HISTORY, PRINCIPLES AND FOUNDATION OF PHYSICAL EDUCATION

B.P.Ed First Year

Compiled by

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SYLLABUS - SEMESTER-1 CC-101 HISTORY, PRINCIPLES AND FOUNDATION OF PHYSICAL EDUCATION

Unit - 1: Introduction

- o Meaning, Definition and Scope of Physical Education
- o Aims and Objective of Physical Education
- o Importance of Physical Education in present era.
- o Misconceptions about Physical Education.
- o Relationship of Physical Education with General Education
- o Physical Education as an Art and Science.

Unit-2 - Historical Development of Physical Education in India

- o Indus Valley Civilization Period. (3250 BC 2500 BC)
- o Vedic Period (2500 BC 600 BC)
- o Early Hindu Period (600 BC 320 AD) and Later Hindu Period (320 AD 1000 AD)
- o Medieval Period (1000 AD 1757 AD)
- o British Period (Before 1947)
- o Physical Education in India (After 1947)
- o Contribution of Akhadas and Vyayamshals
- o Y.M.C.A. and its contributions.

Unit- 3- Foundation of Physical Education

o Philosophical foundation

Idealism, Pragmatism, Naturalism, Realism, Humanism, Existentialism and Indian Philosophy and Culture.

- o Fitness and wellness movement in the contemporary perspectives
- o Sports for all and its role in the maintenance and promotion of fitness.

Unit-4- Biological Principles of Physical Education

- o Growth and development
- o Age and gender characteristics
- o Heredity and environment
- o Body Types.
- o Anthropometric differences, differences in boys and girls
- o Reciprocal innervations

Unit-5- Psychological & Sociological Principles of Physical Education Psychological

- Learning types, learning curve
- o Laws and principles of learning
- o Attitude, interest, cognition, emotions and sentiments

Sociological

- o Society and culture
- o Social acceptance and recognition
- o Leadership
- o Social integration and cohesiveness

References:

Bucher, C. A. (n.d.) Foundation of physical education. St. Louis: The C.V. Mosby Co.

Deshpande, S. H. (2014). Physical Education in Ancient India. Amravati: Degree college of Physical education.

Mohan, V. M. (1969). Principles of physical education. Delhi: Metropolitan Book Dep.

Nixon, E. E. & Cozen, F.W. (1969). An introduction to physical education. Philadelphia: W.B. Saunders Co.

Obertuffer, (1970). Delbert physical education. New York: Harper & Brothers Publisher.

Sharman, J. R. (1964). Introduction to physical education. New York:

A.S. Barnes & Co. William, J. F. (1964). The principles of physical education. Philadelphia: W.B. Saunders Co.

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UNIT-I INTRODUCTION

MEANING AND DEFINITION OF PHYSICAL EDUCATION

The meaning of physical education is always misunderstood. It is an education which develops harmonious growth and development of the child. It develops all the powers of an individual-physical, mental, moral as well as social. According to Comenius, "Education is the development of the whole man. The ultimate end of man is happiness with God." So physical education is considered as education of the body which enables an individual to grow and develop fully. Physical activities are the educational tools that promote optimum growth and development. Physical education is not only doing physical activities but also related with health education, recreation, anatomy physiology, psychology and sociology.

Some important definitions of Physical Education

According to **Charles A Bucher**, "Physical education is an integral ^ part of the total education process and has as its aim the development of physically, mentally, emotionally and socially fit citizen through the medium » of physical activities which have been selected with a view to realizing these outcomes."

According to **Irwin**, "Physical education is a programme of physical activities that develops health in youth through various organic systems of the body; develops skills in physical activities which has implication for enjoyment, emotional development, recreation and the optimum development of the human organism."

According to **H.C. Buck**,"Physical education is the part of general education programme, which is considered with growth, development and education of children through the medium of big muscle activities. Physical activities are the tools, 'they are so selected and conducted as to influence every child's life physically, mentally, emotionally and morally."

According to **Delbert Oberteuffer,**"Physical education is the sum of those experiences which come to the individual through movement."

According to **J.P. Thomas,** "Physical education is the education through physical activities for the development of total personality of the child and its fulfilment and perfection, in body, mind and spirit."

According to **Clark. W. Hetherington,** "Physical education is that phase of education which is concerned, first, with the organization and leadership of children in big muscle activities, to gain the development and adjustment inherent in the activities according to social standards, and second, with the leadership of the activities so that the educational process may go on without growth handicaps."

According to **C.C. Cowell**, "Physical education is the social process of change in the behaviour of human organism, originating primarily from the stimulus of big-muscle play and related activities."

According to J.F. William," Physical education is the sum of man's physical activities selected as to kind and conducted as to outcomes."

According to **J.B.Nash**,"Physical EldUcation is that field of education which deals with big muscle activities and their related responses."

According to **Cassidy**,"Physical education is the sum of the changes in the individual caused by experiences centering in motor activity."

According to **Nixon and Cozens**, "Physical education should be defined as that phase of the whole process of education which is concerned with vigorous muscular activities and related responses and with the modifications in the individual resultant from these responses."

According to **Marshal & Rees**, "Physical education is but one aspect of the larger problem of education in general, and any system which divorces, or tends to divorce, the physical from the moral and intellectual aspects of life, is thoroughly unsound."

According to **Sharman**, "Physical Education should help to develop skills and attitudes which will be conducive to the wise use of leisure time and provide opportunities for emotional control living according to acceptable social standards and self expression."

According to **Brownhill and Hagman**, "Physical education is the accumulation of wholesome experiences through participation in large muscular activities that promote optimum growth and development."

According to **AAPHER**, "Physical education is the way of education through physical activities which are selected and carried on with regard to values in human growth, development and behaviour."

SCOPE OF PHYSICAL EDUCATION

An extent to what any discipline can reach is said to be the scope of that particular discipline. Physical Education having very wide scope, it is not limited to mere physical activities or physical exercises. Physical education include every aspect that lead individual to all round development. History of various Nations has proved physical Education is in cultural heritage of human beings. Physical Education is not limited to school or college curricular but has successfully influenced human beings in all walk of life, and in every field of development. Age, sex or physical abilities of individuals have no bar as far as physical educational programmes are concerned.

- Scope of physical Education covers following:-
- Games and sports
- Corrective exercises
- Basic stances and exercises
- Rhythmic activities/programmes
- Social Awareness programmes
- Educational institution curriculum
- Scientific Methodology
- Rehabilitative programmes

Games and sports:

Games and sports widen the scope of physical Education to extreme. It includes every fame of football, cricket soccer chess etc.

(Team game, individual game) or in other words it includes any variety of game or sport e.g. combative, ball game, indigenous etc. physical Education has its influence in every part of it. Any skill display includes physically Education; Physical itself clears its scope in this field, but this merely not the knowledge of physical

activities. The load planning, the intensity of sports activity, playing technique, tactics and making of strategies all includes effective educational processes given by physical education. Therefore Games and sports cannot be taken apart from its scope.

Corrective Exercises and Rehabilitative programme:

Good posture makes individual work efficiently. This knowledge of correct and good basic posture is presented effectively by physical Educationist. Even a wrong sitting habit can lead to bad posture, many times work demands results in bad posture, physical education clears the basic concept about the posture and presents the effective exercises to overcome bad postures.

Basic stances and Exercises:

Every productive skill needs good and accurate position of the , athlete. Physical Education introduces to us different exercises for different skills for better performance. Knowledge about the stances, grips, action and execution of the skills assists in enhancing the performance. Therefore physical education has its effective and successful scope in the field of physical Education.

Recreational programmes:

Today's world every individual needs to recharge oneself to become more productive even after heavy workload. Physical Educational processes include Recreational activities as its essential programme. After the heavy work out every human wants to feel relaxed and recreational, physical Education introduces many Recreational activities that refreshes and recharges the individual. This scope of physical Education on the other hand contributing a lot in mankind.

Rhythmic Activities:

Rhythmic activities include folk dances, aerobics, lezium etc. which mainly enhances the coordinative ability of an individual. We cannot neglect the fact that many of these Rhythmic Activities is integral part of our Indian culture like Bhangra and other folk dances. Therefore it is validly said that physical Education is in cultural heritage of India.

Social Awareness programmes:

Physical Education introduces us about Hygiene, sex education, prevention from injuries etc. which ultimately proves very assisting to society.

Educational Institutions curriculum:

Educational institutions having physical activities as essential part of curriculum. This mainly includes 'INTRAMEURAL AND EXTRAMEURAL PROGRAMMES" physical training through activities like calisthenics, Bhartium and other mass training exercises clears the wide scope of physical Education.

Scientific Methodology:

Bio-mechanics, sports physiology, sports science, sports psychology etc. newly introduced subjects in the field of physical Education widens its scope in the scientific field of Education. Every day new methodology is being introduced for the enhancement of sports field. The urge to grow faster and achieve new heights in the field of sports no doubt increasing the scope of physical Education.

Rehabilitative programme:

For temporary-injured athlete it is very important to maintain his/her fitness level. Physical education widen its scope by introducing Rehabilitative exercises which aims to reduce the recovery period of injured athlete and

also maintains the fitness components (strength, speed, endurance, flexibility etc) that ultimately leads for better performance after recovery).

Coaching:

The wide scope of physical education also covers Coaching. In the field of Coaching knowledge of physical education makes coaches more empowered and efficient. Many basic aspects of coaching is easily understood by the physically educationists and the theoretical subjects -matter as well as practical aspects are widely covered in Physical education.

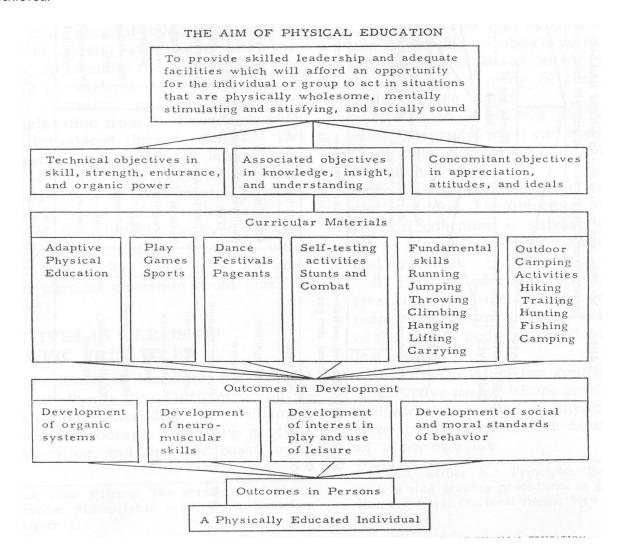
Aims of Physical education:

To provide skilled leadership and adequate facilities which will afford an oppurtunity for the individual or group to act in situations that are physically wholesome, mentally stimulating and satisfying, and socially sound.

OBJECTIVES

The objectives will help the physical educators to understand better what they are trying to achieve.

If the objectives are understood, the physical education will know through what activities those are to be achieved.



The objectives will help to understand the worth of the field.

Objectives will help to interpret better the worth of the field to general educator and a lay person even.

