COURSE

GUIDE

KHE 125

Adapted Physical Education

Course Team

Course Developer/Writer

Dr. Charles Gabriel Iortimah,

Department of Human Kinetics and Health Education, Benue State University, Makurdi.

Course Editor

Prof. Ebenezer Olatunde Morakinyo

University of Ibadan, Nigeria.

NATIONAL OPEN UNIVERSITY OF NIGERIA

MAIN COURSE

CONTENTS **Page**

MODULE 1 ADAPTED PHYSICAL EDUCATION (APE)

Unit 1 History of APE and Acts or Laws Governing A.P.E

Unit 2 Meaning and functions of Adapted Physical Education

Unit 3 Key legislation and A.P.E National Standards

Unit 4 Individuals with disabilities education (types)

Module 1

Introduction

This module is titled “Adapted Physical Education (APE)”, it comprises of five units which chronologically include History of APE and Acts or Laws Governing A.P.E, Meaning and functions of adapted Physical Education, Key legislation and A.P.E National Standards, Education of all handicapped children act, and Individuals with disabilities education (types).

UNIT 1 HISTORY OF A.P.E AND ACTS OR LAWS GOVERNING A.P.E

CONTENTS

1.0 INTRODUCTION

Individuals have different body abilities, and in this regard, the desire to cater to individual differences and provide physical education to a differently-abled child serves as a stepping stone for Adapted Physical Education. Physical education is for every child irrespective of his or her age, race or ability.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Write the history of Adapted Physical Education

* Relate the acts or laws of APE to learning

3.0 MAIN CONTENT,

3.1 History of Adapted Physical Education

Adapted Physical Education is generally viewed as a term that originated in the United States. In 1975, the United States Congress created Public Law 94-142 (today known as the Individuals with Disabilities Education Act [IDEA]) believed that students with disabilities could benefit from physical education and that physical education services, modified when necessary, and should be a part of all students' educational programmes. Although legislators realized that many students with disabilities could participate in general physical education without the need for modifications from the general programme, they also realized that some students with disabilities would have difficulty in safely and successfully participating in and benefiting from general physical education without modifications or support.

In 1838, physical activity began to receive special attention at the Perkins School for students with visual disabilities in Boston (Wikipedia, 2020). Mostly, it is because the director of the school wanted students to receive all the health benefits of physical activity. The students participated in gymnastic exercises and swimming. This was the first physical education programme in the country for students who were blind. Early adapted physical education programmes were medically oriented and preventative, developmental, or corrective in nature. The

purpose was to prevent illness and promote health. Up until 1952, several schools would excuse students with disabilities from physical education. In 1952 the American Association for Health, Physical Education and Recreation (AAHPER) formed a committee to define adapted physical education and give direction for teachers. This committee defined adapted physical education as "a diversified programme of developmental activities, games, sports, and rhythms suited to the interests, capacities, and limitations of students with disabilities who may not safely or successfully engage in unrestricted participation in the rigorous activities of the regular physical education programme". Lastly, in 1968, the Kennedy Foundation established the Special Olympics. This programme has grown rapidly and holds competitions at local, state, national and international levels in an ever-increasing range of sports.

Organisations Promoting APE

The organisations promoting APE include

- International Federation of Adapted Physical Activity (IFAPA)
- American Alliance for health, Physical Education, Recreation and Dance (AAHPERD).
- National Council and Physical Education and Recreation for Individuals with Disabilities (NCPERID) etc.
- National Wheelchair Basketball Association.
- US Club Sitting Volleyball and US Paralympics Sitting Volleyball.
- US Paralympics Sports Club

3.2 Acts or Laws of Adapted Physical Education

· **1973 The Rehabilitation act of 1973**

* Designed to prevent discrimination and provide equal opportunity for individuals with disabilities in programmes or activities receiving federal financial assistance.

· **1975 The Education for all Handicapped Children Act of 1975**

* Designed to ensure that all children with handicapping conditions have available to them a free appropriate public education that emphasizes special education (including physical education) and related services designed to meet their unique needs.

· **1978 The Armature Sports Act of 1978**

* Passes to coordinate national efforts concerning armature activity, including activity associated with the Olympic Games.

· **1983 Amendments to the Education for All Handicapped Children Act**

* Provided incentives to states to provide services to infants, toddlers, and preschoolers with handicapping conditions.

· **1986 Education for all Handicapped Children Amendments of 1986**

* Expanded educational services to preschool children. And established programs for early intervention.

· **1990 Individuals with Disabilities Education Act (IDEA)**

* Replaced the term "handicapped" with "disabilities," expanded on types of services offered and disabilities covered.

· **1997 Individuals with Disabilities Education Act Amendments of 1997**

* Provided several changes in the law, including provisions for free appropriate education for all children with disabilities (ages 3 to 21); extension of a "developmental delay" provisions for children ages 3 to 9; emphasis on educational results; required progress reports for children with disabilities that are the same as those for children without disabilities; and changes in individualized education program (IEP) requirements.

· **1998 Olympic and Armature Sports Act**

* The United States Olympic Committee assumed the role and responsibilities of the United States Paralympics Committee

SELF ASSESSMENT EXERCISE

In which year did the American Association for Health, Physical Education and Recreation (AAHPER) formed a committee to define adapted physical education and give direction for teachers?

(a) 1952 (b) 1852 (c) 1853 (d) 1953

You may include this answer

4.0 CONCLUSION

To close the curtain, Adapted Physical education entails the adjustment of general physical education to suit the needs of individuals with disability.

5.0 SUMMARY

You have learnt in this unit that:-

i) In 1952 the American Association for Health, Physical Education and Recreation (AAHPER) formed a committee to define adapted physical education and give direction for teachers.

6.0 TUTOR-MARKED ASSIGNMENT

1. Write the history of Adapted Physical Education

7.0 REFERENCES/FURTHER READING

https://digitalcommons.brockport.edu/cgi/viewcontent.cgi?article=1023&context=pes_facpub. Retrieved on 25th February, 2020.

http://labbbape.blogspot.com/2012/03/history-of-adapted-physical-education.html/ Retrieved on 25th February, 2020.

UNIT 2 MEANING AND FUNCTIONS OF ADAPTED PHYSICAL EDUCATION

CONTENTS

1.0 INTRODUCTION

The cardinal yearning of physical educators is to provide physical education to every individual irrespective of their abilities. In the view of the above assertion physical activities are adopted, modify, accessorized and adjusted to meet the needs of differently able or individuals with disability.

Adapted Physical Activity refers to programmes and services across the life span of a child, including post-school sport and recreation programmes. Therefore Adapted physical education is a branch under Adapted physical activity.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Define Adapted Physical Education

* List 3 functions of Adapted Physical Education

3.0 MAIN CONTENT

3.1 MEANING OF ADAPTED PHYSICAL EDUCATION

Adapted Physical education (APE) is a programme which deals with the art and science of developing, implementing, and carefully monitoring an instructional physical education programme for learners with disabilities. They are instructional programmes for a learner with a disability, based on a comprehensive assessment, to give the learner the skills necessary for a lifetime of rich leisure, recreation, and sport experiences to enhance physical fitness and wellness. It has its principles and methods of adapting Physical Education, Sports and Recreation. Adapted physical education generally refers to school-based programmes for students ages 3–21 years. According to Dunn & Leitschuh (2010) Adapted physical education programs are those that have the same objectives as the regular physical education programme, but in which adjustments are made in the regular offerings to meet the needs and abilities of exceptional students. Note that both general and adapted physical education shares the same objectives. The major difference between general and adapted physical education is that in the latter, "adjustments" or adaptations are made to the regular offerings to ensure safe, successful, and beneficial participation. Many adaptations can be implemented within the general physical education setting such as asking a peer to provide assistance, modifying equipment and rules of games such as lowering the basketball stand and rings or allowing a child to stand closer to net when serving in volleyball, or modifying instruction such as using pictures or visual cues for children with hearing impairments or extra verbal cues and physical guidance for children with visual impairments.

Physical Education is defined as the development of physical and motor skills, fundamental motor skills and patterns, skills in aquatics, dance and individual and group games and sports; including intramural and lifetime sports. Federal law mandates that physical education be provided to students with disabilities adapted to suit their capabilities.

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
- Intellectual disability
- Multiple disabilities
- Orthopaedic impairment
- Other health impairment
- Serious emotional disturbance
- Specific learning disability
- Speech or language impairment
- Traumatic brain injury
- Visual impairment including blindness

The services provided by an APE teacher include (adapted from Sherrill, 1998):

- Planning services
- Assessment of Individuals /Ecosystems
- Prescription/Placement: The IEP
- Teaching/Counselling/Coaching
- Evaluation of Services
- Coordination of Resources and Consulting
- 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.

Difference between Adapted Sport and APE

Adapted Sports: This concept is often used interchangeably with A. P. E; however, there is a slight difference between the two. Thus Adapted sport refers to sports modified or created to meet the unique needs of individuals with disabilities such as wheelchair basketball, frame football, Sitting volleyball, and wheelchair dance sports, etc. Whereas A.P.E refers to an educational programme that provides education to individuals with special needs.

Key Terms in Adapted Physical Education

1. Special Education: This refers to a formal educational training given to people (children or adults) with speech needs. It is categorize into the disabled, the disadvantaged, and the gifted and talented.

2. Exceptional children: exceptional children are those children that differ from what the society regards as a normal. He or she may be highly intelligent or extremely dull.

3. Impaired: This refers to an identifiable organic or functional condition; some part of the body is actually missing, a portion of an anatomical structure is gone, or more parts of the body do not function properly.

4. Disabled: this is regarded as a limitation or restriction of an individual, because of impairments, in performing an activity.

5. Handicapped: this refers to conditions which as a result of impairment, disability, are adversely affected psychologically, emotionally, or socially, or in a combination of ways.

6. The Individuals with Disabilities Education Act (IDEA): As the nation's special education law, IDEA provides rights and protections to children with disabilities and to their parents or legal guardians. Learning your rights under IDEA can make it easier to get the help your child needs (and is legally entitled to) at school. IDEA was first passed in 1975. (At that time, it was called the Education for All Handicapped Children Act.) The primary purposes of IDEA are:

IDEA provides a free appropriate public education (FAPE) to children with disabilities, IDEA requires schools to find and evaluate students suspected of having disabilities, at no cost to families. This is called Child Fund. Once kids are

found to have a qualifying disability, schools must provide them with special education and related services (like speech therapy and counselling) to meet their unique needs. The goal is to help students make progress in school.

IDEA also gives parents or legal guardians a voice in their child's education, under IDEA, you have a say in the decisions the school makes about your child. At every point in the process, the law gives you specific rights and protections. These are called procedural safeguards. For example, one safeguard is that the school must get your consent before providing services to your child.

3.2 FUNCTIONS OF ADAPTED PHYSICAL EDUCATION

As with physical education for the general school population, the purpose of adapted physical education is to provide students with the motor skills necessary for lifelong physical activity via play, recreational pursuits, leisure activities, and organized sports.

Functions and Benefits of Adapted Physical Education

All individuals benefit from regular physical activity and children with special needs especially. We could all gain from these physical, mental and social benefits of being active.

- **Improvements in muscle strength, coordination, and flexibility.**
- **Improve exercise endurance, cardiovascular efficiency, and possibly increased life expectancy.**
- **Experience better balance, motor skills and body awareness.**
- **Show improvement in behaviour, academics, self-confidence and building friendships.**
- **Have positive changes in their health, quality of life and boost their self-esteem.**
- **Experience a sense of accomplishment and possibly the taste of winning or personal satisfaction.**
- **Experience increases in attention span, on-task behaviour, and level of correct responding.**
- **Increase appetite and improve quality of sleep.**
- **See a decrease in secondary health complications like obesity, high blood pressure, low HDL ("good") cholesterol and diabetes.**
- **Find an outlet for their physical energy, help them cope with stress, anxiety and depression.**

SELF ASSESSMENT EXERCISE

1. 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 (TRUE OR FALSE)

2. What is the fundamental distinction between Adapted Physical Education and Adapted Physical Activity? (a) Adapted Physical Education deals with school-based programmes for students with disability ages from 3–21whilst, (b) Adapted Physical Activity refers to programs across the life span, including post-school sport and recreation programs. (c) Both of them are not related (d) a-b

You may include the following answers.

1. TRUE

2. (d)

4.0 CONCLUSION

To encapsulate, Adapted Physical Education (APE) is a programme which deals with the art and science of developing, implementing, and carefully monitoring an instructional physical education programme for learners with disabilities. In the same vein, it entails the act of readjusting and modifying general physical education to suit the needs of individuals with disabilities.

5.0 SUMMARY

You have learnt in this unit that:-

i) Adapted Physical ESducation (APE) is a programme which deals with the art and science of developing, implementing, and carefully monitoring an instructional physical education programme for learners with disabilities.

ii) Adapted Physical Activity refers to programs across the life span, including post-school sport and recreation programs.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is Adapted Physical Education?
2. Define Adapted Physical Activity.
3. List 5 benefits of Adapted Physical Education

7.0 REFERENCES/FURTHER READING

https://brainly.in/question/1398876#. Retrieved on 23rd February 2020.

https://ifapa.net/ape/. Retrieved on 3rd march 2020.

https://ifapa.net/what-is-apa/. Retrieved on 3rd march 2020.

https://kidcompanions.com/children-with-special-needs-benefits-of-physical-activities-and-adaptive-sports/. Retrieved on 3rd march 2020.

https://www.apens.org/whatisape.html. Retrieved on 23rd February 2020.

Modified from Block, M.E. (2016). *A teacher's guide to adapted physical education* (4th Ed.). Baltimore: Paul H. Brookes.

UNIT 3 KEY LEGISLATION AND A.P.E NATIONAL STANDARDS

CONTENTS

4.0 Conclusion

5.0 Summary

6.0 Tutor-Marked Assignment

7.0 References/Further Reading

1.0 INTRODUCTION

This unit shall discuss the key legislations and A.P.E National Standards of specialised knowledge to include human development, motor behaviour, exercise science, teaching, measurement and evaluation and a host of others.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* State the Standards of Specialized Knowledge.

* Know the implications to APE learners

3.0 MAIN CONTENT

3.1 Key Legislations and A.P.E National Standards

15 Standards of Specialized Knowledge

The purpose of the Adapted Physical Education National Standards project was to ensure that physical education for children with disabilities are delivered by a qualified Adapted Physical Educator. In order to meet this purpose a set of 15 national standards representing the content a qualified Adapted Physical Educator must know to do their job was developed. In addition, a national certification examination was developed to measure the specialized content. The content an Adapted Physical Educator must know was identified and divided into 15 broad standards. The following are brief descriptions of the specific standards. To see the standards in full, you must acquire the Adapted Physical Education National Standards Guide.

Standard 1: 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.

Standard 2: MOTOR BEHAVIOUR

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.

Standard 3: 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.

Standard 4: 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.

Standard 5: 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.

Standard 6: 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 their needs.

Standard 7: 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.

Standard 8: 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.

Standard 9: 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 behaviour, exercise science and curriculum theory and development are applied to this standard in order to successfully design and plan programs of physical education.

Standard 10: 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 behaviour, and exercise science, are applied to this standard in order to effectively provide quality physical education to individuals with disabilities.

Standard 11: 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.

Standard 12: 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.

Standard 13: 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.

Standard 14: 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 programmes 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.

Standard 15: 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.

3.2 Education of All Handicapped Children Act

As federal and state courts throughout the nation developed the constitutional right of handicapped children to equal treatment in the public school system, Congress considered a uniform national procedure for funding and implementing these educational rights. In the spirit of court decisions in the area, as well as in recognition that vast differences existed among the states in providing services to handicapped children, P. L. 94-142 was passed. It was a critical statutory recognition that, in the famous words of the PARC court,

... all mentally retarded persons are capable of benefitting from a program of education and training; that the greatest number of retarded persons, given such education and training, are capable of achieving self-sufficiency ... that the earlier such education and training begins, the more thorough hand the more efficiently a mentally retarded person will benefit from it; and, whether begun early or not, that a mentally retarded person can benefit at any point in his life and development from a program of education and training. I

Congress found that of the eight million children it identified as handicapped in the United States, more than half were not receiving appropriate educational programs, and the special needs of the remaining half were not fully met. Fully one million children were entirely excluded from schools, forcing families to obtain their child's education, if at all, at great expense. In response to these findings, the law mandates a free program of education and training "designed to meet the unique needs" of each handicapped child. Although no state is required to accept funding under 94-142, those that do must provide the services and protections mandated.

The keystone of the law is the requirement that every handicapped student be provided with a "free appropriate public education".

a program of special education and related services which (a) have been provided at public expense, under public supervision and direction, and without charge, (b) meet the standards of the state educational agency, (3) include an appropriate preschool, elementary, or secondary school education in the state involved, and (d) are provided in conformity with the individualized education program .... 2 This provision is controversial because of its generality. "Appropriateness," de-pending on the orientation of the particular school administrator or parent, may be interpreted in a variety of ways. For some school officials, a program meets the legal standard if a child is permitted to attend school and is provided with services a local board of education can afford. Some parents, on. the other hand, have argued that every service that will aid a child should be provided to the fullest extent possible. Legally speaking, a student need not be offered the best or most expensive educational techniques, materials, and services available, but public schools must design and develop an individualized plan for the exceptional person so that learning can be attained. As the definition indicates, the program must be provided at no cost to the person's parent or guardian. Special education is further defined to include "classroom instruction, instruction in physical education, home instruction and instruction in hospitals and institutions."3 The specially designed instruction must be offered in the most normal or least restrictive environment possible. Together with special education, services that will help a child benefit from the program must be provided. The services described in 94-142 may be transportation, psychological counselling, speech and language or occupational and physical therapy, as well as recreation. This list of services is lengthy but not all-inclusive, so that each child's needs may be considered. As a result, school officials and parents must allow for related services that may be somewhat esoteric but that will help a child to learn. Naturally, disputes arise over the type and nature of the related services to be offered. One particular bone of contention is the question of therapy. School administrators have argued that therapy is a medical or treatment service and need not be provided under an education law. These officials frequently re-fuse to provide therapy or psychological counselling, instead referring parents to independent clinics. Others have been known to claim that no related services need be provided, thus limiting a special education program to classroom instruction. The latter view is contrary to the mandate of 94-142. In all cases a parent may be called upon to prove, by using the opinions of psychologists,

medical doctors, or other experts, that a certain related service is required. Although services will undoubtedly help each child, a service is legally mandated only when a child would otherwise fail to benefit from a program of special education. Officials are not permitted to deny services merely because they are not presently provided to any other student or because their provision would necessitate the hiring of additional personnel. Additionally, a child may not be placed on a waiting list for a service (or any aspect of a program).

SELF ASSESSMENT EXERCISE

1. Communication is not one among the 15 standards of specialized knowledge TRUE OR FALSE?

2. The goal of ----------is to focus on APE teachers remaining current in their field.

(a)Ethics (b) Continuing education (c) Communication (d) Human development

You may include the following answers

1. FALSE

2. (b)

4.0 CONCLUSION

In a nutshell, the purpose of the Adapted Physical Education National Standards project was to ensure that physical education for children with disabilities are delivered by a qualified Adapted Physical Educator.

5.0 SUMMARY

You have learnt in this unit that:-

i) The 15 Standards of Specialized Knowledge are; Human development, motor behaviour, , exercise science, measurement and evaluation, history and philosophy, unique attributes of learners, curriculum theory and development, assessment, instructional design and planning, teaching, consultant and staff development, student and programme evaluation, continuing education, ethics, and communication.

6.0 TUTOR-MARKED ASSIGNMENT

1. List 6 Standards of specialized knowledge

7.0 REFERENCES/FURTHER READING

https://apens.org/15standards.html. Retrieved on 20th February, 2020.

https://link.springer.com/chapter/10.1007%2F978-1-4615-9245-7_2. Retrieved on 9th May, 2020.

UNIT 4 INDIVIDUALS WITH DISABILITIES EDUCATION (TYPES)

CONTENTS

1.0 INTRODUCTION

Individualized educational programme is a pertinent aspect of adapted physical activity that specially provides educational programmes for individuals with disabilities.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Define the concept of Individualized educational programme
* State the IEP required components
* How to determine who need IEP
* Role of parents in IEP

3.0 MAIN CONTENT

3.1 Individualized Education Programme

Individualized Education Programme

The **Individualized Education Programme**, often called the **IEP**, is a legal document under United States law that is developed for each public school child in the U.S. who needs special education. It is created through a team of the child's parent(s) and district personnel who are knowledgeable about the child's needs. IEPs must be reviewed every year to keep track of the child's educational progress.

An IEP outlines the special education experience for all eligible students with a disability. An eligible student is any child in the U.S between the ages of 3-21 attending a public school and has been evaluated as having a need in the form of a specific learning disability, autism, emotional disturbance, other health impairments, intellectual disability, orthopaedic impairment, multiple disabilities, hearing impairments, deafness, visual impairment, deaf-blindness, developmental delay, speech/language impairment, or traumatic brain injury. The IEP describes present levels of performance, strengths, and needs, and creates measurable goals based on this data. It provides accommodations, modifications, related services, and specialized academic instruction to ensure that every eligible child receives a "Free and Appropriate Public Education" (FAPE) in the "Least Restrictive Environment" (LRE). The IEP is intended to help children reach educational goals more easily than they otherwise would. The four component goals are: conditions, learner, behaviour, and criteria. In all cases, the IEP must be tailored to the individual student's needs as identified by the IEP evaluation process, and must help teachers and related service providers (such as paraprofessional educators) understand the student's disability and how the disability affects the learning process.

The IEP describes how the student learns, how the student best demonstrates that learning, and what teachers and service providers will do to help the student learn

more effectively. Developing an IEP requires the team to evaluate the student in all areas of suspected disability, consider the student's ability to access the general education curriculum, consider how the disability affects the student's learning, and choose a federal placement for the student.

As long as a student qualifies for special education, the IEP is mandated to be regularly maintained and updated up to the point of high school graduation or prior to the 21st or 22nd birthday. If a student in special education attends university upon graduation, they are no longer "children with disabilities" under the Individuals with Disabilities Education Improvement Act of 2004 (IDEA) and are instead protected under Section 504. They can apply for and receive Section 504 accommodations, but the process is very different. Placements in public schools often occur in "general education" classrooms. Other types of placements include RSP (within a resource room), Special Day Class, Self Contained Class, Co-Teacher and specialized classes, or sub-specialties taught by a special education teacher. Students can also be removed from an IEP if it is determined the student is no longer eligible upon re-evaluation.

An IEP is meant to ensure that students receive an appropriate placement not only in special education classrooms or special schools. It is designed to give the student a chance to participate in regular school culture and academics as much as is possible for that individual student. In this way, the student is able to have specialized assistance only when such assistance is absolutely necessary, and otherwise maintains the freedom to interact with and participate in activities to the same extent of their non-disabled/general education peers.

IEP required components

In the US, the Individuals with Disabilities Education Act (IDEA) require public schools to develop an IEP for every student with a disability who is found to meet the federal and state requirements for special education. The IEP must be designed to provide the child with a Free Appropriate Public Education (FAPE). The term IEP refers to both the educational program provided to a child with a disability and to the written document that describes that educational programme. The IDEA requires that an IEP be written according to the needs of each student who is eligible under the IDEA; an IEP must also meet state regulations. The following must be included:

- The student's present levels of academic and functional performance
- Measurable annual goals, including academic and functional goals

- How the student's progress toward meeting annual goals is to be measured and reported to the parents
- Special-education and related services, as well as supplementary aids to be provided to the student
- Schedule of services to be provided, including when the services are to begin, the frequency, duration, and location for the provision of services
- Program modifications or supports provided to school personnel on behalf of the student
- Least Restrictive Environment (LRE) data which includes calculations of the amount of time to be spent each day by the student in general-education settings compared to special-education settings
- Explanation of any time the student will not participate along with non-disabled children
- Accommodations to be provided during state and district assessments that are necessary to measuring the student's academic and functional performance.

