሚገኙ መረጃዎች ምስጢር የተጠበቀ እና ከዚህ ጥናት ውጪ ለሌላ ዓላማ በፍጹም አይውልም ። ስለዚህ የዚህ ጥናት ውጤት እውነትና ባለው ነባራዊ ሁኔታ ላይ የተመረከዘ እንዲሆን ተጠያቂዎች ለቀረቡላቸው ጥያቄዎች መልሳቸውን በግልፅ እና በነፃነት ይሰጡኝ ዘንድ በአክብሮት እጠይቃለሁ።

ለትብብርዎ በቅድሚያ አመሰግናለሁ !

በአካል ጉዳተኛ ተማሪዎች የሚሞላ መጠይቅ

ክፍል አንድ :- አጠቃላይ መረጃ

1. አድራሻ :- ዞን ----- ወረዳ -----

2. ት/ቤት -----

3. የታ ወንድ ሴት

4. ዕድሜ ሀ 14 - 18 ለ. 19 - 23 ሐ. 24 እና ከዚያ በላይ

5. ክፍል -----

6. የአካል ጉዳት ዓይነት ዓይን ጆሮ እጅ፣ እግር፣ የጀርባ አጥንት

ክፍል ሁለት :- የሚከተሉት ጥያቄዎች የአካል ጉዳተኛ ተማሪዎች በሰውነት ማጎልመሻ ትምህርት እንቅስቃሴ ክፍለ ጊዜዎች ያላቸውን ተሳትፎ እና ተሳትፎ አቸውን የሚገቱ ችግሮችን ይመለከታሉ። በጥያቄዎቹም አኳያ የመስማማት ወይም ያለመስማማት ደረጃዎችን የሚገልጹ አምስት አማራጮች ተሰጥተዋል። ስለዚህ በአማራጮቹ ግርጌ ከሚገኙት ሳጥኖች በአንዱ ውስጥ የ " X " ምልክት በማስቀመጥ ጥያቄዎቹን ይመልሱ

ማሳሰቢያ ሲ.ማ.ት የሰውነት ማጎልመሻ ትምህርት ማለት ነው።

ቁ	ጥያቄዎች	በጣም እስማማለሁ	እስማማለሁ	እርገጠኛ አይደለሁም	አልስማማም	ፍፁም አልስማማም
	የአካል ጉዳተኛ ተማሪዎች ቀደም ባሉት የክፍል ደረጃዎች ውስጥ በሲ.ማ.ት እንቅስቃሴ ክፍለ ጊዜዎች በጣም ጥሩ የሆነ ተሳትፎ አላቸው					
	የአካል ጉዳተኛ ተማሪዎች በተለይም በ2ኛ ደረጃ ት/ቤት ውስጥ በሲ.ማ.ት እንቅስቃሴ ክፍለ ጊዜዎች አመርቂ የሆነ ተሳትፎ ያደርጋሉ					
	የአካል ጉዳተኛ ተማሪዎች በሲ.ማ.ት እንቅስቃሴ ክፍለ ጊዜዎች ጥሩ ተሳታፊ እንዲሆኑ እገዛና ማበረታታት ይደረግላቸዋል					

ቁ	ጥያቄዎች	በጣም እስማማለሁ	እስማማለሁ	እርገጠኛ አይደለሁም	አልስማማም	ፍፁም አልስማማም
	መምህራን የሰ.ማ.ት እንቅስቃሴዎችን ለአካል ጉዳተኛ ተማሪዎች በሚያመች እና የተማሪዎችን ችግር ባገናዘበ መልኩ አሻሽለው ያቀርባሉ					
	መምህራን የአካል ጉዳተኛ ተማሪዎችን ለመርዳትና ለማበረታታት እንዲሁም ጥሩ የሰ.ማ.ት እንቅስቃሴ ተሳታፊዎች እንዲሆኑ ለማድረግ ከፍተኛ ፍላጎት ያሳያሉ					
	መምህራን የሰ.ማ.ት እንቅስቃሴዎችን ከቀላል ወደ ከባድ በመግለፅ እና በማሳየት የአካል ጉዳተኛ ተማሪዎች ያለችግር እንዲተገብሩ ያደርጋሉ					
	መምህራን በአካል ጉዳተኛ ተማሪዎች እና ጉዳት አልባ በሆኑ ተማሪዎች መካከል የመተሳሰብ እና የመረዳዳት ልምድ እንዲጎለብት ያበረታታሉ					
	የአካል ጉዳተኛ ተማሪዎች በሰ.ማ.ት እንቅስቃሴ ክፍለ ጊዜዎች መምህራቸውን የመጠየቅ እና ሀሳብ የመለዋወጥ እድል እያገኙም					
	የሰ.ማ.ት እንቅስቃሴ ፈተናዎች የአካል ጉዳተኛ ተማሪዎችን ሁኔታ ያገናዘበ ነው					
	የአካል ጉዳተኛ እና ጉዳተኛ ያልሆኑ ተማሪዎች የሰ.ማ.ት የፈተና ውጤት ተመጣጣኝ ነው					
	የአካል ጉዳተኛ ተማሪዎች በሰ.ማ.ት እንቅስቃሴ ፈተናዎች ላይ ጨርሶ አይሳተፉም					
	የ2ኛ ደረጃ የሰ.ማ.ት የተማሪዎች መፅሐፍት የአካል ጉዳተኛ ተማሪዎችን ሲረዱ የሚችሉ መመሪያዎች /መግለጫዎች/ አሉአቸው					
	በትምህርት ቤቱ ውስጥ የተለያዩ የስፖርት ሜዳ እና መገልገያ ቁሳቁሶች በበቂ ሁኔታ ስለሚገኙ ለአካል ጉዳተኛ ተማሪዎች ተሳትፎ አስታዎጾ እያደርጋሉ					
	የትምህርት ቤቱ አስተዳደር የአካል ጉዳተኛ ተማሪዎችን የሰ.ማ.ት ተሳትፎ እና የፈተና አሰጣጥ ዘዴ በሚገባ ይከታተላል					
	የዞንና ወረዳ ትምህርት ቤሮ ኤክስፐርቶች ለሰ.ማ.ት መምህራን የአካል ጉዳተኛ ተማሪዎችን እንዴት ማስተማር እንዳለባቸው የሚረዱ መረጃ ድጋፍ ይሰጣሉ					