Objectives will help to know and appreciate the outcomes to be achieved.

Various physical educators have proposed a number of objectives but the following objectives can be termed as the common.

OBJECTIVES OF PHYSICAL EDUCATION

Physical Development objectives (Organic Development):

The objectives of physical development deals with the program of activities that develop various organic systems of the body. It results in the ability to resist fatigue, the ability to recover and the ability to resist fatigue, the ability to recover and the ability to sustain adaptive effort. The value of this objective is based on the fact that the individual will be more active, have better performance and be healthier. The term organic refers to the digestive circulatory, excretory, heat regulatory, respiratory and other systems of the human body. These systems are stimulated and trained through activities such as hanging, climbing running, throwing, carrying and jumping. With vigorous muscular activity, several beneficial results take place. The trained heart provides better nourishment to the entire body. The trained heart beats slower than the untrained heart and pumps more blood per stroke, with the result that more blood is dolivered to the cella and there in better removal of waste products. The trained individual can perform work for a longer period of time, with less expenditure of energy and much more efficiently. Therefore physical education should aid in the development of the trained individual so that he will be better able to perform the routine tasks and live a healthful and happy existence.

2. Motor Development objectives (Neuro Muscular Development)

The motor development objective is concerned with developing body awareness and making useful physical movement with as little expenditure of energy as possible and with being graceful in the movement. Effective motor movement depends on a harmonious working together of the muscular and nervous system. The neuromuscular skill is t perform with a degree of perfection. The objective to develop as many skills as possible so that the individuals interests will be wide and varied. Individuals enjoy by participating in activities in which they are skilful. The development of skill contributes to confidence, brings recognition, enhance physical and mental health makes participating safer, cuts down expenditure of energy and contributes to the aesthetic sense.

3. Cognitive Development Objective:

The cognitive development objective deals with the accumulation of a body of knowledge and the ability to think and to interpret this knowledge. Physical activities must be learned, hence there is a need for thinking on the part of the intellectual mechanism. The individuals not only should learn co-ordination but also should acquire a knowledge of rules, techniques and strategies involved in physical activities. Furthermore, a knowledge of followership, leadership, courage, self-reliance, assistance to others, safety, and adaptation to group patterns is important.

4. Social Development objective:

The social development objective is concerned with helping an individual in making personal adjustments, group adjustments and adjustments as a member of society. Each individual has certain basic social needs that was be met. These include a feeling of belonging recognition that their physique and physical skills have for their social change. When these needs are met, the individual becomes well adjusted socially. Through physical

education, individual should learn social qualities such as cooperation, friendship, courtesy, sympathy, honesty, aspect for authority etc.

5. Affective Development Objective:

Another factor that should not be overlooked is the affective development. Physical education should be concerned with helping young people to clarify and think through their value judgments, appreciations and attitudes. Much can be done to motivate boys and girls to analyse and assess their own values and attitudes.

IMPORTANCE OF PHYSICAL EDUCATION

Physical education has become a part of school curriculum all over the world. It explains about body movement and other physical activities. It involves variety of activities including individual and team sports. Participation in various games develops cooperation. The need and importance of physical education are as follows:

- **A. Harmonious growth and development:** Harmonious growth and development is the most important objective of physical education. All living things grow, A tiny seed can grow into a huge tree. Adult elephants are 60 times heavier than baby elephants. Every living organism consists of cells. The cells can multiply and divide to form other cells. Physical education also has relation with growth and development. Exercise may promote muscle strength. The regular physical training can improve various organs.
- **B. Development of physical fitness:** Through games and sports development of body takes place. A person physically fit can help others whenever his help is required. The various components of physical fitness are speed, strength, endurance, flexibility and agility. Physical fitness enables a person to perform vigorous activities. Generally physical fitness and good health are considered synonymous but it is wrong. A healthy person may be physically unfit because he may be lacking in some component of physical fitness. Regular vigorous exercise also increases the efficiency and capacity of an individual to lead a fruitful life. Therefore vigorous physical activities should be done for the physical growth and development.
- **C. Emotional Development**: Many competitive sports develop the emotional qualities which are very essential for socialization. For example a boxer while playing is emotionally agressive but after the last bell he shakes his hands with the opponent by converting his anger into affection. Hence we can say that sports helps a lot for the emotional development.
- **D. Development of cooperative attitude:** Specially in team games all the players practise together to win jointly. The lesson of cooperation is learned within the team. The tactics involved in team games are successful due to cooperation of the players, e.g. in hockey, a player scores a goal with the cooperation of his team mates.
- **E. Development of Sympathetic attitude:** While playing if somebody gets injured, all the players display affection and sympathy towards him. It can be observed in the cricket match also whenever any player gets injured all the players rush towards him sympathetically.
- **F. Channelization of Surplus energy:** It is evident from surplus energy theory that every individual possesses extra energy which tends to play. Sports and games provide a healthy outlet of surplus energy' otherwise this surplus energy can tend somebody towards antisocial acitivity. So the proper channelization of energy helps in socialization process.
- **G. Development of Discipline :** We have to play under rules and regulations of the game in discipline. So games and sports develop habit of discipline which is also an important social quality. Fear of disqualification in the match also directs a player to remain disciplined in spite of emotional arousal.

H. Development of National Integration: Physical education and sports help a lot in the process of National integration. Number of playful activities also create feeling of brotherhood. We can attain National integration through games and sports.

Games and sports help a lot in promoting National integration as many opportunities are given to the citizens for the development of qualities which promote national integration.

- **I. Development of Socialisation**: An individual can develop many social qualities through games and sports like dutifulness, discipline, loyalty, cooperation, sincerity, tolerance, regularity, punctuality, morality, etc. which promote the feelings of friendship and brotherhood. Hence we can say that games and sports contribute a lot towards the formation of healthy society.
- **J.** Knowledge of Health Education: Healthful living requires an intensive and extensive understanding of health. Health education guides a person to lead a fruitful life. Health education acts as public relations which gives information about health and disease. It is very essential for every community.

Health education informs the people about the prevention of disease particularly in epidemics. It motivates the people to develop their habits and ways of living. For example, drinking of contaminated water leads to many health hazards which can be prevented by the knowledge of safe drinking water.

- **K. Knowledge of Human Body:** Physical education provides knowledge and understanding of various systems of the human body. It enables a person to know about effects of exercise on various systems of the body. This knowledge can help an individual to protect his body from various diseases.
- **L. Development of leadership:** There are many opportunities to lead in the field of physical education, like captain of cricket team who acts wisely, sincerely, impartially and effectively. Even leadership training is provided when a leader is appointed for warming up. Sometimes organisation of competitions also helps in the development of leadership qualities.

It is clear from the above important that physical activities lead to the development of harmonious growth and development of the body. In the conclusion we can say that physical education and sports should be popularised on massive scale and should reach even the rural areas.

MINSCONCEPTIONS ABOUT PHYSICAL EDUCATION

Physical education is so vast a subject that it is mostly misunderstood In the ancient time, physical education was considered as physical training only. It was made essential for the training of defence personnel. Physical training was given to warriors only. The aim of physical training was to produce tough persons who can help in fighting war and patural calamities. At that time physical education was only limited to physical training. There are following misconceptions about physical education which are still prevalent nowadays:

- **A. Wastage of time**: Many parents think that participation in physical » activities is just wastage of time. However this opinion is totally wrong as participation in physical activities develops body. The mind and body "are two inter-related aspects of the same entity. A proverb, 'sound mind in a sound body' also supports psycho-physical unity of man. Mind and body are like two wheels of a bull cart. In the absence of one wheel the effect is found on smother wheel. Hence if physical condition of the body is disturbed, the mental condition of the body is also affected. For example a physically fatigued person cannot do mental work properly, on the other side mentally fatigued person cannot do physical work properly.
- **B.** Physical Education is considered as participation in games only: Most of the people think that physical education is only participation in games. However physical education enables a person to maintain health and

fitness. Many qualities like love, affection, tolerance, obedience, cooperation etc., are learned through participation in games.

- **C. Poor social status:** Until recently physical educationists had poor social status. However this perception is changing day by day. Sports persons are given social awards like Arjuna Award which can uplift the social status as society has started recognising sports personalities.
- **D. Physical education and Career:** Most of the people do not opt physical education as career, as they are not aware of its vast area. However physical education has many specialised branches like physiology of exercise, kinesiology, sports anthropometry, physiotherapy etc. which can be opted as a good career.
- **E. Indiscipline:** It is also observed that sports persons are considered as indisciplined. Physical education on the other hand trains a person to remain disciplined. We have to play under rules and regulations of game in discipline. So physical education develops habit of discipline which is also an important social quality. Fear of disqualification in the match also directs a player to remain disciplined in spite of emotional arousal.
- **F. Wastage of money:** Still it is thought that games require a lot of sports equipment which is considered as wastage of money. However sports and games provide a healthy outlet of surplus energy, otherwise this surplus energy can tend somebody towards anti social activities. So the proper channelisation of energy helps in educating the child.

RELATIONSHIP OF PHYSICAL EDUCATION WITH GENERAL EDUCATION

Physical Education has been accepted as an integral part of Education. The physical Education teachers work for the achievement of the ultimate purpose of general education. Let us discuss how far a Physical Education teacher can help in achieving the objectives of general education.

Education contributes to the development and advancement of the nation's culture. Educational institutions play a primary role in the achievement of intellectual skill, knowledge, understanding and appreciations. Physical Education as a phase of the total educational process helps in realising these purposes.

Before we evaluate the role of Physical Education in the achievement of objectives of general education, we should understand the meaning of education and its objectives.

The term 'education' means different things to different individuals. The simple meaning of education is a change, modification of behaviour or an adjustment on the part of the student as a result of experiences. A number of definitions made on educations are

A training process that comes about through study and instruction.

A series of experiences that enable a person to better understand new experiences.

John Dewey, an educator defines education as "the reconstruction of events which compose the lives of individuals so that new events become more purposeful and more meaningful" Education is a 'doing' phenomenon. One learns through doing. Education takes place in the classroom, in the library, on the playground, in the gymnasium and at home.

The primary goals of education are dissemination of knowledge, the liberation of minds, the development of skills, and the establishment of wholesome attitudes which are useful in the improvement of the society. The primary goals of general education are individual development, with emphasis on behaviour and social usefulness together with intellectual development as an outcome of learning. The important educational objectives are civic responsibility, the learning of respect, tolerance and self responsibility, development of intelligence and effective thinking, knowledge of body, knowledge f health and training of body and spirit.

Physical Education plays an important role in the education process. The mind and the body represent a unit in human beings. One gives strength to the other and both function harmoniously in the educated person. When physical education is applied to education, it can readily be seen it plays an instrumental role in the education process. Physical education with its emphasis on building a physically, emotionally, mentally and socially fit society, plays an important role in education. The role of physical education can be discussed in relation to three domains namely cognitive, affective and psychomotor.

1. Cognitive Domain's

The objective of cognitive development is concerned with knowledge and understanding. Physical Education contributes to cognitive development in the following ways.