The student should attend when appropriate. If the student is over fourteen years, s/he should be invited to become a part of the IEP team. Additionally, when the student is sixteen years of age, a statement of post-secondary goals and a plan for providing what the student needs to make a successful transition is required. This transition plan can be created at an earlier age if desired but must be in place by the age of sixteen years.

An IEP must also include other pertinent information found necessary by the team, such as a health plan or a behaviour plan for some students.

The outcome of the IEP development process is an official document that describes the education plan designed to meet the unique needs of a student with a disability.

Determination of eligibility for special education and Who needs an IEP

Further information: Special education in the United States

Before an IEP is written for a student with a disability, the school must first determine whether the student qualifies for special education services. To qualify, the child's disability must have an adverse effect on the child's educational progress.

To determine eligibility, the school must conduct a full evaluation of the child in all areas of suspected disability. Based in part on the results of the evaluation, the school along with the parents meet to review the results the child's current level of

performance and to determine whether special education services are needed. In some cases, people may go undiagnosed because of strong visual memories and oral skills they pose, which can mask symptoms of having an impaired learning disorder.

If the child is found to be eligible for services, the school is required to convene an IEP team and develop an appropriate educational plan for the child. The IEP should be implemented as soon as possible after the child is determined eligible. IDEA does not state specific time-frames for each step, but each state determines its own laws for identifying the criteria regarding education and how it should be followed. States have added specific timelines that schools must follow for the eligibility, IEP development, and IEP implementation milestones.

As outlined by IDEA, students can receive free appropriate education under special education law if they fall under one of 14 categories. A child who has difficulty learning and functioning and has been identified as a special needs student is the perfect candidate for an IEP.

Kids struggling in school may qualify for support services, allowing them to be taught in a special way, for reasons such as:

1. Autism
2. Deaf-blindness
3. Deafness
4. Developmental delay (for children aged 3–9, varies by state)
5. Emotional and behavioural disorders
6. Hearing impairment
7. Intellectual disability (formerly referred to as mental retardation)
8. Multiple disabilities
9. Orthopaedic impairment
10. Other health impairment
11. Specific learning disability
12. Speech or language impairment
13. Traumatic brain injury
14. Visual impairment, including blindness

While teachers and school psychologists have the ability to initiate evaluations for special education service eligibility, they are unqualified to make medical diagnoses. Attention deficit hyperactive disorder (ADHD), autism spectrum disorder (ASD), and physical and developmental delays must be diagnosed by a physician. Although most children with physical or developmental delays, who have received consistent medical care , are diagnosed at an early stage by their

paediatricians, it is imperative to include a medical professional in the student's evaluation process if one of the aforementioned conditions is suspected but undiagnosed. When children are diagnosed early, they can start receiving services at earlier stages of development. State health and/or education departments offer early intervention services for children under the age of three years, while the public school system offers services for children from ages three through twenty-one.

Members of the IEP team

The IEP team includes the student, the student's parent(s) or legal guardian(s), a special education teacher, at least one general-education teacher, a representative of the school or of the school district who is knowledgeable about the availability of school resources, and an individual who can interpret the instructional implications of the results of the student's evaluation (such as the school psychologist). The parent or school may also bring other individuals who have knowledge or special expertise regarding the child. For example, the school may invite related service providers, such as speech and occupational therapists. The parent may invite professionals who have worked with or assessed the child or someone to assist the parent in advocating for the needs of their child, such as a parent advocate or an attorney.

If appropriate, the child may also participate in IEP team meetings. For example, some children begin participating in their IEP meetings when they reach middle school age.

A typical IEP team and team meeting includes:

- At least one of the child's parents or legal guardians. Parents are expected to be treated as equal participants with school personnel in developing the IEP as IDEA's policy states.
- A case manager or a representative of the school district (not the student's teacher) who is qualified to provide or supervise special education.
- The student's teacher(s) and principal(s). At least one teacher is required to attend, though all are invited.
- A general education teacher is required to attend if the recommended program includes activities with general education students, even if the child is in a special education class in the school.
- Any provider of a related service to the child. Normally, services include speech therapy, occupational therapy, or adapted physical education.
- Professionals who are qualified to explain the results of the testing. This usually requires at a psychologist and educational evaluator to attend if an

assessment or report is reviewed. This usually occurs at the 3-year review or triennial IEP.
- The student's guidance counsellor may be needed in attendance to discuss courses that may be required for the student for his or her education.

The following people are invited, but not required to, attend:

- Other persons involved with the child who they feel are important for the IEP team to hear; for example, the child's psychologist or tutor. They are invited to attend by the parent(s).
- An educational advocate, a social worker, and/or a lawyer knowledgeable in the IEP process.
- Related service personnel (in person or written recommendation), if the student is receiving related services (such as speech therapy, music therapy, physical therapy or occupational therapy). It is valuable for related service personnel to attend the meeting or at least provide written recommendations concerning the services in their area of specialty.

Role of the parents

Parents are to be considered full and equal members of the IEP team along with school personnel. Parents have the right to be involved in meetings that discuss the identification, evaluation, IEP development, and educational placement of their children. They also have the right to ask questions, dispute points, and request modifications to the plan, as do all members of the IEP team.

Although the IEP team are required to work toward a consensus, school personnel are ultimately responsible for ensuring that the IEP includes the services that the student needs. School districts are obligated by law to make a proposal for services to the parent. If an agreement cannot be reached, the school district cannot delay in providing the services which it believes are the best services to ensure that the student receives an effective educational program.

Under IDEA Part D, the United States Department of Education funds at least one parent training and information centre in each state and most territories to provide parents the information they need to advocate effectively for their child.[8] Some centres may also provide a knowledgeable person to accompany a parent to IEP meetings to assist the parent in the process.

The school is mandated to make an effort to ensure that at least one parent is present at each IEP team meeting. If they do not attend, the school is required to show that due diligence was made to enable them to attend, including notifying the

parents early enough that they have an opportunity to attend, scheduling the meeting at a mutually agreed on time and place, offering alternative means of participation, such as a phone conference.

The school is required to ensure that the parent understands the proceedings of IEP team meetings and to include an interpreter for parents who are deaf or whose native language is not English.

Developing the student's education plan

After the student is determined to be eligible for special education services, the IEP team is required to develop an IEP to be implemented as soon as possible after eligibility is determined. Using the results of the full individual evaluation (FIE); the IEP team works together to identify the student's present level of educational performance as well as the student's specific academic and any related or special services that the child needs in order to benefit from their education.

When developing an IEP, the team must consider the strengths of the student, the concerns of the parent for their student's education, results of the initial or most recent evaluation of the child (including private evaluations conducted by the parents), and the academic, developmental, and functional needs of the student. The team must also consider areas of deficit. Corresponding annual goals and objectives should be created to improve these areas. In the case of a student whose behaviour impedes their own learning or that of other children, the team is required to consider positive behaviour intervention and support to address the behaviour. An FBA may be required by the team to address the behavioural concerns. An FBA is conducted by a child psychologist with input from the IEP team.

The IEP team is required to consider the student's communication needs. For example, if a student is blind or visually impaired, the IEP is mandated to provide instruction in Braille unless an evaluation of the student's reading and writing skills, needs, and future needs indicate that this instruction is not appropriate for the student. If a student is deaf or hard of hearing, the team is required to consider the child's language and communication needs, including the need to communicate with school personnel and peers, and the student's need for direct instruction in the child's language and communication mode. In the case of a child with limited English proficiency, the team is required to consider the language needs of the child as those needs relate to the child's IEP.

A matrix is drafted containing the student's present level of performance, indicators about ways the student's disability influences participation and progress in the general curriculum, a statement of measurable goals that include benchmarks or

short-term objectives, the specific educational services to be provided which include program modifications or supports, an explanation of the extent that the child will not participate in general education, a description of all modifications in state-wide or district-wide assessments, the projected date for services to begin and their expected duration, the annual statement of transition service needs (beginning at age 14), a statement of inter-agency responsibilities to ensure continuity of services when the student leaves school (by age 16), and a statement regarding how the student's progress will be measured and how the parents will be informed in the process.

IDEA requires a student's IEP to be developed solely based on their needs and not on pre-existing programs or services available in the district. Whether particular services are available in the district should not be considered when identifying the services a student needs to receive an appropriate education.

Determining the appropriate placement

After the IEP is developed, the IEP team determines placement the environment in which the student's IEP can most readily be implemented. IDEA requires that the IEP is completed before placement decisions are made so that the student's educational needs drive the IEP development process. Schools may not develop a child's IEP to fit into a pre-existing program for a particular classification of disability; the placement is chosen to fit the IEP, which is written to fit the student.

IDEA requires state and local education agencies to educate children with disabilities with their non-disabled peers to the maximum extent appropriate. A child can only be placed in a separate school or special classes if the severity or nature of the disability prevents the student from receiving an appropriate education in the regular classroom, even with the use of supplementary aids and services. When determining placement, the starting assumption must be the student's current academic level and needs as evident by the disability.

Some of the more common placement settings include the general education classroom, an integrated class, a resource class, a self-contained class, and other settings, which include separate schools and residential facilities. A school system may meet its obligation to ensure that the child has an appropriate placement available by providing an appropriate program for the child on its own, consulting with another agency to provide an appropriate program, or utilizing some other mechanism/arrangement that is consistent with IDEA. The placement group bases its decision on the IEP and which placement option is appropriate for the child.[11] The general education classroom is seen as the least restrictive environment. In addition to the general education teacher, there will also ideally be a special

education teacher. The special education teacher adjusts the curriculum to the student's needs. Most school-age IEP students spend at least 80 percent of their school time in this setting with their peers. Research suggests students with special need benefit from being included in general education and its curriculum.

An integrated classroom is made up of mostly neurotypical children and several children who have IEPs. These are typically higher functioning children with disabilities that require help in areas of social skills. This setting allows them to model the behaviour of neurotypical children. Typically, there is an aide in this classroom setting to assist those children with IEPs.

The resource class is where the special education teacher works with small groups of students using techniques that work more efficiently with the students. This setting is available for students who spend between 40- 79 percent of their time in the general education classroom. The term "resource" in this context refers to the amount of time spent outside general education, not the form of instruction.

Another setting option is the separate classroom. When students spend less than 40 percent of their day in the general education class, they are said to be placed in a separate class. They are allowed to work in small, highly structured settings with a special education teacher. Students in a separate class may be working at different academic levels. Other settings include separate schools and residential facilities. Students in these settings receive highly specialized training to address both special learning and behavioural needs and acquire both academic and life skills instruction. These schools have the highest degree of structure, routine, and consistency.

Implementation and review

After the IEP is developed and placement is determined, the student's teachers are responsible for implementing all educational services, program modifications, or supports as indicated by the individual education plan. Schools are required to have an IEP in effect at the beginning of the school year. Initial IEPs are required to be developed within 30 days after eligibility is determined, and the services specified in the child's IEP are required to be provided as soon as possible after the IEP is developed.

An initial IEP is required to be accepted and signed by a parent or guardian before any of the outlined services may begin. Formerly, parents had 30 calendar days to take the paperwork home for their consideration. Currently, the IEP must be signed or appealed within 10 days, or the school can implement the most recent version.

The IEP team is responsible for conducting an annual review to ensure that the student is meeting goals and/or making progress on the benchmarks specified for each objective. If an IEP is not helping the student in the classroom, an immediate revision is to occur.

Procedural safeguards

School personnel have an obligation to provide parents with a Procedural Safeguards Notice, which is required to include an explanation of all of the procedural safeguards built into IDEA. The information must be understandable and in the native language of the parent.

A copy of the Procedural Safeguards Notice is required to be present at an IEP meeting. The school must give the parent a copy of the child's IEP at no cost.[13]

An extensive system of conflict resolution procedures are set out in the statutory provisions. They include the right to examine records, advance notification of intent to change the educational program, the right to engage in mediation, and a right to an impartial due process hearing.

Services that may be provided to a child with a disability

- Specially designed instruction
- Parental involvement
- Related services
- Program modifications
- Classroom accommodations
- Supplementary aids and services
- Resource room

Specially designed instruction

Specially designed instruction affects the instructional content, method of instructional delivery, and the performance methods and criteria that are necessary to help the student make meaningful educational progress. This instruction is designed by or with an appropriately credentialed special education teacher or related service provider. Students may have better success with small-group instruction as presented in a resource room (mandated by program and placement outlined in the IEP) particularly with language-based instruction.

For some students, teachers may need to present information through the use of manipulative. For other students, teachers may need to select and teach only

important key concepts and then alter evaluation activities and criteria to match this content change.

The IEP team determines whether a specific type of instruction is included in a student's IEP. Generally, if the methodology is an essential part of what is required to meet the individualized needs of the student, the methodology is included. For instance, if a student has a learning disability and has not learned to read using traditional methods, then another method is used. When including such an IEP recommendation, the team describes the components of the appropriate type of methodology, as opposed to naming a specific program.

Program modifications

Modifications can be made to the program's content, such as lowering success criteria for academic success, decreasing alternative state assessments, such as off-grade level assessments, or allowing the student to receive a "focused grade"—a grade that is recognized in a high school diploma, but is noted as "focused".

Classroom accommodations

Some of a student's educational needs may be met using class accommodations. Accommodations are typically provided by general educators within the general education environment. Accommodations do not involve modifying the material's content but rather allows students to receive information or to demonstrate what they have learned in ways that work around their impairment, thereby minimizing the likelihood of a significant disability. For example, a child may complete fewer/different parts of a homework assignment or an assessment than other students. They may also write shorter papers or be given different projects and assignments in replacement of the original task.

Accommodations may also include provisions such as preferential seating, providing photocopies of teacher notes, giving oral rather than written quizzes, extended time for tests and assignments, use of a word processor or laptop, taking tests in a quiet room, prompts and reminders for focus breaks for sensory needs, and assistance with specific subject areas.

Modifications in the curriculum can occur if a student needs to learn material that the class has moved on from, like working on exponents while the class is moving on to applying them in the order of operations. They also may occur in grading rubrics, where a student with an IEP may be assessed on different standards than other students.

Supplementary aids and services

- Assistive technology
- Teacher's aide in classroom that provides additional support for one or more specific students

Related services

If the child needs additional services to access or benefit from special education, schools are required to provide the related services, which include: speech therapy, occupational or physical therapy, interpreters, medical services (for example, a nurse to perform procedures the child needs during the day, for example, catheterization), orientation and mobility services, parent counselling, and training to help parents support the implementation of their child's IEP, psychological or counselling services, recreation services, rehabilitation, social work services, and transportation. If necessary a student is provided with specialized transportation. This can be the case if the student has a severe disability and requires a wheelchair, or is identified to have an emotional problem.

How Are Services Delivered?

In most cases, the services and goals outlined in an IEP can be provided in a standard school environment. This can be done in the regular classroom (for example, a reading teacher helping a small group of children who need extra assistance while the other kids in the class work on reading with the regular teacher) or in a special resource room in the regular school. The resource room can serve a group of kids with similar needs who are brought together for help.

However, kids who need intense intervention may be taught in a special school environment. These classes have fewer students per teacher, allowing for more individualized attention.

In addition, the teacher usually has specific training in helping kids with special educational needs. The children spend most of their day in a special classroom and join the regular classes for non academic activities (like music and gym) or in academic activities in which they don't need extra help.

Because the goal of IDEA is to ensure that each child is educated in the least restrictive environment possible, effort is made to help kids stay in a regular classroom. However, when needs are best met in a special class, then kids might be placed in one.

The Referral and Evaluation Process

The referral process generally begins when a teacher, parent, or doctor is concerned that a child may be having trouble in the classroom, and the teacher notifies the school counsellor or psychologist.

The first step is to gather specific data regarding the student's progress or academic problems. This may be done through:

- a conference with parents
- a conference with the student
- observation of the student
- Analysis of the student's performance (attention, behaviour, work completion, tests, class work, homework, etc.)

This information helps school personnel determine the next step. At this point, strategies specific to the student could be used to help the child become more successful in school. If this doesn't work, the child would be tested for a specific learning disability or other impairment to help determine qualification for special services.

It's important to note, though, that the presence of a disability doesn't automatically guarantee a child will receive services. To be eligible, the disability must affect functioning at school.

To determine eligibility, a multidisciplinary team of professionals will evaluate the child based on their observations; the child's performance on standardized tests; and daily work such as tests, quizzes, class work, and homework.

People who provides instructional support services

The professionals on the evaluation team can include:

- a psychologist
- a physical therapist
- an occupational therapist
- a speech therapist
- a special educator
- a vision or hearing specialist
- others, depending on the child's specific needs

As a parent, you can decide whether to have your child assessed. If you choose to do so, you'll be asked to sign a permission form that will detail who is involved in the process and the types of tests they use. These tests might include measures of specific school skills, such as reading or math, as well as more general developmental skills, such as speech and language. Testing does not necessarily mean that a child will receive services.

Once the team members complete their individual assessments, they develop a comprehensive evaluation report (CER) that compiles their findings, offers an educational classification, and outlines the skills and support the child will need.

The parents then have a chance to review the report before the IEP is developed. Some parents will disagree with the report, and they will have the opportunity to work together with the school to come up with a plan that best meets the child's needs.

Developing an IEP

The next step is an IEP meeting at which the team and parents decide what will go into the plan. In addition to the evaluation team, a regular teacher should be present to offer suggestions about how the plan can help the child's progress in the standard education curriculum.

At the meeting, the team will discuss your child's educational needs as described in the CER and come up with specific, measurable short-term and annual goals for each of those needs. If you attend this meeting, you can take an active role in developing the goals and determining which skills or areas will receive the most attention.

The cover page of the IEP outlines the support services your child will receive and how often they will be provided (for example, occupational therapy twice a week). Support services might include special education, speech therapy, occupational or physical therapy, counselling, audiology, medical services, nursing, and vision or hearing therapy. They might also include transportation; the extent of participation in programs for students without disabilities; what, if any, modifications are needed in the administration of state-wide assessment of student achievement; and, beginning at age 14, the inclusion of transition planning as a part of the process.

If the team recommends several services, the amount of time they take in the child's school schedule can seem overwhelming. To ease that load, some services may be provided on a consultative basis. In these cases, the professional consults with the teacher to come up with strategies to help the child but doesn't offer any

hands-on instruction. For instance, an occupational therapist may suggest accommodations for a child with fine-motor problems that affect handwriting, and the classroom teacher would incorporate these suggestions into the handwriting lessons taught to the entire class.

Other services can be delivered right in the classroom, so the child's day isn't interrupted by therapy. The child who has difficulty with handwriting might work one on one with an occupational therapist while everyone else practices their handwriting skills. When deciding how and where services are offered, the child's comfort and dignity should be a top priority.

The IEP should be reviewed annually to update the goals and make sure the levels of service meet your child's needs. However, IEPs can be changed at any time on an as-needed basis. If you think your child needs more, fewer, or different services, you can request a meeting and bring the team together to discuss your concerns.

SELF ASSESSMENT EXERCISE

1. One of the following is not among the category of disorders that aid in determining a child that needs IEP

(a)Multiple disabilities (b) Orthopaedic impairment (c) Specific learning disability (d) Xenophobia

2. The under listed are professionals on the evaluation team in IEP except?

(a) a psychologist (b)a physical therapist(c) a stealing therapist (d)an occupational therapist

You may include the following answers

1. (d)

2. (c)

4.0 CONCLUSION

IEP is a well organized education plan designed to meet the unique needs of a student with a disability. Parents have the right to choose where their kids will be educated. This choice includes public or private elementary schools and secondary schools, including religious schools. It also includes charter schools and home schools.

However, it is important to understand that the rights of children with disabilities who are placed by their parents in private elementary schools and secondary schools are not the same as those of kids with disabilities who are enrolled in public schools or placed by public agencies in private schools when the public school is unable to provide a free appropriate public education (FAPE).

Two major differences that parents, teachers, other school staff, private school representatives, and the kids need to know about are:

1. Children with disabilities who are placed by their parents in private schools may not get the same services they would receive in a public school.
2. Not all kids with disabilities placed by their parents in private schools will receive services.

The IEP process is complex, but it's also an effective way to address how your child learns and functions. If you have concerns, don't hesitate to ask questions about the evaluation findings or the goals recommended by the team. You know your child best and should play a central role in creating a learning plan tailored to his or her specific needs.

5.0 SUMMARY

You have learnt in this unit that:-

i) An IEP outlines the special education experience for all eligible students with a disability.

ii) The professionals on the evaluation team can include a psychologist, a physical therapist, and an occupational therapist etc.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is IEP?

2. How can a child who needs IEP be determined?

7.0 REFERENCES/FURTHER READING

https://en.wikipedia.org/wiki/Individualized_Education_Program. Retrieved on 5th May, 2020.

https://kidshealth.org/en/parents/iep.html. Retrieved on 5th May, 2020.

https://www.understood.org/en/school-learning/specialservices/ieps/understanding-individualized-education-programs. Retrieved on 5th May, 2020.

MODULE 2 INDIVIDUAL ADAPTED PHYSICAL EDUCATION PROGRAMME

Unit 1 Objectives of Adapted Physical Education

Unit 2 Students with disabilities and physical education programme

Unit 3 Placement in physical education activities

Unit 4 Mainstreaming students with disabilities in physical education

Module 2

Introduction

Module four is titled “Individual Adapted Physical Education Programme”, which is sub divided into units, they include Objectives of Adapted Physical Education,

Students with disabilities and physical education programme, Placement in physical education activities, and Mainstreaming students with disabilities in physical education.

UNIT 1 OBJECTIVES OF ADAPTED PHYSICAL EDUCATION

CONTENTS

1.0 INTRODUCTION

In APE, the instructor provides planning and assessment, consultation for general physical education teachers, specially designed instruction, and adapts or modifies the curriculum, task, equipment, and/or environment so a child can participate in all aspects of physical education with the paramount desire to enhance independence of the differently-able children.

APE and general physical education teachers work together to design meaningful and beneficial instruction for all students. This unit is written to provide the reader with the necessary objectives of Adapted Physical Education.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* States 4 objectives of A.P.E

3.0 MAIN CONTENT

3.1 Objectives of Adapted Physical Education

The objective of Adapted Physical Education is to facilitate the student's independent function and to decrease the effect of the child's disability on his/her ability to benefit from the special education process.

The primary aims and objectives of the APE program are:-

1. To let the child participate regularly in movements that is age-appropriate to help develop the motor-skills.

2. To develop a healthy level of balance, flexibility, muscular strength, body composition, and cardio-respiratory endurance.

3. To learn new games and their rules and to demonstrate it correctly in the game settings.

4. To learn and demonstrate appropriate social skills during physical activities.

5. To develop motor skills and to learn the benefits of regular physical activity.

6. Develop competency in movement and motor skills.

SELF ASSESSMENT EXERCISE

List 2 objectives of A.P.E

4.0 CONCLUSION

To sum up, Adapted Physical Education is in existence to support differently-abled individuals to participate and enjoy the maximum benefits accrued with Physical Education.

5.0 SUMMARY

You have learnt in this Unit that:-

i) Adapted Physical Education is to facilitate the students' independent function.

ii) Adapted Physical Education help to develop motor skills and to learn the benefits of regular physical activity.