ቁ	ጥያቄዎች	በጣም እስማማለሁ	እስማማለሁ	እርገጠኛ አይደለሁም	አልስማማም	ፍፁም አልስማማም
	<p><u>ክፍል ሦስት</u></p> <p>የሚከተሉትን የአመለካከት /Opinion/ ጥያቄዎች ከተሰጡት አማራጮች አንዱን በመምረጥ ይመልሱ</p>					
5	በሰውነት ማሳልመሻ ትምህርት እንቅስቃሴዎች ላይ መሳተፍ ለአካል ጉዳተኛ ተማሪዎች አድካሚ እና አሰልጣኝ ነው					
7	የሰ.ማ.ት እንቅስቃሴ ለአካል ጉዳተኛ እና ጉዳተኛ ላልሆኑ ተማሪዎች እኩል አስታዎፅኦ አለው					
8	የሰ.ማ.ት የአካል ጉዳተኛ ተማሪዎችን የጤንነት ሁኔታ በማሻሻል ረገድ ክፍተኛ አስታዎፅኦ አለው					
9	የሰ.ማ.ት እንቅስቃሴ የአካል ጉዳተኛ ተማሪዎች በራስ የመተማመን መንፈስ እንዲያዳብሩ የረዳል					
10	የአካል ጉዳተኛ ተማሪዎች የሰ.ማ.ት ለአካላዊ ፣ አእምሮአዊ ፣ ማህበራዊ ፣ እና ስነልቦናዊ እድገታቸው ስላለው ክፍተኛ አስታዎፅኦ መሰረታዊ የሆነ እውቀት አላቸው					
11	አካል ጉዳተኛ ተማሪዎች በክፍል ውስጥ በሚሰጥ የሰ.ማ.ት ላይ እንጂ በተግባር በሚሰጥ የሰ.ማ.ት እንቅስቃሴዎች ላይ ለመሳተፍ ፍላጎት የላቸውም					
12	የአካል ጉዳተኛ ተማሪዎች በአጠቃላይ ለሰ.ማ.ት ካላቸው ጥላቻ የተነሳ በተግባር እንቅስቃሴዎች ላይ ለመሳተፍ አይፈልጉም					
13	አካል ጉዳተኛ ያልሆኑ ተማሪዎች በሰ.ማ.ት እንቅስቃሴ ክፍለ ጊዜዎች የአካል ጉዳተኛ ከሆኑ ተማሪዎች ጋር በአንድነት መስራት አይፈልጉም					
14	መምህራንና የአካል ጉዳተኛ ተማሪዎች በሰ.ማ.ት እንቅስቃሴ ክፍለ ጊዜዎች አካል ጉዳተኛ ለሆኑ ተማሪዎች ጥሩ አመለካከት የላቸውም					

ቁ	ጥያቄዎች	በጣም እስማማለሁ	እስማማለሁ	እርገጠኛ አይደለሁም	አልስማማም	ፍፁም አልስማማም
5	የሰ.ማ.ት መምህራን አካል ጉዳተኛ እና ጉዳተኛ ያልሆኑ ተማሪዎች በሰ.ማ.ት እንቅስቃሴ ክፍለ ጊዜዎች በአንድነት መማር እንደሌለባቸው ያስባሉ					
6	የአካል ጉዳተኛ ተማሪዎች ወላጆች በልጆቻቸው ስፖርታዊ እንቅስቃሴ ስለሚተማመኑ አስፈላጊውን የሞራል እና የማቴሪያል እገዛ ያደርጉላቸዋል					
7	የአካል ጉዳተኛ መሆኔ የሰውነት ማጎልመሻ ትምህርት እንቅስቃሴዎችን እንዳልሰራ ፈፅሞ አያግደኝም					
8	በሰ.ማ.ት እንቅስቃሴ ክፍለ ጊዜዎች እንደሌሎች ተማሪዎች/ጓደኞቼ/ ጥሩ ተሳታፊ ባለመሆኔ ክፍተኛ ሥነ-ልቦናዊ ችግር አሳድሮብኛል					
9	በሰ.ማ.ት እንቅስቃሴ ወቅት በመገለሌ የተነሳ ከጓደኞቼ ጋር የመግባባት እና ጥሩ ግንኙነት የመፍጠር ችሎታዬ ቀንሷል					

➤ **ክፍል አራት** :-ለሚከተሉት ጥያቄዎች ያልዎትን አስተያየት በፅሁፍ ይግለፁ

የአካል ጉዳተኛ ተማሪዎች በሰ.ማ.ት እንቅስቃሴ ወቅት ጥሩ ተሳታፊ እንዲሆኑ ያስችላሉ የሚሏቸውን ዜደዎች /Strategies /ይጠቁሙን

አመሰግናለሁ !

Declaration

I, the undersigned, declare that this thesis is my original work and all sources of materials used have been duly acknowledged.

NAME: Solomon H/Mariam

SIGNATURE: _____

DATE: _____

This thesis has been submitted for examination upon my approval as university advisor.

NAME: Ato Abraha Asfaw

SIGNATURE: _____

DATE: _____