Physical Education programmes contribute to academic achievement by providing daily movement experiences and instructions in selected basic motor activities, by providing knowledge and modifying behaviours in regard to good health practices, and by aiding in the process of social and emotional development.

Physical Education contributes to knowledge of exercise, health and disease, instructions are given about the importance of nutrition, Physical activity rest and sleep. Physical education provides knowledge and understanding relating to the various organic systems. Physical Education contributes to an understanding of the role of Physical activity and sports in the culture. They affect the country's politics, government, economy and educational systems. Sports and physical activity dominate the newspapers, magazines, radio and television.

Affective Domain

The affective domain is primarily concerned with interests, appreciations, attitudes and values. Following re some of the contributions of Physical Education to this domain. Physical Education contributes to an appreciation of beauty. The human body is a thing of beauty if it has been properly developed. Nothing is more beautiful than perfectly proportioned and developed human body. The beauty of movement is developed through Physical activity.

Physical education helps in the formulation of an individual's philosophy of life. Through the medium of Physical activity, guidance is given as to what is right and proper. Physical Education program stresses human welfare. When an activity is planned, the needs and welfare of the participants are taken into considerations. Play experiences offer an opportunity for children a rich social experiences which help to develop child's personality. Every educated person should have the characteristics of courtesy, politeness, fair play and other social behaviours. Good training in Physical Education activities provide opportunities to develop the characteristics of courtesy, politeness, fair play and good sportsmanship. Physical education bring children and youth from all walks of life, all creeds, colours, and races.

According to J.B. Nasls Physical Education is that phase of the whole field of Education that deals with bit muscle activities and their related responses.

Physical education is concerned with the acquisition of motor skills, and the maintenance of fitness for optional health as well as attainment of knowledge and the development of positive attitudes towards Physical activity.

In recent years there has been considerable discussion regarding whether Physical Education is the best name for this field. Other names that have been suggested include movement education, kinesiology, sports education, physical fitness, sport, applied physical sciences and motor education. The term that is used widely at

present time is physical education and sport. The various sub-disciplines of physical education are sport sociology, Biomechanics, sports medicine, Exercise physiology, sport Philosophy, History, Pedagogy, Sport Psychology, Motor Learning, Motor development, adopted Physical education, Health related fitness, performance related fitness, Health, Recreation and athletics.

Physical education, with its emphasis on building a physically, emotionally, mentally, and socially fit society, plays an important role in general education. A heavy responsibility rests upon the shoulders of those who spend a large share of their time with the youth of today. If experiences are provided that are satisfying, successful, and directed toward enriching an individual's life, these purposes of education will be accomplished. Physical education teachers have within their power the ability to aid in the fulfillment of the objectives of self-realization, human relationship, economic efficiency, and civic responsibility in each individual. Physical education, when applied to general education, plays an important role in the development of the student. The education that takes place on the playground, in the swimming pool, and in the gymnasium can help considerably in accomplishing these purposes.

A fuller description of the role of physical education in the educational process is needed at this point. For purposes of organization such a discussion may be grouped under four headings, which have been adapted from the Educational Policies Commission's list of objectives toward which education is striving.

The objectives of intellectual self-realization are aimed at developing the individual so that he realizes his potentialities. This development means much more than the accumulation of knowledge. It means that the individual in the process of constant interaction with his environment has achieved his rightful place, that a proper relationship has been established, and that he recognizes and associates with what is best in his culture. It means that education is interested not only in shaping the individual for his future role as a member of society but is interested also in his development and growth as he progresses toward adult life. Physical education should contribute to the objectives of intellectual self-realization in the following ways.

- 1. Physical education should contribute to academic achievement. Research findings indicate that physical education programs can contribute to academic achievement by providing daily movement experiences and instruction in selected basic motor activities, consistent with the developmental level of the students; by promoting physical fitness; by providing knowledge and modifying be-havior in regard to good health practices; and by aiding in the process of social and emotional development, which leads to a more positive self-concept. Research findings also indicate that the intellectual, physical, and emotional developments are closely associated. Endocrinology has shown that mentality changes as body chemistry changes. Biology has linked the cell to the learning experience. Psychology points to the act that the child's earliest learnings are actual and kinesthetic. Just as it is important to teach English so that students can communicate effectively with one another, history so that they have an understanding of their cultural heritage, and mathematics so they can understand the technology of our society, it is also important to educate students regarding their physical selves so they can function most efficiently as human beings. For further explanation of the evidence to support the relationship between physical education and academic achievement, Psychological Interpretations of Physical Education.
- 2. Physical education should contribute to an inquiring mind. An inquiring mind is essential to the educated person. Only through curiosity is it possible to probe into the makeup of one's environment.

The motor mechanism of the child en-ables him to explore, to cruise, and to see his environment. It stimulates his curiosity. He wants to see what is on the other side of the fence, how hot the stove is, what happens when he pulls the light cord, what is in the box with the cover, how people react to certain situations, and the like. Motor activity helps develop the inquiring mind and aids in the solving of problems that at times thwart the individual. In fact, psychologist Newell C. Kephart, former Executive Director of the Achievement Center for Children at Purdue University, points out that motor activity is related to higher thought processes. He also indicates that a child's behavior cannot function better than the motor abilities upon which it is based.

Today, in education, the independent study movement is becoming more popular in our schools and colleges. Alexander and Hines,* in their book entitled Independent Study in Secondary Schools, describe the independent learner as one who makes optimum use of his intellectual and other powers. He is one who undertakes on his own initiative learning tasks important to him. The student in the independent study movement desires the opportunity to participate in activities that will provide him with answers to questions that are perplexing him. Physical education provides the op-portunity for students to participate in such activities. One may visit a school at 7 A.M. and observe a youngster running around a track with an interested coach holding a stopwatch for him. Physical education activities open up new fields of curiosity. The student seeks to discover the answers to such questions as why a vigorous workout and a shower are exhilarating and why exercise improves his appetite, circulation, respiration, stamina, and endurance; why Jim can lift his own weight in the air and Dick cannot; why Henry can wield a tennis racquet with great skill; and why Sally can swim so gracefully. A new and interesting phase of living is opened to the individual through activity. His inquiring mind is ac-tive, and he seeks the answers to his health and physical problems. Many opportunities should be provided the student to do independent study in various physical education activities that interest him.

3. Physical education should contribute to the ability to speak, read, and write effectively. Physical education, through the various activities that it sponsors, can in-directly help an individual to speak, read, and write with more effectiveness and clarity. Through the development of a healthy and physically fit body one may possibly have better poise to command the attention of one's listeners. Francois Delsarte, a French teacher of voice and dramatics, pointed this out when he developed a special system of physical exercises that were aimed at more effective dramatics and singing. This system spread to America, where it was received with a great deal of interest. Many teachers of oratorical public speaking were in accord with Delsarte's methods, combined them with their own ideas, and developed a system of exercises that contributed to health, poise, grace, and beauty of face and figure.

The ability to read efficiently is impor-tant to an individual's development. It has been pointed out that there are three types of illiterates. First, there are those who cannot read; second, those who have mastered the mechanics of reading but do not use this acquired art; and, third, those who read material of insignificant value. Physical education can contribute to discrimination in reading by pointing out scientific materials available in regard to the maintenance and promotion of one's health and physical fitness. It can discount the literature of health and physical culture "fad-dists," quacks, quick-cure artists, and medicine men who are exploiting the public. It can refer students to sources of information where scientific information may be obtained. It can develop in the student a critical attitude toward quick health cures and other misleading advertising that is chronicled daily in newspapers and magazines and broadcast over radio and television. Through this medium of discrimi-natory reading, physical education can con-tribute to self-realization.

Physical education should aid an indi-vidual to write effectively. The ability to ex-press one's views in a clear, concise man-ner is a medium that contributes immensely to the solving of problems. In the presentation of physical education reports on activities, in health lessons, and in the writing of examinations, there should be a constant alertness on the part of the physical education teacher to see that acceptable standards of written work are followed. This work should not be the sole prerogative of the English profession. Instead, it is the duty of all educators to utilize every "teachable moment" in the improvement of the writing ability of their students.

4. Physical education should contribute to knowledge of exercise, health, and disease. The educated person has an under-standing of the facts pertinent to exercise, health, and disease. To a great degree, a person's success is dependent upon his health. His state of health and physical fitness will determine to a great extent whether or not he succeeds in realizing his potentialities. An individual cannot expect to be a top executive in the business world if he is sick and stays away from work 2 or 3 days a week. He cannot expect to achieve stardom in professional athletics without a physically strong and healthy body. He cannot expect to be accepted by members of his community if his life is controlled by drugs such as heroin and LSD. He cannot aspire to a high-salaried position in radio, engineering, the ministry, education, advertising, law, medicine, or dentistry unless his body can stand the rigors of long hours of study and work. He cannot expect to achieve happiness in living unless he is in good health. There-fore, a knowledge of exercise, health, and disease is a contributing factor to self-realization so that health obstacles, handicaps, and strains may be guarded against.

Physical education contributes to this knowledge by instructing the individual in regard to the importance of nutrition, physical activity, rest, and sleep; by informing him of the dangers of drugs; by exploring with him the preventive and control measures that exist to guard against disease; by providing opportunities for vigorous outdoors activity; by motivating the formation of wholesome health attitudes and habits; by following up the correction of defects; by stressing safety factors for the prevention of accidents; and by establishing various health services. Through the experiences and knowledge provided by a physical education program, the objectives of self-realization are brought much closer to attainment.

5. Physical education should contribute to family and community health. The educated person protects his own health, his dependents' health, and the health of the individuals within the community where he resides. The educated person has a knowledge of health and disease and applies these facts to himself, to his family, and to his community. He sees that his body is cared for in the manner prescribed by the authorities on health and disease and has periodic health examinations. He gets adequate amounts of exercise, rest, and sleep; eats the right kind of food; engages in activity conducive to mental as well as physical health; and sees that others also have the same opportunities to maintain and improva their health in accordance with his standards. He realizes that health is a product that increases in proportion as it is shared with other individuals, and he knows that health is everybody's business. In many ghetto areas where the horror of drug abuse has taken countless lives, the educated person who has knowledge of such horrors is the one who can inform members of the community of the dangers to them if they use drugs.

Physical education provides a program of activity to improve the physical and mental health of the individual, his family, and the entire community. In the schools a planned program of physical activity is offered as an essential to the optimum body functioning of young people during this developmental period of their

lives. It enables them to experience many pleasurable emotions and to develop organic power essential to a healthy, happy, and interesting existence, so that they will not have to turn to antisocial pursuits as an outlet for their frustrations. The groundwork for adult years is laid during this formative period. Recreational programs provide facilities and opportunities for the adult to continue, after leaving school, physical activity adapted to his needs. They offer adults the opportunity to lose themselves in wholesome activity and thus be relieved of some of the tension experienced in modern day living. Such a program is essential to the health of all.

