CHAPTER I

INTRODUCTION

In today's world, where the number of youth with disabilities is growing, it is important that these individuals are provided with the same quality educational experiences as their nondisabled peers. Physical education services should be no different. Adapted Physical Education provides youth with disabilities a means to master physical education goals. The individualized Physical Education Program allows students to move at their own pace; while in a Physical Education setting that fits their individual needs. By modifying instructions and equipment, students with disabilities are able to achieve success while building strength, endurance, and skill levels that will hopefully keep them physically active for the rest of their lives, in today's world.

Human body is the temple of God. It is a committed responsibility on the part of the society to foster and develop the temple. Enhancing the functional efficiency of the human body to enable every child experience the joy of living an abundant life is important to improve the social fabric. Kindling the light of awareness within the young to give their lives sparkle and joy and the principle and purpose is committed obligations of all personal who handle the growing child. Education is a lifelong process of changes and modification is an individual for better adjustment as a citizen, so that he can live in society. Adapted physical Education offered to students with cross motor delays other disability-related difficulties that make them unable to participate productively in a regular physical education class. Adapted Physical Education class will usually be taught by
someone with a background in physical therapy who can adjust the activities so that they will be appropriate, safe and therapeutic for each individual student.

Adapted physical education is the art and science of developing and implementing a carefully designed physical education instructional program for an individual with a disability based on a comprehensive assessment to give the individual the skills necessary for a lifetime of rich leisure, recreation, and sport experiences to enhance physical fitness and wellness by Auxter 2001. Council on physical education for children of the National Association for Sport and Physical Education and the Adapted Physical Activity Council of the American Association. In other words, inclusion in Physical Education means that all students, including students with disabilities, start in regular physical education. Ultimately, it is the school’s responsibility to justify why a student with disabilities should be removed from regular physical Education. It is possible in some cases that a student with disabilities starts.

In an alternative placement before ever being placed in regular physical Education, However it should be emphasized that such placement policy should be the exception, not the rule. Demonstrating that the student will fail in regular education even with support without first placing the student in regular physical education can be very difficult and has not been supported by recent court decisions. India is a democratic country. Every citizen young and old in the country has a right to live good and healthy life. For this he has to have his healthy food, living environment and education to help him live full life. Education in all its rationality must help him to lead and enjoy culturally. Wholesome life that is socially worthwhile education to be worthwhile, must fulfill the aspiration of the humanity
itself advise conditioned by the ultimate realize of the potentiality of each and every individual. Play is not only the mode of education but also an innate need for the growth and development of the individuals the aids the man to grow physically, physiologically, intellectually and socially. It is the responsibility of all citizens of the country, parents, teachers, neighbors etc., to provide for all children in the country, enjoyable, wholesome play opportunity as a part of educational process. When well organized it certainly contributes to the development of desirable traits of social behavior in the individuals concerned. It is the duty of the teachers, particularly in the primary and elementary schools and especially. The physical education teachers at all levels to provide sports and games for all children in the schools, Adaptive physical education is a branch of physical education designed for the children who are thus hearing impaired it may be physical, mental, emotional or intellectual or all combined to certain extent. In the democratic country like ours even these unfortunate people need physical education and they have equal right for such special provision. They cannot participate in the normal programme, along with normal classmates. This makes them to have self confidence and help to overcome the inferiority complex, for them “Life is not a bed of Roses” and they need sound mind in a sound body.

MEANING OF PHYSICAL EDUCATION

Physical education is “an educational based subject that aims at total or wholesome development of the learner through use of movement and well selected activities. The overall goal of physical education is to influence and educate learners through physical means, which in turn results in outcomes that go beyond the physical fitness” by Kiganjo.
MEANING OF ADAPTED PHYSICAL EDUCATION

Adapted Physical Education is an instructional Program Provided by Teachers certified in Adapted Physical Education. It is a specifically designed physical education program for students with disabilities who are unable to participate and benefit fully in regular physical education. It is individualized to meet the identified motor or physical education needs of students in special education. The student’s program may include consultation, support, modifications or inclusion in regular Physical Education, or self-contained Adapted Physical Education instruction, or a combination of regular and adapted physical education.

Adapted physical educators facilitate the optimal physical and emotional development of children with disabilities and recognize the wide range of motor abilities found in atypical populations. Adapted Physical Education (APE) services accommodate students of all ages and functional abilities via systemically designed instructional programs focused on functional mobility skills, motor and physical fitness, life time leisure and age-appropriate gross motor competencies.

SPECIAL PHYSICAL EDUCATION

It was specially designed physical education is prescribed in a child's individualized, the public agency responsible for the education of that child shall provide the services directly, or make arrangements for it to be provided through other public or private programs, Education in separate facilities. The public agency responsible for the education of a handicapped child who is enrolled in a separate facility shall insure that the child receives appropriate physical education services. Physical education is defined in as follows: The term means the development of Physical and motor fitness, Fundamental motor skills and patterns; and Skills in
aquatics, dance, and individual and group games and sports i.e., including intramural and lifetime sports. The term includes special physical education, adapted physical education, movement education, and motor development.

Differences between the terms "adaptive", "adapted", "special physical education" and "specially designed physical education" Different people use these terms differently. In Florida program arrangements in which some modifications are made to compensate for students' disabilities in order to allow them to participate in the regular basic physical education program are commonly referred to as "adaptive physical education", and program arrangements that are tailored to meet the individual physical-motor needs of students with disabilities are commonly referred to as "specially designed physical education." The term "adapted physical education" is used nationally to refer to both programs of physical education designed for an entire class of students with disabilities and programs designed to meet the special needs of one or more students with disabilities in a regular physical education class.

Terms "adaptive", "adapted", "special", or "specially designed physical education" is defined in federal or state laws and regulations. The term "adaptive physical education" is not referred to in federal laws and regulations and the terms adapted, special and specially designed physical education are mentioned, but not defined. No definitions of these terms are provided by state laws and regulations. In 1947, the American Alliance for Health, Physical Education, Recreation and Dance adopted the following definition of "adapted physical education: "A diversified program of developmental activities, games, sports, rhythms, suited to the interest, capacities and limitations of students with disabilities who may not safely or
successfully engage in unrestricted participation in the vigorous activities of the general physical education program. This definition is still widely accepted by professionals in the field.

Physical education program arrangement options are available for students with Disabilities. A physical education continuum of services designed to meet the needs of students with disabilities as determined through the individual education plan Individualized Education Program development process could include the following options specified in the May 23, 1980, OSE, Office of Special Education Policy Paper on Individualized Education Programs (IEPS) were Regular PE with Non-Handicapped Students. Many learning disabled and speech impaired children participate in the regular PE program with non-handicapped students without special provisions. In addition, some children with other handicapping conditions and without any physical-motor problems is e.g., some educable mentally handicapped, “EMH” children also participate in the regular physical education program.

Some individual children in various disability areas i.e., including those with physical impairments are able to participate in the regular PE program with non handicapped students if special adaptations are made for them. Especially Designed physical education an individual handicapped child will require specially designed PE that is different from that for non handicapped children. It might also differ from the kind of PE provided to other children with the same handicapping condition. A child might participate in a special body conditioning or weight training program, or, depending upon his/her specific needs and abilities, participate in some type of individual skill sport. d. PE in Special Settings. Under certain circumstances, some of the handicapped students within a given disability receive their education in a
special setting is e.g., an ESE centre or a separate wing of a regular school building.

most of the students participate, as a group, in the same basic PE program.

Special physical education requirements for students with severe emotional disturbances (SED); Although Rule 6A-6.03016 (4) (a) and (b) FAC, requires that SED students be served for the "full school week in a special class" and that they be provided "a highly structured academic and affective curriculum, including but not limited to art, music, and recreation services which are specifically designed for severely emotionally disturbed students, it does not address special physical education requirements. It is noteworthy that even though some physical education services could be subsumed under recreation services, they represent a district program entity with different goals and methodology.

Special physical education requirements for children placed in programs for prekindergarten students with disabilities; Federal laws and regulations require instruction in physical education for all students with disabilities and do not specify different requirements for certain age groups.

Physical education, specially designed if necessary, is a required component of a free appropriate public education (FAPE) in the least restrictive environment for students with disabilities who receive special education services.

Professionals and parents who understand and communicate the physical education requirements of the Individuals with Disabilities Education Act (IDEA) can advocate more effectively for children and school-based adapted physical education (APE) programs. This webinar will review IDEA physical education
requirements for students with disabilities, discuss some relevant legal decisions and federal policy clarifications related to IDEA and physical education.

**IMPORTANCE OF ADAPTED PHYSICAL EDUCATION**

Adapted Physical education is an essential part of the basic educational program and contributes to the development of the total individual. Every student with a disability is entitled to participate in a program activity, specially designed if necessary. Adapted physical educators facilitate the optimal physical and emotional development of children with disabilities and recognize the wide range of motor abilities found in atypical populations. Adapted Physical Education (APE) services accommodate students of all ages and functional abilities via systemically designed instructional programs focused on functional mobility skills, motor and physical fitness, life time leisure and age-appropriate gross motor competencies.

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instructional programs focused on functional mobility skills, motor and physical fitness, life time leisure and age-appropriate gross motor competencies. Organizations across the United States are heavily pushing for more physical activity in physical education (PE) classes, after-school programs and community-based programs for children. This will also mean a greater push for the availability of adapted physical education (APE) services, which are so important for youth with disabilities. The President's Council on Fitness, Sports and Nutrition reported that physical activity is 4.5 times lower for children and youth with disabilities compared to their peers without disabilities. The purpose of PE is for students to learn, practice, and master skills that will allow them to be physically active for a lifetime. While PE has the same purpose, APE curriculums allow for students to work on a more individualized curriculum that focuses on each student's strengths, needs, and interests.

As a trained adapted physical educator, I have noticed that students experience a higher level of success while in APE, as well as in general PE classes with one-on-one assistance. Students who were enrolled in my self-contained APE classes really benefited from the smaller class size that offered personal adaptations and a more defined class structure. Most importantly, APE services provide students with ample opportunities to increase their confidence in a physical activity setting and to improve their overall self-esteem.

The Individuals with Disabilities Education Act ("IDEA") is a Federal law designed to ensure that all children with disabilities, from birth to 21 years of age, have free appropriate public education available to them. This includes early intervention, special education, and related services designed to meet their
individual needs. IDEA requires that PE services, specially designed if necessary, must be made available to every child with a disability receiving free public education. In accordance with the law, the term "physical education" includes special education, APE, movement education, and motor development. IDEA states that if specially designed physical education is prescribed in a child's individual education program, that the public agency must be responsible for the child's education by providing the necessary services directly or making arrangements for services to be provided through other public or private programs free of charge to the child and parents.

Students who may not qualify to receive special education services, but still require disability-appropriate educational services may still be eligible. Section 504 of the Rehabilitation Act of 1973 requires that the public agency responsible for the child's education provide students with disabilities-appropriate educational services designed to meet the individual's needs. Under these requirements, a student with a Section 504 plan can quality for APE services as well, in importance of Adapted Physical Education.