6.0 TUTOR-MARKED ASSIGNMENT

1. State 4 objectives of A.P.E

7.0 REFERENCES/FURTHER READING

https://brainly.in/question/1398876: Retrieved on 13th February, 2020.

https://mycbseguide.com/questions/6989/: Retrieved on 13th February, 2020.

UNIT 2 STUDENTS WITH DISABILITIES AND PHYSICAL EDUCATION PROGRAMME

CONTENTS

7.0 References/Further Reading

1.0 INTRODUCTION

We live in a society where everybody needs physical education for a healthy living. However, not everyone can afford it without modification of either the curriculum or the activities. Therefore, the advent of adapted physical education has modified and counterbalances the opportunities of both the disabled and non-disabled students toward participating in physical education.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Interpret IEP requirement by U.S department of education

* List and explain at least 6 out of the 14 categories of IEP

3.0 MAIN CONTENT

3.1 Physical Education for Students with Disabilities

Physical education is an integral part of general education that educates an individual physically, mentally, socially, economically, and emotionally through well organized and conducted physical activities.

Individual with Disability Education Act (IDEA) 2004 requires that students with disabilities receive physical education services, specially designed if necessary. If your child has a disability and an IEP, the school must provide physical education as part of your child's special education program.

Many students with disabilities can safely and successfully participate in general physical education, with or without accommodations and supports. However, some children benefit from specially designed or adapted physical education. Content in adapted physical education should mirror the general physical education curriculum to the greatest extent possible.

Because physical education is a required component of special education, your child's general and/or adapted physical education teacher should be included as a

member of the IEP team if the student is receiving specially designed physical education.

At a minimum, if your child is receiving specially designed or adapted physical education, the IEP should include a summary of present level of performance in physical education content, the frequency and duration (minutes and days per week or stipulated time period) of physical education services, measurable goals and objectives about content, and the placement where these services are provided. Like all other special education and related services, physical education instruction should be detailed in the IEP.

Note: *These required physical education services are different and separate from related services such as physical and occupational therapy.* Best practice is a "motor team" approach or service delivery model where adapted and general physical education teachers and related service personnel work collaboratively to meet the unique needs of students with disabilities.

Physical Education Content and Requirements in IDEA

34 C.F.R.300.39(b)(2) IDEA defines "physical education" as the development of:

- Physical and motor skills
- Fundamental motor skills and patterns
- Skills in aquatics, dance, and individual and group games and sports (including intramural and lifetime sports)
- Includes special physical education, adapted physical education, movement education, and motor development

20 U.S.C. 1401(29) Special Education: The term 'special education' means specially designed instruction, at no cost to parents, to meet the unique needs of a child with a disability, including -

(A) Instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings; and

(B) **Instruction in physical education.**

34 CFR 300.108 Physical Education. The State must ensure that public agencies in the State comply with the following:

(a) General. **Physical education services, specially designed if necessary, must be made available to every child with a disability receiving FAPE**, unless the public agency enrols children without disabilities and does not provide physical education to children without disabilities in the same grades.

(b) **Regular physical education.** Each child with a disability must be afforded the opportunity to participate in the regular physical education program available to nondisabled children unless -

(1) The child is enrolled full time in a separate facility; or

(2) The child needs specially designed physical education program, as prescribed in the child's IEP.

(c) **Special physical education**. If specially designed physical education is prescribed in a child's IEP, the public agency responsible for the education of that child must provide the services directly or make arrangements for those services to be provided through other public or private programs.

(d) **Education in separate facilities**. The public agency responsible for the education of a child with a disability who is enrolled in a separate facility must ensure that the child receives appropriate physical education services in compliance with this section.

Interpretation of the PE Requirement by the U.S. Department of Education

Commentary to IDEA (page 46583) discusses when PE is required for students with disabilities beyond the grade level requirement of nondisabled peers.

Note: This is a very important clarification that is often not known or understood by school district personnel since it appears in the discussion section of the IDEA regulations in the Federal Register. You should bring this clarification to the attention of school officials if PE is being characterized as a grade level requirement based on what nondisabled peers receive.

1. Physical education **must be made available equally** to children with disabilities and children without disabilities.

2. If physical education is specially designed to meet the unique needs of a child with a disability and is set out in that child's IEP, those services **must be provided whether or not they are provided to other children in the agency**.

3.2 14 disability categories eligible for Individualized Education Programme (IEP)

A child who has difficulty learning and functioning and has been identified as a special needs student is the perfect candidate for an **IEP**. Kids struggling in school may qualify for support services, allowing them to be taught in a special way, for reasons such as: learning disabilities.

14 Disability Categories under IDEA the definitions of the specific disability categories are below. These are federal terms and definitions.

1. Autism: A developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three that adversely affects a child's educational performance. Other characteristics often associated with autism are engaging in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. The term autism does not apply if the child's educational performance is adversely affected primarily because the child has an emotional disturbance, as defined in 5 below. A child who shows the characteristics of autism after age 3 could be diagnosed as having autism if the criteria above are satisfied.

2. Deaf-Blindness: Concomitant [simultaneous] hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness.

3. Deafness: A hearing impairment so severe that a child is impaired in processing linguistic information through hearing, with or without amplification that adversely affects a child's educational performance.

4. Developmental Delay: Children from birth to age three (under IDEA Part C) and children from ages three through nine (under IDEA Part B), the term developmental delay, as defined by each State, means a delay in one or more of the following areas: physical development; cognitive development; communication; social or emotional development; or adaptive [behavioural] development.

5. Emotional Disturbance: A condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: (a) An inability to learn that cannot be explained by intellectual, sensory, or health factors. (b) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers. (c) Inappropriate types of behaviour or feelings under normal circumstances. (d) A

general pervasive mood of unhappiness or depression. (e) A tendency to develop physical symptoms or fears associated with personal or school problems.
The term includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance.
6. Hearing Impairment: An impairment in hearing, whether permanent or fluctuating, that adversely affects a child's educational performance but is not included under the definition of "deafness."
7. Intellectual Disability (formerly known as Mental Retardation): Significantly sub average general intellectual functioning, existing concurrently [at the same time] with deficits in adaptive behaviour and manifested during the developmental period, that adversely affects a child's educational performance.
8. Multiple Disabilities: Concomitant [simultaneous] impairments (such as mental retardation-blindness, mental retardation-orthopaedic impairment, etc.), the combination of which causes such severe educational needs that they cannot be accommodated in a special education program solely for one of the impairments. The term does not include deaf-blindness.
9. Orthopaedic Impairment: A severe orthopaedic impairment that adversely affects a child's educational performance. The term includes impairments caused by a congenital anomaly, impairments caused by disease (e.g., poliomyelitis, bone tuberculosis), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns that cause contractures).
10. Other Health Impairment: Having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment, that— (a) is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, haemophilia, lead poisoning, leukaemia, nephritis, rheumatic fever, sickle cell anaemia, and Tourette syndrome; and (b) adversely affects a child's educational performance.
11. Specific Learning Disability: A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include learning problems that are primarily the result of visual, hearing, or motor disabilities; of mental retardation; of emotional disturbance; or of environmental, cultural, or economic disadvantage.
12. Speech or Language Impairment: A communication disorder such as stuttering, impaired articulation, a language impairment, or a voice impairment that adversely affects a child's educational performance.

13. Traumatic Brain Injury: An acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child's educational performance. The term applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem-solving; sensory, perceptual, and motor abilities; psychosocial behaviour; physical functions; information processing; and speech. The term does not apply to brain injuries that are congenital or degenerative, or to brain injuries induced by birth trauma.

14. Visual Impairment Including Blindness: Impairment in vision that, even with correction, adversely affects a child's educational performance. The term includes both partial sight and blindness.

SELF ASSESSMENT EXERCISE

1. ....is a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three that adversely affects a child's educational performance?

(a) Developmental delay (b) Autissm (c) Underdeveloped brain (d) Autism

2. IDEA 2004 requires that students with disabilities receive physical education services, specially designed if necessary. If your child has a disability and an IEP, the school must provide physical education as part of your child's special education program. TRUE/FALSE?

You may include the following answers

1. (d)

2. TRUE

4.0 CONCLUSION

From the foregoing, IDEA 2004 requires that students with disabilities receive physical education services, specially designed if necessary. Therefore, schools should ensure that the curriculum, rules and activities are adopted and adapted to suit the unique needs of learners.

5.0 SUMMARY

You have learnt in this unit that:-

i) Physical education is an integral part of general education that educates an individual physically, mentally, socially, economically, and emotionally through well organized and conducted physical activities.

ii) IDEA 2004 requires that students with disabilities receive physical education services, specially designed if necessary. If your child has a disability and an IEP, the school must provide physical education as part of your child's special education program.

iii) The 14 disability categories eligible for IEP as stipulated by IDEA include Autism, Deaf-Blindness, Deafness, Developmental Delay, Emotional Disturbance, Hearing Impairment, Intellectual Disability (formerly known as Mental Retardation), Multiple Disabilities, Orthopaedic Impairment, Other Health Impairment, Specific Learning Disability, Speech or Language Impairment, Traumatic Brain Injury, and Visual Impairment Including Blindness.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is physical education?

2. List and explain any four disabilities that are eligible for Individualized Educational Programme?

7.0 REFERENCES/FURTHER READING

http://sinche.uom.gr/sites/default/files/14_disability_categories_under_idea.pdf. Retrieved on 11th September, 2020.

https://www.wrightslaw.com/info/pe.index.htm. Retrieved on 11th September, 2020.

UNIT 3 PLACEMENT IN PHYSICAL EDUCATION ACTIVITIES

CONTENTS

1.0 INTRODUCTION

This unit is built to explain the placement of options in adapted physical education.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Draw continuum APE placement options.
* Explain the services at each level.
* Define the term LRE
* List the types of LRE

3.0 MAIN CONTENT

3.1 Placement in Physical Education Activities

Placement Options in Adapted Physical Education

Placement in physical education is categorized into two alternative options which are most restrictive environment (MRE) and least restrictive environment (LRE).

Most Restrictive Environment (MRE)

This refers to an educational programme which stipulates that students with disabilities should be restricted and segregated to study in special schools without mainstreaming or including them with their non-disabled peers. Or it is a setting that is deduced from the general classroom, such that those students with disabilities will learn without being integrated or fused with the non-disabled students. This setting is termed as the most restricted environment because it limits and restricts differently-abled students to study in a separate environment. This can also be referred to as separate programmes, it is mostly done to disabled students who cannot cope in an LRE or regular class. Nonetheless, the methods of this placement include:

1. Complete day placement in a special class.
2. Complete day placement in a special school.
3. Total time placement in residential schools.

Least Restrictive Environment (LRE)

LRE is part of the Individuals with Disabilities Education Act (IDEA). IDEA says that those children who receive special education should learn in the least restrictive environment. This means they should spend as much time as possible with peers who do not receive special education. LRE can also be viewed as a mainstreamed, and an included setting.

The word “environment” makes LRE sound like a *place*. But it actually is more about your child’s educational *program*. Where your child learns is only one piece of the program.

IDEA says two things about LRE that are important to understand when working with the IEP team:

1. Your child should be with kids in general education to the “maximum extent that is appropriate.”
2. Special classes, separate schools, or removal from the general education class should only happen when your child’s learning or thinking difference—a “disability” under IDEA—is so severe that supplementary aids and services can’t provide your child with an appropriate education.

A key word here is *appropriate*. It refers to what’s suitable or right for your child. Sometimes, putting a child in a general education classroom isn’t suitable because a specific service or program can’t be provided there.

Different Types of LRE

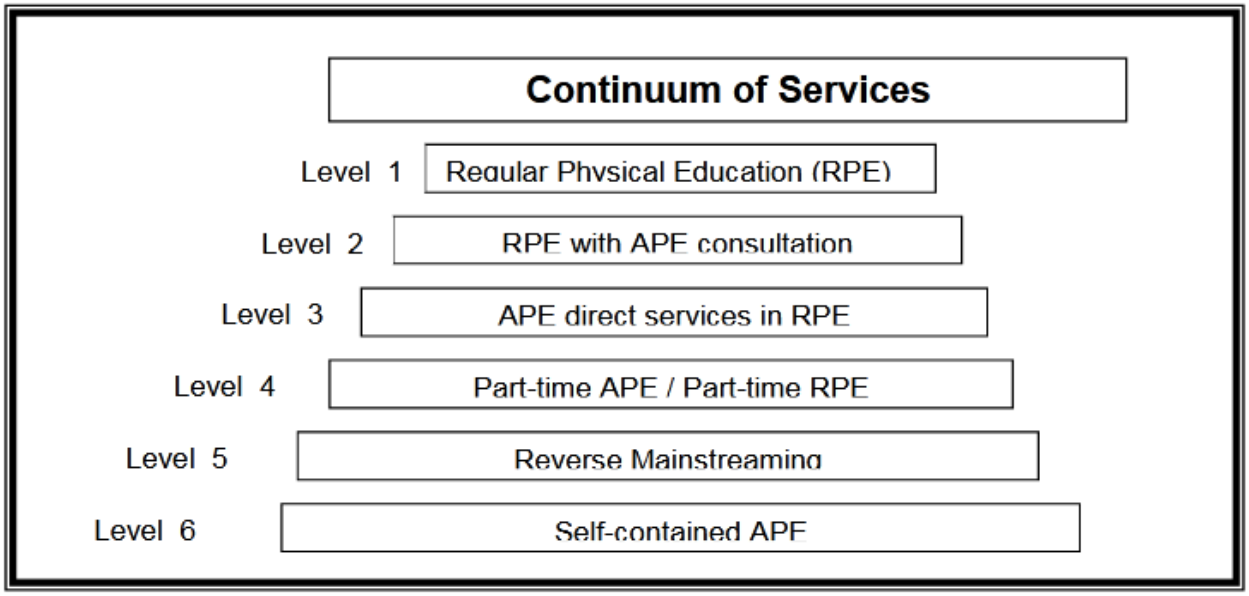
The basic idea of LRE is straightforward. Still, it’s often a hot-button issue at meetings. IDEA doesn’t spell out the LRE for each type of disability. There isn’t necessarily one “right” environment for all kids. And at times, it may be better or more suitable for a child to learn separately.

The intent of LRE is to make sure that kids who receive special education are included in the general education classroom as often as possible. But agreeing on how that happens isn’t always easy. The IEP team, which includes you, decides what the LRE is for your child. Here are some common LRE scenarios:

- **General education classroom with support.** Your child spends the entire day in a general education class. Your child receives supports and services like a tutor or aide, assistive technology, related services, accommodations, and modifications or any combination of these.

- **Partial mainstream/inclusion classroom.** Your child spends part of the day in a general education class. Your child gets some individual or small-group instruction in a special education class, or is pulled out of class for some services.
- **Special education class.** This is a program with specialized instruction for kids with similar learning needs.

- **Specialized program outside of your school district.** This includes private schools, residential programs and hospital programs. The following continuum of placement options provides the student with special needs the opportunity to receive instruction in the least restrictive environment.



Continuum of services in APE

Level 1 Regular Physical Education

*Student attends regular PE with peers

*No APE services are necessary for students' success in this setting

*Regular PE teacher feels comfortable working with student(s) with disabilities with no ongoing staff support

*Student(s) with disabilities can make necessary accommodations on their own

Level 2 Regular PE with APE Consultation

*Student attends regular PE with peers

*APE consults with staff to monitor student progress and address regular PE concerns regarding possible curriculum / activity modifications, behaviour management techniques, and communication skills and/or assessing student skills

*No direct assistance needed for the student

Level 3 Adapted PE Direct Service in Regular PE

*Support personnel assist the student

*APE teacher may engage in team teaching once or twice a week with the regular PE teacher or may provide one on one assistance to the student

*APE teacher is responsible for training the support personnel

Level 4 Part-time Adapted PE and Part-time Regular PE

*Student may attend regular PE when he/she can participate safely and successfully in certain units of instruction while receiving APE instruction during units which he/she cannot safely or successfully participate

*May use flexible of fixed schedule with reverse mainstreaming

Level 5 Reverse Mainstreaming

*Student participates in APE with assistance from non-disabled peer tutors or partners

*Students with disabilities from schools go to regular schools for RPE

*Students without disabilities come to the special education school

*Students with and without disabilities meet at a community-based recreation facility

Level 6 Self-contained Adapted PE

*APE provided at the school at which the student is enrolled by the APE teacher

*APE provided by legally identified personnel at the school in which the student is enrolled. Consulting or monitoring services are provided by the APE.

*Amount of APE instructional time is decided by the ARD Committee.

SELF ASSESSMENT EXERCISE

1. The service provided at level 5 APE placement continuum is reverse mainstreaming TRUE/FALSE?

You may include this answer

1. TRUE

4.0 CONCLUSION

In conclusion, there are six levels of placement options in APE, which explain how place or mobilize students with disabilities.

5.0 SUMMARY

You have learnt in this unit that:-

i) There are six levels for APE placement which include 1 Regular Physical Education, Level 2 Regular PE with APE Consultation, Level 3 Adapted PE Direct Service in Regular PE, Level 4 Part-time Adapted PE and Part-time Regular PE, Level 5 Reverse Mainstreaming, and Level 6 Self-contained Adapted PE.

6.0 TUTOR-MARKED ASSIGNMENT

1. Draw continuum APE placement options.

2. Explain level 6 of APE placement?

7.0 REFERENCES/FURTHER READING

http://sinche.uom.gr/sites/default/files/14_disability_categories_under_idea.pdf. Retrieved on 5th may, 2020.

https://www.region10.org/r10website/assets/File/apeplacement.pdf. Retrieved on 5th may, 2020.

https://www.understood.org/en/school-learning/special-services/special-education-basics/least-restrictive-environment-lre-what-you-need-to-know. Retrieved on 5th may, 2020.

http://www1.gcsnc.com/depts/EC/ape/faq.htm. Retrieved on 5th may, 2020.

UNIT 4 MAINSTREAMING STUDENTS WITH DISABILITIES IN PHYSICAL EDUCATION

CONTENTS

1.0 INTRODUCTION

Mainstreaming is the process of making something starts to be considered normal and acceptable. Therefore mainstreaming in educational context refers to the act of juxtaposing both disabled and non-disabled students to study together.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Define the concept of mainstreaming as regards education.

* List the benefits of mainstreaming to disabled students.

3.0 MAIN CONTENT

3.1 Mainstreaming

Mainstreaming, in the context of education, is the practice of placing students with special education services in a general education classroom during specific time periods based on their skills. To clarify, this means students who are a part of the special education classroom will join the regular education classroom at certain times which are fitting for the special education student. These students may attend art or physical education in the regular education classrooms. Sometimes these students will attend math and science in a separate classroom, but attend English in

a general education classroom. Schools that practice mainstreaming believe that students with special needs who cannot function in a general education classroom to a certain extent belong in the special education environment.

Access to a special education classroom, often called a "separate classroom or resource room", is valuable to the student with a disability. Students have the ability to work one-to-one with special education teachers, addressing any need for remediation during the school day. Many researchers, educators and parents have advocated the importance of these classrooms amongst political environments that favour their elimination.

Oftentimes mainstreamed students will have certain supports they will bring to the general education classroom. A common support is to bring a one-on-one aide to assist them. Other equipment may be tools from their special education classroom that assist them in keeping up with the demands of the general education classroom. This may be a device that helps a deaf student communicate with their peers, a special chair for a student diagnosed with A.D.H.D., or a special desk for a student that is in a wheelchair. Some of these students may need accommodations on assignments or tests.

Proponents of both the philosophy of educational inclusion assert that educating children with disabilities alongside their non-disabled peers fosters understanding and tolerance, better preparing students of all abilities to function in the world beyond school. Children with special needs may face social stigma as a result of being mainstreamed, but also may help them socially develop.

There is often a lot of confusion between the terms mainstreaming and inclusion. Often these terms are used interchangeably, but they mean two very different things. Mainstreamed students are part of the special education classroom. When they enter the regular education classroom for certain subjects, this is considered mainstreaming. In comparison, inclusion students are regular education classroom students who receive special education services. Usually whether is not a student's education is mainstreamed or inclusion is based on which is the least restrictive environment, which can be determined in the students IEP. Dr. Kenneth Shore comments on the least restrictive environment by claiming, “Determining what is the least restrictive environment for a particular student requires balancing the need for the child to learn to integrate socially with his non-disabled peers with the need for the child to receive instruction appropriate to his abilities.”

“United States' federal law stipulates that physical education instruction can be provided in a variety of ways through the following continuum:

1. Regular physical education instruction (least restrictive environment)

2. Modified regular physical education

3. Special or regular class instruction provided by the classroom teacher

4. Adapted physical education designated instructional services (DIS).

In most cases, the APE specialist assesses the student and makes recommendations to the Individualized Education Program (I.E.P.) team regarding the most appropriate physical education program option. At this stage in the IEP process, when all the papers are being shuffled and the goals and objectives are being written, it is important that APE specialists are cognizant of our responsibility to meet the needs of the person as a whole and as a participant in a heterogeneous society. Mainstreaming, or integration of disabled people into the general community, addresses this responsibility and is an invaluable experience that benefits us all. It affords the opportunity to recognize the unique talents, strengths, and contributions made by each member of the group. Children are particularly eager to accept individual differences, and we teachers are obligated to encourage and nurture that behaviour. Sometimes, however, it is appropriate and necessary to deliver remediative and/or therapeutic services in a segregated or isolated environment. It is also important for disabled students to have opportunities to learn and play without feeling the pressure to measure up to unrealistic standards or expectations. We must honestly examine our reasons for choosing a placement option for a particular student. If we find that we are avoiding mainstreaming because of financial considerations, lack of sensitivity or expertise among teachers, low expectations of students, or habitual practices - it is definitely time for a change! "Mainstreaming" too easily becomes "main flooding" if it is not carefully rehearsed and orchestrated by knowledgeable professionals. Done correctly, it is Adapted Physical Activity. It is quite possible to integrate disabled and non-disabled students in a physical education program and insure the safe and successful participation of all. To achieve this goal, there are two major considerations: how students are grouped for instruction, and what units of instruction are chosen. Suggested Groupings Small Groups When "pulling" students out of their regular classrooms for individualized instruction in gross

motor and perceptual-motor development, consider pulling some other students who are not identified for APE services along with them. You may choose students you know will model appropriate skills and behaviours for the group. Those who have low skills and could use the extra help (even though they do not qualify for APE services) might be good candidates for the small group. Either way, you will be providing a more integrated setting that takes the mystery out of where those students are going and what they are doing "over there." You will also have the opportunity to introduce the skills necessary for successful participation in the larger group. "Reverse mainstreaming" is a rather strange term used for an innovative concept. A group of disabled students joins a group of nondisabled students (of equal or smaller number). The nondisabled students are exposed to specialized equipment and facilities that are part of everyday reality for the disabled students. A greater appreciation for that reality is gained when one spends time pushing a wheelchair, wearing a blindfold and trusting a sighted guide, using an augmentative communication device, etc. Small groups allow space and time for genuine shared experiences. Large Groups In this model, the APE specialist teaches the entire class with the regular physical education (PE) teacher, classroom teacher, and/or instructional aide present. The specialist carefully selects activities that will challenge all the students in the class and insure a positive experience for those with low skills. This has always been the goal in physical education classes, but the goal becomes more complicated to achieve when more severely disabled students are involved. In these larger integrated classes, the specialist demonstrates techniques that work for a particular group, and the teachers who attend the class learn to reinforce skills and implement the program on their own. One to One: Peer Tutoring Peer tutoring is a wonderful opportunity for both the tutor and the student. The nondisabled tutor gains experience in breaking down skills into smaller components, explaining them verbally, and demonstrating them visually.