6. Physical education should contribute to skill as a participant and spectator in sports. Recognizing that the body and mind represent a unity in man, the educated person recognizes the value of physical activity. Sports and physical education activities are an important part of our culture. Furthermore, the stress of modern day living, with its quest for material possessions, its machine type labor, its sedentary pursuits, and its competitive nature, has implications for all who would enjoy some of the simple, natural, and wholesome forms of activity. Modern-day man has been bit-ton by a bug that lias destroyed to some extent his sense of values in regard to entertainment. Many persons no longer wish to find entertainment through their own re-sources but, instead, desire to have professionals satisfy these needs. Too frequently they turn to night clubs, horse races, or games of chance for amusement. The educated person selects the manner in which he will spend his leisure time with discretion and with regard for enriched living.

Participating in a game of softball, tennis, or badminton or going for a swim not only provides an interesting and happy experience during leisure hours but at the same time contributes to mental and physical health. The development of physical skills in all persons rather than in just a few select individuals is an educationally sound objective and should be encouraged more and more by educators. The so called rec-reational sports should receive greater emphasis so that activities may be better adapted to the older segment of the population. Swimming, golf, tennis, camping, and similar activities should occupy a prominent place in all physical education programs.

Physical education not only develops skill in the participant but at the same time develops an interest and knowledge of other activities that at times may be engaged in by individuals from the standpoint of a spectator. Although it seems the benefits from participation would outweigh the benefits of being a spectator in regard to physical activity, nevertheless many leisure hours may be spent in a wholesome manner observing a ball game or some other sports activity. The wise person, however, discovers the proper balance between the amount of time he will utilize as a participant and as a spectator. The balance is destroyed if a person fails to realize that being a spectator cannot result in the same values for an individual as being a participant. Physical education can help by supplying a knowledge of various sports so that the role of the spectator may be more meaningful and interesting.

7. Physical education should contribute to resources for utilizing leisure hours in mental pursuits. The educated person has mental resources for the utilization of leisure hours. Recreation is not confined to sports and exercise. Instead, there is a whole game of activities that are more inactive in their nature but that offer entertainment and relaxation after working hours for a great many people. Such activities as reading, photography, music, and painting may be included in this group. Physical education contributes here by providing the material for interesting stories of great athletes, such as Babe Ruth, Jackie Robinson, Glenn Cunningham, Ben Hogan, and Kareem Jabbar. These individuals, through the stories that have been written about them,

allow others to live vicariously their struggles in attaining fame and fortune amidst obstacles that seemed almost in-surmountable. Physical education offers photography and painting enthusiasts subjects for their pictures. Everyone has seen works of art that were inspired through some sports event. Physical education also offers many hobbies. A sport such as fishing motivates a hobby such as tieing flies. Many other examples could be listed.

- 8. Physical education should contribute to an appreciation of beauty. The educated person has developed an appreciation of the beautiful. From the time of early childhood the foundation of an appreciation of beautiful things can be developed. Architecture, landscapes, paintings, music, furnishings, trees, rivers, and animals should ring a note of beauty in the mind of the growing child and in the adult.
 - Physical education has much to offer in the way of beauty. The human body is a thing of beauty if it has been properly developed. The Greeks stressed the "body beautiful" and performed their exercises and athletic events in the nude so as to display the fine contours of their bodies. Nothing is more beautiful than a perfectly proportioned and developed human body. Physical activity is one of the keys to a beautiful body. Also, there is a beauty of movement that is developed through physical activity. When a person picks up an object from the floor, it can be done with great skill and grace, or it can be done crudely and awkwardly. When a football pass is caught, a basketball goal made, a high jump executed, a two and one-half somersault dive performed, or a difficult dance displayed, there can be included in the performance of these acts rhythm, grace, poise, and ease of movement that is beauty in action. Anyone who has seen Jim Ryun run, Jack Nicklaus drive a golf ball, Rod Laver stroke a tennis ball, Wilt Chamberlain hook a shot through the net, or Johnny Bench hit a home run knows what beauty of performance means. Such beauty comes only with practice and per-fection.
- 9. Physical education should contribute to directing one's life toward worthwhile goals. The educated person conscientiously attempts to guide his life in the proper direction. Upon the shoulders of each individual rests the responsibility of determining how he will live, what religion he will choose, the moral code he will accept, the standard of values he will follow, and the code of ethics in which he will believe. This is characteristic of the democratic way of life. In a democracy man can in reality "half control his doom."
 - Man must develop his own philosophy of life. The way he treats his fellow men, the manner in which he assumes responsibility, the objectives he sets to attain on earth, and the type of government in which he believes will all be affected by this philosophy. Through the philosophy that he has established, man forms his own destiny.

Physical education can help in the formulation of an individual's philosophy of life. Through the medium of physical education activities, guidance can be given as to what is right and proper, goals that are worth competing for, intrinsic and extrinsic values, autocratic and democratic pro-cedures, and standards of conduct. Children and youths are great imitators, and the beliefs, actions, and conduct of the coach and the teacher are many times reflected in the beliefs, actions, and conduct of the student. In education, leadership is the key that unlocks the door to self-realization for many of our youth.

PHYSICAL EDUCATION AS AN ART

Art can be described as a method of doing something beautifully. People who do things beautifully may be called artists. Art implies that actions are performed with such principles of taste and imagination, and with such

aesthetic qualities, that they express beauty, grace and poise. A perfect dive (in aquatics), a perfect gymnastic exercise, a beautiful painting, a colourful rainbow or a melodious song excites an emotional response in us. This emotional response is received by us through our various sense organs—ears, eyes, nose etc. Such responses evoke delight and excite admiration within us because of the humanistic values and aesthetic qualities of the object or the experience. In music our auditory perception is involved, in seeing a piece of art our visual perception is involved, in smelling the food our olfactory perception is involved and in athletics our kinaesthetic perception is involved. It is the quality of the perception that evokes aesthetic response so as to term it as an art.

The person who performs an action beautifully, skillfully and creatively is an artist. The teacher or the guide who creates such congenial learning environment which encourages and stimulates his disciple to achieve perfection and beauty in performance is also an artist. An athlete who sails over the high jump bar skillfully, beautifully with grace and poise is an artist and the teacher, the guide who taught him with his soaring imagination and stimulating ideas is also an artist.

Art has two main principles, 'form' and 'organisation' and physical education satisfies both these principles. Form is essential quality of good activity in physical education. The teacher will be able to evaluate the strong, supple physical from as well as the skilled activity as to its good form. Physical education also satisfies the second principle of organisation which is a function of imagination and creativity. Physical education contributes to creativity and appreciation of the same by providing different modes of expression through movements and also by allowing for individual differences of the participants at the same time. These two principles are generally responsible for beautifying the programme of physical education, extrinsically and intrinsically. It can thus, be said that physical education is an art.

PHYSICAL EDUCATION AS A SCIENCE

Physical education can be termed as a science only if the principles, laws, theories on which it is founded are determined and verified. What we know about human being is scattered through many separate disciplines. Physical education draws its principles from various sources like anatomy, physiology, mental hygiene, psychology, anthropology, bio-chemistry, bio-physics, bio-mechanics etc. which contribute much to the understanding of man' and his movements. These sciences have paved the way for building up a scientific basis of physical education. The principles and theories which guide programming in physical education place heavy reliance on these sciences. Principles of these services are so well established that there is hardly any possibility of any change taking place.

Basic characteristics of science are that it provides us the knowledge, the facts, intellectual tool for solving problems, enabling us to construct means and also stresses on results and achievements. As physical education relies heavily on these basic characteristics of science, it can be well said that physical education as a science.

PHYSICAL EDUCATION AS AN ART AND SCIENCE

Since physical education derives its principles both from art and science, it will be appropriate to treat it as an art and a science at the same time. It is an art because it is aesthetic, imaginative and creative. It is science as it is systematic and realistic. Physical education being a rare combination of science and art can be termed as 'artistic science'.

UNIT - II HISTORICAL DEVELOPMENT OF PHYSICAL EDUCATION

PERIOD OF INDUS VALLEY CIVILIZATION (3250 BC - 2500 BC)

This is also known as pre-vedic age. We do not find any proof or record of any kind of physical art or craft during this period. But, various things found at Harappan and Mohanjodaro provide some clue or hints of such kind of art during this period. Various kinds of physical exercises were used to practice by people of this period, however, for this no special events were organised. Activities of a general manner were organised. One of an important and most popular event of pre-vedic people was considered to be dancing. Generally people did not perform dance individually, but event of group dancing was being organised. As in modern period, we organise different swimming competitions, during the pre-medieval period, such event was organised which was called the Groott Bath. Near that place, there situated showers of hot and cold water, which were called the hammam.

For conducting various kinds of sports events, marbles, balls and dicers were used. Various proofs prove that dicing was the most popular game during that period. From some evidences, it has been proved that dicing was not a full time game, but it was used only with board games.

Another important pass-time during this period was animal fighting. Boxing is also considered an important event which was being practised by people of that period.

VEDIC PERIOD (2500 BC – 600 BC)

One of an important asana of Yoga, Suryanamaskara, has its origin in this period. This asana did not have the same value and importance as it has today, but earlier, it was performed in the form of a religious duty. It was during this period that another important asana, Pranayama came into existence.

During this period, military training got a very important place. Hand wrestling, perfect use of various weapons were being practised by people of this period. Swinging was one of a favourite pass-time of people. People of both the sexes used to indulge themselves in various kinds of ball games. Dicing was also popular in this period also. For defeating the enemies in the wars, boxing was employed because of which it was practised by young people to a large extent. People used to participate in various forms of dancing. For pass-time, animal hunting was used. Various kinds of fights were being conducted between different animals and birds.

It was during this period that healthy physique was provided much importance. In comparison to academic learning, physical strength and knowledge of physical activities was considered more important. Not only physical strength was considered important, but spiritual strength was also recognised very important for which practice of various asanas of yoga were being recommended to people of all age groups and of both sexes.

EARLY HINDU PERIOD (600 BC - 320 AD)

During this period, much importance or value was being provided to various kinds of dramas and festivals. Physical training was considered an important part of life. Hunting was a sport which was being practised by people with royal background. Kings and common men used to play dicing and chess.

It is considered that game of chess came into existence during this period and India is the true originator of this game. For physical strength, wrestling, male fighting and various kinds of other activities were employed by people at large. One of an important feature of this age was practising of fighting with animals. Great warriors used to fight not only with human beings but also with powerful animals as they considered it a good means to increase or develop one's physical strength.

LATER HINDU PERIOD (320 AD - 1000 AD)

During this period, much importance was provide to systematic teaching and this thinking inspired some scholars or experts to establish universities of Taxila and Nalanda. At these centres of training, a kind of correlation was found between physical, intellectual and aesthetic training of individuals. Special important was being given to some events like wrestling, archery and mountain climbing.

Importance of physical activities during this period can be measured from the fact that students of the Nalanda University used to practice certain special physical activities daily. Those activities included swimming and yoga. During this period, India was ruled over by Gupta rulers and they took various important steps to improve the condition of physical activities in general public. Common persons were encouraged to participate in certain sports and in physical activities. Various kinds of arrangements were made to organise such sports.