**ADAPTED PHYSICAL EDUCATION EMPHASIZES**

Students are also taught to apply motor and recreational skills to various home, community settings, to facilitate socialization, self and peer group acceptance, and normalization in the community along with the following skills.

- Physical and motor fitness
- Motor skills and patterns
- Body mechanics
- Individual games and sports for lifetime enjoyment and fitness
Leisure/recreation activities
Healthy Lifestyles

CHARACTERISTICS OF ADAPTED PHYSICAL EDUCATION

Developmental delays in chronologically age-appropriate motor skills; Difficulty with equilibrium responses and balance activities; Lack of strength, endurance, flexibility; Poor body or spatial awareness; Chronic medical conditions; Lack of appropriate play and socialization behavior; Poor auditory processing. (Adapted Physical Education, 2012).

ADAPTED PHYSICAL EDUCATION RELATED TO PHYSICAL EDUCATION

Adapted Physical Education is physical education which has been adapted or modified, so that it is as appropriate for the person with a disability as it is for a person without a disability. Federal law mandates that physical education be provided to students with disabilities and defines Physical Education as the development of Physical and motor skills, Fundamental motor skills and patterns (throwing, catching, walking, running, etc) Skills in aquatics, dance, and individual and group games and sports (including intramural and lifetime sports).

The Individuals with Disabilities Education Act (1990) uses the term disability as a diagnostic category that qualifies students for special services. These categories include: Autism, Deaf – Blindness, Deafness, Hearing impairment, Mental retardation, Multiple disabilities, Orthopedic impairment, Other health impairment, Serious emotional disturbance, Specific learning disability, Speech or language, impairment, Traumatic brain injury and Visual impairment including blindness.
ROLL OF ADAPTED PHYSICAL EDUCATION TEACHER

Adapted Physical Education teacher is the person responsible for developing an appropriate physical education plan for individuals with disabilities. The Adapted Physical Education teacher is a physical educator with highly specialized training in the assessment and evaluation of motor competency, physical fitness, play and leisure, recreation and sport skills. The Adapted Physical Education teacher has the skills necessary to develop an individualized physical education program and to implement the program. The Adapted Physical Education teacher is a direct service provider, not a related service provider, because special physical education is a federally mandated component of special education services. The services provided by an APE teacher include (adapted from Sherrill, 1998): Planning services, Assessment of Individuals, Ecosystems, Prescription/Placement: The IEP, Teaching/Counseling/Coaching, Evaluation of Services, Coordination of Resources and Consulting and Advocacy.

The APE teacher is a direct service provider, not a related service provider, because physical education for children with disabilities is a federally mandated component of special education services [U.S.C.A. 1402 (25)]. This means that physical education needs to be provided to the student with a disability as part of the special education services that child and family receive. This is contrasted with physical therapy and occupational therapy, which are related services. These therapies are provided to the child with disabilities only if he/she needs them to benefit from instruction, (Meaning of Adapted Physical Education, 2012).
ROLL OF ADAPTIVE PHYSICAL EDUCATION COACHES

Special Olympics is an extracurricular activity and since coaches' duties are not within their instructional assignments, they do not need to meet the requirements for the Endorsement in Adaptive Physical Education. Training resources are available to prepare teachers for meeting the requirements of the Endorsement in Adaptive Physical Education. Through the cooperation of universities, Teacher Education Centers (TECs), local education agencies, and the Florida Diagnostic and Learning Resources System Centers (FDLRS), various preserve and in service training programs are currently available to prepare teachers to meet the requirements for the Endorsement in Adaptive Physical Education. For additional Information on training resources by Manny Harageones, Program Specialist, Physical Education/Driver Education, Bureau of Elementary and Secondary Education. In addition, the Bureau of Education for Exceptional Students has been sponsoring adaptive physical education training sessions held in conjunction with the Florida Association for Health, Physical Education, Recreation, Dance, and Driver Education annual summer workshops since 1989.

NATIONAL STANDARD FOR ADAPTED PHYSICAL EDUCATION

Federal law mandates free and appropriate public education services for all children with disabilities. Subsequently, the law mandated that these services be provided by “qualified professionals”. The definition of special education within this law included the discipline of physical education. Interestingly, physical education for children with disabilities was the only specific curricular area identified. Although physical education for children with disabilities was specifically addressed in the Federal legislation, the State Educational Agencies were given the responsibility to interpret the term “qualified professionals” within their respective
states in order to develop or amend existing certification and/or licensing qualifications. Unlike other special education areas in teachers of individuals with mental retardation, learning disabilities, etc., most states unfortunately did not have defined certifications for teachers of adapted physical education. While approximately 14 states have subsequently defined an endorsement or certification in adapted physical education, 36 states and eight territories have not defined the qualifications teachers need to provide adapted physical education services to their students with disabilities.

In the spring of 1991, the National Consortium for Physical Education and Recreation for Individuals with Disabilities (NCPERID) in conjunction with the National Association of State Directors of Special Education (NASDSE) and Special Olympics International conducted an "Action Seminar" on adapted physical education for state directors of special education and leaders of advocacy groups for individuals with disabilities. This conference had two goals: (a) identify the barriers that were preventing full provision of appropriate physical education services to individuals with disabilities; and (b) establish an action agenda for addressing and resolving these problems. Although numerous barriers were identified by the group, the most significant for state education leaders were that they did not know what adapted physical education was, how individuals with disabilities could benefit from appropriate physical education programming or what competencies teachers needed to deliver appropriate physical education services to students with disabilities. In response to this need, it was recommended that the NCPERID develop professional standards and a means for evaluating these standards.
Adapted Physical Education is a field which draws upon more than a hundred years of history, having its roots in the 19th century efforts at medically directed remediation of disabilities. Since then, a whole body of scientific research has expanded our understanding of the field to the point where it now constitutes a knowledge base appropriate for a specialist. The field continues to grow exponentially and keeping up with it is essential if students who require APE are to receive the full benefit of the instruction to which they are entitled. The only realistic means available to school districts and parents for ensuring that those students are receiving that benefit is to rely on a National level certifying authority to maintain an updated Standard and to regularly certify that its members are current in their understanding and practice of those skills and knowledge by National Standard for Adapted Physical Education, 2012.

OBJECTIVES OF ADAPTED PHYSICAL EDUCATION

NATIONAL STANDARDS

To define and maintain a body of knowledge based upon what practicing Adapted Physical Education teachers are actually doing in their jobs.

To develop and maintain the national certifying exam that denotes the skills and knowledge APE teachers need to practice Adapted Physical Education.

The determination of current roles, responsibilities and perceived needs of practicing adapted physical educators required: a) the creation of an appropriate tool to collect this information; and b) the identification of a representative sample of practitioners to supply the needed information. The first step in the job analysis was to review previous needs assessment instruments that had been used in the profession and to solicit input from the Executive and Steering Committees. With
this information, the project staff developed and field tested a survey. The second task was to identify a representative sample of practitioners to receive the survey. Since it was essential that the job analysis be completed by teachers who were actually practicing adapted physical educators, it was ultimately decided to identify exemplary K-12 adapted physical educators in each state and then to use this group as the sample. A stratified sampling plan was developed. This process resulted in a total sample size of 585 with each state contributing a weighted number of subjects based upon the population of the state. Two states were unable to produce the requested number resulting in the final sample size of 575. These results were reviewed by the Steering Committee and divided into 15 broad areas. The members of the Steering Committee were then assigned 2-3 of these areas for which they were responsible for delineating the content with their individual Standards Committees. The 15 areas of specialized knowledge were Human Development, Motor Behavior, Exercise Science, Measurement and Evaluation, History and Philosophy, Unique Attributes of Learners, Curriculum Theory & Development, Assessment, Instructional Design & Planning, Teaching, Consultation & Staff Development, Student and Program Evaluation, Continuing Education, Ethics and Communication.

**ADAPTED PHYSICAL EDUCATION NATIONAL STANDARDS GUIDELINES**

**Human Development**

The foundation of proposed goals and activities for individuals with disabilities is grounded in a basic understanding of human development and its applications to those with various needs. For the adapted physical education teacher, this implies familiarity with theories and practices related to human development. The emphasis within this standard focuses on knowledge and skills helpful in providing quality APE programs.
Motor Behavior

Teaching individuals with disabilities requires some knowledge of how individuals develop. In the case of APE teachers, it means having knowledge of typical physical and motor development as well as understanding the influence of developmental delays on these processes. It also means understanding how individuals learn motor skills and apply principles of motor learning during the planning and teaching of physical education to students with disabilities.

Exercise Science

As an adapted physical educator, you must understand that modifications to the scientific principles of exercise and the application of these principles may be needed when teaching individuals with disabilities to ensure that all children with disabilities enjoy similar benefits of exercise. While there is a wealth of information in the foundational sciences, the focus of this standard will be on the principles that address the physiological and biomechanical applications encountered when working with diverse populations.

Measurement and Evaluation

This standard is one of the foundation standards underscoring the background an adapted physical educator should have in order to comply with the mandates of legislation and meet the needs of students. Understanding the measurement of motor performance, to a large extent, is based on a good grasp of motor development and the acquisition of motor skills covered in other standards.

History and Philosophy

This standard traces facts regarding legal and philosophical factors involved in current day practices in adapted physical education. This information is important
to understand the changing contribution that physical education can make in their lives. Major components of each law that related to education and physical activity are emphasized. The review of history and philosophy related to special and general education is also covered in this area.

**Unique Attributes of Learners**

Standard 6 refers to information based on the disability areas identified in the Individuals with Disabilities Education Act (IDEA) found within school age population. Material is categorically organized in order to present the information in a systematic matter. This organization is not intended to advocate a categorical approach to teaching children with disabilities. All children should be treated as individuals and assessed to determine what they needs have.

**Curriculum Theory and Development**

As you are planning to teach physical education to students with disabilities, you should recognize that certain Curriculum Theory and Development concepts, such as selecting goals based on relevant and appropriate assessments, must be understood by APE teachers. As you have no doubt discovered Curriculum Theory and Development is more than writing unit and lesson plans. Nowhere does this come into play more than when you are planning a program for a student with disability.

**Assessment**

This standard addresses the process of assessment, one that is commonly taught as part of the basic measurement and evaluation course in a physical education degree curriculum. Assessment goes beyond data gathering to include
measurements for the purpose of making decisions about special services and program components for individuals with disabilities.

**Instructional Design and Planning**

Instructional design and planning must be developed before an APE teacher can provide services to meet legal mandates, educational goals and most importantly the unique needs of individuals with disabilities. Many of the principles addressed earlier in human development, motor behavior, exercise science and curriculum theory and development are applied to this standard in order to successfully design and plan programs of physical education.

**Teaching**

A major part of any APE position is teaching. In this standard many of the principles addressed earlier in such standard areas as human development, motor behavior, and exercise science, are applied to this standard in order to effectively provide quality physical education to individuals with disabilities.