Advantages of mainstreaming to students with disabilities

The benefits of mainstreaming to students with disabilities include:

- *Higher academic achievement:* Mainstreaming has shown to be more academically effective than exclusion practices. For instance, The National Research Centre on Learning Disabilities found that graduation rates of all students with disabilities in the U.S. increased by 14% from 1984 to 1997,

although this report does not differentiate between students enrolled in mainstreaming, inclusive, or segregated programs. Access to a resource room for direct instruction has shown to be effective in increasing students' academic skills and thus increasing the abilities applied by students in a general education setting. Compared to full-time placement in a special education class or special school, both part-time and full-time placement in the regular classroom have been shown to improve academic achievement in students with mild academic disabilities, as well as to improve their long-term behaviour.

- *Higher self-esteem:* By being included in a regular-paced education setting, students with disabilities have shown to be more confident and display qualities of raised self-efficacy. All students in California who went to a different school prior to attending a mainstreaming program were asked to fill out an assessment of their old school as compared to inclusion program. The assessments showed that out of all students with disabilities 96% felt they were more confident, 3% thought they had the same experience as an excluded student, and 1% felt they had less self-esteem. Overall, students felt that they were equal to their peers and felt that they should not be treated any differently.
- *Better social skills:* Any kind of inclusion practice, including mainstreaming, allows students with disabilities to learn social skills through observation, gain a better understanding of the world around them, and become a part of the "regular" community. Mainstreaming is particularly beneficial for children with autism and ADHD. By interacting with same-aged non-disabled children, children with autism were observed to be six times more likely to engage in social relations outside of the classroom. Because children with autism spectrum disorders have severely restricted interests and abnormalities in communication and social interaction, the increased interaction with typical children may be beneficial to them. The same 1999 study showed that students with Down syndrome were three times more likely to communicate with other people.

Mainstreaming also benefits other children. It opens the lines of communication between those students with disabilities and their peers. If they are included into classroom activities, all students become more sensitive to the fact that these students may need extra assistance.

Benefits to non-disabled students

There is research that suggests that educating non-disabled students and students with disabilities together creates an atmosphere of understanding and tolerance that better prepares students of all abilities to function in the world beyond school.

Students without disabilities who engaged in an inclusive physical education program reported increases in self-concept, tolerance, self-worth, and a better understanding of other people. The students also reported that the inclusion program was important because it prepared them to deal with disability in their own lives. Positive aspects that come from inclusion are often attributed to contact theory. Contact theory asserts that frequent, meaningful, and pleasant interactions between people with differences tend to produce changes in attitude.

Disadvantages

Although mainstreaming in education has been shown to provide benefits, there are also disadvantages to the system.

Trade off with non-disabled students' academic education

One potentially serious disadvantage to mainstreaming is that a mainstreamed student may require much more attention from the teacher than non-disabled students in a general class. Time and attention may thus be taken away from the rest of the class to meet the needs of a single student with special needs. The effect that a mainstreamed student has on the whole class depends strongly on the particular disabilities in question and the resources available for support. In many cases, this problem can be mitigated by placing an aide in the classroom to assist the student with special needs, although this raises the costs associated with educating this child. The added cost of an aide in a classroom to meet needs of special education students can be offset by not funding a teacher in a wholly separate classroom when mainstreaming does not occur.

Teachers are encouraged to teach the entire class differently. This includes being less abstract and more concrete in content, changing lighting, simplifying the design of the classroom, and having a predictable structure and routine rather than novelty.

Harm to academic education of students with disabilities

Some research has suggested teachers who are not aware of and later may choose not to adopt modifications needed for students with special needs are also more resistant to having these students in class. This can lead to regression of the students with disabilities as well as overall decreased classroom productivity.

Teacher–student interactions

It has been seen that general educators provide 98.7% of their teaching time doing whole class interactions. Students with disabilities have been known to require a

significant more amount of individual attention with the classroom teacher. Children with disabilities spend twice as much time in whole-class activities as in one-to-one activities due to the amount of whole-class teaching, yet these students are half as likely to engage in whole-class learning activities such as writing, reading and participating, showing that whole group activities do not meet the needs of students with disabilities as much as individual work would. It is reported that mainstreamed students receive a larger proportion of the classroom teachers' total time than regular education students. However this did not result in an increase in academic instructional time. Mainstreamed students in low-ability classes receive more non-academic correction from the classroom teacher compared to mainstreamed students in average and above-average classes or regular education students. Resulting in students with special education needs (SEN) spending 25% of their time working outside of the classroom, and a reduction of teacher interaction in a whole class setting from 30% to 22%. Therefore, mainstreamed students will spend time in a resource room where they can receive more individualized attention from teachers. In contrast, there has been an increase of the number of teaching assistants (TAs) in mainstream primary settings to assist the learning and inclusion of students with SEN. Interactions with TAs has become an integral part of educational experience for students with SEN, resulting in TA interactions comprising up to a fifth of all observations students with SEN experience. Observations show that the higher the level of student SEN, the more likely it is that the student will interact more with a TA than their classroom teacher. A survey conducted in the UK (2000), composed of 300 teachers found that two-thirds of students with SEN were regularly working with TAs for an average of 3.7 hours per week. Therefore, the use of TAs to support students with SEN has become an established part of academics in a mainstream setting, and interactions with TAs comprise a key part of their day-to-day classroom experience. The survey concluded that TAs was used as alternative to teacher support, which has shown to result in unintended and troubling consequences for students with SEN. It is suggested that the inclusion of TAs in the mainstream classroom to support students with SEN has resulted in the educational experience of these students diverging from the non-SEN student, which then raises concerns about how schools choose to provide support for students with SEN.

Social issues and discrimination

Compared to fully included students with disabilities, those who are mainstreamed for only certain classes or certain times may feel conspicuous or socially rejected by their classmates. They may become targets for bullying. Mainstreamed students may feel embarrassed by the additional services they receive in a regular classroom, such as an aide to help with written work or to help the student manage

behaviours. Some students with disabilities may feel more comfortable in an environment where most students are working at the same level or with the same supports. In the United States, students with autistic spectrum disorders are more frequently the target of bullying than non-autistic students, especially when their educational program brings them into regular contact with non-autistic students. Also, special-needs students can easily get lost in a regular education classroom. In some cases they may be disruptive and may compromise the learning environment of other students.

As seen above, there are many social issues; however, a buddy system has been shown to improve these issues. Through having a buddy system an upper school student will be paired with a younger child with a disability. By doing this the younger student is provided with a positive relationship with a fellow student. The buddy system aims to have the younger student learn the benefits of having and sustaining a positive and supportive friendship. Social issues are improved due to the upper school student helping to alter the social experiences of the younger child through this formed friendship.

High Costs

Schools are required to provide special education services but may not be given additional financial resources. A 2005 study conducted by the Special Education Expenditures Program (SEEP) showed that the cost of educating a special-needs student is between $10,558 and $20,000. In comparison, educating a student who does not need special education services costs $6,556. The average expenditure for educating students with special-needs is 1.6 times that of a general education student.

Distinctions between Mainstreaming and Inclusion

The term mainstreaming and inclusion are used interchangeably. Many people think these terms mean the same thing, but they’re slightly different.

Mainstreaming is the placement of a child with a disability (or exceptionality) in a general education classroom, with the expectation that the student will be able to work and produce assignments at a similar rate as students who don't have disabilities. Students with disabilities who participate in mainstreaming are given the same assignments as other students with only slight differences if necessary. In a mainstreaming classroom, there's only the general education teacher. Therefore, if a student needs help, he/she will have to wait and receive assistance that's similar to what other students in the classroom receive.

Students in a mainstreaming classroom are expected to perform and maintain at a comparable pace with students who don't have disabilities. This type of classroom would also apply to gifted students who might be able to perform well academically but who might struggle socially. Gifted students are students who are excelling above average based on testing results. For some students this method might be best because their disability might have nothing to do with their ability to learn and process information. But for others, this method might cause them to feel socially awkward because they're unable to perform or fit in as well as other students.

A mainstream classroom is a general education classroom, and as such, mainstreaming is the act putting your child with special education needs in the general education classroom for some or most of the day. Your child may also have some instruction in a special education classroom.

Inclusion is also the placement of a child with a disability in a general education classroom. However, in an inclusion classroom, students with disabilities are often given modified assignments and have extra assistance from a special education teacher and/or paraprofessional. The focus when placing students with disabilities in an inclusion classroom is to help prepare them socially and teach them to work at their own level.
An inclusion classroom is a general education classroom that has students who receive special education. *Inclusion* is a teaching approach that focuses on including students with special education needs in the school community.Inclusion goes beyond placement in a general education class. It also aims to have a child participate in the classroom lessons and extracurricular activities.

In summary, Mainstreaming requires the IEP students to attend a regular classroom and they are expected to show improvement in social skills and academic performance; whereas, inclusion requires IEP students to attend regular classrooms for their own benefit not necessarily showing any improvement.
Mainstreaming also requires a child to deal and adjust in the class on his own; inclusion classrooms have a team of specialists supporting the child.

SELF ASSESSMENT EXERCISE

1. The practice of placing disabled and non-disabled in to study together without discrimination is called?

(a) Mainstraeming (b) Menstreeming (c) Mainstreaming (d) Mainstreeming

2. Which of the following is an advantage of mainstreaming to students with disability?

(a) Higher academic performance (b) High cost (c) Poor teacher to student interaction (d) None of the above

You may include the following answers

1. (c)

2. (a)

4.0 CONCLUSION

To sum up, Mainstreaming entails the practice of placing disabled and non-disabled in to study together without discrimination. Thus, this placement of disabled and non-disabled students to study under one roof helps in improving social cohesiveness among them.

5.0 SUMMARY

You have learnt in this unit that:-

i) Mainstreaming, in the context of education, is the practice of placing students with special education services in a general education classroom during specific time periods based on their skills.

ii) The benefits of mainstreaming to students with disabilities include higher academic achievement, higher self-esteem, and Better social skills etc.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is mainstreaming?

2. List and elucidate 4 disadvantages of mainstreaming to a disabled student.

3. How is mainstreaming beneficial to students without disabilities

7.0 REFERENCES/FURTHER READING

http://www.differencebetween.net/language/words-language/difference-between-mainstreaming-and-inclusion/. Retrieved on 13th May, 2020.

https://dictionary.cambridge.org/dictionary/english/mainstreaming. Retrieved on 13th May, 2020.

https://en.wikipedia.org/wiki/Mainstreaming_(education) . Retrieved on 13th May, 2020.

https://link.springer.com/chapter/10.1007/978-3-642-74873-8_25. Retrieved on 13th May, 2020.

https://study.com/academy/lesson/mainstreaming-vs-inclusion-in-special-education.html. Retrieved on 13th May, 2020.

MODULE 3 TEACHING APE TO SPECIFIC STUDENTS WITH DISABILITIES

Unit 1 Visual impairment

Unit 2 Hearing impairment

Unit 3 Orthopaedic impairment

Unit 4 Cerebral palsy

Unit 5 Intellectual and learning disabilities

Unit 6 Autism spectrum disorder

Module 3

Introduction

The third module of this work discuss about “teaching APE to specific students with disabilities”, this module is built on six units which include Visual impairment, Hearing impairment, Orthopaedic impairment, Cerebral palsy, Intellectual and learning disabilities, and Autism spectrum disorder.

UNIT 1 VISUAL IMPAIRMENT

CONTENTS

1.0 INTRODUCTION

Physical education through Adapted physical education has provided giant opportunities to individuals who are visually impaired to enable them to take part in physical activities. Accordingly, this unit shall discuss about visual impairment and as such, it will set clear the activities required for individuals who are visually impaired.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* List 4 activities for visually impaired people.

3.0 MAIN CONTENT

3.1 Visual Impairment

Children with visual impairments can play all of the same sports as their sighted peers, with some modifications. This may include a beeping ball or allowing blind player to walk around and feel the environment before they begin. Modifications can be made continuously until the best solution is found. Children with visual impairments and blindness may need more instruction and practice time to learn new concepts and movements. It is suggested that students receive pre-teaching before the start of a new unit. This can be done before school, after school, during orientation, or at home. Peer tutors may also be effective for students with visual impairments or blindness.

Physical education is important for all students including those who are blind or visually impaired. Although planning will be necessary, it is important to include students in the physical education program as it is a required component of the standard curriculum.

As with other students, students with visual impairments need to be actively involved in physical education programs that teach life long skills to maintain their health. In order to make the program accessible to students, there are adaptations and specialized equipment that may need to be employed to ensure that the student can fully access the physical education program. Prior to determining appropriate adaptations, it is important to first understand the student's functional vision. The Teacher of Students with Visual Impairments will provide information for the team members and P.E. teacher on each student's unique visual needs. One rule of thumb for all students with any visual impairment is to keep the instructional area as uncluttered as possible.

The instruction of recreation skills should be planned and deliberately taught, and should focus on the development of lifelong skills. Often students who are visually impaired do not experience the same opportunities for recreation that students with no vision loss have in the early years. Recreational and leisure activities can provide an avenue for the development of motor skills, social skills, language skills, and fitness. It is important to expose the students to as many age-appropriate recreational activities as possible. This will best prepare the student for future inclusion and independence.

Support the inclusion of students with visual impairments in group activities. Be

sure that students play and talk with classmates rather than sit on the sidelines. Describe choices of activities that are available at recess. During games, allow students to buddy-up with a sighted partner. Remember that students who are visually impaired need support from staff during periods of free play on the playground. The visually impaired student should be able to participate in most recreational activities except for those that require good visual acuity (i.e. dodge ball). Build a student's self-confidence by letting him/her try. Take the student through an activity or game a couple of times before requiring independent movement. For a sighted student, motor imitation is a visual skill; a student who is visually impaired needs to experience the activity physically.

Causes of visual impairment

There are many causes that may lead to loss of vision or lead to impairment of vision.

Common causes that lead to vision loss or visual impairment include injury to the eye, inherited conditions, infections and so forth.

Injury to the eye

Injury to the eyes while playing or at work or due to accidents may result in vision loss and impairment.

Particularly injuries to the cornea are the commonest cause of vision loss.

Inherited conditions of blindness and vision impairment

Retinitis pigmentosa is the most common cause of inherited blindness.

Infections of the eyes

Sometimes if the mother has had a viral infection like German measles that is transmitted from the mother to the developing foetus during pregnancy the baby may be born with blindness or visual impairment.

Trachoma of the eyes caused by contagious microorganism called *Chlamydia trachomatis* may also damage eye sight. This is seen in the developing and underdeveloped countries with poor water and sanitation facilities.

Amblyopia

This is basically impaired vision in one eye due to lack of its use in early childhood.

This is seen in squint or “lazy eye” since both the eyes project differently and send in different messages to the brain the brain may then turn off or suppress images from the weaker eye.

This stops development of the weaker eye leading to amblyopia in that eye.

Cataract

Clouding of part or the entire lens of the eye, normally, the lens is clear to let in the light that focuses on the retina. Cataracts prevent light from easily passing through the lens, and this causes loss of vision.

This condition usually affects the elderly. Symptoms include cloudy or blurry vision, difficulty in seeing in dimly lit areas and bright lights, colours appear faded, double vision etc.

Cataract affects 20.5 million (1 in 6) Americans age 40 and older. By 80 years of age, more than one half of Americans have cataract.

Cataract is the leading cause of blindness in the world (47.8%) compared to other eye disorders.

Diabetic retinopathy

Diabetes affects the small blood vessels in the retina. When damaged this leads to impairment of vision.

This is the commonest cause of blindness and visual impairment in the United States.

An estimated 23.6 million people in the U.S. have diabetes.

Of those, 5.7 million are undiagnosed. Currently, 1 in 10 individuals has diabetes. Between 40% to 45% of all people with diabetes have diabetic retinopathy.

Glaucoma

This condition results due to raised pressure within the eyes. The increased pressure impairs vision by damaging the optic nerve.

This may be seen in older adults and in some babies as well who are born with the condition.

Approximately 2.3 million Americans (1.9%) age 40 and older, have glaucoma.

African-Americans (age 40 and over) are 4 to 5 times more likely than any other ethnic group to have glaucoma

Age related Macular degeneration

Age related Macular degeneration or AMD that is a progressive loss of the visual acuity due to damage to the macula that is the most sensitive part of the retina.

AMD affects more than 1.75 million individuals in the U.S. This number is expected to increase to almost 3 million by 2020 due to the rapid rise in the aging of the U.S. population.

The centre of the visual field appears blurry or opaque. The patient is unable to focus clearly. This mainly occurs in the elderly.

The risk of AMD rises in those exposed to excess sunlight and those who smoke excessively.

AIDS related visual impairment

This is usually caused by viral infections of the eyes called Cytomegalovirus or CMV retinitis.

The estimated proportion of persons with AIDS, who will develop CMV retinitis ranges from 20 to 40%.

Cancer of the eyes

Retinoblastoma is the most common eye cancer of children. There are between 300 and 400 new cases diagnosed annually.

Modification of Physical Activities for visually impaired persons.

With adequate modification of sport individuals with low visual and blindness can participate in both team and individual sports. The fundamental impetus for these

modifications is to ensure independence of the visually impaired person. People who are blind or visually impaired can enjoy many activities, both for recreation and to compete on professional teams.

- Goal ball: this is a team sport, and participants compete in teams of three. Players try to throw a ball which has bells inside (so it can be heard) into the opponent's goal. The teams alternate throwing or rolling the ball from one end to the other and players remain in the area of their own goal in both defence and attack. Many countries, including the United States, have a goal ball team, which competes in the Paralympics.

- Beep baseball: as the name suggests, this is an adapted version of baseball. With the exception of the batter and catcher, all team members are blind (those who are partially sighted wear blindfolds to be on an equal playing field with their teammates). The bases beep when activated so that players know in which direction to run. Many states, including Illinois, have beep baseball teams.
- **Bowling**: Students can learn basic bowling skills by playing with home-made or purchased bowling sets that can be used at home and school. A sound source can be placed behind the pins in order to provide an auditory target for the students. Many bowling alleys will provide bumpers, or portable bowling rails, upon request.

- Swimming: this can be easily adapted for those who are blind or visually impaired and wish to do it as a hobby or on a professional team. Simple techniques – like dividing lanes with ropes to help someone without sight to stay oriented – can help. You can read more about this in my previous post about swimming as someone who is blind.

- Running: like everyone else, people who are blind or visually impaired run in all types of events. These include track and field, marathons and races. Some athletes might be able to run the course independently, while others – particularly those who are totally blind – will use the assistance of sighted guides. Many people who are blind run in marathons, biathlons and triathlons. The United States Paralympics team also includes a track and field division for runners who are blind or visually impaired.

- Other sports that can be adapted include cycling, skiing, rowing, sailing, archery, and power-lifting. Judo, wrestling and rock climbing require little or no modifications for participants with vision loss. These activities also have dedicated teams or divisions for athletes who are blind or visually impaired.

SELF ASSESMENT EXERCISE

1. A visually impaired person cannot participate in any sporting activity, TRUE / FALSE?

2. Which among the following is a cause of Visual impairment?

(a) Xenophobia (b) Agoraphobia (c) Amblyopia (d) Phobia

You may include the following answers

1. FALSE

2. (c)

4.0 CONCLUSION

By and large, Adapted Physical Education had provided an opportunity to enable the visually impaired persons to tap the benefits of participating in sporting activities.

5.0 SUMMARY

You have learnt in this unit that:-

i) With the aid of scrupulous modifications, students who are visually impaired can participate in all sporting activities.

ii) Causes of visual impairment are: Glaucoma, injury of the eye, cancer of the eyes, inherited conditions, amblyopic and so on.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is visual impairment?

2. List and explain four causes of visual impairment?

3. As a Physical educator, what are the sporting activities that you will provide for visually impaired student?

7.0 REFERENCES/FURTHER READING

http://www.aoa.org/documents/CPG-14.pdf Retrieved on 20th July, 2020

https://chicagolighthouse.org/sandys-view/swimming/

https://chicagolighthouse.org/sandys-view/what-are-some-of-the-sports-played-by-people-who-are-blind-or-visually-impaired/ ; Retrieved on 20th July, 2020.

https://www.news-medical.net/health/Causes-of-visual-impairment.aspx; Retrieved on 20th July, 2020.

https://www.teachingvisuallyimpaired.com/pe-adaptations.html; Retrieved on 20th July, 2020.

https://www.teachingvisuallyimpaired.com/recreation-adaptations.html Retrieved on 20th July, 2020.

kidshealth.org/teen/diseases_conditions/sight/visual_impairment.html# Retrieved on 20th July, 2020.

www.cdc.gov/ncbddd/actearly/pdf/parents_pdfs/VisionLossFactSheet.pdf Retrieved on 20th July, 2020.

www.lighthouse.org/.../ Retrieved on 20th July, 2020.

UNIT 2 HEARING IMPAIRMENT

CONTENTS

1.0 INTRODUCTION

Generally speaking, verbal communication with the environment is a basic rudiment of sporting activities, and as such the participants communicate with their teammates, coaches, officials, opponents, and fans. Therefore, individuals who have hearing impairment seem to find it tedious when competing in regular and unadapted sports. Nevertheless the modification of sporting activities to suit the needs of all has aid individuals with hearing impairments to participate in sports without finding it tedious.

Furthermore, the Deaf do not compete in the Olympics and Paralympics; there is no category for deaf athletes. The Deaf have their own Olympics called Deaflympics (previously called *World Games for the Deaf*, and *International Games for the Deaf*) these are International Olympic Committee (IOC)-sanctioned event at which deaf athletes compete at an elite level.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Explain the meaning of visual impairment
* List 5 cause of hearing impairment
* List the causes of hearing impairment

3.0 MAIN CONTENT

3.1 Hearing Impairment

Hearing impairment as a disability category is similar to the category of deafness, but it is not the same. The official definition of a hearing impairment by the Individuals with Disabilities Education Act (IDEA) is "an impairment in hearing, whether permanent or fluctuating, that adversely affects a child's educational performance but is not included under the definition of 'deafness.'" Thus, knowing the definition of deafness is necessary to understand what sort of disabilities is considered hearing impairments. A hearing loss above 90 decibels is generally considered deafness, which means that a hearing loss below 90 decibels is classified as a hearing impairment. Being deaf or hard of hearing typically has little impact on the development of motor skills, fitness levels, and participation in sports. However, it is still important to accommodate students who are deaf or hard of hearing in the physical education setting.

Communicate using his or her preferred means of communication. When giving verbal instructions, make sure the student can see the instructors face clearly. Make sure you speak clearly and at a normal rate. Incorporate visual aids that have images or descriptive words. Repeat comments or questions made by the student's classmates. This helps all students alike. Check for understanding by asking students to repeat directions or demonstrate a skill. If an interpreter is involved, make sure to speak directly to the student, rather than the interpreter.

Classifications of Hearing impairment

Mild

If you have mild hearing loss, you may hear some speech sounds, but will have difficulty with soft sounds.

Moderate

If you have moderate hearing loss, you'll struggle to hear/understand speech when someone is talking at a normal level.

Severe

If you have severe hearing loss, you will hear little-to-no speech when spoken at normal levels, and hear only some loud sounds.

Profound

If you have profound hearing loss, you may only hear very loud sounds and no speech at all.