Hunting was considered an important pass-time during this period and cock fighting was becoming more popular. Various kinds of animal fighting was popular during that period.

Bodily health was considered an important means for improving spiritual conditions of the people. Much importance was given to the sound physique and people were encouraged to participate in various kinds of physical activities for this purpose. Physical activities were practised by people on regular basis and various kinds of supports or encouragement was provided by monarchs.

MEDIEVAL PERIOD (1000 AD - 1757 AD)

During this period, importance of systematic education was considered and now for this purpose, certain organisations were being established, which were termed as 'Gurukulas'. Military training was provided much importance during this period.

Importance of a systematic training or education was being recognised in this period because of which people were encouraged to set-up more and more gymnasiums.

There was a kind of Gymnasium Movement in the country which was headed by Shree Samarth Ramadas Swamee.

Inspite of this movement, there was not much increase in the number of gymnasiums in the country. Still now, religious places were used as a place to provide physical education. Wrestling and various events of gymnastics got very importance during this period. Some of the specific sport activities got very popularity during this period, some of which were horse riding, javelin throwing and wrestling. Malkhamb also enjoyed a special place and it was because of this importance that two new types of malkhambs were introduced, which were Hanging Malkhamb and Cane Malkhamb. Horse riding was learnt by not only males b¹ also by females. As a recreational activity, chess was used by a large number of people.

During the whole period, physical education and various physical activities enjoyed an important role. They were considered not only for the warriors and soldiers, but also for the common men. Mostly those activities were practised which can provide soldiers with war skills. For the warriors, wrestling was considered an important recreational event. One of an important aspect of wrestling training was body massage.

Another important activity was boxing. Other activities which were popular during that period were hunting, swimming and animal fighting. There was a sport which was similar to today's polo which was being practised during that period. Another important passtime was pigeon flying and various individual sports competitions were organised from time to time. Various Kinds of indoor activities were also organised from time to time. A big source of recreation was gardening.

BRITISH PERIOD (BEFORE 1947)

A Flash Back to Pre-Independence days: Physical Education has always existed in the Indian society in one form of the other but had never been considered as a part and parcel of school curriculum. No doubt, the English are the sports loving people and pioneers in education but while in India, as rulers, they also never paid any attention to the inclusion of physical education in the school education programme. In 1833, Government of India (at the centre) shouldered the responsibility of education and in 1870, the subject of education was made a state subject – only the centre retained the supervisory powers. Surprisingly, physical education was given no place in the school programme. For the first time it was the Indian Education Commission in 1882 that recommended "Physical training be promoted in the interest of the youth by the encouragement of native games, gymnastics, the interest in the school children to take physical activities as something enjoyable. In 1894, the question of making physical education as a compulsory subject was considered but no definite policy came out of this. Western games especially cricket, were becoming very popular with the princely states.

Private organizations for physical education like gymnasia, vyayam shalas, Akhadas and Kreera Mandal contributed appreciably to the spread of traditional interest in developmental and conditioning activities like dands, baithaks, hogic exercises, various folk dances, wrestling, lathi fight, exercises with light apparatus and indigenous games like kho-kho, Atyapatya. It is heartening to note that some of the princely states also promoted some games especially polo, hockey, cricket etc. Princely states like Hyderabad, Jodhpur, Patiala, Cooch Bihar, Baroda, Jaipur and a few others patronized these Westren games apart from traditional sports like wrestling.

Whatever the programme of physical education existed in pre-independence days, it was carried on by the ex-service men re-employed by school authorities. They imparted military drill and P.T. exercises to the children and often prepared the children as scouts for school ceremonies and inspection days. The out-standing development of scientific physical education in India in pre-independence days goes to the Y.M.C.A. College of Physical Education, Madras founded in 1920, by Mr. H.C. Buck. Since its inception this college has been working tirelessly and self-lessly to promote and systematize physical education in India. In 1931, the Government College of Physical Education Lucknow were established. In 1938, came into existence another "Training Institute of Physical Education" Kandivali (B0mbay). In 1914, Vaidya Brothers founded Sri Hanuman Vyayam Prasark Mandal, Amravati, basically to serve the cause of traditional physical education in India. In 1924, this institution started a five weeks summer course for young men and women in indigenous activities. A youth completing this course was awarded "Vayayam Visharad". Here in 1946 at the time of All India Physical Education Conference, National Association of Physical Education and Recreation of India was formed. The Mandal team gave numerous demonstrations of activities in Europe and Middle East and in 1936 at Olympic Games at Berlin and in 1949 at the second Lingaid at Stockholm.

PHYSICAL EDUCATION IN INDIA (AFTER 1947)

THE ALL INDIA COUNCIL OF SPORTS

The All India Council of Sports was formed in the year 1954 by the Ministry of Education, Government of India It was intended to serve the cause of games and sports in the country and to act as a co-ordinating body between the National Federations, National Association and Central Government. Originally this body consisted mainly the Presidents of National sports Federations and special organizations and five Government nominees

and the total strength was 25. This body was re-constituted in 1969 and the entire body of the council consisted of members nominated by the Government of India. Then the total strength wasmade as 15. This council was generally reconstituted for every 3-years.

This council has several functions. They may be enumerated as follows:

- i) To advice the Government of India in all matters pertaining to games and sports,
- ii) To give advice and assistance to the various National Sports organizations with a view to raise the standard of games in the country,
- iii) To recommend to the Central Government to give financial aid to deserving sports organization,
- iv) To act as a Liasion between the National Sports organizations and the Central Government,
- v) To recommend financial grants for construction of stadia, purchase of games and sports materials and conduct coaching camps by the concerned sports bodies,
- vi) To effect proper control over the funds or deputation of national teams abroad and to recommend financial aid for meeting the expenses of foreign teams visiting India,
- vii) To recommend to the Government of India the names and outstanding and distinguished sportsmen in the country for the award of National titles like Arjuna, Padma Shri, Padma Bhushan etc.

It was the All India Council of Sports that recommended the establishment of the National Institute of Sports at Patiala.

The States of the Indian Union were asked to form state sports Councils and get themselves affiliated to the All India Council. Accordingly most of the States have formed their own Sports Councils. Even District Sports Councils have been formed in many States with a view to popularise games and sports not only in urban areas but also in rural areas.

Coaching schemes are being organised at different levels viz. District, State and National.

The All India Council of Sports has become obsolate after the founding of the SAI (Sport Authority of India).

NATIONAL DISCIPLINE SCHEME

Late Gen J.K. Bhonsle, while in Japan during the Second World War and during the I.N.A movement in the East, was impressed by the educational system of Japanese nation which not only was based on sound philosophical and scientific foundations but also embodied in itself physical and mental training. This, perhaps, resulted into an enviable pattern of individual and national discipline in Japanese people.

After India became independent and Sh. Bhonsle came to the Centre as a Deputy Minister for Rehabilitation, he conceived the idea of introducing such type of training for the refugee children who has settled in Delhi and Punjab. It was in this context that the National Discipline Scheme took birth on July 24, 1954 at Kasturba Niketan, Lajpat Nagar, New Delhi where hundreds of refugees were temporarily lodged. The scheme came into being as an experiment with the help of a couple of ex-I.N.A. soldiers and officers who still had the spark of service, patriotism and respect for national ideals. Gradually the scheme was introduced to other institutions in Punjab, Gujarat, and Bengal. Numerous rallies and demonstrations that were encomium for Gen.Bhonsle and his selfless workers and so the scheme spread like a wild fire. In 1957 the Scheme was handed over to the Union Education

Ministry for furthering the cause of discipline amongst the Indian youth. A directorate was set up for N.D.S and Gen.BhonIse was made its Director General.

It was to his initiative that the Central Training Institutes, Sarika (Rajasthan) (1960) and Barwala (1963) were established to train the N.D.S. instructors to cater to the growing need and demand in the country. The training courses were extended to the period of nine months. The N.D.S. instructors were paid by N.D.S. Directorate but worked with school authorities.

Objectives: The aim and objectives of the scheme were:

- (i) To make the youth healthy in mind and body and instill in them a sense of patriostism, self-reliance, tolerance and self-sacrifice.
- (ii) To develop human values and to build in them a desire to serve the country and humanity at large. Programme: The programme of the scheme covered items such as
 - 1. **Physical training:** Through drill and marching and physical training exercises and tables, gymnastics and sports.
 - 2. **Mental training:** Through lectures on discipline, patriotism, good citizenship, National Flag and National Anthem etc.
 - 3. **Administration:** Through appointment of leaders in rallies and demonstrations.
 - 4. **Organization:** Through various opportunities to the students for forging their way forward, at the organization of sports days, rallies and ceremonial parades.
 - 5. **Cultural Programme:** By singing emotional and national integration songs of different States irrespective of one's caste, creed, language and State boundaries. Folk dances were very significant part of this programme. All men and women had to learn dances.

What N.D.S. was in 1954, it was not after a decade. It had grown to be a great department. It had, by the end of 1964 about 7000 N.D.S. instructions, working in the schools throughout the country.

It was not static but a dynamic Institution that borrowed the best features of various Physical Education programmes and prepared a coherent plan of its own activities. Numerous conferences and seminars were held to modify its objectives and its organizational set-up. This scheme accepted new programmes and absorbed in itself such programmes which other schemes professed to have.

Special Features

- 1. The Scheme ensured mass participation and all teachers of the scheme had to learn all activities to achieve proficiency in them. The children were also taught all activities without exception.
- 2. It had intensive nature of training.
- 3. Supervisory pattern was very effective.
- 4. It aimed at uniformity throughout the country so that mass rallies could be held without much labour.
- 5. Refresher and re-orientation courses, held at least every year for all N.D.S. instructions, kept the instructors fresh and made them aware of the latest developments.

- 6. Chances of rapid promotion on the basis of seniority-cum-merit served as incentives for the teachers to put their heart and soul in their work.
- 7. Its training centres attracted students from all over India and the people tried to live a life devoid of personal interest, language barrier, and colour distinction. The training institutes shoed themselves as miniature India representing greal unity in diversity. They were examples of emotional and national integration.

The N.D.S. movement was a dynamic institution and a revolutionary concept. It at least had made efforts to give impetus to the cause of physical education by posting N.D.s. instructors in almost all the states who worked under a uniform pattern and centrally organized administration. This scheme remained a scheme and did not become a permanent administration and ultimately died its own death after having been amalgamated with the confluence of N.F.C. National Discipline Scheme revived some of the indigenous activities like lezium malkhamb, folk dances etc. Still at State or National rallies theses activities are presented by thousands of children with great gusto and remarkable rhythm. The N.D.S. though a thing of the past, has become a legend in itself.

N.C.C

After the achievement of Independence a committee headed by Shri H.N. Kunzru recommended the establishment of the National Cadet Corps. The recommendation was implemented in 1948 by an Act of Parliament. This scheme is under the control of the Ministry of Defense and it is being operated through the Director General of N.C.C in co-operation with State Governments.

The object of this scheme is to develop character, leadership and a national flavor to defend the country.