**Consultation and Staff Development**

As more students with disabilities are included in the general education program, teachers will provide more consultation and staff development activities for colleagues. This will require sensitivity and excellent communication skills. The dynamics of interdisciplinary cooperation in the consultation process requires knowledge of several consultative models. This standard identifies key competencies an adapted physical educator should know related to consultation and staff development.
Student and Program Evaluation

Program evaluation is a process of which student assessment is only a part. It involves evaluation of the entire range of educational services. Few physical educators are formally trained for program evaluation, as national standards for programs have only recently become available. Therefore, any program evaluation that has been conducted is typically specific to the school or district, or limited to a small range of parameters such as number of students scoring at a certain level of a physical fitness test. Adapted physical education programs or outcomes for students with disabilities are almost never considered in this process.

Continuing Education

The goal of this standard is to focus on APE teachers remaining current in their field. A variety of opportunities for professional development are available. Course work at a local college or university is just one avenue. APE teachers can take advantage of workshops, seminars and presentations at conferences, conventions or in service training. Distance learning opportunities are also becoming abundant.

Ethics

A fundamental premise of the Adapted Physical Education National Standards Project is that those who seek and meet the standards to be certified as adapted physical educators will strive at all times to adhere to the highest of ethical standards in providing programs and services for children and youth with disabilities. This standard has been developed to ensure that its members not only understand the importance of sound ethical practices, but also adhere to and advance such practices.
Communication

In recent years, the role of the professional in APE has evolved from being a direct service provider to include communicating with families and other professionals in order to enhance program instruction for individuals with disabilities. This standard includes information regarding the APE teacher effectively communicating with families and other professionals using a team approach in order to enhance service delivery to individuals with disabilities.

ADAPTED PHYSICAL EDUCATION PROGRAM

The Adapted Physical Education (APE) program is an academic discipline with a multidisciplinary knowledge base. The program is further enhanced by a variety of practicum experiences available through community agencies, and school settings. The primary purpose of APE is to ameliorate problems in the psychomotor domain for students with disabilities who may not safely or successfully engage in unrestricted participation of the general physical education program. However, the role of the APE specialist is dynamic and multidimensional, utilizing a comprehensive service delivery system to emphasize a healthy active lifestyle across the lifespan for individuals with disabilities.

Adapted Physical Education Program of Brevard County will deliver physical fitness and activities that will increase or maintain endurance, flexibility and strength. e.g. power walking, aerobics, exercises, weight training, etc. Promote the development of physical skills for the use of playground equipment, e.g. swinging, climbing and hanging, hopscotch, basketball etc. Promote the development of the physical skills to acquire carry-over leisure or recreational
activities that can be used with the family and in the community, e.g. swimming, bowling, dance, bicycling, miniature golf, etc.

Enhance the physical therapist’s goals, e.g., balance, walking, range of motion exercises, aquatics, Mobility Opportunities via Education goals, etc. Promote the development of the skills to successfully participate in regular physical education for inclusion, softball, volleyball, basketball, etc. Promote in the development of the skills needed to participate in Special Olympics, e.g. soccer, roller-skating, track and field events, etc. Promote the acquisition of the skills necessary for fair play, sportsmanship, understanding and following the rules, and respecting the rights of others. Consult with regular physical education teachers to facilitate the inclusion of students with disabilities in regular physical education classes.

HISTORY OF ADAPTIVE SPORTS

More than 55 million Americans have disabilities, and over the past two centuries, adaptive sports have grown dramatically, as more leagues, facilities and programs have cropped up with each passing year. Although before 1840 there were no organized adaptive sports, today wheelchair basketball players attend Division I schools on scholarship and there’s no telling what progress these incredible athletes will make in the years to come. The following timeline chronicles some of the most important milestones in adaptive athletes’ journey of advancement.

1840: Perkins School for Pupils with Visual Disabilities in Boston offered the first physical education program for students with visual impairments.

1870: Ohio’s School for the Deaf was the first school for the deaf to offer baseball to students.
1885: Football for deaf athletes was introduced in Illinois.

1888: Sports clubs for the deaf were created.

1906: Basketball was introduced at the Wisconsin School for the Deaf.

1907: The Overbrook and Baltimore Schools for the Blind participated in the first telegraphic track and field meet for the visually impaired.

1922: CISS, the International Committee of Sports for the Deaf, was founded.

1924: Nine countries participated in the first International Silent Games in Paris, France.

1945: The American Athletic Association for the Deaf is now called the USA Deaf Sports Association, was founded. July 28, 1948: The inaugural Stoke Mandeville Wheelchair Games was held in Buckinghamshire, England. Although the Paralympics evolved from this event, it is still held annually and is now called the World Wheelchair Games.

1949: The University of Illinois hosted the first national wheelchair basketball tournament.

1956: The National Wheelchair Athletic Association was founded. It is now Wheelchair Sports USA.

1960: The 9th Annual Stokes Mandeville Wheelchair Games was held six days after the close of the XVII Summer Olympics in Rome. This marked the first time games for athletes with disabilities were contested in the same year and city as the Summer Olympics.

1964: The International Sport Organization was founded.

1965: The International Summer Games for Athletes with Hearing Disabilities took place in Washington, DC.
1967: The National Handicapped Sports Association was founded.

1968: The Kennedy Foundation established the Special Olympics international games.

1976: US Association of Blind Athletes was founded.

1978: The Amateur Sports Act mandated the US Olympic Committee to coordinate national management and oversight of amateur sports, including competitions for adaptive athletes. The USOC created the Committee on Sports for the Disabled (COSD) to coordinate the development of sports for athletes with disabilities and the Paralympics team.

1978: The US Cerebral Palsy Athletic Association was founded.

1982: The International Coordinating Committee for Sports for the Disabled in the World (ICC) was founded.

1984: The International Olympic Committee recognized the term “Paralympics” and retroactively assigns the name to the Stoke Mandeville Games beginning in 1960.

1986: Dwarf Athletic Association of America was founded.

1986: The US Les Autres Association was founded.

1989: The International Paralympics Committee was founded.

1990: The Americans with Disabilities Act (ADA) prohibits discrimination based on disability.

1990: The Individuals with Disabilities Education Act became federal legislation.

1997: The Individuals with Disabilities Education Act (IDEA) mandates special education, including physical education, be available to children with disabilities and that physical education programs are tailored to the individual needs
of each student, if necessary. Children with disabilities are guaranteed an equal opportunity to participate in athletics.

1998: As a result of the Amateur Sports Act, the US Olympic Committee created the US Paralympics Corporation (USPC) to coordinate the management and oversight of the US Paralympics movement. The USPC continues the development of adaptive sports.

July 26, 1999: The Invacare World Team Cup wheelchair tennis tournament was held at the USTA National Tennis Center in New York. September 30, 2000: Maria Runyan, despite being legally blind, finished eighth in the 1,500 meters at the Summer Olympics in Sydney. It was the best finish ever by an American woman in that event.

January 13, 2001: The first annual Mayor’s Cup Wheelchair Basketball Tournament was held in New York City. May 25, 2001: Erik Weihenmayer became the first legally blind person to reach the summit of Mount Everest.

June 19, 2001: IOC and IPC sign an agreement on the organization of the Paralympics Games, reaffirming that the Paralympics Games, which are the world games for athletes with disabilities, always take place shortly after the Olympic Games, using the same sporting venue and facilities.

June 29, 2003: The first annual Hope & Possibility 5-Mile Run/Walk took place in New York City.

September 18, 2003: Neil Parry, whose lower right leg was amputated, played on the punt return unit for the San Jose State football team against Nevada.

September 26–27, 2003: “Integration Through Sport” was the motto of the first International Paralympics Day 2003, which took place in Bonn, Germany.
March 9, 2006: Before the Paralympics Winter Games in Torino, Italy, Nordic skier Jouko Grip (Finland), alpine skier Annemie Schneider (Germany) and Nordic skiing and athletics coach Ulla Renvall (Sweden) were the first inductees into the Paralympics Hall of Fame.

March 15, 2006: Canadian Chantal Petitclerc carried her country’s flag in the opening ceremony for the Commonwealth Games which integrate wheelchair events into non-disabled competition in Melbourne, Australia. It was the first time an athlete with a disability had that honor in an integrated competition.

July 29, 2006: The O&P Extremity Games, an extreme-sports competition for people with limb loss or difference, premiered in Florida.


Adapted Physical Education is physical education which has been adapted or modified, so that it is as appropriate for the person with a disability as it is for a person without a disability. Federal law mandates that physical education be provided to students with disabilities and defines Physical Education as the development of Physical and motor skills Fundamental motor skills and patterns throwing, catching, walking, running, etc, Skills in aquatics, dance, and individual and group games and sports including intramural and lifetime sports.

The Individuals with Disabilities Education Act (1990) uses the term disability as a diagnostic category that qualifies students for special services. These categories include: Autism, Deaf – Blindness, Deafness, Hearing impairment, Mental, retardation, Multiple disabilities, Orthopedic impairment, Other health
impairment, Serious emotional disturbance, Specific learning disability, Speech or language impairment, Traumatic brain injury and Visual impairment including blindness.

Adapted Physical Education (APE) may be offered to students with gross motor delays or other disability-related difficulties that make them unable to participate productively in a regular physical education class. An Adapted Physical Education class will usually be taught by someone with a background in physical therapy who can adjust the activities so that they will be appropriate, safe, and therapeutic for each individual student. The class may take place in a gym where regular education students are also having classes, and the teacher may facilitate appropriate interaction between the classes. In order to get APE for your child, request that it be put in his or her IEP, and be prepared to justify the need for adaptation. Adapted Physical Education is physical education, 2012.

Adapted physical education (APE) is physical education that is individualized and specially designed to address the needs of students with disabilities who require adaptations or modifications to be physically active, participate safely, and make progress toward Pennsylvania’s Academic Standards for Health, Safety, and Physical Education. The need for APE is based on student assessment.

It is important to know that adapted physical education follows the same principle of least restrictive environment (LRE) as all other special education services. This means that the Individualized Education Program (IEP) team should consider the full array of delivery options, beginning with participation in the general physical education class, Adapted physical education, 2012.
Adapted Physical Education (APE) program is an academic discipline with a multidisciplinary knowledge base. The program is further enhanced by a variety of practicum experiences available through community agencies, and school settings. The primary purpose of APE is to ameliorate problems in the psychomotor domain for students with disabilities who may not safely or successfully engage in unrestricted participation of the general physical education program. However, the role of the APE specialist is dynamic and multidimensional, utilizing a comprehensive service delivery system to emphasize a healthy active lifestyle across the lifespan for individuals with disabilities, Adapted Physical Education program, 2012.

Adapted Physical Education Program is the philosophy of the academic and clinical faculty that an entry-level APE program in adapted physical education must prepare a graduate to enter the profession as an educator who can provide comprehensive and contemporary Adapted Physical Education services in a safe, effective, ethical and legal manner to individuals of all ages and abilities. The goals of these services are to develop, restore or maintain a person's maximum physical function.

To competently provide Adapted Physical Education services, the graduate must be able to appropriately apply knowledge and skills of physical performance and behavioural assessment that is within the scope of APE environment and be prepared to recommend placement in the least restrictive environment (LRE). In addition, one should be a consumer of educational/legal literature and an active participant in professional development to provide the most current and effective adapted physical education services. Finally the graduate must be able to
communicate and interact effectively and appropriately in verbal, nonverbal or written form and in a socially responsible manner with students, families, caregivers, related service providers, Pre KG - 12 educators and general community.