Causes of hearing loss

Things that can cause sensorineural hearing loss are:

- Aging
- Injury
- Excessive noise exposure
- Viral infections (such as measles or mumps)
- Shingles
- Ototoxic drugs (medications that damage hearing)
- Meningitis
- Diabetes
- Stroke
- High fever or elevated body temperature
- Ménière's disease (a disorder of the inner ear that can affect hearing and balance)
- Acoustic tumours
- Heredity
- Obesity
- Smoking

- Hypertension

Things that can cause conductive hearing loss are:

- Infections of the ear canal or middle ear resulting in fluid or pus build-up
- Perforation or scarring of the eardrum
- Wax build-up
- Dislocation of the middle ear bones (ossicles)
- Foreign object in the ear canal
- Otosclerosis (an abnormal bone growth in the middle ear)
- Abnormal growths or tumours

Common signs of hearing loss

You frequently ask others to repeat themselves

If you find yourself saying “what?” all the time, or you need to be looking at someone to hear what they’re saying (by also reading their lips), your hearing might be fading.

You turn the TV to a volume others find loud

When you can’t have a conversation because your TV is too loud, it’s time to get a hearing test.

You have trouble understanding conversations in noisy places

This is one of the first challenges people with hearing loss encounter: tracking what someone else is saying in a noise-filled place like a restaurant.

You have difficulty hearing women and children’s voices

High-frequency hearing loss is very common — so it’s to be expected that women and children's voices would be tough to hear.

You feel like others are mumbling

A classic complaint of people who have hearing loss is that others don’t speak clearly. If you find yourself thinking people are mumbling and hard to understand, that may be a symptom of hearing loss.

You have trouble hearing on the phone

If you have trouble occasionally, that is OK. If you constantly feel like you cannot hear on the phone, whether you're using a landline or mobile phone, this may be a symptom of hearing loss.

You avoid social situations that were once enjoyable

People, who can't engage easily, feel left out of conversations, or who have bad experiences trying to hear in public spaces often decide it's easier to decline invitations and stay at home. It doesn't have to be this way.

You have ringing in your ears

Ringing in your ears is often thought to be a symptom of hearing loss or damage to the auditory system — and hearing loss and tinnitus very often go hand in hand.

You are told by others that you have hearing loss

If more than one friend or family member questions your hearing acuity — in seriousness or jest — guess what? They could be onto something.

Preventing noise-induced hearing loss

Fortunately, noise-induced hearing loss can be prevented. Preventing noise-induced hearing loss requires you to do three things:

1. Know what sounds are too loud (anything above 85 dB)
2. Either avoid loud sounds or limit your exposure or proximity to them
3. Wear hearing protection when you can't avoid or move a safe distance from loud noises

Prevention of hearing impairment

1. Use hearing protection around loud sounds. Foam earplugs are an economical solution, or consider purchasing custom earplugs to best reduce the sound levels.
2. Turn the volume down on the TV, radio, music, etc.
3. Avoid loud or noisy activities/places, when possible.
4. Limit your time exposed to loud sounds.
5. When listening to loud sounds (e.g., music, concerts, fitness classes, etc.), take breaks from the noise.
6. Move away from the loudest sound source (e.g., speakers, fireworks, etc.).

7. Give your ears time to recover after being exposed to loud noises.
8. Do not put anything smaller than your elbow in your ear! This includes cotton swabs, bobby pins, keys, paperclips, or anything else you might use to clean or scratch your ears.
9. Keep moving! Exercise keeps the blood pumping throughout the body, including the ears. This keeps the internal parts of the ears healthy.
10. Get your hearing tested, especially if you experience a change in your hearing, ringing or fullness in your ears over 24 hours.

Methods of Sport modifications for Hearing impairment

Deaf athletes participate in all sports, with very little if any modifications. The following simple modifications can easily be incorporated into an integrated setting.

1. Use lights to start and end a race

In sports such as swimming lights will be used to start the race. The lights can be found on the side of the pool directly under the swimmer which is connected to the starters' gun. When the gun is fired, the lights go on to indicate the start of the race. This system can be used for other sports to substitute for the traditional starter's gun / siren. Another alternative if lights are not available would be to simply raise/drop arm to start a race.

2. Referees to use visual signs to gain attention

Referees can use visual signals to gain the attention of an athlete during competition using flags or basic gesturing such as waving.

3. Use a tap on the shoulder to gain attention

A deaf captain might need attention from the referee when requesting an explanation about a rule during the play. It is more likely the captain will touch the referee on his/her shoulder for attention. It is an acceptable thing for deaf people to tap people for attention.

4. Visual aids for scoring

Visual aids for scoring should be used at all times such as electronic scoreboards or whiteboards / blackboards.

5. A few seconds to explain

A deaf athlete playing sport with hearing players will usually stop if everyone else around them has stopped, such as when a referee has stopped play. A few extra seconds should be taken, where practical, to explain the referee's decisions to the deaf athlete.

6. Contact Deaf Sports Australia for further information

You can contact Deaf Sports Australia in order to obtain details regarding the specific rules and modifications available for the particular sport in which you are involved.

Types Sport for individuals with hearing impairment

A Deaf athlete is able to compete without significant restrictions, with the exception of communication barriers. In team sports and some individual events, hearing loss can be limiting, however, these restrictions disappear in the Deaf Games. The sports and their rules are identical to those of able-bodied athletes. There are no special sports, and the only adaptations are to make auditory cues visible, such as the use of strobe lights for starting signals. Among the athletes allowed to compete in the Deaf Games, there are no classifications or restrictions except for the requirement that each have a hearing loss of at least 55 decibels in the better ear. Persons who are Deaf or have Hearing Impairments can therefore take part and benefit from most Sports, Hobbies and other physical activities. These activities are a good way to increase the social skills, gain physical agility as well as confidence, and understand social situations. The under listed sports are can be participated by individuals with visual impairment.

Activity	**Suggested Accommodations for Competition**
Archery	Hearing devices + FM; red/yellow/green signal lights, tactile stimulator on wrist
Badminton	Hearing devices; large hand gestures prior to call for the ball; FM to hear umpire
Basketball	Red light behind each backboard lights at end of a quarter; portable loop system around bench with the coach using the microphone plus hearing devices

Bowling	Hearing devices; Visual stimulus or scorekeeper/teammate to notify the bowler if s/he has fouled.
Canoeing	Hearing devices; Buddy system to relay announcements; person with hearing loss in rear seat; visual signals or flag in conjunction with a ‘go’ gunshot;
Cross Country	Hearing devices; visual signals; red/yellow/green light for ready/set/go or flag in conjunction with a ‘go’ gunshot;
Curling	Simple signal system between players while on ice; FM during time-out conference with coach
Diving	Assistive listening device with headphones for coaching advice on pool deck; visual signs for scores.
Fencing	Visual signals in addition to auditory signals for on guard/ready/fence; tactile device on wrist/ankle
Field Hockey	Hearing devices + FM for communication between player and coach during sideline discussions. Hand motions, shoulder taps to bring attention of player with hearing loss to coach
Football	Hearing aid within a modified helmet (info provided); visual signals between players during plays.
Golf	Hearing devices + FM to use with advising partner
Gymnastics	Receive coaching advice via hearing devices and remove them while competing; visual scoring
Judo	Coach must have attention of competitor before making appropriate gestures or visual signals
Lacrosse	Hearing devices + FM for communication between player and coach during sideline discussions; head gear may allow for use of hearing devices during play; hand gestures between players
Riflery	Hearing protection; thorough knowledge of firing range protocol commands; vibrator on wrist

Rowing	Use of a red flag and verbal commands to signal start; pre-determined signals to correspond with verbal commands (person in front of individual with hearing loss brings a foot down to signify go)
Rugby	Due to physical nature of sport an ITE hearing aid with a soft canal is recommended for safety. Buddy system to relay coach messages as players are substituted or use of hand gestures
Skiing	Hearing devices; visual starting procedure such as red/yellow/green lights visible to all competitors
Soccer	Hearing devices as long as there is no threat of injury. ITE aid with soft canal recommended. Players deliver messages during substitutions and/or hand gestures. FM use or loop for coach conferences.
Softball	Hand signals for each umpire call used by closest teammate on field or between coach/players
Swimming	Raised flag for 'on your mark', dropped flag for 'go'. Can be in conjunction with gunshot or strobe light. Drop flag in water in front of swimmer when a false start occurs.
Table Tennis	Hearing devices + FM for between game conferences with partner. Hand signals between partners for use during play.
Tennis	Hearing devices. Use of hand signals during doubles. Visual score cards.
Volleyball	Use of hand signals during game; visual scoreboard. Visual signal to accompany whistle signals.
Water Polo	Hand signals between players. Whistle plus flag to signal start or fouled plays, may add hand signals.
Weightlifting	Hearing devices; extra cuing by coach or teammates as needed when it's the individual's turn.
Wrestling	Hearing aid use may not be recommended due to physicality of sport. Locate individual next to coach when possible. If individual cannot easily hear the whistle 'go' signal it could be augmented by the coach

banging the mat as a tactile signal to the competitors.

SELF ASSSESMENT EXERCISE

1. The following sports can be participated by a hearing impaired person except?

(a) Tennis (b) Soccer (c) Weightlifting (d) None of the above

2. Dislocation of the middle ear bones (ossicles) can lead to conductive hearing loss TRUE/FALSE

You may include the following answers

1. (d)

2. TRUE

4.0 CONCLUSION

In conclusion, The Deaf or persons with Hearing Impairments can take part in most sports with little or no modification which include; judo, gymnastic, archery, softball, badminton, and so on. Volleyball, weightlifting, water polo, wrestling,

5.0 SUMMARY

You have learnt in this unit that:-

i) The official definition of a hearing impairment by the Individuals with Disabilities Education Act (IDEA) is “an impairment in hearing, whether permanent or fluctuating, that adversely affects a child’s educational performance but is not included under the definition of ‘deafness.'”

ii) The sporting sports that can be carried out by a hearing impaired person are; judo, gymnastic, archery, softball, badminton, Volleyball, weightlifting, water polo, and wrestling and so on.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is hearing impairment?

2. List 4 method of Sport modifications for Hearing impairment

3. Enumerate 5 sports that can be played by hearing impaired persons.

7.0 REFERENCES/FURTHER READING

http://disabilityinfosa.co.za/hearing-impairments/sport-for-hearing-impaired/. Retrieved on 6th March, 2020.

https://fimswomen.com/2018/08/31/fitness-for-the-deaf-and-hard-of-hearing/. Retrieved on 6th March, 2020.

https://successforkidswithhearingloss.com/sports/. Retrieved on 6th March, 2020.

https://www.aussiedeafkids.org.au/sport-modifications.html. Retrieved on 6th March, 2020.

https://www.mayoclinic.org/diseases-conditions/hearing-loss/symptoms-causes/syc-20373072. Retrieved on 6th March, 2020.

https://www.starkey.com/hearing-loss/prevention. Retrieved on 6th March, 2020.

https://www.starkey.com/hearing-loss/symptoms. Retrieved on 6th March, 2020.

https://www.starkey.com/hearing-loss/types-and-causes. Retrieved on 6th March, 2020.

UNIT 3 ORTHOPAEDIC IMPAIRMENT

1.0 Introduction

2.0 Objectives

1.0 INTRODUCTION

Mobility seems to be a giant challenge to students who are suffering from orthopaedic impairment. In the same vein, they tend to find it difficult as a lot of sporting activities require movement.

2.0 OBJECTIVES

By the end of this unit, you should be able to:-

* Define orthopaedic?

* Define orthopaedic impairment?

* List 3 causes of orthopaedic impairment?

* List 5 sports that can be played by an orthopaedic impaired person.

3.0 MAIN CONTENT

3.1 Orthopaedic impairment

Orthopaedic refers to the branch of medicine dealing with the treatment of bones, joints, and muscles. This is also true of any of the other conditions that an orthopaedist would treat, including:

– Musculoskeletal trauma
– Spine disorders
– Sports injuries
– Acute injuries and congenital disorders effecting joints, bones, or muscles

– Concussions
– Chronic degenerative conditions

According to the Individuals with Disabilities Education Act (IDEA), an orthopaedic impairment is defined as a bone-, joint-, or muscle-related disability that is so severe that it negatively affects a child's educational performance. Sometimes orthopaedic impairments are called physical disabilities. Causes of orthopaedic impairment range from genetic abnormalities (such as those that cause a missing arm or leg) to disorders like cerebral palsy, as well as other issues.

Students are typically evaluated by a healthcare professional to determine if they have an orthopaedic impairment that will interfere with their academic progress. Medical professionals may also observe the child in the classroom to get a sense of potential problems the student will face.

Children may be born with an orthopaedic impairment or they may acquire it at some point in life. Hereditary, congenital, and environmental factors can play a role in causing orthopaedic impairments that affect the normal functioning of the bones, joints, or muscles.

For example, a child may be born with joint deformities, spinal bifida, or muscular dystrophy. Acquired causes can include disease, injury, or surgery. (Injury or surgery may lead to the loss of a limb, muscle contractures, or bone loss that can make movement difficult.) The orthopaedic impairment disability category, per IDEA, includes all orthopaedic impairments, regardless of cause.

Causes of Orthopaedic Impairment

- Amputation
- Birth trauma
- Burns
- Cerebral palsy
- Disease (poliomyelitis, bone tuberculosis)
- Fractures
- Genetic abnormality (e.g., the absence of a member, clubfoot)
- Injury

Impact on Education

Students with orthopaedic impairments typically have the same cognitive abilities as their peers without disabilities. Because of this, school staff should try to include

these students in mainstream classes as much as possible. The IDEA law states that students should be educated in the least restrictive environment when appropriate.

The extent to which a child's education is affected due to their impairment varies. Factors such as the type and severity of the impairment play a role. While many students with orthopaedic impairment do not have cognitive or learning problems, some may experience related neurological or motor issues that can affect sensory processing, perception, and learning.

For example, impairments such as amputations and fractures can impact attendance, making it harder for kids to keep up academically. Other impairments that have accompanying brain involvement such as birth trauma and cerebral palsy may lead to learning difficulties resulting from sensory and cognitive issues.

Staying active while living with a disability can help you strengthen your heart, build strong muscles and bones, improve coordination, and make you feel better about yourself.

For those with disabilities, there are many adaptive sports and recreation programs that can be enjoyed for health, wellness, leisure, social, and competition benefits.

Before participating in recreational activities or sports, check with your physical therapist or physician to be sure that you are healthy enough for exercise, and what amounts of physical activity are safe for you.

Sports for Orthopaedic impairment

The under listed sports can be participated by physically challenged students with the aid of modification;

Cycling

The most common way for individuals with disabilities to cycle is with the use of modified bikes. Tricycles provide the greatest stability and can be modified with special seats and handlebars. If pedalling a bike or staying upright is difficult, hand cycling allows you to pedal the cycle with your arms in a seated or reclined position. Tandem cycling is a safe way for individuals with visual or hearing impairments to enjoy cycling, and can be upright or recumbent. Cycles can also be modified to allow another person to push the cycle, if needed. The related organisations for this sport include; Wheelchair Sports Federation, Disabled Sports USA, US Hand cycling Federation, and US Deaf Cycling Association

Golf

Adaptive golf can be performed standing or sitting. Adaptive golf carts can help with stabilizing the body while swinging the club, and golf clinics can teach individuals with disabilities about adaptive equipment and how to play golf with various disabilities involving limb loss, paralysis, sight, hearing, and emotional, mental, and intellectual impairments. The related organisations for this sport include; National Amputee Golf Association, American Disabled Golf Association, and Golf 4 the Disabled.

Horseback Riding

Hippo-therapy, therapeutic horseback riding, therapeutic horsemanship, and equine-assisted therapy are terms associated with using horses in the lives of people to improve physical, social, cognitive, sensory, and emotional well-being. Many of these programs are led by certified instructors and therapists.

The related organisations for this sport include; PATH International provides a list of riding programs across the country.

Paddling

Paddling sports include canoeing, kayaking, rowing, and rafting. Modifications are made to each individual's canoe or kayak based on needs, making it easy to participate in canoeing and kayaking organizations. Simple adaptations may be needed for positioning and gripping. Canoes, tandem kayaks, and rafts allow people of all abilities to participate in paddling sports together.

The related organisations for this sport include; The American Canoe Association, and the book, "Canoeing and Kayaking for People with Disabilities."

Sitting Volleyball

In sitting volleyball, players must be seated on the ground, and the game follows the same rules as stand-up volleyball, with the exception of a shorter net, smaller court, and the caveat that at least 1 buttock must remain in contact with the floor whenever the player contacts the ball.

The related organisations for this sport include; US Club Sitting Volleyball and US Paralympics Sitting Volleyball.

Snow Skiing

Snow skiing can be performed sitting or standing, and people with all types of disabilities can enjoy skiing with the assistance of adaptive equipment. For individuals with less strength, stability, and coordination, skiing can be performed sitting in a bucket seat on 1 or 2 skis (mono-skis and bi-skis respectively). Handheld outriggers are used for stability and steering. Outriggers are mini skis on the end of poles and can also be used for stand-up skiing. Tethers and tandem skis allow you to ski with the assistance of another person steering. A trained guide skis with a visually impaired skier, calling out instructions from in front, beside, or behind the skier.

The related organisations for this sport include; Disabled Sports USA provides a list of local chapters with information for programs across the country.

Swimming

Adaptive swimming includes all swim strokes and distances. Individuals with various disabilities can participate, including those who are deaf or hard of hearing, blind, and those with cognitive and physical disabilities of all kinds. Because adaptive swimming does not require special equipment, an individual with a disability can participate in a program in their area, with very little modifications.

The related organisation for this sport is; US Paralympics Sports Club.

Tennis

Tennis uses adaptive equipment for mobility, such as a wheelchair. Rule modifications are made and based on types of disabilities, and a stand-up player can play against or on the same team as a wheelchair player.

The related organisations for this sport include; Let’s Roll Wheelchair Tennis provides video tutorials on how to play the game.

Wheelchair Basketball

Wheelchair basketball is accessible to those with a variety of physical disabilities. The game is played using many of the same rules and standards of basketball, with some variations for dribbling and contact from the wheelchair.

The related organisation for this sport is; National Wheelchair Basketball Association.

Other Adaptive Sports

Other activities and sports for individuals with disabilities include shooting, archery, pool, fishing, hunting, table tennis, sailing, fencing, Bocce, rugby, bowling, softball, lacrosse, scuba, water skiing, and others. A physical therapist can help you determine possible modifications to equipment, and advise which activities might be best for you.

SELF ASSESSMENT EXERCISE

1. Which of the following is a cause of Orthopaedic Impairment?

(a) Burns (b) kinetics (c) wax builds up (d) none of the above

You may include the following answers

4.0 CONCLUSION

From the foregoing, an orthopaedic impairment is defined as a bone, joint, or muscle related disability that is so severe that it negatively affects a child's educational performance. Nevertheless, Individuals with such disability can also take part in sporting activities through effective modification of rules and equipments.

5.0 SUMMARY

You have learnt in this unit that:-

i) Orthopaedic impairment is defined as a bone, joint, or muscle related disability that is so severe that it negatively affects a child's educational performance.

ii) Causes of Orthopaedic Impairment are; amputation, birth trauma, burns, cerebral palsy, disease (poliomyelitis, bone tuberculosis), fractures, genetic abnormality (e.g., the absence of a member, clubfoot), injury

6.0 TUTOR-MARKED ASSIGNMENT

1. Define Orthopaedic impairment?

2. List 6 causes of Orthopaedic impairment?

3. Highlight 4 adaptive sports for Orthopaedic impairment?

7.0 REFERENCES/FURTHER READING

https://www.choosept.com/resources/detail/adaptive-sports-people-with-disabilities. Retrieved on 7th March, 2020.

https://www.verywellfamily.com/what-is-orthopedic-impairment-2162506. Retrieved on 7th March, 2020.

UNIT 4 CEREBRAL PALSY

1.0 INTRODUCTION

The human brain coordinates all activities in the body; therefore, if any of its parts are affected, it will impede the normal functioning of the body. Heredity and environment are the giant factors that cause this disability. This unit shall discuss cerebral palsy that is one of the brain disabilities in the human body.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Define the term Cerebral palsy?
* List 5 causes of cerebral palsy?
* Enumerate 4 types of cerebral palsy?
* List and elaborate 3 treatments to help a cerebral palsy victim.
* List 4 the Physical activities suitable for individuals with cerebral palsy?

3.0 MAIN CONTENT

3.1 Cerebral palsy

The brain controls all that we do. Different parts of the brain control the movement of every muscle of the body. In cerebral palsy, there is damage to, or lack of development in, one of these areas of the brain. ‘Cerebral' – refers to the brain. 'Palsy' – can mean weakness or paralysis or lack of muscle control.

Therefore cerebral palsy is a disorder of muscle control which results from some damage to part of the brain. Cerebral palsy (CP) also refers to a group of disorders that affect muscle movement and coordination. In many cases, vision, hearing, and sensation are also affected. CP is the most common cause of motor disabilities in childhood. The term cerebral palsy is used when the problem has occurred early in life, to the developing brain.

Children with cerebral palsy can have problems such as muscle weakness, stiffness, awkwardness, slowness, shakiness, and difficulty with balance. These problems can range from mild to severe. In mild cerebral palsy, the child may be slightly clumsy in one arm or leg, and the problem may be barely noticeable. In

severe cerebral palsy, the child may have a lot of difficulties in performing everyday tasks and movements.

Types of cerebral palsy

Spastic cerebral palsy

This is the most common type of cerebral palsy. Spasticity means stiffness or tightness of muscles. The muscles are stiff because the messages to the muscles are relayed incorrectly from the damaged parts of the brain. When people without cerebral palsy perform a movement, groups of muscles contract whilst the opposite groups of muscles relax or shorten in order to perform the movement. In children with spastic cerebral palsy, both groups of muscles may contract together, making the movement difficult. The symptoms can affect the entire body or just one side of the body.

Dyskinetic cerebral palsy

This refers to the type of cerebral palsy with abnormal involuntary movements. People with dyskinetic CP have trouble controlling their body movements. The disorder causes involuntary, abnormal movements in the arms, legs, and hands.

In some cases, the face and tongue are also affected. The movements can be slow and writhing or rapid and jerky. They can make it difficult for the affected person to walk, sit, swallow, or talk. It is divided into two types of movement problems, called dystonia and athetosis.

Dystonia – this is the term used for sustained muscle contractions that frequently cause twisting or repetitive movements, or abnormal postures.

Athetosis – this is the word used for the uncontrolled extra movements that occur particularly in the arms, hands and feet, and around the mouth. The lack of control is often most noticeable when the child starts to move – for example, when the

child attempts to grasp a toy or a spoon. In addition, children with athetoid cerebral palsy often feel floppy when carried.

Hypotonic cerebral palsy

Hypotonic CP causes diminished muscle tone and overly relaxed muscles. The arms and legs move very easily and appear floppy, like a rag doll.

Babies with this type of CP have little control over their head and may have trouble breathing. As they grow older, they may struggle to sit up straight as a result of their weakened muscles. They can also have difficulty speaking, poor reflexes, and walking abnormalities.

Ataxic cerebral palsy

This is the least common type of cerebral palsy. Ataxic (or ataxia) is the word used for unsteady shaky movements or tremor. Children with ataxia also have problems with balance. They may have difficulty walking and performing fine motor functions, such as grasping objects and writing.

Mixed cerebral palsy

Some people have a combination of symptoms from the different types of CP. This is called mixed CP.

In most cases of mixed CP, people experience a mix of spastic and dyskinetic CP.

The Parts of the body that are affected

Again, this varies greatly from one child to another. Certain words are used to describe the parts affected: Hemiplegia – the leg and arm on one side of the body are affected (also described as hemiparesis). Diplegia – both legs are predominantly affected. Children with diplegia usually also have some difficulties with their arm and hand movements. Quadriplegia – both arms and both legs, and the trunk, are affected (also described as quadriparesis). The muscles of the face, mouth and throat can also be involved.