The N.C.C. was not compulsory to the students in educational institutions. But due to the emergency declared, it was made imperative for the students in colleges to join the N.C.C. and stay in it for at least 3 years. Only those who are medically unfit were exempted. The N.C.C. and gives practice in elementary military training. There is a junior and senior N.C.C. Rifle training was introduced in the senior N.C.C. from 1960 onwards.

NATIONAL SPORTS ORGANIZATION (NSO)

The National Sports Organization is an effort by the Government of India to promote the development of athletics and sporting activities with the youth of India. It is present in many important institutions of India such as the IITS and IIMs, and very talented athletes are selected. The safest weapon sports in the International arena which develops superb reflex actions & stamina without the fear of getting injured. Pioneer of Spochan in India is Prof.Dr.Siddiq Mahmoodi from Hyderabad, who is appointed President of Spochan for for India by the Founder Grandmaster Kaicho Tetsundo Tanabe Sensei of Japan.

The National Sports Organization is a nationwide movement to instill physical awareness amongst the youth. The NSO Nitt chapter consists of around 1000 students in all the 4 years. The NSO is responsible for organizing the sports day in the college. It also conducts regular meetings in which the students are encouraged to take up various sports activities.

NATIONAL SERVICE SCHEME (NSS)

The National Service Scheme (NSS) is an Indian government-sponsored public service program conducted by the Department of Youth Affairs and Sports of the Government of India. Popularly known as NSS, the scheme was launched in Gandhiji's Centenary year, 1969. Aimed at developing student's personality through community service, NSS is a voluntary association of young people in Colleges, Universities and at +2 level working for a

campus-community linkage. The cardinal principle of the NSS programme is that it is organised by the students themselves, and both students and teachers through their combined participation in community service, get a sense of involvement in the tasks of nation building.

SCOUTS AND GUIDES

The Scout movement was first started in England. The founder of this movement was Sri Robert Paden Powell, an army officer. He outlined in 1902 his idea for a scouting programme with a view to provide recreation for post school youth. In 1908 the Boys' scouts organization was inaugurated in England by Baden Powell. Similarly he and his sister helped to organize Girl Guides.

The scout movement spread to several parts of the world and in India it was introduced in 1909 exclusively for the European and Anglo-Indian boys. Afterwards it was started for the Indian boys also. It was in 1916 that the Indian Boys Scouts Association was founded by Mrs. Annie Besant. Lord Baden Powell who visited our country in 1921 established the Boys Scout Association. Within a span of two decades, the movement spread by leaps and bounds and there were three organizations viz. (i) The Hindustan Scout Association (ii) The Boys Scout Association of India and (iii) The Girls guiding Association of India. In the Post-Independence period these three associations were amalgamated and formed into a single association in 1950 by the then Education Minister the late Maulana Abdul Kalam Azad. From that time onwards the Association was named as Bharat Scouts and Guides.

The following are the divisions of the Scouts and Guides:

Scouts: (i) Cubs, (ii) Scouts and (iii) Rovers

Guides: (i) Bul Bul (ii) Guides (iii) Rangers

Scout promise and Law are given stress in this movement. The scout promise consists of Duty to God and Country, Service to fellowmen and obedience to the Scout Law. The Scout Law emphasizes Trustworthiness, Loyalty, Helpfulness, Friendliness, Courtesy, Kindness to animals, Obedience, Cheerfulness, Thrift and Purity.

Camping forms an important activity of this movement. Rallies and Jamborees are conducted from time to time.

SPORTS AUTHORITY OF INDIA (SAI)

The Development of sports talent was a challenge for independent India which was not an easy task. The Government of India realized the urgency and took the decision to start National Institute of Sports (NTS) in the year 1961 at Motibagh palace, Patiala. Through this premier center, the sports awareness was spread through out the country.

In the year 1982, IX Asid was conducted successfully at New Delhi, by constructing sophisticated infrastructure which went a long way to create sports consciousness amongst the people of the country. As a result the expansion of sports developmental activities started in a big way which resulted in the birth of Sports Authority of India (SAI). In order to bring NIS which was under Society for the National Institute of Physical Education and Sports (SNIPES) to under SAI for effective programmes, the amalgamation took place on May 1st 1987 under the name of SPORTS AUTHORITY OF INDIA headed by the then Prime Minister of India late Sri.Rajiv Gandhi as its first president.

Main Objectives:

- 1. To promote sports in India.
- 2. To train National teams for participation in international competitions
- 3. To prepare High Calibre coaches and to enrich their competence and knowledge.
- 4. To improve scientific back-up to achieve performance in sports.
- 5. To identify hidden talents and groom them with scientific approach
- 6. To co-operate with other sports organizations, to provide infrastructure information.
- 7. To provide organizational support, technical know-how documentation and sports and scientific information with a view to achieve excellence in sports.
- 8. SAI conducts full year orientation and refresher courses in various disciplines and sports sciences and are being conducted for all the coaches from SAI and states on regular basis update their knowledge in coaching.
- 9. Certificate course for six weeks in coaching for PE.Teachers is also being conducted during summer vacation.
- 10. At NIS various departments have been setup for sports sciences. The departments include sports physiology, Biomechanics, psychology, General theory and methods of Training, Anthropometry and Sports Medicine.

Schemes by SAI

SAI has launched the following schemes to spot and nurture the talents of various age groups through different agencies and are being trained by SAI coaches. The expenditure on boarding, lodging, education, sports kit/uniform, sports equipment, training and competitions are being borne by SAI.

a) National Sports Talent Contest (NSTC)

The scheme was launched in the Year 1985. Few schools have been adopted by extending one time grant of 5 lakhs per school to develop infrastructure facilities. The talented children of 8-12 years age group are selected and admitted. The aim of this scheme is to bring sports consciousness and commitment among young children and parents and to train children and develop them for medal winning prospectives in future.

b) Sport Hostels.

Sports hostel have been started in conjucture with state government. It is to achieve international standard by providing constant training to the talented sports persons in the age group of 16 - 20 years.

c) Special Area Games (SAG)

Remote corners of India have talented sports persons but are devoid of sports facilities since independence. SAI have launched a scheme to tap talents from special area where the talents are available in abundance. Aims of a this schemes are

i) To tap talents in special area such as traditional sports and individuals having potential for modem sports,

- ii) To spot talents from population of which physical or genetic constitution have any relevance to some sports,
- iii) To spot talent from areas whose location and environment is conducive to particular sports. *

d) Army Boys Company

This scheme was launched by SAI in collaboration wflh Army headquarters for 9-14 years of boys. Its aim is to produce disciplined soldiers as well as excellent sports persons.

e) Sports Project Development Area (SPDA)

It is to establish and develop pyramidal sports infrastructure of different level from village to National and to tap and nurture talents of sub junior/junior and train them scientifically on a long term basis.

f) National Coaching Scheme

Regional coaching centers have been established depending upon the requirements of the states/UTS. SAI has given number of coaches to the District Coaching Centres. It's aims are a) to impart coaching to sports children and to follow up scientific training for the talented children, b) to train the state team prior to the national competition, c) to develop sports in rural areas by conducting coaching camps/ competition and providing scholarships.

g) Prize money Scheme for Schools

The incentive scheme for promotion of sports and games in schools through prize money was introduced in the year 1986. It's aim is to encourage educational institutions to take interest in promoting sports activities in their schools. (Eg.) The winning schools of District level prize money competitions (are awarded Rs. 10,000/in five disciplines viz. Athletics, Basket ball, Football, Hockey and Volleyball.

h) Sports Equipment for States/UTS

SAI extends the supply of non consumable sports equipments to the extent of Rs. 1.5 lakhs per District.

i) Rural Sports

The scheme was launched to spot talents among the rural youth through their participation in sports, competitions from block level to National level in all the disciplines. Selected children are awarded handsome scholarships.

j) Women Sports Festival

Women sports was launched to commemorate the international women's year in 1975. The concept of women sports in India was brought to encourage women folks from all walks of life to take part in sports activities from Block level to National level. This festival is being organized and. participated by women.

NETAJI SUBHAS NATIONAL INSTITUTE OF SPORTS

Netaji Subhas National Institute of Sports is the largest sports institute of Asia and is popularly known as NIS Patiala. This complex was made by the Maharaja of Patiala. Later this building was dedicated for the promotion of sports by his offspring. NSNIS is always known as "Mecca" of Indian games. This institute created many highly talented coaches which showed their efficiency and proficiency in preparing teams for International competitions.

In ancient times this place was the house of Maharaja of Patiala. It is in old Moti Bagh Palace But now days

this is an Academic Wing of the Sports Authority of India. On 7th May, 1961 it was established by the Government of India with the prime objective of developing sports and to impart training to the coaches in various sports. On 23rd January, 1973, it was renamed as Netaji Subhas National Institute of Sports (NSNIS).

Following sports facilities are available in NSNIS, Patiala:

- 1) Gymnasium & Swimming Pool Complex
- 2) Athletic Track Synthetic (8 Lanes), Grass (4 Lanes) and Cinder (8 Lanes)
- 3) Volleyball, Handball & Judo
- 4) 2 Squash Courts
- 5) 3 Indoor Halls for Wrestling, weightlifting, Boxing, Basketball, Badminton, Table Tennis
- 6) Area for Lawn Tennis (4 hard & 1 grass court)
- 7) Archery Ground
- 8) 9-Hole Golf Course
- 9) 2 Football Grounds
- 10) 4 Volleyball courts
- 11) Turf Wicket Cricket Ground & 6 Cricket Nets
- 12) Cycling Velodrome
- 13) 2 Basketball Cement Courts
- 14) Hockey Field Astroturf and 3 Grass Fields
- 15) 2 Handball Grounds
- 16) 5-Lane Jogging /Cross Country Track

Major achievements of NSNIS

- 1. Major Dhyan Chand winner of Gold Medal in 1928 Amsterdam Olympics
- 2. PT Usha winner of Seoul Asiad shoes in 1986 are produced by NSNIS.

SPORTS DEVELOPMENT AUTHORITY OF TAMIL NADU (SDAT)

Tamil Nadu has made fair strides in the field of sports. The Sports Development Authority of Tamil Nadu (SDAT) is the government body that is vested with the responsibility of developing sports and related infrastructure in the state. The SDAT owns and operates a number of world class stadiums and organizes various sporting events. It also accommodates various sporting events, both at domestic and international level, organized by other sports associations at its venues. The YMCA College of Physical Education at Nandanam in Chennai was established in 1920 and was the first college for physical education in Asia.

Cricket is the most popular sport and Kabaddi is the state game of Tamil Nadu. M. A. Chidambaram Stadium in Chennai is an international cricketing arena with a capacity of 50,000 and houses the Tamil Nadu Cricket Association. Popular cricketers from Tamil Nadu who have represented the national team include

S. Venkataraghavan, Kris Srikkanth, Robin Singh, Lakshmipathy Balaji Subramaniam Badrinath and Dinesh Karthik. Cricket contests between local clubs and teams is also popular across the state. The MRF Pace Foundation in Chennai is a much sought after fast bowling academy by pace bowlers all over the world. The traditional sport of Kabaddi, called Sadu Gudu in Tamil, is another popular sport played extensively in the rural areas. Silambam is another popular traditional sport played in the rural areas.