The faculty believes that the foundation of the entry-level multidisciplinary professional curriculum and the preparation of graduates is an ever changing interactive teaching and learning process in which both students and faculty are actively involved together. Decision making, critical thinking and problem solving are integrated with the acquisition and application of knowledge, and skills by means of sequenced practicum experiences in the Pre KG - 12 education and general community.

The faculty blends broad concepts and theory with specific knowledge and facts in the curriculum to provide correlated, coordinated, and progressively sequenced didactic and practicum experiences for students. The importance of effective communication, professional collaboration, and student education in the provision of comprehensive and quality psychomotor programming is also a basic element of the curricular philosophy.

The faculty also promotes transition from Pre KG - 12 educations to participation in appropriate community leisure activity. The faculty seeks to provide an atmosphere and environment that encourages and assists students to maximally develop their personal and professional potential while respecting his/her student's psychological rights. Students have opportunities to identify and fulfil personal education needs and goals. Service to the community, to the university and to the profession, as well as recreational and employment activities, are means by which students may participate in non-curricular activities. Faculty members are available
and prepared to provide advice, counsel, and guidance related to various academic, professional, personal or employment matters identified by students or faculty.

The content of the professional curriculum is determined in response to the Adapted Physical Education National Standards (APENS) and emerging educational trends. The curriculum design and content are periodically reviewed and evaluated by academic and clinical faculty, students, practitioners and other interested persons from the university and community. Curriculum development is directly related to this review process and procedures that are within the control of the College of Education and Human Services (CEHS) Department of Health, Physical Education and Recreation (HPR) and the Adapted Physical Education Program.

In summary, this curriculum is designed to prepare graduates to be knowledgeable and skilled, to function as an entry-level adapted physical educator; to perform, as members of a multifactor evaluation (MFE) team; to improve the general health and independence of individuals with disabilities and to become lifelong learners and the future leaders of the adapted physical education profession, (Adapted Physical Education Program is the philosophy, 2012).

HEARING IMPAIRED

"Hearing Impaired" is a technically accurate description of someone who is hard of hearing or who has no hearing. However, many Deaf, hard of hearing and late deafened people prefer not to be called impaired. They don't want to be primarily defined by their lack of or poor hearing.

Hearing Impairment is the inability of an individual to hear sounds adequately. This may be due to improper development, damage or disease to any
part of the hearing mechanism. Hearing is a prerequisite for the development of normal speech and language. A child learns to speak by hearing the speech of others in the family and surroundings. Deafness is an invisible impairment. Deafness at birth or in early childhood has disastrous effects on the child's overall development. These effects vary depending upon the age of onset, nature and degree of hearing impairment. The term "Hearing Impaired" is a technically accurate description of someone who is hard of hearing or who has no hearing. However, many Deaf, hard of hearing and late deafened people prefer not to be called impaired. They don't want to be primarily defined by their lack of poor hearing. While it's true that their hearing is not perfect, that doesn't make them impaired as people. Most would prefer to be called Deaf, Hard of Hearing or deaf when the need arises to refer to their hearing status, but not as a primary way to identify them as people where their hearing status is not significant.

A hearing impaired is inability to receive sounds through the ear. A mild loss of hearing is being unable to hear low or distant sounds. This type of hearing impairment may require the use of a hearing aid, which can amplify sounds. A severe hearing loss is marked by a deficit of not being able to distinguish sounds.

**TYPES OF HEARING LOSS**

1. Conductive hearing loss
2. Sensory neural hearing loss
3. Mixed hearing loss
4. Central auditory processing disorders
EARLY INTERVENTION ON HEARING IMPAIRED

Term Hearing Impairment encompasses a continuum of hearing loss from slight to profound. “The Hearing Impaired Manual: Recommended Procedures and Practices” explains the term hearing impairment, “The child’s residual hearing is not sufficient to enable him or her to understand the spoken word and develop language, thus causing extreme deprivation in learning and communication. Or the child exhibits a hearing loss which prevents full awareness of environmental sounds and spoken language, limiting normal language acquisition and learning achievement”. Once a hearing loss has been confirmed by medical experts parents will then be able to choose appropriate assistive technology to facilitate their child’s hearing loss. Furthermore, parents will then be able to help their child develop the necessary skills needed to acquire speech and language skills and communicate effectively. Early detection of a hearing loss is imperative so invention and treatment can be established immediately. Untreated hearing loss will inevitably cause a child to be severely delayed with thinking skills and speech and language production. When a child is unable to clearly hear phonetic distinctions during the first year of life, the child is at substantial risk for language learning problems. Consequently, the child will suffer delays or failure within the educational environment and amongst peers. Parents of a child with hearing impairment must be well-informed about their child’s hearing disability. Obtaining treatment and diagnosis of a child’s hearing loss as early as possible is imperative so intervention and a individualized management plan can be established. Deaf people are capable of playing all sports that are open to people with normal hearing, though if the labyrinth is affected or acute deafness develops a deaf person may suffer from giddiness and disturbance of posture. Deaf people may be prevented from participating in sports that need good communication.
unless suitable arrangements are made. One must understand how the ear works in order to understand the type of loss their child has. To explain, “Sound travels through the air in the form of waves of varying frequency. The frequencies of these waves determine the pitches of the sound that is heard. Sound waves are channeled into the external ear canal where they are transmitted to the middle ear which consists of the eardrum and three small bones in the ear cavity. This part of the ear serves as an amplification system. The middle ear compensates for the loss of the intensity of sound as it travels from the air medium of the middle ear to a fluid medium within the inner ear known as the cochlea. Sound travels as waves of fluid to a specific area depending on the frequency of the sound in the cochlea. The fluid movement then causes the tutorial membrane to vibrate against the hair cells which then stimulates the auditory nerve. The auditory nerve is responsible for transmitting the sound stimuli to the auditory center in the brain. The components that make up the sound and speech that are heard are coordinated and sent to higher centers of the brain for interpretation”.

**CONDUCTIVE HEARING LOSS**

Conductive hearing loss is affecting the conduction pathways for sound to reach the inner ear. Conductive hearing losses usually affect all frequencies of hearing evenly and do not result in severe losses. Conductive hearing loss results from defects in the outer or middle ear. The sound is not conducted efficiently to the inner ear. All sounds heard thus become weak and/or muffled. Usually such individuals speak softly irrespective of the surrounding environmental noise. Conditions that cause conductive hearing loss are: Wax in the ear canal, Diseases of the outer and middle ear associated with symptoms like ear ache and ear discharge, Congenital defects in the outer or middle ear defect and damage to the outer or
middle ear, Upper respiratory tract infections, Neglect of care of ears and oral cavity mouth caused by diseases or obstructions in the outer or middle ear that usually affect all frequencies of hearing. A hearing aid generally helps a person with a conductive hearing loss. This disorder is caused by a physical obstruction to the condition of the sound weaves to the inner ear, such as impacted wax or a middle ear infection. Although the nature of the obstruction may be severe and the hearing seriously impaired, deafness is never total. Impact wax can be readily removed by a physician, and infection can be treated medically with relatively good chances for arresting or improving it, particularly in its early stages. A hearing aid is very useful in improving a hearing loss due to conduction difficulties. Two causes of conductive hearing loss that are of particular interest to the physical educator include external obits and obits media, there is an inflammation of the auditory canal due to infection. Although a hearing loss does not occur with this condition unless there are severe swelling, students with external obits should not swim until the infection subsides. Obits media, infection of the middle ear, accounts for more conductive hearing losses than any other condition. Although this is a common disorder with young children, without proper medical treatment, obits media can damage the ossicles, preventing the normal transmission of sound. Some young children have artificial tubes inserted into their ears. This is done to alleviate blockage of the Eustachian tube, thereby reducing the unequal pressure on the two sides of the tympanic membrane. Insertion of the tubes permits the middle ear to heal. Swimming is usually contraindicated during the period of time the tubes are worn.

**SENSOR NEURAL HEARING LOSS**

Sensor neural hearing loss is from damage to the delicate sensory hair cells of the inner ear or the nerves which supply it. These hearing losses can range from
mild to profound and they often affect the person's ability to hear certain frequencies more than others. Sensor neural hearing loss is caused due to damage or disease of the inner ear or auditory nerve. It could also result as an after effect of infectious diseases like measles, mumps, meningitis and T.B. Some conditions that may cause congenital sensor neural hearing loss are: Hereditary childhood deafness, Rh incompatibility, Premature birth before due time, Birth Asphyxia is lack of oxygen supply to the new born due to inability to breathe normally resulting in blueness of baby due to various reasons. Viral infections in pregnancy, Exposure to X–rays in the first trimester of pregnancy taking X–ray within the first three months, Harmful drugs of mycin variety e.g. streptomycin, Acoustic neuronal i.e., Tumor of the auditory nerve. Sensor neural: the result from damage to the inner ear. This loss can range from mild to profound and can have an impact on certain frequencies.

Sensor neural loss is usually a more serious condition and less likely to be improved by medical treatment. It is cause by damage to the cells or nerve fibers that receive and transmit the sound stimuli. The loss of hearing may range from mild to total disability. Some degree of Sensor neural deafness is common among the aging. A certain amount of high - tone nerve deafness appears to be part of the natural process of aging in many people, just as many of advanced years suffer hardening of the arteries and deterioration of eyesight. This condition is in fact so prevalent that the most common cause of nerve deafness is attributed to aging. In children and young adults the most frequent cause of Sensor neural deafness is congenital, the nerve having been injured or destroyed before or during birth. However, researchers into the causes of deafness in children have discovered that a number of cases heretofore classified as hereditary were actually associated with certain contagious diseases that the mother contracted during the early months of
pregnancy. Rubella, mumps and influenza all have been indicated as causes of deafness in infants whose mothers were afflicted during early pregnancy.

**CASES OF SENSOR NEURAL DEAFNESS**

Congenital origins are classified as acquired deafness. Among the common causes are brain infection such as meningitis, brain fever and sleeping sickness and communicable diseases such as scarlet fever, measles, influenza and others. At one time it was considered that hearing aids were of little value to those with sensor neural hearing loss, but with the improvement of the quality of hearing aids, it has become possible to successfully fit more and more persons with this type of hearing loss. Prolonged loud sounds of any spectra can produce a temporary threshold shift (auditory fatigue); recovery usually takes place within a day. The more intense the sound, the shorter the exposure time necessary before a temporary fatigue takes place. Continual exposure eventually produces a permanent hearing loss. As a general rule, the ears should not be exposed to sounds ever 130 decibels (unit of loudness) longer than momentarily. There is some evidence to suggest that prolonged listening to amplified music is causing hearing losses in young men and women, especially among the musicians themselves. In these cases, the hearing loss occurs in the higher frequency ranges. The combined sounds of the environment, such as street noises in a city, often reach levels of intensity that may cause hearing loss.