Causes of cerebral palsy

Abnormal brain development or injury to the developing brain can cause CP. The damage affects the part of the brain that controls body movement, coordination, and posture.

The brain damage usually occurs before birth, but it can also happen during birth or the first years of life. In most cases, the exact cause of CP isn't known. Some of the possible causes include:

- Asphyxia neonatorum, or a lack of oxygen to the brain during labour and delivery.
- Gene mutations that result in abnormal brain development.
- Severe jaundice in the infant.
- Maternal infections, such German measles and herpes simplex.
- In the period shortly after birth for example, when an infant develops a severe brain infection, such as encephalitis and meningitis, in the first few days or weeks of life..
- Intracranial haemorrhage or bleeding into the brain.
- Head injuries as a result of a car accident, a fall, or child abuse.
- In the early months of pregnancy – for example, if the mother is exposed to certain infections such as Rubella (German measles), or Cytomegalovirus (CMV).

Signs and Symptoms of cerebral palsy

The symptoms of CP vary from person-to-person and range from mild to severe. Some people with CP may have difficulty walking and sitting. Other people with CP can have trouble grasping objects.

The symptoms can become more severe or less severe over time. They also vary depending on the part of the brain that was affected.

Some of the more common signs include:

- delays in reaching motor skill milestones, such as rolling over, sitting up alone, or crawling
- variations in muscle tone, such as being too floppy or too stiff
- delays in speech development and difficulty speaking
- spasticity, or stiff muscles and exaggerated reflexes
- ataxia, or a lack of muscle coordination
- tremors or involuntary movements
- excessive drooling and problems with swallowing
- difficulty in walking

- favouring one side of the body, such as reaching with one hand
- Neurological problems, such as seizures, intellectual disabilities, and blindness.

Most children are born with CP, but they may not show signs of a disorder until months or years later. Symptoms usually appear before a child reaches age 3 or 4.

Call your doctor if you suspect your child has CP. Early diagnosis and treatment are very important. Cerebral palsy can affect the whole body, or it might be limited primarily to one limb or one side of the body. The brain disorder causing cerebral palsy doesn't change with time, so the symptoms usually don't worsen with age. However, as the child gets older, some symptoms might become more or less apparent.

Prevention of cerebral palsy

The majority of problems that cause CP can’t always be prevented. However, if you’re pregnant or planning on becoming pregnant, you can take certain preventive measures to minimize complications.

It’s important to get vaccinated against diseases that can cause fatal brain damage, such as rubella. It’s also crucial to receive adequate prenatal care. Attending regular appointments with your doctor during pregnancy can help prevent premature birth, low birth weight, and infections.

Treatment of cerebral palsy

The goal of treatment is to improve limitations and prevent complications. The management of cerebral palsy requires a team approach with the parents, therapists, doctors, nurses and teachers all contributing to ensure optimal progress is made. Treatment can be considered in three areas:

1. Treatment of the movement problem.

2. Treatment of the associated medical problems.

3. Provision of therapy and early intervention services.

Treatment of CP may include assistive aids, medications, and surgery.

Assistive aids

Assistive aids include:

- eyeglasses
- hearing aids
- walking aids
- body braces
- wheelchairs

Medications

Oral anticonvulsants and muscle relaxants are commonly used as first-line treatments for CP. Your doctor might prescribe:

- diazepam (Valium)
- dantrolene (Dantrium)
- baclofen
- tizanidine (Zanaflex)

Your doctor might also suggest local injections of botulinum toxin type A (Botox) or intrathecal baclofen therapy, where the drug is delivered by an implantable pump.

Surgery

Orthopaedic surgery may be used to relieve pain and improve mobility. It may also be needed to release tight muscles or to correct bone abnormalities caused by spasticity.

Selective dorsal rhizotomy (SDR) might be recommended as a last resort to reduce chronic pain or spasticity. It involves cutting nerves near the base of the spinal column.

Other treatment

Other types of treatment for CP include:

- speech therapy
- physical therapy
- occupational therapy
- recreational therapy
- counselling or psychotherapy
- social services consultations

Although stem cell therapy is being explored as a potential treatment for CP, research is still in the early stages.

Classifications of CP

Cerebral palsy is classified according to the Gross Motor Function Classification System (GMFCS). The World Health Organization (WHO) and the Surveillance of Cerebral Palsy in Europe developed the GMFCS as a universal standard for determining the physical capabilities of people with CP.

The system focuses on:

- the ability to sit
- the capability for movement and mobility
- charting independence
- the use of adaptive technology

The five levels of the GMFCS increase with decreasing mobility:

Level 1 cerebral palsy

Level 1 CP is characterized by being able to walk without limitations.

Level 2 cerebral palsy

A person with level 2 CP can walk long distances without limitations, but they can't run or jump.

They may need assistive devices, such as leg and arm braces, when first learning to walk. They also may need to use a wheelchair to get around outside of their home.

Level 3 cerebral palsy

A person with level 3 CP can sit with little support and stand without any support.

They need handheld assistive devices, such as a walker or cane, while walking indoors. They also need a wheelchair to get around outside of the home.

Level 4 cerebral palsy

A person with level 4 CP can walk with the use of assistive devices.

They're able to move independently in a wheelchair, and they need some support when they're sitting.

Level 5 cerebral palsy

A person with level 5 CP needs support to maintain their head and neck position.

They need support to sit and stand, and they may be able to control a motorized wheelchair.

Physical Activities for students with Cerebral palsy

It is vital to note here that, adapted sport has provide the opportunity for students with cerebral palsy to take part in physical activities in other to improve their physical fitness, socialize, and effectively utilize their leisure time. The under listed are the adapted sports for these people.

Wheelchair Basketball

Wheelchair basketball is a fast-paced game played by two teams of five players where the object is to shoot the ball into the opposing team's basket. The match consists of four periods of ten minutes. If the score is tied at the end of playing time for the fourth period, the match will be continued with an extra period of five minutes or with as many such periods of five minutes as are necessary to break the tie. Wheelchair Basketball is open to all individuals with a physical impairment, although participants will require some trunk and upper limb function. Functional capacity to complete the skills necessary to play are pushing, pivoting, shooting, rebounding, dribbling, passing and catching. It is not an assessment of a player's level of skill, merely their functional capacity to complete the task. The International Wheelchair Basketball Federation (IWBF) is the governing body for wheelchair basketball around the world. IWBF is a non-profit organization whose purpose is to provide opportunities for persons with a lower limb disability to play the game of wheelchair basketball.

Sitting Volleyball

In sitting volleyball, players must be seated on the ground, and the game follows the same rules as stand-up volleyball, with the exception of a shorter net, smaller court, and the caveat that at least 1 buttock must remain in contact with the floor whenever the player contacts the ball.

The related organisations for this sport include; US Club Sitting Volleyball and US Paralympics Sitting Volleyball.

Race Running

Race Running is an adapted sport being developed by Cerebral Palsy Sport in England. It is for children, young people and adults who cannot functionally run and rely on sports aids for mobility and balance.

A Race Runner is a three wheeled frame where the athlete is supported by a saddle and body plate. The athlete propels against the frame using their feet, and steers using the mobility within their hands and/or arms. People with cerebral palsy can take part in Race Running as a recreational activity and Race Running is a very effective way of improving overall fitness, strength and physical and emotional well-being.

There are also competitions available with athletics events in distances from 60m, 100m, 200m, 400m, 800m and 1500m depending on the athlete's experience and level of fitness.

Most participants are able to use the Running Bike to propel themselves considerably faster than they can unassisted despite considerable physical challenges. The Race Runner can be used by children from 3-4 years through to adulthood. It is predominantly suitable for those with Cerebral Palsy, although it is also suitable for those with Muscular Dystrophy, Parkinson's disease and other disabilities that affect mobility and balance.

Source: http://www.cpsport.org/wp-content/uploads/2015/03/2016-05-09-

16.47.21.jpg

Frame Football

Frame Football is an adapted form of football designed for people who use a walker or crutches for their daily mobility to move around and may have restricted mobility. The adapted and inclusive game was designed to enable those children, young people and adult who were previously unable to play football with ambulant or able bodied players and it is a new way to play the beautiful games of football.

Frame Football recognizes that frame users, often excluded from playing with their able bodied peers, need their own format for football and now provides a level playing field on which to play football.

Diagram of frame football players

The Format

Frame Football is based on the 11-a-side game, however with certain modifications to support people with a physical disability. As a developmental game, the pitch can be between 25m and 50m in length, and 16m to 35m in width, but the pitch must be rectangular in shape.

With the spectrum of disability and ability levels, this gives coaches flexibility to support the needs of their players. Games last for two equal periods of 20 minutes, or 4 periods of 10 minutes. This can be shorter for younger players or those with a lower level of mobility.

Frame Football is played in a 5-a-side format. Frame Football goals are slightly smaller at 3.66m wide by 1.8m high. Kick-ins is used in Frame Football to return the ball into play from the side-lines, the same as in the format of Futsal.

Frame contact with the ball is allowed but players are encouraged to use their feet where they can.

Contact between frames is an inevitable part of the game, but should be managed by coaches so that activity remains safe. A guideline of only 1 vs. 1 challenges allowed in game play supports safety and fair play.

In Frame Football there is no offside rule. Frame Football players will be able to do most of the activities coaches are used to delivering in any other football session, however slight adaptations will help make them more specific to the needs of the players and format of the game they play.

Take into account the age, level of disability, ability and mobility. Players with cerebral palsy and other physical disabilities may tire more quickly and so need shorter work intervals with longer rests.

Swimming

Cerebral Palsy Sport offer a range of opportunities for swimmers with cerebral palsy from introductory sessions for new swimmers through to specialist coaching and competitive galas, tailored awareness and education courses.

Programmes provide tailored events and development pathways for swimmers of all abilities. We also work closely with other delivery agencies to ensure good quality provision exists locally for everyone to enjoy.

Unfortunately due to the current Covid-19 situation, all of our swimming events have been cancelled until 2021. Please follow Government guidance on the most up-to-date advice and adhere to Swim England guidance on returning to the pool when it is safe to do so.

Benefits of Swimming

There are many benefits to swimming and here are just some of the reasons swimming is great for everyone:

- Knowing how to swim can save lives
- It is a non-impact sport meaningless force on joints
- Improves endurance, muscular strength and cardio fitness
- Helps reduce stress and anxiety
- All-over body workout
- Helps keep your heart, weight and lungs healthy
- Improves flexibility, coordination, balance and posture
- Great way to make new friends

Table cricket

Table Cricket is a game for everyone to play and enjoy – young or old, disabled and non-disabled – and is a great way to teach the basic rules of cricket, all on a table top.

Table Cricket was originally developed by Doug Williamson in 1990, through Project Adapted at Nottingham Trent University. It stemmed from the desire to devise another appropriate sporting opportunity for youngsters who could not take part in the traditional Paralympic sports. It was created especially for those with more severe physical impairments, and trials were conducted in Nottingham and at Stoke Mandeville.

SELF ASSESSMENT EXERCISE

1. The concept cerebral simply means?

(a) Heart (b) braim (c) palsy (d) brain

2. Which of the following is not an assistive aid for cerebral palsy?

(a) Eyeglasses (b) hearing aids (c) printer (d) walking aids

You may include the following answers

1. (d)

2. (c)

4.0 CONCLUSION

To draw the curtain, cerebral palsy is characterized by lack mobility, coordination and balance. Nevertheless with modifications, individuals with this disability can as well participate in physical activities like their non-disabled peers.

5.0 SUMMARY

You have learnt in this unit that:-

i) 'Cerebral' – refers to the brain. 'Palsy''– can mean weakness or paralysis or lack of muscle control.

ii) Types of cerebral palsy of cerebral palsy include Spastic cerebral palsy, Dyskinetic cerebral palsy**,**Hypotonic cerebral palsy**,** Ataxic cerebral palsy**,** Mixed cerebral palsy.

6.0 TUTOR-MARKED ASSIGNMENT

1. Define the term cerebral palsy?

2. List 4 causes of cerebral palsy?

3. Give a detail treatment on Cerebral palsy classification.

7.0 REFERENCES/FURTHER READING

http://www.cpsport.org/sports/frame-football/what-is-frame-football/. Retrieved on 10th March, 2020.

http://www.cpsport.org/sports/racerunning/. Retrieved on 10th March, 2020.

http://www.cpsport.org/sports/swimming/. Retrieved on 10th March, 2020.

http://www.cpsport.org/wp-content/uploads/2015/03/2016-05-09-16.47.21.jpg

http://www.kznhealth.gov.za/occtherapy/CPbooklet.pdf. Retrieved on 10th March, 2020.

https://cpisra.org/wheelchair-basketball/. Retrieved on 10th March, 2020.

https://www.healthline.com/health/cerebral-palsy#classifications. Retrieved on 10th March, 2020.

https://www.mayoclinic.org/diseases-conditions/cerebral-palsy/symptoms-causes/syc-20353999. Retrieved on 10th March, 2020.

www.cpsport.org/sports/table-cricket/. Retrieved on 10th March, 2020.

UNIT 5 INTELLECTUAL AND LEARNING DISABILITIES

1.0 INTRODUCTION

This unit shall discuss about intellectual and learning disability. In the United. States. these terms have very different meanings. An intellectual disability describes below-average intelligence quotient and a lack of skills needed for daily living. This condition used to be called "mental retardation." Whilst, a learning disability refers to weaknesses in certain academic skills Reading, writing and mathmatics are the main ones.

It is monumentally pertinent to state that; learning disability and learning difficulty are different concepts thus; the relationship that exists between them is that; all learning difficulties are learning disabilities but not all learning disabilities are learning difficulties.

2.0 OBJECTIVES

By the end of this unit; you should be able to:

* Define the term 'intellectual disability' and 'learning disability'

* List the cause and symptoms of intellectual disability

* Highlight the adapted sports that can be played by individuals with either intellectual disabilities or learning disability

* Explain the types of learning disability

3.0 MAIN CONTENT

3.1 Intellectual disability

Intellectual disability (ID), once called mental retardation, is characterized by below-average intelligence or mental ability and a lack of skills necessary for day-to-day living. People with intellectual disabilities can and do learn new skills, but they learn them more slowly. There are varying degrees of intellectual disability, from mild to profound. An intellectual disability is characterised by someone having an IQ below 70 (the median IQ is 100), as well as significant difficulty with daily living such as self-care, safety, communication, and socialisation. Someone with intellectual disability has limitations in two areas. These areas are:

- **Intellectual functioning.** Also known as IQ, this refers to a person's ability to learn; reason, make decisions, and solve problems.
- **Adaptive behaviours.** These are skills necessary for day-to-day life, such as being able to communicate effectively, interact with others, and take care of oneself.

IQ (intelligence quotient) is measured by an IQ test. The average IQ is 100, with the majority of people scoring between 85 and 115. A person is considered intellectually disabled if he or she has an IQ of less than 70 to 75.

To measure a child's adaptive behaviours, a specialist will observe the child's skills and compare them to other children of the same age. Things that may be observed include how well the child can feed or dress himself or herself; how well the child is able to communicate with and understand others; and how the child interacts with family, friends, and other children of the same age.

Intellectual disability is thought to affect about 1% of the population. Of those affected, 85% have mild intellectual disability. This means they are just a little slower than average to learn new information or skills. With the right support, most will be able to live independently as adults.

There are a number of general modifications that can be applied in a physical education environment for students with intellectual disabilities.

The first set of modifications deal with communication. When instructing students use shorter sentences, use gestures or demonstrations as supplement to verbal cues, repeat directions and have students repeat directions back to you, provide praise often, and give more feedback.

The next set of modifications deal with practice. Give students extra practice trials, build in more time for a student to master skills, make sure activities are perceived as fun, promote active participation, shorten activities to reduce problems with attention span, and allow choices in what activity will be done, when it will be done, where it will take place, and with whom the child will participate in the activity with. One method to structure activities is known as level teaching. To accommodate for students with varying levels of intellectual disabilities a game will be designed with different levels. For example, if the specific sport is volleyball the instructor will set up 3 courts with different modifications at each court to accommodate for these varying levels of disability. Court 1 may have a set of cones designating opposing sides while Court 3 has a net set in place. Different rules may be applied to different courts as well, allowing every student to be challenged in a constructive way.

The third set of modifications deal with curriculum. Adjust the general education curriculum to meet the needs of a student. For example, reduce the number of objectives that need to be mastered. If a student is severely delayed, an entirely new curriculum may need to be made. Activities may also need to provide early success which will encourage adherence.

The final set of modifications deal with the environment. It should be structured and visually appealing. It is essential to reduce playing areas in order to eliminate distractions. Plan to structure the environment in a way that will allow you to deal with behavioural problems.

Signs and symptoms of intellectual disability

There are many different signs of intellectual disability in children. Signs may appear during infancy, or they may not be noticeable until a child reaches school age. It often depends on the severity of the disability. Some of the most common signs of intellectual disability are:

- Rolling over, sitting up, crawling, or walking late
- Talking late or having trouble with talking
- Slow to master things like potty training, dressing, and feeding himself or herself
- Difficulty remembering things
- Inability to connect actions with consequences
- Behaviour problems such as explosive tantrums
- Difficulty with problem-solving or logical thinking

In view, severe state of intellectual disability may give rise to health challenges such as seizures, mobility skills challenge, vision impairment, mood disorders (autism, anxiety, etc.), and hearing problems.

Causes of Intellectual disability

Anytime something interferes with normal brain development, intellectual disability can result. However, a specific cause for intellectual disability can only be pinpointed about a third of the time.

The profound causes of intellectual disability are:

- Genetic conditions. These include things like Down syndrome and fragile X syndrome.
- Problems during pregnancy. Things that can interfere with fetal brain development include alcohol or drug use, malnutrition, certain infections, or preeclampsia.
- Problems during childbirth. Intellectual disability may result if a baby is deprived of oxygen during childbirth or born extremely premature.
- Illness or injury. Infections like meningitis, whooping cough, or the measles can lead to intellectual disability. Severe head injury, near-drowning, extreme malnutrition, infections in the brain, exposure to toxic substances such as lead, and severe neglect or abuse can also cause it.
- None of the above. In two-thirds of all children who have intellectual disability, the cause is unknown.

Ways of preventing intellectual disability

Certain causes of intellectual disability are preventable. The most common of these is fatal alcohol syndrome. Pregnant women shouldn’t drink alcohol. Getting proper

prenatal care, taking a prenatal vitamin, and getting vaccinated against certain infectious diseases can also lower the risk that your child will be born with intellectual disabilities.

In families with a history of genetic disorders, genetic testing may be recommended before conception.

Certain tests, such as ultrasound and amniocentesis, can also be performed during pregnancy to look for problems associated with intellectual disability. Although these tests may identify problems before birth, they cannot correct them.

The services available to help individuals with Intellectual disability

1. Speech therapy
2. Occupational therapy
3. Physical therapy
4. Individualized educational programme (IEP)
5. Nutritional services
6. Counselling (e.g. Family counselling)
7. Training with special assistive devices

Tips to help an intellectually disabled child

Below are the tips to help an intellectually disability;

- Learn everything you can about intellectual disabilities. The more you know the better advocate you can be for your child.
- Encourage your child's independence. Let your child try new things and encourage your child to do things by him or herself. Provide guidance when it's needed and give positive feedback when your child does something well or masters something new.
- Get your child involved in group activities. Taking an art class or participating in Scouts will help your child build social skills.
- Stay involved. By keeping in touch with your child's teachers, you'll be able to follow his or her progress and reinforce what your child is learning at school through practice at home.

- Get to know other parents of intellectually disabled children. They can be a great source of advice and emotional support.

Types of intellectual disability

Fragile X syndrome

Fragile X syndrome is the most common known cause of an inherited intellectual disability worldwide. It is a genetic condition caused by a mutation (a change in the DNA structure) in the X chromosome. This disability is found much in boys than girls.

People born with Fragile X syndrome may experience a wide range of physical, developmental, behavioural, and emotional difficulties; however, the severity can be very varied.

Some common signs include a developmental delay, intellectual disability, communication difficulties, anxiety, ADHD, and behaviours similar to autism such as hand flapping, difficulty with social interactions, difficulty processing sensory information, and poor eye contact.

Down syndrome

Down syndrome is not a disease or illness, it is a genetic disorder which occurs when someone is born with a full, or partial, extra copy of chromosome 21 in their DNA. It is also called trisomy 21.

Down syndrome is the most common genetic chromosomal disorder and cause of learning disabilities in children.

People with Down syndrome can have a range of common physical and developmental characteristics as well as a higher than normal incidence of respiratory and heart conditions.

Physical characteristics associated with Down syndrome can include a slight upward slant of the eyes, a rounded face, and a short stature. People may also have some level of intellectual and learning disabilities, but this can be quite different from person to another.

https://www.shutterstock.com/image-illustration/downsyndrome-karyotype-female-labeled-isolated-on-414114790

Developmental delay

When a child develops at a slower rate compared to other children of the same age, they may have a developmental delay.

One or more areas of development may be affected including their ability to move, communicate, learn, understand, or interact with other children.

Sometimes children with a developmental delay may not talk, move or behave in a way that's appropriate for their age but can progress more quickly as they grow. Therefore in some cases it becomes severe to the level of impeding their learning and education.

Prader-Willi Syndrome (PWS)

Prader-Willi syndrome (PWS) is a rare genetic disorder which affects around 1 in 10,000 – 20,000 people This disability is quite complex and it's caused by an abnormality in the genes of chromosome 15.

One of the most common symptoms of PWS is a constant and insatiable hunger which typically begins at two years of age. People with PWS have an urge to eat because their brain (specifically their hypothalamus) won't tell them that they are full, so they are forever feeling hungry.

The symptoms of PWS can be quite varied, but poor muscle tone and a short stature are common. A level of intellectual disability is also common, and children can find language, problem solving, and maths difficult.

Someone with PWS may also be born with distinct facial features including almond-shaped eyes, a narrowing of the head, a thin upper-lip, light skin and hair, and a turned-down mouth.

Fatal alcohol spectrum disorder (FASD)

FASD refers to a number of conditions that are caused when an unborn foetus is exposed to alcohol.

When a mother is pregnant, alcohol crosses the placenta from the mother's bloodstream into the baby's, exposing the baby to similar concentrations as the mother.

The symptoms can vary however can include distinctive facial features, deformities of joints, damage to organs such as the heart and kidneys, slow physical growth, learning difficulties, poor memory and judgement, behavioural problems, and poor social skills.

Many cases are also often misdiagnosed as autism or ADHD as they can have similarities.

The World Health Organisation recommends that mothers-to-be, or those planning on conceiving, should completely abstain from alcohol**.**

3.2 Learning disability

Learning disabilities

A learning disability is a reduced intellectual ability and difficulty with everyday activities – for example household tasks, socializing or managing money – which affects someone for their whole life.

Having a learning disability means that people find it harder to learn certain life skills. The problems experienced vary from person to person, but may include aspects such as learning new things, communication, managing money, reading, writing, or personal care. Some people are born with a disability, whereas others may develop one as a result of an accident or illness in childhood.

Types of learning disabilities differ hugely. Someone with mild disabilities may be able to live independently with minimal support, whereas someone with severe and profound disabilities may require 24 hour care, and help with performing most daily living skills.

A learning disability is defined by the Department of Health as a “significant reduced ability to understand new or complex information, to learn new skills (impaired intelligence), with a reduced ability to cope independently (impaired social functioning), which started before adulthood”.