The ATP Chennai Open tournament held in Chennai every January is the biggest Tennis event in South Asia. Tennis players from Tamil Nadu who had made it to the big stage include Ramanathan Krishnan, Ramesh krishnan, Vijay Amritraj, Mahesh Bhupathi and Prakash Amritraj. Tamil Nadu has a long standing motorsports culture. The sport was pioneered by Sundaram Karivardhan in his early days. Notable sportspersons from Tamil Nadu in the field are Narain Karthikeyan, the first Indian to participate in F1 racing, and Karun Chandok. Motor racing events are held at the Irungattukottai track (near Sriperumbudur), Sholavaram track and Kari Motorspeedway near Coimbatore.

The Tamil Nadu Hockey Association is the governing body of Hockey in the state. The Mayor Radhakrishnan Stadium in Chennai hosts international hockey events and is regarded by the International Hockey Federation as one of the best in the world for its state-of-the-art infrastructure. Chennai hosted the SAF Games in 1995. Anju Bobby George, bronze medalist from Sydney Olympics, represents Tamil Nadu in the national arena. Shanthi Soundararajan, silver medalist (later stripped) from Doha Asian Games, also hails from the state. The Jawaharlal Nehru Stadium in Chennai is a multipurpose stadium hosting Football and Track & Field events. The Indian Triathlon Federation and the Volleyball Federation of India are headquartered in Chennai. Chennai hosted India's first ever International Beach Volleyball Championship in 2008.

Chess and Carrom are popular indoor sports. World Chess champion and Indian Grand Master Viswanathan Anand and Arjuna Awardee and two-time world carrom champion Maria Irudayam hail from Tamil Nadu. Snooker was invented by General Sir Frederick Roberts at the Ooty Club in Udhagamandalam. The Velachery Aquatics Sports Complex in Chennai hosts different kinds of water sports. The SDAT - TNSRA Squash Academy in Chennai, one of the very few modern squash facilities in South Asia, hosts international squash events. Tamil Nadu has six 18-hole Golf courses, the most popular of which are the Kodaikanal Golf Club, established in 1895, and Gymkhana Club, Chennai. The Madras Boat Club, set up in 1867, hosts regular rowing races on the Adyar River. The 232 year old Guindy race course in Chennai is popular horse racing venue. Apart from these, the Multi-Purpose Indoor Games Complex in Chennai hosts international events for Volleyball, Basketball, Badminton and Table Tennis. In the recent years, adventure sports have also gained popularity, especially amongst the tourists visiting the state.

SCHOOL GAMES FEDERATION OF INDIA (SGFI)

The National School Games Federation came into being in 1954. The representatives of the Education Department of various states met in Calcutta in December 1954 for the All India Physical Education Conference. At the meeting it was acknowledged that games and sports not only built up strong physique but also play a very prominent role in the promotion of national integration. Healthy competitions in sports and games provided opportunities for the younger generation to come together, understand one another, and help in building up a strong nation. The staging of Inter-State National Championships in games and sports annually for high schools was agreed upon at the meeting. Shri AC. Das of the Cuttack Physical Education College was appointed as General Secretary of the Federation.

The National School Games Championship was to be organised every year by the National School Games Federation. The competition was open only to bonafide students of High Schools and higher secondary schools

who had not completed 19 years of age. He/She must have put in a minimum of 60% attendance in the class and should not have any arrears of School fees. A competitor who has secured one of the first three places in the National open Amateur Athletics and swimming championship shall not be permitted to participate.

The objectives of the Federation as laid down in the constitution are:

- 1. "To encourage, promote and popularise all recognised Olympic athletic events and games as well as indigenous national games suited to them amongst the school boys and girls of India.
- 2. To work for the physical welfare of the school boys and girls of India.
- 3. To hold the National and International sports meets for school boys and girls in such places and at such times as may be decided upon and to award certificates and prizes for National school games and sports.
- 4. To control and regulate on an amateur basis all kinds of Olympic games and sports and such other kindred activities in co-operation with other state school athletic and games Associations throughout the Indian Union.
- 5. To secure adequate participation of athletes in Olympic games and such other International contests in the various |branches of sports and games as may be approved by the -Federation.
- 6. To promote and assist in the formation of State Associations and to affiliate them.
- 7. To co-ordinate Inter-State School activities by holding All-India competitions at different centres by rotation, as for as possible".

The First National School games Meet was staged at Fcichmathi, Madhya Pradesh with two games (Football and Kabaddi) and athletics for boys and Volleyball and athletics for girls in May 1955. Only Seven States entered the Meet. For the Second Meet in Cuttack, Orissa, the number rose to Nine States. The Third, Fourth and Fifth Meets showed great progress, as more States participated and thereby the number of competitors also increased. The number of items was also increased. For the Fifth meet in Bombay almost all the States participated and the total number of competitors was over 1500. At the end of the Fifth meet the Executive Committee of the Federation decided to hold the meet in subsequent years in two parts viz. The Autumn Meet and the Winter Meet and the items were also decided accordingly.

The Autumn Meet (October or November)

Boys	Girls
Football	Kho-Kho
Kabaddi	Table Tennis
Table Tennis	Swimming
Swirnming	

The Winter Meet (December or January)

Boys	Girls
Hockey	Volleyball
Basketball	Basketball
Volleyball	Badminton
Badminton	Gymnastics
Gymnastics	Athletics

Athletics

In 1960, the Sixth Autumn Meet was held in Indore, Madhya Pradesh and the Winter Meet in Thiruvananthapuram. Thereafter the National School Games championship has been conducted every year regularly Shri B.N. Basu, Secretary to the Government and Special Officer, Sports, Government of Bihar is the President of the National School Games Federation. The Twelfth Autumn Meet was staged in Madras in October 1966 and the Winter Meet in Udaipur in December 1966.

ASSOCIATION OF INDIAN UNIVERSITIES (AIU) Inter-University Sports Board of India

The Inter University Sports Board of India was constituted for the purpose of efficient running of the Inter-University tournaments and for the promotion of sports and games in the Indian Universities. Two headquarters of the Inter-University Sports Board be located at the same place where the headquarters of the Inter-University Board (Vice Chancellors) are situated. The Inter-University Sports Board shall be composed of.

- a) One nominee from each of the member universities
- b) The president and secretary of the Inter university Board who shall be ex-officio president and secretary of the Sports Board.

The Sports Committee of the Inter University Board is composed of the Chairman, the Secretary, the Assistant Secretary (Sports), two members nominated by the chairman for a period of one year (who possess knowledge of technical matters) and two members connected with Universities. The committee has powers to see whether the sports activities are organised under the general direction of the Inter University Board and in comformity with its policies.

Every constituent University of the Inter University Board shall be affiliated to the Inter University Sports Board and shall pay an annual affiliation fee as may be fixed from time to time. No entry fee shall be charged for any game on tournament organised by the Inter University Sports Board for the benefit of its constituent member. The Inter-University Sports Board shall meet at least once a year before the end of May.

AIMS AND OBJECTIVES

University sports is an integral phase in the total education of the University students. The Inter University competitions are merely one of the means, towards developing a more totally educated citizens through sports in its finest concept. The competitions conducted by University on behalf of this Board are, therefore to be considered not as ends in themselves but rather as educational projects concerned with assisting in the total education of the university student. The principal objectives of the Sports Board shall be:

- i) to organise the Inter-University tournaments and competitions in recognised games and sports.
- ii) to participate in national and international competitions;
- iii) to encourage sportsmanship generally and to promote friendly relations among constituent universities.
- iv) to raise the standard of Sports and athletics prevailing in the colleges, universities and other member institutions and to work for the development of character values through sports amongst the university students.
- v) to organise coaching camps in regional and national basis.

Tournaments and Zones

The following tournaments shall ordinarily be organised by the Board.

Men

Athletics, badminton (shuttle cock & ball), basketball, boxing, chess, cricket, cycling, football, gymnastics, malkhamb, weight lifting and best physique, hockey, kabaddi, kho kho, rowing, shooting, squash racket, swimming, diving and water-polo, table tennis, tennis, volleyball and wrestling.

Women

Athletics, badminton (shuttle cock & ball), basketball, Football, hockey, kabaddi, kho kho, swimming, table tennis, tennis, and volleyball.

Games may be included or deleted by the Sports Board from time to time, at its annual meetings. Tournament, in various games shall be organised on an All India basis 2-zone and 4-zone basis as decided by the Sports Board at its annual meetings, from time to time. The Universities are grouped into four zones namely North zone, East zone, South zone and West zone. When tournaments are conducted in 2-zones, North zone and East zone will go together and the South zone and West zone will form one zone. The new zones so formed shall be called North zone and South zone.

Each Constituent University shall enter only one team for each game. The Inter University Sports Board at its annual meeting shall allocate the responsibility for the conduct of tournaments in the year following. The Universities who have been allocated the responsibility of organising the Inter Univasity tournaments shall be called as "Organising Universities".

INDIAN OLYMPIC ASSOCIATION

Foundation of IOA

Sir Dorabji Tata towards the end of 1919 first sowed the seeds for establishing a Sports body at National level for promoting the Olympic Sport in united India. Sir Dorabjii Tata with the support of Dr.A.G.Noehren then Director of YMCA established the Indian Olympic Association (IOA) in 1927. Sir Dorabji Tata and Dr. Noehren have become the Founder President and Secretary General respectively of IOA.

Though no National Olympic Committee was formed in India, Sir Dorabji Tata fielded a token contingent of 6 members i.e. four athletes and two wrestlers in the Antwerp Olympic Games in 1920. During these Games Sir Dorabji Tata was elected as a member of the International Olympic Committee (IOC) and thus became the first IOC member in India. Upon his return to India from Antwerp Olympic Games, Sir Dorabji Tata, in association with Dr. A. G. Noehren began to search throughout India for talent in athletics. This talent search aroused national interest in athletics and helped to promote the organisation of athletic meetings in all States and provinces in India.

In February 1924, the first ever Inter-State Athletic meet was organised in Delhi and an eight -member Athletic team selected during this meet was sent for the Paris Olympic Games in 1924. By 1927, the IOA decided to hold regular inter-State Games and since then National championships in all Sports are being held in various states of India.

Sir Dorabji Tata and Dr. Noehren ran the IOA activities until 1928. The mantle was then handed over to Maharaja Bhupindra Singh of Patiala (1928-1938), and Prof. Guru Dutt Sondhi (1928-1952) respectively. Sir Dorabji Tata continued as IOC member in India until his death in 1931. In 1932 Prof. Guru Dutt Sondhi, who was also the Indian representative within the International Amateur Athletic Federation, assumed his responsibilities.

IOA the apex Sports Organization of Olympic Sport in the country is responsible for the Indian contingent's participation in the Olympic Games, Commonwealth Games, Asian Games(Outdoor-Indoor-Beach) and South Asian Games. Each Olympic and Non-Olympic Sport has a Federation at the National level and are affiliated/recognized to/ by IOA.