**MIXED HEARING LOSS**

Mixed hearing loss is the combination of conductive and sensoineural hearing loss. One of the main causes of this type of loss is the long standing ear infection known as Chronic Supportive Otitis Media. In CSOM, ear discharge in the
form of pus, blood or clear water is seen. This starts with conductive loss yielding to sensoineural impairment, if not treated immediately and regularly. A mixed hearing loss refers to a combination of conductive and sensoineural loss and means that a problem occurs in both the outer or middle and the inner ear. When the conductive loss and sensor neural loss are present, the result is classified as a mixed loss. Individuals who experience this disorder may have what is referred to as a significant air conduction or bone conduction gap. If the conductive aspect of the hearing loss is stabilized, the probability of receiving assistance through the use of a hearing aid is good. The individual then functions similarly to those who experience only a conductive loss.

**CENTRAL HEARING LOSS**

A central hearing loss results from damage or impairment to the nerves or nuclei of the central nervous system, either in the pathways to the brain or in the brain itself. Central hearing loss is due to damage, malformation or infections of the neural pathways and the hearing centre in the brain. The child may hear but has difficulty in understanding what he hears. Some of the children classified as learning disabled or slow learners may have this type of hearing loss.

**FUNCTIONAL HEARING LOSS**

Functional hearing loss is due to some psychogenic condition or maybe due to deliberate exaggeration of hearing thresholds for personal gains.

**NATURE OF HEARING DISABILITIES**

Term deaf is commonly used to describe partial hearing loss as well as total loss. However, Wilson and his associates (19740) point out that a definite distinction should be made between hard-of-hearing and deaf. These authors are concerned that
labeling hard-of-hearing students as deaf or reacting to them as if they were deaf will produce a situation that may prevent potential development of hearing ability. In 1975, the Executives of American Schools for the deaf defined the term “deaf”, “hard-on-hearing”, and “hearing impaired” by Larson and Miller, 1978. “A deaf person is recognized as one who is unable, with or without a hearing aid, to process linguistic information through audition. The hard-on-hearing are defined as those who, with the assistance of a hearing aid, have sufficient residual hearing to process linguistic information. Hard-on-hearing individuals, therefore, have hearing that is deficient but functional. Deaf persons, on the other hand, have nonfunctional hearing. The term hearing impaired is a generic term used to identify a hearing disability and includes both the hard-on-hearing and deaf. Modern educational methods for students with impaired hearing make the maximum use of the residual hearing that they posses. Consequently, it is important that educators teach students who are hard-on-hearing more nearly like hearing students than like students who are deaf.

Hearing loss may also be described in terms of its age of onset. Hearing impairments may be congenital, present at birth, or adventitious, occurring later in life. The child who is deaf from birth will not able to learn to speak spontaneously. They needs of this youngster are very different from those of a child who acquires a hearing loss after the age seven, when speech and language are well developed. Frequently, the term prelingual and postlingual are used to distinguish the impact of a hearing impaired on the ability of the students to speak. Those with a postlingual hearing loss normally, with special assistance, retain the ability to speak.
Like the eye, the ear is a complex organ, capable of discriminating the intensity and frequency of various sounds. Sound is first received by the outer ear and transmitted to the middle ear before it finally reaches the inner ear, where it is transferred to the brain via the auditory nerve.

Fig : 1 Structure of the Ear

Function of the outer ear is to collect sound waves and transmit them via the auditory canal to the middle ear. In the middle ear, the sound passes from the tympanic membrane to the ossicular chain, where vibration created by the motion of the stapes, incuse, and malleus move the sound from the outer to the inner ear. The inner ear is divided into two sections, the vestibule and the cochlea. The latter part, the cochlea, is the critical element in hearing. As the stapes bone moves, the oval window moves, transmitting the sound from the middle ear to the fluid-filled cochlea. Inside the cochlea are thousands of tiny hair cells that are set in motion. Movements of the hair cells in turn causes electrical impulses to be sent to the brain, also located in the inner ear three small loops called the semicircular canal, Although the semicircular canals do not contribute to the hearing process, they are
extremely important in helping individuals maintain balance. Hearing disabilities are usually in origin, and damage to any part of the ear, outer, middle, or inner, can result in a hearing loss.

**IMPACTING ON LEARNING AND TEACHING**

Deaf student who has English as a second language, it is not surprising if they are experiencing linguistic problems. Difficulties manifest themselves most obviously in written work, where mistakes may be found with sentence structure, verb tenses, word omissions, etc. To exacerbate the problem, carrier language is often hidden in fluent speech and therefore difficult to lip read. The lack of hearing and auditory memory means that students may be unable to rehearse what is put down on a page. Furthermore, BSL has a grammar and syntax that is quite different to that of spoken English, which can also confuse the student. Research shows that the reading age of deaf students leaving school is below the national average, therefore it is likely that deaf people reaching Higher Education are already functioning at a relatively advanced level. However, reading can remain a laborious task for some deaf students, as their vocabulary can be considerably restricted in comparison with their hearing peers. Unfamiliar words, or words which have not been specifically introduced to the student, cannot be lip-read. Consequently, deaf students often have to research not only the technical jargon relating to the subject, but also language that is commonplace for hearing peers. An exceptional amount of time can be spent on reading and preparing assignments, often with the support of an individual language/learning support tutor.

In comparison to hearing students, the pathway to general knowledge may have been significantly blocked for the hearing impaired student. Hearing students
absorb general knowledge through reading newspapers, listening to the TV or radio and holding discussions with other students. This incidental information often helps to form the opinions and develop the skills necessary for Higher Education. Yet, deaf students can be denied access to this whole wealth of general knowledge and life experience. The knock-on effect is often reflected in deaf student's written work, which may be judged to be lacking in depth, containing immature and sometimes uninformed opinions and exhibiting problems with sequencing and overall structure. Group work can be problematic for students with hearing impairments and a number of enabling strategies may need to be adopted by the rest of the group. As an important component of many group activities is to devolve responsibility and control to students, tutors may be concerned that their scope for intervention and to take measures to include all students is necessarily compromised. To mitigate this, systems to encourage groups to take responsibility for the inclusion of all students need to be in place.

Tutors need to think carefully about the structure of their course, tutorial support, resources, staff development and learning environments, as replacing large lectures and seminars by more accessible resource based learning using small tutorial groups and computer based learning can reduce the need for communication support. Providing lecture and course notes in advance can be a great help to the student and support worker, and providing these in electronic form may be the most flexible approach. Using visual aids e.g. Power Point can also help support the understanding of spoken information.
CHARACTERISTICS INFORMATION DURING LECTURES

Students who are deaf or hard of hearing may need to lip-read, and if this is the case, then the lecturer’s face or any other speaker in the lecture theatre needs to be visible. Spot lighting may be needed for lip-reading and sign language interpretation when the room is darkened, e.g. for showing slides or video. Where students use the services of a lip speaker or an interpreter, such educational support workers are likely to need short breaks during lectures. They may also need help with provision and positioning of seating. Both student and signer or lip speaker will derive great benefit from being given an outline of the lecture material beforehand. Signs for new terminology need to be devised in advance: signs for specialized vocabulary such as heterocyclic compounds or hermeneutics are not instantly available to signers. In general, it is helpful to supplement aural information with visual information for students who are deaf or hard of hearing.

PARTICIPATING IN SEMINARS

For students who lip-read, furniture might need to be rearranged so that the faces of everyone can be seen. A horse-shoe seating arrangement is helpful for this, ideally with none of the participants silhouetted against the light. If a student with auditory difficulties is being excluded because of several people talking at once which makes lip reading impossible, the tutor could control the situation by passing a pencil or baton from person-to-person, with only the holder of the baton being allowed to speak. Prior notice of the topic and main ideas provides the context which is crucial for successful lip-reading. If the subject matter is not sufficiently structured to allow this, the main ideas could be recorded in a textual way as the seminar progresses. Background noise can be amplified by hearing aids where room loops are not installed. Students might use equipment, such as radio aid systems, to
get round the problem, and in these cases, speakers might be asked to wear a radio microphone, which is not a difficult request to comply with. Alternatively, a change of room to a quieter side of the building may help. Rooms with soft furnishings can also help as they reduce echo.

PLACEMENTS AND FIELD TRIPS

Departments organizing placements, field trips or study abroad for students with impairments will need to consider, ideally alongside the students themselves, the differences between the new context and environment and the more usual, and often more structured, context of study. Sometimes, the use of equipment, arrangements or personal assistance could, with a little planning, transfer to a different context. It will sometimes be necessary to identify additional items of equipment for specific purposes. For example, a sound monitor could be used as a visual indicator of classroom noise for a trainee tutor with auditory difficulties. The fact that funding may need to be found to purchase additional equipment for placements, field trips or study abroad, underlines the necessity to play and prepare long before the placement start date. Students with impairments are positive assets on courses, where a reminder of the diversity of human experience is important. It can be instructive to be reminded of substantial gains for all students from organizing placements in such a way that students with impairments are safely included, and not to think exclusively about problems.

AUDITORY DIFFICULTIES ON HEARING IMPAIRMENTS

Students with hearing impairments may depend on their sight for communication e.g. speech reading, lip reading, British Sign Language or a form of English using BSL vocabulary called Sign Supported English. The DDA states that
an 'inability to hold a conversation with someone talking in a normal voice' or an 'inability to hear and understand another person speaking clearly over the voice telephone' counts as a 'substantial adverse' effect under the Act. When the consequences of someone's deafness or hearing loss are being considered, the effect of background noise should be taken into account. Any attempts to treat or correct a person's deafness or hearing loss are ignored for the purposes of the DDA. Importantly, this means that even if a person uses a hearing aid, his or her hearing without that equipment aid is what counts. The Constitution of Nepal defines persons with disabilities as persons who are mentally or physically unable or incompetent to lead a normal life.

**HEARING IMPAIRMENTS AND AUDITORY DIFFICULTIES**

Students with hearing impairments may depend on their sight for communication e.g. speech reading, lip reading, British Sign Language or a form of English using BSL vocabulary called Sign Supported English. The DDA states that an 'inability to hold a conversation with someone talking in a normal voice' or an 'inability to hear and understand another person speaking clearly over the voice telephone' counts as a 'substantial adverse' effect under the Act. When the consequences of someone's deafness or hearing loss are being considered, the effect of background noise should be taken into account. Any attempts to treat or correct a person's deafness or hearing loss are ignored for the purposes of the DDA. Importantly, this means that even if a person uses a hearing aid, his or her hearing without that equipment aid is what counts.

For severely and profoundly deaf people, acquiring language is a different process from the way in which hearing people develop language. Usually language
is acquired through plentiful exposure to meaningful linguistic interaction in early childhood. Severe deafness drastically reduces both the quantity and the quality of linguistic input available to the deaf person. For a deaf student, English language development is rarely natural and automatic, but can be a laborious process with numerous obstacles and pitfalls. For many prelingually deaf students those born deaf, English is their second language and BSL is their first. However, unlike other students who do not have English as their first language, prelingually deaf students are physically unable to learn English the way a German or French native speaker learns English. They cannot be immersed in the language around them for they cannot hear it. In addition, since BSL is entirely visual, deaf students do not have a written or spoken language on which to base their second language learning.