Sometimes, the term 'Global Developmental Delay' (GDD) is used to describe a learning disability. GDD describes a condition that occurs between birth and the age of 18 which prevents a child from reaching key milestones of development like learning to communicate, processing information, remembering things and organising their thoughts.

People with learning disabilities do not learn certain skills as quickly as other people and may therefore need extra help in certain aspects of their lives. The specific skills in question will depend upon the type of disability. People with mild learning disabilities may live alone, travel independently, and work.

They may not require any support from their local authority, or may just need support in managing their finances. Other people may require more regular support to ensure their safety and health on a daily basis. Those with more severe or complex needs may need extensive, hour-to-hour help in performing basic skills, such as eating, dressing and washing.

Learning disabilities are due to genetic and/or neurobiological factors that alter brain functioning in a manner which affects one or more cognitive processes related to learning. These processing problems can interfere with learning basic skills such as reading, writing and/or math. They can also interfere with higher level skills such as organization, time planning, abstract reasoning, long or short term memory and attention. It is important to realize that learning disabilities can affect an individual's life beyond academics and can impact relationships with family, friends and in the workplace.

Since difficulties with reading, writing and/or math are recognizable problems during the school years, the signs and symptoms of learning disabilities are most often diagnosed during that time. However, some individuals do not receive an evaluation until they are in post-secondary education or adults in the workforce. Other individuals with learning disabilities may never receive an evaluation and go through life, never knowing why they have difficulties with academics and why they may be having problems in their jobs or in relationships with family and friends.

Learning disabilities should not be confused with learning problems which are primarily the result of visual, hearing, or motor handicaps; of intellectual disability; of emotional disturbance; or of environmental, cultural or economic disadvantages.

Generally speaking, people with learning disabilities are of average or above average intelligence. There often appears to be a gap between the individual's potential and actual achievement. This is why learning disabilities are referred to as "hidden disabilities": the person looks perfectly "normal" and seems to be a very bright and intelligent person, yet may be unable to demonstrate the skill level expected from someone of a similar age.

A learning disability cannot be cured or fixed; it is a lifelong challenge. However, with appropriate support and intervention, people with learning disabilities can achieve success in school, at work, in relationships, and in the community.

In Federal law, under the Individuals with Disabilities Education Act (IDEA), the term is "specific learning disability," one of 13 categories of disability under that law.

"Learning Disabilities" is an "umbrella" term describing a number of other, more specific learning disabilities, such as dyslexia and dysgraphia. Find the signs and symptoms of each, plus strategies to help below.

Types of Learning Disabilities

Learning disability encompasses learning difficulty; therefore, below are the types of learning difficulty that can also be tagged as learning disability:

Dyscalculia

This is a specific learning disability that affects a person's ability to understand numbers and learn math facts.

Dysgraphia

This is a specific learning disability that affects a person's handwriting ability and fine motor skills.

Dyslexia

It is a specific learning disability that affects reading and related language-based processing skills.

Non-Verbal Learning Disabilities

Has trouble interpreting nonverbal cues like facial expressions or body language and may have poor coordination.

Oral / Written Language Disorder and Specific Reading Comprehension Deficit

It is Learning disability that affects an individual's understanding of what they read or of spoken language. The ability to express one's self with oral language may also be impacted.

ADHD

This is a disorder that includes difficulty staying focused and paying attention, controlling behaviour and hyperactivity.

Dyspraxia

This refers to a disorder which causes problems with movement and coordination, language and speech.

Executive Functioning

This is a disorder that affects, planning, and organization, strategizing, attention to details and managing time and space.

Difference between learning disability and learning difficulty

In general, a learning disability constitutes a condition which affects learning and intelligence across all areas of life, whereas a learning difficulty constitutes a condition which creates an obstacle to a specific form of learning, but does not affect the overall IQ of an individual. For example, Down's syndrome is classified as a learning disability, whereas dyslexia is classified as a learning difficulty, in that it only affects an individual's relationship to the processing of information, usually manifested in problems with reading, writing, and spelling.

Difference between learning disability and mental health problem

A learning disability is a permanent condition developing at the latest in early childhood, whereas mental illness (or a mental health problem) can develop at any time, and is not necessarily permanent. People can get better and resolve mental health problems with help and treatment.

Whilst mental health problems can be treated through therapy, social support, medication, or a combination of these, people with learning disabilities are not 'treated' but rather receive support which enables them to most effectively and happily lead their lives. Anyone can develop a mental health problem at any stage of their life, which means that they must be given the necessary support to deal with it, and ideally to prevent it from occurring at all.

Causes of Learning disabilities

Learning disabilities are caused by something affecting the development of the brain. This may occur before birth (prenatally), during birth, or in early childhood. Learning disabilities can be caused by any one of a variety of factors, or by a combination. Sometimes the specific cause is not known. Possible causes include the following:

- An inherited condition, meaning that certain genes passed from the parents affected the brain development, for example Fragile X.
- Chromosome abnormalities such as Down's syndrome or Turner syndrome.
- Complications during birth resulting in a lack of oxygen to the brain.
- A very premature birth.
- Mother's illness during pregnancy.
- The mother drinking during pregnancy, for example Foetal Alcohol Syndrome.
- A debilitating illness or injury in early childhood affecting brain development, for example a road traffic accident or child abuse.
- Contact with damaging material (like radiation).
- Neglect, and/or a lack of mental stimulation early in life.
- Some people with learning disabilities have additional physical disabilities and/or sensory impairments.

Symptoms of a learning disorder/disability

Children with learning disabilities struggle with school work more than their peers. This can take many forms. They may struggle to read, be confused by math, or have trouble with formulating their thoughts and communicating them. Overall, they need to work harder than peers for their accomplishments in school. Parents often say that homework is a "battle" or they find themselves working with the child every night to try to keep up. The child may appear inattentive, especially in school, because they cannot process information like other students. Most parents

say that they sense that something is “wrong” and teachers often will confirm or bring to the parent’s attention.

Common signs that a person may have learning disabilities include the following:

- Problems reading and/or writing
- Problems with math
- Poor memory
- Problems paying attention
- Trouble following directions
- Clumsiness
- Trouble telling time
- Problems staying organized

Ways to accommodate students with learning disability

- Reduce class size: This allows teacher extra one on one time with students. Often a class of 20-30 students proves to be more effective than double or triple that in general physical education classes.
- Use peer tutors: Peers can be trained in how to provide specific skill feedback as well as modify activities so the student has higher success. This can be effective when class size cannot be reduced.
- Offer learning strategies: Both teachers and peer tutors can provide strategies to help disorganized learners focus. This includes provided picture cues, video cues, and additional cues such as footprints on the floor to help a student understand what and how to perform an activity.
- Provide structured practice: Allow the student to get many practice opportunities. This will help them learn how to listen to and observe visual feedback for performance.
- Identify success: Reframe success for students in a way that does not focus on the end result. For example, using correct form in shooting should be a measure of success rather than making the basket.
- Use a variety of senses when giving instructions: Some students do better listening to instruction while others do better watching a demonstration. Others may do best when physically guided into the pattern. By incorporating many types of learning styles, students will be more likely to succeed.

SELF ASSESSMENT EXERCISE

1. Intellectual disability is different from learning disability TRUE/FALSE?

2. One of the under listed is not a type of learning disability

(a)Dylesia (b) Dysgraphia (c) Dyslesia (d) Dyscalculia

You may include the following answers

1. TRUE.

2. (a).

4.0 CONCLUSION

In conclusion, people with either intellectual disability or learning disability find it challenging participating in sporting activities because of their slow ability to quickly master skills. Nonetheless, sports have been modified, adapted, and accommodated to suit the needs of individuals with either learning disability or intellectual disability.

5.0 SUMMARY

You have learnt in this unit that:-

i) Intellectual disability (ID), once called mental retardation, is characterized by below-average intelligence or mental ability and a lack of skills necessary for day-to-day living. People with intellectual disabilities can and do learn new skills, but they learn them more slowly.

ii) Types of intellectual disability include Fragile X syndrome, Down syndrome, Developmental delay, Prader-Willi Syndrome (PWS), and Fatal alcohol spectrum disorder (FASD).

iii) A learning disability is a reduced intellectual ability and difficulty with everyday activities – for example household tasks, socializing or managing money which affects someone for their whole life.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is intellectual disability?

2. What is learning disability?

3. List the causes of intellectual disabilities

4. What is the difference between learning disabilities and learning difficulties?

7.0 REFERENCES/FURTHER READING

http://www.childrenshospital.org/conditions-and-treatments/conditions/l/learning-disorders-and-disabilities/symptoms-and-causes. Retrieved on 5th April, 2020.

https://www.aruma.com.au/about-us/about-disability/types-of-disabilities/types-of-intellectual-disabilities/. Retrieved on 5th April, 2020.

https://www.google.com/search?q=types+of+intellectual+disability&client.com. Retrieved on 5th April, 2020.

https://www.mencap.org.uk/learning-disability-explained/learning-difficulties. Retrieved on 5th April, 2020.

https://www.mentalhealth.org.uk/so/node/1955. Retrieved on 5th April, 2020.

https://www.shutterstock.com/image-illustration/downsyndrome-karyotype-female-labeled-isolated-on-414114790. Retrieved on 5th April, 2020.

https://www.understood.org/en/learning-thinking-differences/getting-started/what-you-need-to-know/whats-the-difference-between-learning-disabilities-and-intellectual-disabilities. Retrieved on 5th April, 2020.

https://www.webmd.com/parenting/baby/intellectual-disability-mental-retardation#1-2. Retrieved on 5th April, 2020.

UNIT 6 AUTISM SPECTRUM DISORDER

CONTENTS

1.0 INTRODUCTION

Various strategies exist to allow students with autism to be successfully included in a physical education setting.

Preparing for inclusion is essential to know the students' needs, abilities, and preferences. It is also important to prepare the student. The physical education environment may be anxiety inducing for them. Because of this, educators can slowly introduce the students to the environment. They may also preview the class using visual organizers to describe the setting the students will be a part of. They may also make visual schedules prior to class. It is also important to prepare the peers by teaching them what autism is and behaviours associated with it.

Instructing the student, there are a variety of methods for instructing students with autism. This involves the intentional use of equipment to encourage specific behaviours. The next is verbal prompts. This includes avoiding negative sentences. For example, instruction such as "step with your right leg" as opposed to "don't step with your left leg". Verbal prompts also include keeping phrases literal as well as provided concise instructions. It is also important to be consistent with language use. Peer tutors may also provide a lot of benefits for students in the physical education setting.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Explain the term Autism Spectrum Disorder
* State the causes of ASD
* Differentiate between ASD and ADHD
* List the modified sports that can be played by people with ASD

3.0 MAIN CONTENT

3.1 Autism spectrum disorder

Autism spectrum disorder is a condition related to brain development that impacts how a person perceives and socializes with others, causing problems in social interaction and communication. The disorder also includes limited and repetitive patterns of behaviour. The term "spectrum" in autism spectrum disorder refers to the wide range of symptoms and severity.

Autism spectrum disorder includes conditions that were previously considered separate autism, Asperger's syndrome, childhood disintegrative disorder and an unspecified form of pervasive developmental disorder. Some people still use the term "Asperger's syndrome," which is generally thought to be at the mild end of autism spectrum disorder.

Autism spectrum disorder begins in early childhood and eventually causes problems functioning in society socially, in school and at work, for example. Often children show symptoms of autism within the first year. A small number of children appear to develop normally in the first year, and then go through a period of regression between 18 and 24 months of age when they develop autism symptoms.

While there is no cure for autism spectrum disorder, intensive, early treatment can make a big difference in the lives of many children.

Symptoms of Autism

Some children show signs of autism spectrum disorder in early infancy, such as reduced eye contact, lack of response to their name or indifference to caregivers. Other children may develop normally for the first few months or years of life, but then suddenly become withdrawn or aggressive or lose language skills they've already acquired. Signs usually are seen by age 2 years.

Each child with autism spectrum disorder is likely to have a unique pattern of behaviour and level of severity — from low functioning to high functioning.

Some children with autism spectrum disorder have difficulty learning, and some have signs of lower than normal intelligence. Other children with the disorder have normal to high intelligence they learn quickly, yet have trouble communicating and applying what they know in everyday life and adjusting to social situations.

Because of the unique mixture of symptoms in each child, severity can sometimes be difficult to determine. It's generally based on the level of impairments and how they impact the ability to function.

The symptoms of ASD are categorized under social communication and interaction, and patterns of behaviour.

Symptoms under Social communication and interaction

A child or adult with autism spectrum disorder may have problems with social interaction and communication skills, including any of these signs:

- Fails to respond to his or her name or appears not to hear you at times
- Resists cuddling and holding, and seems to prefer playing alone, retreating into his or her own world
- Has poor eye contact and lacks facial expression
- Doesn't speak or has delayed speech, or loses previous ability to say words or sentences
- Can't start a conversation or keep one going, or only starts one to make requests or label items
- Speaks with an abnormal tone or rhythm and may use a singsong voice or robot-like speech
- Repeats words or phrases verbatim, but doesn't understand how to use them
- Doesn't appear to understand simple questions or directions
- Doesn't express emotions or feelings and appears unaware of others' feelings
- Doesn't point at or bring objects to share interest
- Inappropriately approaches a social interaction by being passive, aggressive or disruptive
- Has difficulty recognizing nonverbal cues, such as interpreting other people's facial expressions, body postures or tone of voice

Symptoms under Patterns of behaviour

A child or adult with autism spectrum disorder may have limited, repetitive patterns of behaviour, interests or activities, including any of these signs:

- Performs repetitive movements, such as rocking, spinning or hand flapping
- Performs activities that could cause self-harm, such as biting or head-banging
- Develops specific routines or rituals and becomes disturbed at the slightest change
- Has problems with coordination or has odd movement patterns, such as clumsiness or walking on toes, and has odd, stiff or exaggerated body language
- Is fascinated by details of an object, such as the spinning wheels of a toy car, but doesn't understand the overall purpose or function of the object
- Is unusually sensitive to light, sound or touch, yet may be indifferent to pain or temperature
- Doesn't engage in imitative or make-believe play
- Fixates on an object or activity with abnormal intensity or focus
- Has specific food preferences, such as eating only a few foods, or refusing foods with a certain texture

As they mature, some children with autism spectrum disorder become more engaged with others and show fewer disturbances in behaviour. Some, usually those with the least severe problems, eventually may lead normal or near-normal lives. Others, however, continue to have difficulty with language or social skills, and the teen years can bring worse behavioural and emotional problems.

When to see a doctor

Babies develop at their own pace, and many don't follow exact timelines found in some parenting books. But children with autism spectrum disorder usually show some signs of delayed development before age 2 years.

If you're concerned about your child's development or you suspect that your child may have autism spectrum disorder, discuss your concerns with your doctor. The symptoms associated with the disorder can also be linked with other developmental disorders.

Signs of autism spectrum disorder often appear early in development when there are obvious delays in language skills and social interactions. Your doctor may recommend developmental tests to identify if your child has delays in cognitive, language and social skills, if your child:

- Doesn't respond with a smile or happy expression by 6 months
- Doesn't mimic sounds or facial expressions by 9 months
- Doesn't babble or coo by 12 months
- Doesn't gesture — such as point or wave — by 14 months
- Doesn't say single words by 16 months
- Doesn't play "make-believe" or pretend by 18 months
- Doesn't say two-word phrases by 24 months
- Loses language skills or social skills at any age

Causes of Autism

The exact cause of ASD is unknown. The most current research demonstrates that there’s no single cause. However autism spectrum disorder can be caused by genetic or environmental factors.

Some of the suspected risk factors for autism include:

- having an immediate family member with autism
- genetic mutations
- fragile X syndrome and other genetic disorders
- being born to older parents

- low birth weight
- metabolic imbalances
- exposure to heavy metals and environmental toxins
- a history of viral infections
- fatal exposure to the medications valproic acid (Depakene) or thalidomide (Thalomid)
- Gender of the child (boys are about four times prone to ASD than girls).

No link between vaccines and autism spectrum disorder

One of the greatest controversies in autism spectrum disorder centres on whether a link exists between the disorder and childhood vaccines. Despite extensive research, no reliable study has shown a link between autism spectrum disorder and any vaccines. A controversial 1998 study proposed a link between autism and the measles, mumps, and rubella (MMR) vaccine. However, that study has been debunked by other research and was eventually retracted in 2010.

Avoiding childhood vaccinations can place your child and others in danger of catching and spreading serious diseases, including whooping cough (pertussis), measles or mumps.

Complications and challenges of individuals with ASD

Problems with social interactions, communication and behaviour can lead to:

- Problems in school and with successful learning
- Employment problems
- Inability to live independently
- Social isolation
- Stress within the family
- Victimization and being bullied

Prevention

There's no way to prevent autism spectrum disorder, but there are treatment options. Early diagnosis and intervention is most helpful and can improve behaviour, skills and language development. However, intervention is helpful at any age. Though children usually don't outgrow autism spectrum disorder symptoms, they may learn to function well.

Autism Spectrum Disorder (ASD) is a developmental disability that can cause significant social, communication and behavioural challenges. There is often nothing about how people with ASD look that sets them apart from other people,

but people with ASD may communicate, interact, behave, and learn in ways that are different from most other people. The learning, thinking, and problem-solving abilities of people with ASD can range from gifted to severely challenged. Some people with ASD need a lot of help in their daily lives; others need less.

A diagnosis of ASD now includes several conditions that used to be diagnosed separately: autistic disorder, pervasive developmental disorder not otherwise specified (PDD-NOS), and Asperger syndrome. These conditions are now all called autism spectrum disorder.

Diagnosis

Diagnosing ASD can be difficult since there is no medical test, like a blood test, to diagnose the disorders. Doctors look at the child's behaviour and development to make a diagnosis.

ASD can sometimes be detected at 18 months or younger. By age 2, a diagnosis by an experienced professional can be considered very reliable.[1] However, many children do not receive a final diagnosis until much older. This delay means that children with ASD might not get the early help they need.

Treatment of Autism spectrum disorder

There are no "cures" for autism, but therapies and other treatment considerations can help people feel better or alleviate their symptoms.

Many treatment approaches involve therapies such as:

- behavioural therapy
- play therapy
- occupational therapy
- physical therapy
- speech therapy

Massages, weighted blankets and clothing, and meditation techniques may also induce relaxing effects. However, treatment results will vary.

Some people on the spectrum may respond well to certain approaches, while others may not.

Alternative treatments

Alternative treatments for managing autism may include:

- high-dose vitamins
- chelation therapy, which involves flushing metals from the body
- hyperbaric oxygen therapy
- melatonin to address sleep issues

Research on alternative treatments is mixed, and some of these treatments can be dangerous.

Before investing in any of them, parents and caregivers should weigh the research and financial costs against any possible benefits.

Autism and exercise

Children with autism may find that certain exercises can play a role in alleviating frustrations and promoting overall well-being.

Any type of exercise that your child enjoys can be beneficial. Walking and simply having fun on the playground are both ideal.

Swimming and being in water can serve as both exercise and a sensory play activity. Sensory play activities can help people with autism who may have trouble processing signals from their senses.

Sometimes contact sports can be difficult for children with autism. You can instead encourage other forms of challenging yet strengthening exercises.

Distinction between Autism and Attention Deficit Hyperactivity Disorder

Autism and ADHD are sometimes confused with one another.

Children diagnosed with ADHD consistently have issues with fidgeting, concentrating, and maintaining eye contact with others. These symptoms are also seen in some people on the spectrum.

Despite some similarities, ADHD isn't considered a spectrum disorder. One major difference between the two is that people with ADHD don't tend to lack socio-communicative skills.

If you think your child has symptoms of hyperactivity, talk to their doctor about possible ADHD testing. Getting a clear diagnosis is essential to ensure that your child is receiving the correct treatment.

It's also possible for a person to have both autism and ADHD.

Accommodated Physical activities for individuals with ASD

Below are some of the sporting activities for individuals with ASD:

- **Swimming** – Children with autism who have a tough time with ball-handling skills can do well with basic strokes and typical water play. There's also no reason why a kid with autism can't take part in a swim team especially since swim team members compete individually.
- **Track and Field** – For kids with autism, track and field may be a terrific outlet. Track events require fewer non verbal communication skills than most team sports, yet kids who excel at track are valued team members.
- **Bowling** – Even though it's loud, bowling seems to be a natural sport to many kids with autism. Perhaps it's the repetition — bowl twice, sit down. Or maybe it's the satisfaction of seeing the pins come crashing down. Whatever the reasons, bowling is a great sport for social events that include kids on the autism spectrum.
- **Horseback Riding** – A terrific sport for kids with autism. In fact, many autistic kids ride horses as a therapeutic activity (as such it's termed "hippotherapy"). It's not unusual for autistic kids to find it easier to communicate with animals than with people — and many autistic children excel at horsemanship.
- **Hiking** – Hiking, which can be an individual or group activity, is an easy way to get exercise and enjoy nature without the pressure of intense social communication.
- **Martial Arts** – While martial arts aren't sports in the typical sense, they are physical outlets. They also combine the elements of predictability and structure with the challenges of physical interaction with other people. For many kids with autism, the martial arts are a wonderful way to build physical skills along with self-esteem.

SELF ASSESSMENT EXERCISE

1. Autism spectrum disorder is not a neurological and developmental disorder TRUE/FALSE?

2. The fundamental difference between ASD and ADHD is that individuals with ADHD don’t tend to lack socio-communicative skills TRUE/FALSE?

You may include the following answers

1. FALSE

2. TRUE

4.0 CONCLUSION

Autism spectrum disorder (ASD) is a neurological and developmental disorder that begins early in childhood and lasts throughout a person's life. It affects how a person acts and interacts with others, communicates, and learns. It includes what used to be known as Asperger syndrome and pervasive developmental disorders.

It is called a "spectrum" disorder because people with ASD can have a range of symptoms. People with ASD might have problems talking with you, or they might not look you in the eye when you talk to them. They may also have restricted interests and repetitive behaviours. They may spend a lot of time putting things in order, or they may say the same sentence again and again. They may often seem to be in their "own world."

At well-child checkups, the health care provider should check your child's development. If there are signs of ASD, your child will have a comprehensive evaluation. It may include a team of specialists, doing various tests and evaluations to make a diagnosis.

The causes of ASD are not known. Research suggests that both genes and environment play important roles.

There is currently no one standard treatment for ASD. There are many ways to increase your child's ability to grow and learn new skills. Starting them early can lead to better results. Treatments include u and communication therapies, skills training, and medicines to control symptoms.

5.0 SUMMARY

You have learnt in this unit that:-

i) Autism Spectrum Disorder (ASD) is a neurological and developmental disorder that begins early in childhood and lasts throughout a person's life. It affects how a person acts and interacts with others, communicates, and learns

ii) Autism Spectrum Disorder is generally caused by genetic and environmental factors.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is Autism Spectrum Disorder?
2. Explain the reason why is Autism called a “spectrum disorder”?
3. List 5 causes of Autism Spectrum Disorder?

7.0 REFERENCES/FURTHER READING

https://bciaba.com/sports-children-autism-spectrum-disorders-asd/. Retrieved on 11th May, 2020.

https://www.cdc.gov/ncbddd/autism/facts.html. Retrieved on 11th May, 2020.

https://www.healthline.com/health/autism#outlook. Retrieved on 11th May, 2020.

https://www.mayoclinic.org/diseases-conditions/autism-spectrum-disorder/symptoms-causes/syc-20352928

MODULE 4 ADAPTED PHYSICAL EDUCATION JOBS AND CERTIFICATION

Unit 1 Jobs for specific disabilities

Unit 2 APE certifications and APE qualifications

Unit 3 Teaching Adapted Physical Education and class format

Unit 4 Psychological effects of handicapping conditions

Module 4

Introduction

Module 4 is titled “Adapted physical education jobs and certifications.” it is written in units which include Jobs for specific disabilities, APE certifications and APE qualifications, Teaching APE and class format, and Psychological effects of handicapping conditions.