**ASSESSMENT**

Impairments of various kinds, the usual assessment format may need to be modified to achieve the assessment objectives. Clarity about the latter will be very helpful in determining acceptable modifications, which will be different for different types of assessment, or for different parts of the assessment, e.g. a student with auditory difficulties may have no additional difficulty in completing a written exam paper, but invigilators may need to provide oral information during the examination, e.g. about changes to the exam paper, in writing. Achievements which are being assessed may be capable of being demonstrated in a variety of ways. Responses can be conveyed by a student using sign language, which can then be verbalized by an interpreter, and written by an amanuensis. For some students who are pre-lingual deaf, written English may be *deaf* English, i.e. in the word order of sign language, which is very different from the word order of English. If the subject of the
assessment is what is understood rather than how this is expressed, then signed responses may be acceptable.

Classification of tests can be divided into Informal hearing testing and Formal hearing testing. Informal hearing testing again tested with following test Screening tests, TFT, PTA and Speech Audio and Formal hearing testing classified an objective tests, OAE and BSERA. Auditory Steady, State response, Audiogram interpretation, Degrees of hearing loss -10 dB HL to 25dB HI-Normal hearing Sensitivity, 26-40 dB-Mild Hearing loss , 41-55 dB Moderate hearing loss, 56-70 dB Moderately severe hearing loss, 71-90 dB Severe hearing loss, 91 dB and above Severe hearing loss.

MANAGEMENT OF DISABILITIES

Assessment of physically disabled people should also include assessment of orthotic and prosthetic devices, some of which may be hazardous in certain sports. It is usual to remove calipers and prosthetic legs when participating in water sports, as these may cause the wearer to sink. Buoyant artificial limbs are available to allow people who have had an amputation to take part in water sport. An artificial limb that is buoyant however can interfere with the function of a life jacket and prevent a person who is floating face down in water from turning over.

Disabled people seek information and advice from their medical advisers, who may not be fully aware of all aspects of the particular sporting activity being contemplated. If specific information is required, people should be directed towards a specialist who has a better understanding of what a particular sporting activity entails. In competitive sport the disabled person is examined by a doctor or member of the paramedical profession, usually a physiotherapist, both of whom are familiar
with the classification systems. Attempts have been made over the years to improve classifications basing them on people's abilities rather than disabilities.

**CAUSES OF HEARING IMPAIRMENT**

The most common cause of conductive hearing loss in kids and teens is *Otis* which is the medical term for an ear infection that affects the middle ear. Ear infections cause a build-up of fluid or pus behind the eardrum, which can block the transmission of sound. Even after the infection gets better, fluid might stay in the middle ear for weeks or even months, causing difficulty hearing. But this fluid is usually temporary, and whether it goes away on its own which is usually the case or with the help of medications, once it's gone a person's hearing typically returns to normal. Blockages in the ear, such as a foreign object, impacted earwax or dirt, or fluid due to colds and allergies, can also cause conductive hearing loss.

People also get conductive hearing loss when key parts of the ear, the eardrum, ear canal, or ossicles are damaged. For example, a tear or hole in the eardrum can interfere with its ability to vibrate properly. Causes of this damage may include inserting an object such as a cotton swab too far into the ear, a sudden explosion or other loud noise, a sudden change in air pressure, a head injury, or repeated ear infections. Sensor neural hearing impairment results from problems with or damage to the inner ear or the auditory nerve. Its causes include, Genetic disorders: Some genetic inherited disorders interfere with the proper development of the inner ear and/or the auditory nerve. Injuries to the ear or head: Injuries such as a skull fracture can cause hearing loss.

Complications during pregnancy or birth: Some babies are born with hearing impairment due to infections or illnesses that the mother had while she was
pregnant, which can interfere with the development of the inner ear. Premature babies are also at higher risk for hearing impairment. Infections or illnesses: Certain conditions, such as repeated ear infections, mumps, measles, chickenpox, and brain tumors, can damage the structures of the inner ear. Medications: Certain medications, such as some antibiotics and chemotherapy drugs, can cause hearing loss. Loud noise: A sudden loud noise or exposure to high noise levels such as loud music over time can cause permanent damage to the tiny hair cells in the cochlea, which then can't transmit sounds as effectively as they did before. The outer hair cells are usually affected first, because they're very sensitive to loud sounds. Remember that these cells help us hear soft sounds. If exposure to loud noise continues for long periods of time, the inner hair cells and even the auditory nerve can become affected, Causes Hearing Impairment.

Before Birth: Family history of childhood deafness, Deafness in family members, Consanguineous marriages, Marriage between close relations such as uncle-niece, first cousin, Blood group complications or Rh- incompatibility, Infectious diseases or illnesses during pregnancy e.g. syphilis, German measles or Rubella with fever, mumps, Very poor physical condition of the expectant mother. Excessive alcohol or nicotine intake by the expectant mother, Intake of ototoxic drugs, Ototoxic drugs are drugs that can damage the hearing mechanism if used indiscriminately. For e.g. Gentamycin, amikacin, quinine preparations and Excessive exposure to X-rays. During the Birth Process: Birth Asphyxia i.e., lack of oxygen supply to the new born due to inability to breathe normally resulting in blueness of baby due to various reasons, Delayed or feeble birth cry, Birth weight less than 1200 grams. After Birth: Pre-maturity. Deformities of ear, nose, face & throat, Jaundice, high fever or convulsions immediately after birth, Infectious
diseases e.g. whooping cough, mumps, measles, syphilis, meningitis, viral fever, T.B. Intake of antibiotics for a long duration, i.e., especially those known to be ototoxic, Injury to the head and/or ear, i.e., by accidents etc, Continuous exposure to loud sounds, High blood pressure, diabetes, Aging, Tumor on the auditory nerve, Middle ear infections and ear discharge etc.

**PREVENTION OF HEARING IMPAIRMENT**

To realize that hearing loss caused by loud noise can be prevented. The only cause that can be prevented is noise-induced hearing loss. There are steps you can take to reduce your risk of this type of hearing loss. The intensity of sound is measured in units called decibels, and any sounds over 80 decibels are considered hazardous with prolonged exposure. These include things like loud music, sirens and engines, and power tools such as jackhammers and leaf blowers.

To reduce the risk of permanent hearing damage, you can, Turn down the volume on your stereo, TV, and especially the headset on your music player. Wear earplugs if you're going to a loud concert or other event along with music. Special protective earmuffs are a good idea if you operate a lawn mower or leaf or snow blower, or at a particularly loud event, like a car race. Cotton in the ear doesn't provide enough protection.

If you feel your hearing is different after being at an event with a lot of noise for example, you need to ask people to repeat what they're saying; it means you're probably experiencing a temporary hearing loss due to noise. Don't worry, it will go away usually after a good night's sleep, but it means that next time you want to participate in the same event, you should wear protection for your ears to avoid a permanent hearing loss.
Avoid marriages amongst close relatives, Immunize adolescent girls and women in child bearing age against Rubella, Ensure good health of the expectant mother seek health check-ups at regular intervals, Expectant mother should avoid contact with persons suffering from infectious diseases, Make sure that the delivery is performed under the supervision of a trained person. Follow the child's immunization schedule properly, Maintain good ear hygiene: Keep the ears clean, free from dust, water, wax etc., Do not clean or scratch your ears with pointed objects like matchsticks, hairpins, pencils etc. It can rupture the eardrum or injure the ear canal, Avoid slap or blow to the ear as it can cause a hearing problem that may be irreversible. Keep a watch on young children playing with tiny objects like beads, seeds etc. If they put them in the ear, the eardrum may get ruptured or the ear canal may be injured, do not put oil or any other liquid in the ear as they can result in pain, swelling and ear discharge. Keep your ears dry always; do not swim in dirty water. Unclean water entering the ear can cause ear infection. While swimming always plug your ears with cotton, especially while diving. This prevents the water from directly entering your ear and rupturing the eardrum. Do not have your ears cleaned by roadside quacks. They use unclean instruments, which may cause infection. The eardrum too may get damaged. Clean your ears with cotton buds regularly or get them cleaned by a doctor, Avoid using unwashed pillow covers, towels, etc., used by a person with ear discharge.

This may cause infection in your ear too. While feeding a baby keep its head raised otherwise milk may enter into the ear cavity through the small passage connecting the throat and the ear. It can cause pain with swelling and ear discharge, Avoid exposure to loud sounds, Do not take medicines without the doctor’s advice.
and use ear protectors while working in noisy places. Many of the factors causing
hearing impairment cannot be always controlled. But knowledge about these factors
helps us in identifying ‘at risk’ individuals. A detailed hearing evaluation is
recommended to start rehabilitative measures as early as possible to ensure a bright
future for the individual.

Fig: 2 Hearing Aids

Do not clean or scratch your ears with pointed objects like matchsticks,
hairpins, pencils.

TREATMENTS

Treatment for hearing loss varies depending upon the cause of the hearing
impairment. Treatment may involve removing wax or dirt from the ear or treating an
underlying infection. If there is damage or a structural problem with the eardrum or
ossicles, surgery may help to repair it. If the problem is with the cochlea or hearing
nerve, a hearing aid or cochlear implant may be recommended. Hearing aids come in various forms that fit inside or behind the ear and make sound louder. They are adjusted by the audiologist so that the sound coming in is amplified enough to allow the person with a hearing impairment to hear it clearly. Sometimes, the hearing loss is so severe that the most powerful hearing aids can't amplify the sound enough. In those cases, a cochlear implant may be recommended.

Cochlear implants are surgically implanted devices that bypass the damaged inner ear and send signals directly to the auditory nerve. A small microphone behind the ear picks up sound waves and sends them to a receiver that has been placed under the scalp. This receiver then transmits impulses directly to the auditory nerve. These signals are perceived as sound and allow the person to hear.

Depending upon whether someone is born without hearing congenital deafness or loses hearing later in life after learning to hear and speak, which is known as post-lingual deafness, medical professionals will determine how much therapy the person needs to learn to use an implant effectively. Many people with implants learn to hear sounds effectively and even use the telephone.

More than 200,000 people around the world have received cochlear implants and about one third of them are children. Some patients with hearing loss and their families may decide not to restore hearing. This is particularly true of children whose parents are hearing impaired and want their children to be able to function in the deaf community. The language of the deaf community is American Sign Language (ASL). ASL is a system of gestures many deaf and hearing-impaired people use to communicate.
SPORTS FOR THE DISABLED

Sports for the Disabled in General, as opposed to Deaf Sports Specifically, these terms will be used. The Groups referred to by these terms have requested that the term Sports for the Disabled replace the term Handicap Sports in the terminology of National Sports Federations and the National Olympic Committee. The reason for this is to harmonize with the officials terms used internationally and to avoid misunderstandings. The term “Handicap Sports” has been used, inaccurately, to mean both sports for the Physically Handicapped and for the Deaf. To clarify, National Federation of Handicap Sports and National Federation of Deaf remain separate organizations and sports events. The term Sports for the Disabled is the blanket term which includes Deaf sports. To avoid misunderstandings it should be used when referring to all sports for the Disabled.

Common name for Sports for the physically handicapped and the Deaf should be Sports for the Disabled. This name should be used by Governmental Agencies, the National Federation of Sports and the National Olympics Committee to specify the group referred to in financial discussions and for purposes of information. I.e. the National Federation of Sports for the Physically Handicapped or the National Federation of Deaf Sports: Two separate Associations. For purposes of university and other education the terms sports for the Physically Handicapped and Sports for the deaf should be used separately.

DEAF SPORTS

Tamil Nadu Sports Council of the Deaf is a Sports Organization for the Deaf & Hard-of-Hearing. The Rules are virtually the same as in ordinary sports, but with certain modifications. Deaf sports are an important part of the Social lives of the
Deaf and Hard-of-hearing, breaking the isolating language barrier. To qualify for competition in Sports Council, Players must have a hearing reduction of at least 55 decibels.

HISTORY OF CULTURE AND DEAF EXPERIENCE

Sheila Chandra from Rachelle Hole, who, until recently was Employed as our family support worker: “I was born and brought up in England by my Indian family, and growing up, I felt a great gap an absence of roots and a context in which to placer myself. In England I was surrounded by cultural stereotypes and images of the ‘English Rose’ and I Knew I was never going to be like that.” Rachelle Hole comments:”Sheila Chandra is an Indian musician. She grew up in England with her family, but did not feel she could connect with or measure up to the cultural stereotypes of ‘White England’. As an adult she seeks to connect with her culture, traditions of her ancestors, finding her identity/self. When I read this quote I kept thinking about the parallels between Sheilas’s experience and the experience of deaf children growing up in a hearing world/family and the cultural ‘hearing’ stereotypes that deaf children are confronted with on a daily basis. That led me to think about the resources and gifts of the deaf community in enabling the deaf child to ‘Weave his/her ancestors’ voices.’ She takes the gifts of her present experience s and mixes them with the recourses o her Indian traditions and culture. I wondered how the deaf culture weaves together the gifts of the hearing culture of their parents and the resources and gifts of the deaf community and culture.” This is an excellent starting point for this discussion: the role of “Deaf culture” in the development of deaf children. This is a relatively new concept that continues to be nebulous and continues to be misunderstood by many people, both Deaf and hearing persons alike. On one extreme, there are those who would require all families to learn ASL and
Deaf culture in order to raise their deaf children to the point to excluding speech. On the other extreme, there are those who would deny the existence of deaf culture and attach utterly no value to it in the development of deaf children or sign language. A few years ago, I wrote a column, “Deaf culture: A Bugaboo?” in which discussed the role of deaf culture for families with deaf children. The principal ideas behind this column was that deaf culture can become a useful tool for families in terms of raising their deaf children, is a valuable source of information on how a child can live with his/her deafness, and can strengthen the deaf child’s self-concept. In fact, it can enhance the bond between the deaf child and his/her hearing parents, as one parent wrote to our organization a couple of years ago: “I don’t’ think I’ll lose my deaf child to deaf culture; in fact, it has helped me find my child.”

However, we may need to stand back and consider what is really important for the deaf child and his family. Obviously, the number one priority is to establish a communication bond between the family and the deaf child and making the deaf child an integral part of the family, it is the most fundamental right of any child. While we can and do encourage families to start developing sign language skills as quickly as possible in order to begin this process, most families struggle with the concept of deaf culture during a time when just the reality of having a deaf child and the use of sign language is uppermost in their minds. A concern for the deaf child’s immediate future puts Deaf culture on the back burner and is not a priority at this time. In fact, it can be somewhat frightening. There will always be a gap in the development of all deaf children; they will never experience the same kind of enculturation that children with normal hearing go through, and the hearing world will never be able to accommodate them completely, no matter how good their
speech and hearing function can be. They will always view themselves differently from other hearing persons and be treated differently by them. How deaf children will view themselves is at the heart of the matter. Would they view this difference in a positive light or in a negative way. It is like the case of the half-empty glass vs., half full glass, except that there is a need to make the glass full.

How, then can “Deaf culture” help families in the early stages without being too invasive or making them feel compelled. I think “Deaf Culture” could be better conveyed to families as “Deaf Experience” which speaks volumes of the rich gifts that Deaf persons can offer deaf children and their families. “Deaf Experience” imparts a sense of sharing. Once families become comfortable with the idea of “Deaf Experience” after a few years, they might be more comfortable with and ready to explore “Deaf culture” with their deaf children. Knowing that she would never become an “English rose”, Sheila Chandra, as she poetically put it, “Weaves” together the elements of both Indian and English cultures into something positive and self-fulfilling, become a beautiful hybrid in the process, The interweaving of “Deaf Experience” and the Culture of the family will produce a deaf child who would become a different kind of a rose, but nevertheless a rose. This interweaving of both hearing and deaf elements will serve to make the deaf child’s glass full instead of being half-empty or half-full. Ten years ago, I spoke to a national convention of educators of the deaf about the concept of culture in deaf culture by focusing on the need for deaf children to have the benefit of the experiences and knowledge of the Deaf community. A following speaker disagreed with my comments, saying “Deaf children belong to their parents, not to Deaf culture”. I quite agree with her, but she had it backwards. Deaf culture belongs to deaf children and their families, not the other way around. That is the way it should be.
IMPORTANCE OF SIGN LANGUAGE

Being Deaf means not being able to hear. Most of us were born deaf or lost our hearing at an early age. That is why we use a visual language, Sign. Sign Language is our mode of direct communication, as is speech for the hearing. Nowadays, Sign Language is used by many hand-of-hearing people, too. The Council provides a sports culture for members of this language minority to meet. Of course, we deaf sportsmen and our organization thrive best in settings where Deaf culture prevails and Sign Language is used by all. Each Country has its own Sign Language. Thanks to similarities in the grammatical structure of all signed languages, however, deaf people from different countries can understand each other fairly well. This is because many structural and grammatical features of Sign Languages are universal.

Some of the Practical Differences are: Communication between players. Deaf players can’t shout things like “Pass it here!” or Over here! Or Watch your back! Or “Behind you!” to each other, Whistle blowing doesn’t help. Referees must get players’ attention by other means than blowing a whistle. Not being able to hear can affect player performance in games like Table-Tennis or Badminton where the sound of the racket or paddle striking the ball or birdie tells how hard a hit it is. Deaf players can’t be goaded on by roars or hear cheers from the Crowds. A Deaf player has to look around to determine his and other player’s position on the field.

GAME MODIFICATIONS ON HEARING IMPAIRMENT

Loud speakers must be replaced or complemented by screened lettering or Sign Language. Start pistols should be replaced by a Flash of Light. Where hearing people can use their ears, Deaf people need to use their eyes, The Hearing respond
to sounds, where the Deaf need visual signals and sign language communication. Through a Sign Language Interpreter, Deaf players can join in on “Hearing” sports. A deaf member of a “Hearing” team needs an interpreter to talk to his teammates: discuss technique and tactics or just socialize with the other players. An Interpreter can be called in for all situations were signers and non-signers need to communicate. Good Interpreter services are essential to full participation. An Interpreter can be called in for all situations were signers and non-signers need to communicate. Good Interpreter services are essential for full participation.

DEAF OLYMPICS

Deaf Olympics Games are the Biggest International Event, with players and spectators from all over the World, in 2001 at the Committee International of Silent Sports. Congress in Rome by agreement of International Olympic Committee and CISS, the name Deaf Olympics replaced the former name Deaf World Games. The Deaf Olympics were given the same status as the Paralympics Games and Olympic Games. This means that Deaf Olympic Games have the same status for DEAF sports as the Olympics for “the Hearing” and the Paralympics for the Disabled.

HISTORY OF INTERNATIONAL DEAF SPORTS FEDERATION


BROADER HORIZONS: Athletes with a background in Deaf Sports sometimes join hearing terms and Clubs. They are not at any physical disadvantage there, but it can be difficult socially. Deaf people often feel left out of the talk and discussions of the
other players. This calls for an Interpreter. Deaf players are more at home on the
team if the other players learn a little sign and use an interpreter when discussing
theory and tactics. Deaf athletes with Hearing Team experience often achieve better
than those who play only on Deaf teams. However, for us Deaf people Deaf sports
are not just sports: they’re a way of Life.

**PHYSICAL FITNESS**

According to John (1958) “Physical fitness implies the ability to function at
one’s best level of efficiency in all his daily living. Physical fitness, an instrument
for social good, is the capacity to successfully respond physically, mentally and
emotionally to the forces of life without undue debilitations. Physical fitness in one
of the facets of a person’s all round harmonious development. Physical fitness, the
cultural phenomenon of great complexity and magnitude is a historically
preconditioned level of health and comprehensive development of a person’s
physical activities, corresponding to the requirements of labor activity, normal
functioning of the body’s vital systems and longevity. Physical fitness adds grace to
the young, wealth to the poor, ornament to the rich and acts as a consoling factor to
the old. The place of physical fitness in any society reflects something of that
society’s characteristics”

With no physical stimulus, the sensory receptors became starved, subsequently causing the body to aches and pains. With proper fitness, one can relieve much of these unnecessary pains and unpleasant complications. It is almost impossible to pass an entire day without being exposed to something that involves physical fitness. This notional preoccupation with fitness has affected every segment of our society. The quality of one’s life depends upon the quality of work
he or she does. Physical fitness is thus, essential for all but the degree of physical fitness is very individualized and will vary according to the demands and requirements of a specific task. The school athlete must constantly work to improve his or her strength, endurance, flexibility, speed and cardio respiratory efficiency whereas the student who cycles to school will require less effort to maintain his or her physical fitness. The test cricketer needs a different level of physical fitness. A 40 year old mother requires a different physical fitness level than her daughter. So, physical fitness varies according to the circumstances of a person at different times in his or her life. In short, physical fitness is a must for all. The basic traits of physical fitness are its mass nature and scientific approach. The traits of this mass nature and the scientific approach to physical fitness combine to make a single on the basis of the following principles: Universality, the link with social practice, the comprehensive development of the personality and the efficiency in improvement of public health.

Universality means that the fitness system encompasses the entire population regardless of age and social group. The link with social practice helps to prepare the young generation for active labor and to increase the creative activity and the longevity of the population. The principle of comprehensive and harmonious development of the personality expresses the general trend and close interrelation of different aspects of fitness system as a whole. Man’s comprehensive development is essential for economic, social, technological and cultural progress. The principle of improving public health permeates the entire system of fitness. Physical fitness is, thus, closely interlinked to make upon entire organic unity.
IMPACT OF PHYSICAL EXERCISE AND HEARING IMPAIRMENT

According to Barry (1987) “Exercise occupies a lead role in keeping a person fit. It will be quite difficult to adjust one’s life in terms of stress, diet, sleep and so on without proper exercise. According to Plato, Lack of activity destroys the good condition of every human being, while movement and methodical physical exercise save it and preserve it. Exercise means using and toning the body. Exercise builds and maintains physical fitness”.

Physical exercise is a capsule for better living. With regular exercise, coronary arteries that supply blood to the heart enlarge and new blood capillaries develop within the organ larger, stronger and more efficient. Exercise increases strength and efficiency of the muscles of rib cage and diaphragm. This causes an increase in the lung volume, enabling a person to take in more air and thus absorb more oxygen. A person who exercises regularly breathes more slowly at rest than one who does not work out. But, when required, he or she can breathe deeply and oxygenate a given volume of blood, spending less energy. With regard to physical fitness there are several factors that a number of overlapping activities and of course, individual preferences are to be taken into account, so as to achieve the same goal. Fitness activities include jogging, swimming, cycling, walking, weight training, aerobic dance, water aerobics, callanetics, free arm exercises and yoga.