UNIT 1 JOBS FOR SPECIFIC DISABILITIES

CONTENTS

1.0 INTRODUCTION

Living with a disability may limit your activities and opportunities but cannot holistically stop you from achieving your special needs. Nonetheless, the high quest to financial stability as well as to curb high rate of begging amongst differently-abled citizens serves as the impetus that gave rise to the modification and creation of jobs for individuals with disabilities. This unit shall delve into jobs for specific disabilities.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Define the term Job.
* List 5 hearing impairments jobs.
* List six Jobs that are available for individuals who are physically challenged.

3.0 MAIN CONTENT

3.1 Jobs for Specific Disabilities

Jobs refer to the activities, in which individuals do in other to earn a living either daily, weekly, and monthly etc. There's nothing like the satisfaction of putting your best abilities to the test in a workplace. No matter what type of disability you have, there are jobs out there that suit your experience and skills.

Generally, every disability has one or more jobs opportunities, but in this work, it will be limited to jobs available for the physically challenged, visual impairment, and hearing impairment.

Jobs for physically challenged people

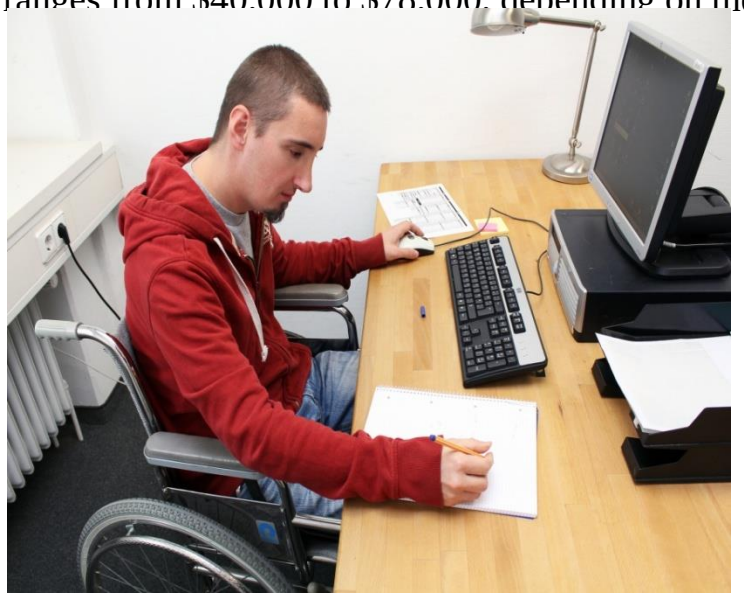
Physically challenged is also known as orthopaedic impairment. Individuals in this category can also find great job opportunities in every industry. Companies are beginning to recognize the unique strengths of people with physical limitations.

The under listed are the types of job readily available for individuals who are physically challenged.

1. Accounting Specialist

As an accounting or bookkeeping specialist, you can handle financial matters for clients or work as a desk assistant. It's a great way to utilize quick thinking, organizational skills, and good communication.

And best of all, it's something you can do from anywhere. The average salary ranges from $40,000 to $78,000, depending on the type of accounting.



The above picture is of a man in a wheelchair sitting at a desk and working

2. Counsellor

Whether you're a guidance counsellor or a vocational counsellor, you can draw upon your own experiences to help others. Why not help other people with disabilities navigate their schoolwork, find jobs, and live their day to day lives?

As a counsellor, you can join a rewarding career that can allow you to help improve the lives of disabled students and adults. The average salary is around $50,000 to $60,000.

3. Medical Administration Assistant

Working as an assistant in a medical office or hospital department means that you can work a job without being mobile. Just by organizing files, answering the phones, and handling paperwork, an administrative assistant manages every aspect of the office. Without this job, things wouldn't run at all.

Many employers will also value your experience to help people on staff understand what some patients are going through. Depending on the role--as an office assistant, a technician, or a manager, the salary can vary widely. You can expect anything from $35,000 to over $100,000.

4. Call Centre

Working at a call centre gives you plenty of flexibility, and it doesn't take any prior knowledge or education specific to working at a call centre. With the right training, all you'll need is a computer, a telephone, and a headset.

Whether you're in an office or working virtually at home, there are a variety of customer service jobs available that you can do over the phone. Because of the ease of the job, there are a high percentage of people with disabilities working in these positions.

It has an average salary of around $30,000, although the number can go up if you rise in the ranks to become a supervisor.

5. Legal Assistant

You don't need an expensive law degree to work in the legal field. As a legal assistant, a legal secretary, or a paralegal, this industry offers a number of job opportunities that are easy to handle from a desk.

While some of these jobs require a two-year degree, you can also look for certificates or training programs to break into the field. The average salary ranges from $50,000 to $65,000 a year.

6. Pharmacy Technician

As a pharmacy technician or assistant, you can work a job that requires little physical labour and makes a decent salary.

In this case, your disability might be an advantage, as pharmaceutical companies might offer jobs to people who have experience taking or handling certain types of medications.

Either way, if you have an outgoing personality and like to work with people, this might be the right job for you. Salary ranges from a pharmacy aide or technician at about $30,000 to a pharmacist at $100,000 to $120,000 a year.

7. Other Work from Home Careers

If you need the flexibility and accommodation of working from home, here are a few other industries that are actively looking for remote employees.

Freelance writing, web design, technical support, sales, and data entry all require little more than internet access and a computer. If you have specific skills, like creative writing or photography, you can work as an independent freelancer. Working from home in these jobs allows you to set your own hours and manage your own income--depending on when and where you're able to work.

Jobs for people with Visual impairment

Interestingly, being blind is not a poverty sentence, and in this regard; a lot of jobs are available for people with visual impairment.

1. Financial advisor

Do you have strong people skills? Do you enjoy analysing trends and following current events? In this career, you can help clients create strategies to meet their short- and long-term financial goals.

A bachelor's degree in a business or economics-oriented field can help you break into this career.

2. Network Engineer

Network engineers (also called computer network architects) must be adept at imagining complex networks and routers that are often set up in other locations. Many people with visual impairments have learned to excel at this type of internal visualization.

In this type of career, you could design networks ranging from small-scale links between a company's different locations to a whole cloud-based infrastructure. A bachelor's degree in computer science or networking can help you get started. As well, some people in this career have an MBA.

3. Applications software developer

Screen-reading software and other adaptive technologies make it possible for visually impaired professionals to code and perform the other work involved in developing apps and computer programs. In fact, a worldwide survey found that one percent of computer programmers are blind.

4. Physical therapist

Imagine helping people cope with or recover from injuries or medical conditions that cause pain or decreased mobility. You could work with patients from a wide range of age groups, and this profession offers many different specialties to choose from.

Plus, the number of job openings for physical therapists is expected to grow through 2028 as more and more people seek treatment for pain or loss of mobility related to conditions like diabetes, obesity, and age-related ailments.

5. Occupational therapist

Have you ever been helped by occupational therapists and occupational therapy assistants as part of your journey toward becoming self-sufficient? Would you like to help other people with disabilities or chronic illnesses acquire more independence so that they can live full lives too? Your own experiences with obstacles that get in the way of independent living can provide excellent insights into your clients' challenges.

You'll need to earn a master's degree, and all states require certification.

6. Speech-language pathologist

Communication is complex. And you've probably experienced some of the nuanced challenges of communicating with a disability in your own life. So why not use some of the skills you've acquired in dealing with those challenges in order to treat others' speech difficulties?

The job outlook for this career is expected to be strong through 2028 since the average age of Americans is rising and more people are experiencing speech problems due to issues like strokes or dementia.

7. Web developer

Want to help organizations make their websites accessible to everyone? You could specialize in an area such as accessibility auditing, user-interface design, or backend development.

8. Registered nurse

You can pursue all kinds of great nursing careers—in many different settings. So if you're interested in this vocation, set up some informational interviews with nurses in various specialties. That way, you can gain some insight into which path may be best for you. (Some medical environments are tricky to navigate with a disability.)

The job outlook for nursing is very strong, particularly in outpatient and long-term care facilities.

9. Marketing specialist

Would you like to advise companies on the best ways to sell their products and services? By conducting research, interviewing potential customers, and gathering and analysing data, you could help shape sales strategies and promotional campaigns. Plus, the job outlook for this career is strong, with 20-percent job growth expected through 2028.

As well, people with visual disabilities form a largely untapped but potentially huge market. That's because over 26.9 million people in the U.S. have experienced some loss of vision. With that number expected to rise as baby boomers age, a blind person like you could provide insight into reaching that growing consumer group.

10. Teacher

Visually impaired teachers can thrive at every education level. In fact, blind teachers have their own association that provides resources, support, and job postings.

11. Social worker

Has your disability taught you how to navigate the world of social services? Do you want to use your experiences to help others overcome their own challenges? You can specialize in many different areas of social work, including medical social work.

12. Counsellor

Well-developed empathy and the ability to learn from life experiences are two qualities that help counsellors relate to their clients and provide effective emotional support. That's why many people with visual impairments thrive in this kind of role. (They have learned to be careful listeners, which is a valuable skill for counsellors.)

13. Massage therapist

Your ability to pay close attention to tactile sensations could help you deliver effective massage treatments. (Although it's considered a myth that the other senses become more enhanced with vision loss, people with visual impairments do often learn to pay more attention to sensations like touch.)

14. Personal trainer

Are you enthusiastic about physical fitness? Do you want to share your passion with others? This is a flexible career option since you can often choose your own hours and clients. You could even specialize in helping blind clients and act as a role model for other people with disabilities who want to stay fit.

15. Customer service representative

Customer service reps often work over the phone or via live online chat, answering customers' questions and solving problems for them. So if you're friendly and tech-savvy, this could be a great job option that also offers flexibility. (Some people in this career get to work at home.

Jobs for hearing impaired people

A hearing impaired person lacks only that knack of verbal communication and can perform a lot of jobs to earn a living.

The employment opportunities available for people living with hearing difficulty or deafness include;

1. Tailoring

2. Athletics

3. Shoe Making

4. Software designing

5. Teaching

6. Photography

7. Massage therapy

SELF ASSESSMENT EXERCISE

1. An individual who is living with a disability has zero opportunity to get a job TRUE/FALSE

2. Which of the following is a legal job for individuals who are visually impaired?

(a) Stealing (b) Kidnapping (c) Drug trafficking (d) Teacher

You may the following answers

1. FALSE

2. (d)

4.0 CONCLUSION

In view, the good news is that; individuals with disabilities also have monumental employment opportunities just like the non-disabled individuals, and in this regard living with a disability is not a poverty sentence or is not an excuse to penury.

5.0 SUMMARY

You have learnt in this unit that:-

i) Jobs refer to the activities, in which individuals do in other to earn a living either daily, weekly, and monthly etc.

ii) Living with a disability may limit your activities and opportunities but cannot holistically stop you from achieving your special needs.

6.0 TUTOR-MARKED ASSIGNMENT

1. Define the term Job?

2. List 5 hearing impairments jobs?

3. List six Jobs that are available for individuals who are physically challenged?

7.0 REFERENCES/FURTHER READING

https://www.disabledperson.com/blog/posts/182. Retrieved on 20th September, 2020.

https://www.trade-schools.net/articles/jobs-for-blind-people. Retrieved on 20th September, 2020.

UNIT 2 APE CERTIFICATIONS AND QUALIFICATIONS

CONTENTS

7.0 References/Further Reading

1.0 INTRODUCTION

This unit shall discuss about, APE Certifications and APE Qualifications for teachers.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Briefly state the mission of APENS.

* State 4 qualifications or requirements to be a certified adapted physical education professional.

3.0 MAIN CONTENT

3.1 APE Certification for Teachers

It is common for teachers to specialize or have advanced preparation in adapted physical education. National and state level adapted physical education teacher certifications or licenses exist.

Adapted Physical Education National Standards (APENS), the mission of APENS is to promote the 15 Adapted Physical Education Standards and national certification exam. The goal of APENS is to ensure that all students who qualify for specially designed physical education services receive them from a "qualified" teacher. Teachers who pass the APENS exam receive CAPE recognition (Certified Adapted Physical Educator).

Some individual states also have add-on teaching licenses or certifications in adapted physical education.

Talk with your school district, ask about teacher qualifications, encourage your district to hire staffs that are qualified to teach adapted or specially designed PE.

Personnel development in adapted physical education can lead to meaningful student success and positive education outcomes. This Webinar from the National Centre to Improve Recruitment and Retention of Qualified Personnel for Children with Disabilities highlights the roles & responsibilities and preparation of adapted physical education (APE) teachers.

3.2 APE QUALIFICATIONS

Qualifications

Qualifications vary by state. In order to be qualified an educator must have met their state's approved or recognized certification, licensing, registration, or other comparable requirements. While these vary by state, there are national standards set in place to allow somebody to become a Certified Adapted Physical Education Professional or CAPE. These requirements include

- A bachelor's degree in physical education or equivalent (sport science, kinesiology, etc.)
- A minimum of 200 hours of practicum experiences in adapted physical education
- Completion of a minimum of 9 credits of coursework from a related field
- A valid teaching certificate in physical education
- Take the APENS National Certification Exam

While certification will certainly help educators create well-developed adapted physical education programs, there are no requirements for local school districts to hire CAPE's.

SELF ASSESSMENT EXERCISE

1. What is the full meaning of CAPE?

(a) COVID19 Against Physical Education (b) Come and push education (c) Centre for Advanced Physical Education (d) Certified Adapted Physical Educator.

2. The mission of APENS is adversely to the promotion of the 15 Adapted Physical Education Standards and national certification exam TRUE/FALSE?

You may include the following answers

1. (b)

2. FALSE

4.0 CONCLUSION

Conclusively, APE can be successfully taught to students with special needs only through qualified and certified adapted physical educators.

5.0 SUMMARY

You have learnt in this unit that:-

i) Adapted Physical Education National Standards (APENS), the mission of APENS is to promote the 15 Adapted Physical Education Standards and national certification exam.

ii) The goal of APENS is to ensure that all students who qualify for specially designed physical education services receive them from a "qualified" teacher. Teachers who pass the APENS exam receive CAPE recognition (Certified Adapted Physical Educator).

iii) Requirements of CAPE include:

- A bachelor's degree in physical education or equivalent (sport science, kinesiology, etc.)
- A minimum of 200 hours of practicum experiences in adapted physical education
- Completion of a minimum of 9 credits of coursework from a related field etc.

6.0 TUTOR-MARKED ASSIGNMENT

1. Briefly state the mission of APENS.

2. State 4 qualifications or requirements to be a certified adapted physical education professional.

7.0 REFERENCES/FURTHER READING

https://en.wikipedia.org/wiki/Adapted_physical_education. Retrieved on 7th July, 2020.

UNIT 3 TEACHING ADAPTED PHYSICAL EDUCATION AND CLASS FORMAT

CONTENTS

1.0 INTRODUCTION

It is axiomatic to state here that; Teaching of APE can be effective only through a well scrutinized arrangement, modifications and class formation. This unit shall delve into class formations that will spur effective implementation of APE programme in schools.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Define the term class format
* List 5 class formats in APE

3.0 MAIN CONTENT

3.1 Teaching Adapted Physical Education and Class Format

Teaching: This refers to the act of educating; informing, enlightening and transferring of knowledge to individual(s) in order to toss off ignorance, illiteracy and enhances skills. Teaching may occur deliberately or unconsciously at different milieus such as the school, market, worship places, and at home. Adapted More also, teaching of special education or Adapted physical education requires well delineated and modified approaches, and strategies. These approaches include curriculum, class format, and method of teaching.

Qualifications of an Adapted Physical Education Teacher

The Adapted Physical Education (APE) teacher is an educationally trained professional who is able to assess individual students and develop, adapt and implement specialized physical education programs in the motor domain.

The APE teacher is a direct service provider, not a related service provider, because special education 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 child's special education. This is contrasted with physical therapy and occupational therapy, which are related services.

If specially designed instruction, such as adapted physical education (APE), is required in a student's Individual Education Program (IEP), then the services must be provided by a qualified teacher. A certified physical educator is legally qualified to provide adapted physical education for students who require specialized physical education as defined in the IEP. Adapted Physical Education certification

is not required in Colorado. However, it is suggested that the teacher providing APE services become Nationally Certified through the National Consortium for Physical Education and Recreation for Individuals with Disabilities, earning a CAPE (Certified Adapted Physical Education) certification. Course work in APE is strongly recommended and additional education and/or experience in special education would be beneficial.

Adapted Physical Education Service Provision

As a direct service, Adapted Physical Education is provided to students who have needs that cannot be adequately addressed in the regular physical education program. In addition to APE, other service delivery options include APE collaboration and APE consultation, specially designed physical education, modified physical education, and general physical education.

Provision of APE is based on the same process of referral, assessment, and individual program planning that other special education services follow. An assessment and evaluation of motor skills performance is considered by the IEP team in determining how specialized physical education is to be delivered.

Federal law guarantees the opportunity for students to participate in physical education regardless of physical, cognitive, or emotional abilities. Finding the least restrictive environment (LRE) for each learner is both a federal mandate and a best practice. The environment is considered to be least restrictive when it matches individual abilities and appropriate services and provides students with as much independence as possible.

Responsibilities of the Adapted Physical Education Teacher

- Completing comprehensive motor assessments of individuals with disabilities and making specific program recommendations
- Providing direct services to students who are eligible and in need of APE
- Consult with physical education staff providing physical education instruction for individuals with disabilities
- Consult with other IEP team members about student need in the area of APE
- Serve as an IEP member at IEP meetings
- Monitor student progress

- Evaluate and assess students
- Advocate for the student and parent

Determining what to teach

A physical education instructor will assess the needs of the students considering their employment opportunities and living arrangements after graduation. This will allow them to create an adapted physical education curriculum for students following the ABC planning process. The steps in this process are as follows.

1. Define the student's curriculum goals.
2. Delineate the objectives for each curriculum goal.
3. DetermSine the emphasis each goal should receive in the curriculum.
4. Calculate the amount of time available.
5. Calculate the average objective mastery time.
6. Determine how much content can fit in the curriculum.
7. Sequence the goals and objectives developmentally.

Class format

Class format is defined as the way in which members of the class are organized. There are seven class formats that are most commonly used in adapted physical education settings.

1. One-to-one instruction: one teacher or assistant for every student.
2. Small group: 3-10 students working together with a teacher or assistant.
3. Large group: entire class participating together as a group.
4. Mixed group: using various class formats within one class period.
5. Peer teaching or tutoring: using classmates or students without disabilities from other classes for teaching and assisting students with disabilities.
6. Teaching stations: several areas in which smaller subsets for the class rotate to practice skills.
7. Self-paced independent work: each student works on individual goals at his or her own pace following directions on task cards or with guidance from the teacher or assistant.

Teachers must find the best class format to help the student achieve the goals for the lesson.

SELF ASSESSMENT EXERCISE

1. -------is defined as the way in which members of the class are organized (a) Class boundary (b) Class solidarity (c) Master plan (d) Class format

2. ------ several areas in which smaller subsets for the class rotate to practice skills.

(a) Teaching stations (b) Large group (c) small group (d) None of the above.

You may include the following answers

1. (d)

2. (a)

4.0 CONCLUSION

In conclusion, effective teaching of Adapted Physical Education is made possible by modifying activities, equipment, environment, rules and the curriculum of general physical education.

5.0 SUMMARY

You have learnt in this unit that:-

i) Class format is defined as the way in which members of the class are organized.

ii)

6.0 TUTOR-MARKED ASSIGNMENT

1. What is class format?

2. List 4 APE class formats?

7.0 REFERENCES/FURTHER READING

https://en.wikipedia.org/wiki/Adapted_physical_education#_Class_format. Retrieved on 7th July, 2020.

UNIT 4 PSYCHOLOGICAL EFFECTS OF HANDICAPPED CONDITIONS

CONTENTS

1.0 INTRODUCTION

Psychology deals with the study of behaviour. Thus the concept psychological encompasses mental and emotional feelings. This unit shall discuss about psychological effects of disabilities to individuals.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

* Define psychology

* Highlight the psychological effects of disabilities

3.0 MAIN CONTENT

3.1 Psychology

Psychology is a field of endeavour that deals with the study of both overt (observable behaviours or behaviours that can be observed e.g. Dancing, singing, eating, laughing and drawing) and covert behaviours (unobservable behaviours or behaviours that are not observable e.g. thinking, feelings, and perception) using empirical or scientific means. Despite the distinctions between overt and covert behaviours, it is possible to infer covert behaviour from certain overt manifestations. For instance happiness and sadness may be deduced or inferred from ones facial expression.

Psychological effects of Handicapped conditions

Disabilities affect the entire family. Meeting the complex needs of a person with a disability can put families under a great deal of stress — emotional, financial, mental and sometimes even physical. However, finding resources, knowing what to expect, and planning for the future can greatly improve overall quality of life.

Psychological effects of Handicapped conditions include:

- Students may be reluctant to reach out for help for a psychological disability due to the perceived stigma and misconceptions surrounding diagnosis and treatment.
- Lack of persistent attention to a task.
- Many students with a psychological disability are very private about their diagnosis and condition. SSD counsels them to share accommodation letters, but not disability specifics with faculty or staff. Please refrain from asking a student what particular type of disability he or she has.
- They often feel shy and lack the confidence of air out their views.
- Constant Depression and hopelessness.
- Generalized Anxiety & Panic Disorder or excessive anxiety and worry, recurrent panic attacks
- Obsessive Compulsive Disorder (OCD) i.e. uncontrollable thoughts and repetitive behaviours
- Post Traumatic Stress Disorder (PTSD) i.e. difficulty concentrating, hyper vigilance, difficulty falling asleep and/or staying asleep, irritability
- Schizophrenia i.e. a distorted perception of reality, hallucinations, delusions, disorganized thoughts and speech, lack of emotional expression

SELF ASSESSMENT EXERCISE

1. Which of the following is an overt behaviour?

(a) Happy (b) Dancing (c) perception (d) None of the above

2. Psychology is simply define as the study of both overt and-------- behaviour?

(a) Thinking (b) emotion (c) solar (d) covert

You may include the following answers

1. (b)

2. (d)

4.0 CONCLUSION

From the foregoing, Psychology is a field of endeavour that deals with the study of both overt (observable behaviours or behaviours that can be observed e.g. Dancing, singing, eating, laughing and drawing) and covert behaviours (unobservable behaviours or behaviours that are not observable e.g. thinking, feelings, and perception) using empirical or scientific means.

5.0 SUMMARY

You have learnt in this unit that:-

I) Psychology is a field of endeavour that deals with the study of behaviour.

ii) Overt behaviours (observable behaviours or behaviours that can be observed include dancing, singing, eating, laughing and drawing

iii) Covert behaviours or unobservable behaviours or behaviours that are not observable include thinking, feelings, and perception.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is psychology?

2. What are the psychological effects of disabilities?

7.0 REFERENCES/FURTHER READING

http://www.oandplibrary.org/op/1954_02_019.asp. Retrieved on 7th July, 2020.

https://diversity.utexas.edu/disability/psychological-disabilities-2/. Retrieved on 7th July, 2020.

Igbo, H.I and Obida, J.A (2014) fundamentals of educational psychology: Makurdi. Eagle prints.