Carl (1987) is defined “Term physical fitness has been divided into two distinct categories: skill-related and health-related fitness. Skill-related fitness performance fitness includes those qualities that provide the individual with the ability to participate in sports activities. The components of skill-related fitness are agility, balance, coordination, speed, power and reaction time. Health-related fitness
includes regular exercise in combination of proper diet and abstention from smoking and using potentially dangerous drugs and it will increase greatly one’s quality of health. The components of health-related fitness are cardio respiratory endurance, muscular endurance, muscular strength, body composition and flexibility”.

According to Arjun (1991) “Exercise increases the size of existing blood vessels and makes them more elastic. It promotes the formation of new blood vessels not only in the heart, but also in the skeletal muscles, thus improving the oxygen supply to all parts of the body. Exercise increases the total blood volume in the body, the density of red blood cells and the hemoglobin content. This increases efficiency of the body’s oxygen transport system as well as the waste disposal mechanism, leading to improved muscular endurance and efficiency. Exercise helps to burn calories not only when exercising, but burns calories at a higher rate even after finished exercising and converts them into muscle tissues. “High levels of blood cholesterol are strongly associated with heart attacks. Regular exercise will lower cholesterol levels. Exercise brings down high blood pressure; reduces body fat and increases muscle mass; helps reduce weight; keeps blood sugar under control; relieves muscle and joint pains; reduce stress; prolongs life; exercise improves feeling of well being”.

Achieving and maintaining physical fitness helps prevent the premature occurrence of numerous illnesses and diseases. It also helps in rehabilitation after illness or disease has happened. It helps for mental alertness. It promotes emotional stability. It enhances spiritual and moral development. Exercise, thus contributes towards an increased level of fitness and an holistic approach to good health.
AAHPERD YOUTH FITNESS PROGRAM LAUNCHED

The American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) today announced a new era in youth fitness assessment called the Presidential Youth Fitness Program in partnership with the President's Council on Fitness, Sports and Nutrition (PCFSN), Amateur Athletic Union (AAU), The Cooper Institute and the U.S. Centers for Disease Control and Prevention (CDC). The Presidential Youth Fitness Program, which will replace the 24-year old Physical Fitness Test for youth, is a comprehensive program which emphasizes health over performance and uses FITNESSGRAM® as the program's student fitness assessment.

In addition to The Cooper Institute's FITNESSGRAM®, a partnership with NFL Charities as part of the NFL PLAY 60 Program, the Presidential Youth Fitness Program provides:

1. Professional development and materials from AAHPERD;
2. Administration of the youth fitness recognition program by AAU; and
3. Scientific and tracking expertise of CDC.

The major purpose of the Presidential Youth Fitness Program health-related fitness assessment is:

1. To help students understand their fitness data analysis, improve, and/or, maintain their physical well-being;
2. To develop cognitive concepts about fitness assessment and interpretation of results; and
3. To monitor and reinforce student learning and achievement in reaching personal fitness goals
The new Presidential Youth Fitness Program will measure health-related components of fitness: aerobic capacity, muscle strength, endurance, flexibility and body composition, and provide professional development and materials to help physical educators safely and effectively implement the program. Important communications to parents will also help they better understand the benefits of physical activity for their children.

"We want every physical education teacher in this country to help children and their parents to understand the health-related fitness outcomes and to assist in the development of individual fitness plans," says Dr. Roetert. "To keep fitness in a positive mode, children's individual fitness scores will not be used as a criterion for grading in physical education class and will be confidential between the teacher, student and parent. Through the new Presidential Youth Fitness Program, physical education teachers will have access to the necessary tools they need to help children develop healthy lifestyles that will optimize their health and educational experience beyond the school years." Among its first contributions to the new program, AAHPERD will coordinate a Presidential Youth Fitness Program 101: Understanding the Basics free webinar on Tuesday, September 25 at 1 pm EDT, which will be lead by Dr. Jayne Greenberg, district director of Physical Education and Health Literacy, Miami Dade County Public Schools. This will be the first of monthly free webinars about different aspects of the program that will be held this school year. All webinars will be archived. To register for the webinar, go to Presidential Youth Fitness Program.

A nonprofits professional education association, AAHPERD is committed to enhancing the quality of physical education programs in this country. A quality
physical education program plays a unique role in teaching students the importance of health-related fitness, as well as developing physical competences and cognitive understanding about physical activity so that students can adopt healthy and physically active lifestyles. Purposeful measurement such as the new fitness assessment program is an appropriate component of quality physical education. For more information about a quality physical education program, visit NASPE/AAHPERD. According to AAHPERD President, Irene Cucina, D.P.E., of Plymouth State University, "AAHPERD members throughout the country are so proud to play an important role in creating the new Presidential Youth Fitness Program with these esteemed partners. The partners' commitment, energy and resourcefulness is targeted to improving our children's health so that they are better able to learn, have higher self-esteem and are at lower risk for developing chronic disease. I am confident that an exciting new era in children's health awaits us." AAHPERD, an alliance of five national associations, six district associations, and a Research Consortium, provides its members with a comprehensive and coordinated array of resources, support, and programs to help practitioners improve their skills to further the health and well-being of the American public. It is the largest organization of professionals involved in physical education, recreation, fitness, dance, health promotion and all specialties related to achieving an active, healthy lifestyle. AAHPERD serves 20,000 members and has its headquarters in Reston, Virginia, 25 miles west of Washington DC.

Physical education, specially designed if necessary, is a required component of a free appropriate public education (FAPE) in the least restrictive environment for students with disabilities who receive special education services. Professionals and parents who understand and communicate the physical education requirements of
the Individuals with Disabilities Education Act (IDEA) can advocate more effectively for children and school-based adapted physical education (APE) programs. This webinar will review IDEA physical education requirements for students with disabilities, discuss some relevant legal decisions and federal policy clarifications related to IDEA and physical education.

**REASON FOR THE SELECTION OF THE TOPIC AND VARIABLES**

The goals and objectives are reflective of the physical education instructional content and monitored/evaluated according to district policy, to ensure that goals and objectives are being met in a timely manner. To adapting or modifying the physical education curriculum and/or instruction to address the individualized abilities of each child, Adaptations are made to ensure that each students will be experienced in success of a safe environment. Placement is outlined in the IEP and may include one or more of the following variables will be selected in this study.

The general physical education setting, the general physical education setting with a teaching assistant or peers, A separate class setting with peers, A separate class setting with assistants, A one-to-one setting between students and the instructor.

Adapted physical education is developmentally appropriate physical education at its finest. It is adapting, modifying and/or changing a physical activity so it is as appropriate for the person with a disability as it is for a person without a disability. The APE teacher is a direct service provider, not a related service provider, because special physical education is a federally mandated component of special education services. This means that physical education needs to be provided to the student with a disability as part of the child’s special education. This is
contrasted with physical therapy and occupational therapy, which are related services. These therapies are provided to the child with disabilities only if he/she needs them to benefit from instruction.

Change the word “adapted” to “modified” and you have the idea of Adapted physical education. It is good teaching which adapts (modifies) the curriculum, task, equipment and/or environment so that all students can fully participate in physical education. Hence the researcher chose this topic and related variables.

STATEMENT OF THE PROBLEM

The purpose of the study was to Design, Analysis and Implementation on Adapted Sports Training Program to Hearing impaired students

HYPOTHESIS

1. It was hypothesized that there would be significant improvement on AAHPERD Youth Fitness components due to adapted sports training program for the hearing impaired students

2. It was also hypothesized that there would be significant difference between adapted sports training program group and control group on AAHPERD Youth Fitness components.

SIGNIFICANCE OF THE STUDY

The Significance of the study may be useful to fulfill the following ways in Physical education programme.

1. This study will help to evaluate the AAHPERD youth fitness.
2. This study would provide good opportunity to physical education teachers and doctor, coach, and adapted physical education trainer to know about the efficiency of hearing impaired students.

3. This study would provide guidance to the physical education teachers and doctor, coach, and adapted physical education trainer to know the influence of adapted physical education program to improve the performance of AAHPERD youth fitness.

4. The findings of this study would add to the quantum of knowledge in the area of influence of adapted physical education program.

5. The results of the study may provide guidelines which will help in preparing the influence of adapted physical education program schedules for their hearing impaired students.

6. The results of the present study would throw light on the existing controversies in using adapted physical education program.

LIMITATIONS
The following limitations were not to be considered while interpreting the results of the study. They are,

1. The anthropometric variations of the subjects were not taken into consideration.

2. External factors like diet, lifestyle, habits, body structure, Socio-Economic Status, Motivation and other environmental conditions were not taken into consideration.

3. Changes in atmospheric pressure, temperature, relative humidity and such period of administering the test could not be controlled.
4. Through the subjects were motivated visually, no attempt was made to
differentiate the motivation level during the period of testing.

DELIMITATIONS

The following Delimitation factors were chosen in this study.

1. For the purpose of the study fifty hearing impaired male students were
selected from Kalasalingam University, Krishnankoil, Virudhunager District,
Tamilnadu.

2. The age of the subjects ranged from 16 to 25 years

3. The study was restricted to AAHPERD youth fitness components were
selected.

4. The duration of the training period was restricted to twelve weeks with three
alternative days per week only.

5. The data were collected two days prior to and immediately after the training
period only.

DEFINITION OF THE TECHNICAL TERMS

Sports

"Sport" has roots in the Middle English term disproven, which comes from
Old French deported, which means to divert, to carry away, American Heritage
2003.

Speed

“Speed is the ability to execute motor action, under given conditions, in
minimum possible time” by Wilf Paish.
**Strength**

It the extent to which muscles can exert force by contracting against resistance, e.g. holding or restraining an object or person, Strength, 2012

**Endurance**

“It is the ability which enables the sportsman to do a sports activity effectively without getting tired and to recover quickly from fatigue during after and after the activity”.

**Agility**

Agility is defined as “the physical ability which enables an individual to rapidly change body position and direction in a precise manner.” Barry L. Johnson and Jack K.Nelson, 1982.

**Power**

It is the ability to exert maximum muscular contraction instantly in an explosive burst of movements. The two components of power are strength and speed. e.g. jumping or a sprint start, Strength, 2012.

**Adapted Physical Education**

Adaptive physical education means a specially designed program of developmental Activities, games, sports, and rhythms suited to the interests, capabilities, and limitations of students with disabilities who may not safely or successfully engage in unrestricted participation in the activities of the regular physical education program apart from Adaptive physical education, 2012.
Adapted program

Adapted programming means programming that retains the learning outcomes of the Program of Studies and where adjustments to the instructional process are provided to address the special education needs of the student, Adapted program, 2012.

Hearing Impairment

Hearing impairment occurs when there's a problem with or damage to one or more parts of the ear, Hearing impairment occurs, 2012.

Hearing Aid

Hearing Aid is a Small electronic apparatus that amplifies sound and is worn in or behind the ear to compensate for impaired hearing.