The selection of the National teams is done by the respective National Federations and then recommend to IOA for official sponsorship for participation in the Games being conducted under the auspices of the IOC, OCA, CGF and SAG. A special feature of the Indian Olympic Association is that, the National Federations and the State Olympic Associations are affiliated/recognised to it. The main task of the State Olympic Associations is to Promote the Olympic Sport and to ensure coordination among the State Sports Associations.

The most important task in addition to sponsoring the National teams for Multi Sport Games is the staging the National Games.

The role of IOA

India first participated in Olympics in 1900 in Paris. The country was repre sented by Norman Pritchard, an Anglo Indian who was holidaying in Paris during that time. The Indian Olympic Association is responsible for the preparation and participation of competitors in the Olympic Games as well as in Regional events like Commonwealth and Asian Games. There is a separate federation at national level in each game/sport which assists the Indian Olympic Association and preparation of sportsmen.

The selection of sportsmen is generally carried out on the basis of performance at national level. However, at times, special selection trials are also held to choose the competitors for participation in the Olympic Games and other international events. After initial selection, the competitors are required to attend training camps. The national federations are assisted by the Netaji Subhas National Institute of Sports, Patiala, which provides intensive training for athletes.

The selected competitors are then recommended by the national federations to the IOA for official sponsorship for participation in the Olympic Games.

A special feature of the Indian Olympic Association is that, in addition to the national federation for each sport, there are State Olympic Associations in various States in the country. The State bodies controlling the different sports are affiliated to the national federations and to the State Olympic Associations. The aim of the State Olympic Associations is to ensure the promotion of sports in their respective States, in conjunction with the State bodies for the different games and sports. The overall responsibility for participation in the Olympic Games rests with the Indian Olympic Association. The other responsibilities undertaken by the IOA are as follows:

- 1. Deciding the organisation of National Games
- 2. Maintaining liaison between the Government of India and member federations or associations
- 3. Protecting the amateur status of sportsmen
- 4. Promoting and developing the Olympic Movement

The current president of IOA is Mr. Suresh Kalmadi.

Presidents of IOA

- 1. Sir Dorabji Tata 1927-1928
- 2. Maharaja Bhupindra Singh 1928-1938
- 3. Maharaja Yadavindra Singh 1938-1960
- 4. Raja Bhalindra Singh 1960-1975
- 5. Air Chief Marshal OP Mehra 1976-1980

- 6. Raja Bhalendra Singh 1980-1984
- 7. Mr. V C Shukla 1984-1987
- 8. Dr. B. Sivanthi Adityan 1987-1996
- 9. Suresh Kalmadi (1997-2012)
- 10. N. Ramachandran (2012 Till date)

2020 Summer Olympic bid

The Indian Olympic Association stated that "Delhi would bid for the 2020 Olympics." The IOA had decided to bid for the 2016 games but after a failed attempt to host the 2014 Asian Games, it will now bid for the 2020 games, officials confirmed.

NATIONAL SPORTS FEDERATIONS

National Sports Federations (some are also called associations) are voluntary organizations having their roots in the sports clubs at the baseline. The structure of a typical national sport federation begins with the district sport association having several clubs -affiliated to it. District sport associations make state associations which, in turn, comprise the National Sport Federation. At each level, these "associations" have their • constitution, rules and regulations and clearly defined objectives and functions. Each national sport federation guides, directs and controls the working of its subordinate units on the one hand, and on the other it is guided and directed by its respective international federation in technical matters of the sport, and matters of management by IOA. Obviously, each national sport federation has a mandatory link with its international body as well as IOA. Most of the NSFs and their subordinate units are registered autonomous societies. The IOA also has State Olympic Associations and district Olympic associations which, in turn, comprise the national sport federation. In structure, there exists a parallelism in sports associations and Olympic associations. Except for a few professional sport bodies, all NSFs are affiliated with the IOA.

Within the frame of reference to their respective constitutions and the national policy on sport, the NSFs are at absolute liberty to mobilize financial resources, formulate developmental and action plans to achieve their short-term and long term objectives. They are responsible for holding sports competitions regularly and get their teams trained for participation in state, national and international competitions as the case may be. Of late, the Government through Sports Authority of India (earlier MS) have extended all possible help to NSFs in terms of grants, scientific back-up, infrastructure, coaching etc. in their endeavours to achieve excellence in competitive sports but except for a few streaks of medal-winning performance in certain events, the over-all scenario seems to be dismal.

For the propagation, regulation and control of various games and sports on a national level, federations or associations have been formed from time to time. These Federations get themselves affiliated with their respective

international Federations. National competitions are being held under the auspices and control of the National Federations. Teams for international competitions are selected by the respective Federations and no one can compete in an international competition without the approval of the concerned National Federation. National Federations have their respective constituents in States.

The following are the names of National Federations or Associations with the year of their formation in India.

The Indian Hockey Federation	1925
Indian Weight lifting Federation	1935
All India Football Federation	1937
The Swimming Federation of India	1940
Amateur Athletic Federation of India	1944
Wrestling Federation of India	1948
Basketball Federation of India	1950
Volleyball Federation of India	1951
Gymnastic Federation of India	1951
National Rifle Association of India	1951
The Indian Amateur Boxing Federation	1958
All India Lawn Tennis Association	1920
Board of Control for Cricket in India	1926
Indian Table Tennis Federation	1926
All India Badminton Association	1934
National Cyclists Federation of India	1938
All India Billiards Association	1940
Kabaddi Federation of India	1951
Squash Rocket Association of India	1953
The School Games Federation of India	1954
Yatching Association of India	1960
	Indian Weight lifting Federation All India Football Federation The Swimming Federation of India Amateur Athletic Federation of India Wrestling Federation of India Basketball Federation of India Volleyball Federation of India Gymnastic Federation of India National Rifle Association of India The Indian Amateur Boxing Federation All India Lawn Tennis Association Board of Control for Cricket in India Indian Table Tennis Federation All India Badminton Association National Cyclists Federation of India All India Billiards Association Kabaddi Federation of India Squash Rocket Association of India The School Games Federation of India

REPUBLIC DAY SPORTS (RDS)

The Republic Day Sports are being conducted for students (boys and girls) of VI standard to X standard for Tamilnadu schools. Competitions are being conducted on inter school basis. To start with, the competitions are conducted on zonal, educational district, revenue district and on divisional basis. The participants should be below 17 years of age. The classifications are made as follows.

Age in years	Category
10 to 12	Sub Juniors
12 to 14	Juniors
14 to 17	Seniors

The following games and sports will be conducted for competitions. Basketball, Badminton, Ball Badminton, Football, Hockey, Kabaddi, Kho-Kho, Table Tennis, Volleyball and Athletics.

The Republic Day sports are conducted from the year 1950 for every academic year.

BHARATHIAR DAY SPORTS (BDS)

The Bharathiar Day sports are conducted from the year 1978. It is conducted for the students (boys and girls) of Higher Secondary schools. The competitions are being conducted on inter school basis. To start with, the competitions are conducted on zonal, educational district, revenue district, and divisional basis. The participants should be below 19 years of age.

The following games will be conducted for competitions. Basketball, Badminton, Ball Badminton, Football, Hockey, Kabaddi, Kho-Kho, Table Tennis and Volleyball. The competitions are conducted on every academic year.

ARJUNA AWARD

The **Arjuna Awards** were instituted in 1961 by the government of India to recognize outstanding achievement in National sports. The award carries a cash prize of Rs. 5,00,000, a bronze statuette of Arjuna and a scroll.

Over the years the scope of the award has been expanded and a large number of sportspersons who belonged to the pre-Arjuna Award era were also included in the list. Further, the number of disciplines for which the award is given was increased to include indigenous games and the physically handicapped category.

The Government has recently revised the scheme for the Arjuna Award. As per the revised guidelines, to be eligible for the Award, a sportsperson should not only have good performance consistently for the previous three years at the international level with excellence for the year for which the Award is recommended, but should also have shown qualities of leadership, sportsmanship and a sense of discipline.

DRONACHARYA AWARD

Dronacharya Award is an award presented by the government of India for excellence in sports coaching. The award comprises a bronze statuette of Dronacharya, a scroll of honour and a cash component of Rs.5,00,000. The award was instituted in 1985. As the best sportsperson award is named Arjuna Award, it is appropriate that the coaching award is named after Dronacharya, as he was the Guru of Arjuna.

RAJIV GANDHI KHEL RATNA

The **Rajiv Gandhi Khel Ratna** (**RGKR**) is India's highest honour given for achievement in sports. The words "Khel Ratna" literally translate to "Sports Gem" in Hindi. The award is named after the late Rajiv Gandhi, former Prime Minister of India. It carries a medal, a scroll of honour and a substantial cash component. As of 2004-05, when the award was last bestowed, the cash component stands at Rs. 7,50,000/-.

The award was instituted in the year 1991-92 to supply the lack of a supreme national accolade in the field of sports. Predating the RGKR are the Arjuna awards that have always been given to outstanding sportspersons in *each* of many sporting disciplines every year. The Khel Ratna was devised to be an overarching honour, conferred for outstanding sporting performance, whether by an individual or a team, *across all sporting disciplines* in a given year.

A selection committee consisting of eminent people affiliated to sports is constituted every year by the Ministry of Youth Affairs & Sports to evaluate sporting performances. Usually, performance between April 1 of one year to March 31 of the next year is considered. To qualify for this award, a sportsperson or team must take part in discipline that is included in the Olympic Games, the Asian Games or the Commonwealth Games. Professional sportsmen competing in billiards, snooker and chess are also eligible for this honour. A person can receive this award only once in his lifetime and must be nominated for the award by a member of parliament, state governments, the Sports Authority of India or national sports federations. The committee make a recommendation to the ministry, and after this is vested at various levels in the government, the nominee is invested with the award by the President of India. Whereas the trend has generally been for one outstanding sportsperson to be honoured every year, that is not mandatory. The award need not be bestowed if no candidate is found to have met historic standards of excellence. Two or more individuals or teams may be honored in the same year. On two occasions, two individual sportspersons shared the accolade.

SPECIAL OLYMPICS

Special Olympics is the world's largest sports organization for children and adults with intellectual disabilities, providing year-round training and competitions to more than 4.2 million athletes in 170 countries. Special Olympics competitions are held every day, all around the world—including local, national and regional competitions, adding up to more than 70,000 events a year.[2]

These competitions include the Special Olympics World Games, which alternate between summer and winter games. Special Olympics World Games are held every two years. The Special Olympics World Games are often the largest sporting event to take place in the world during that year. The most recent World Summer Games were the Special Olympics World Summer Games, held in Athens, Greece (The birthplace of the modern Olympic Games), from June 25, 2011 to July 4, 2011.[3]

The most recent Special Olympics World Winter Games were held in Pyeongchang, South Korea from January 29 to February 5, 2013.[4] At the same time, the first Special Olympics Global Development Summit was held on "Ending the Cycle of Poverty and Exclusion for People with Intellectual Disabilities," gathering government officials, activists and business leaders from around the world [5]

The next World Games will be the 2015 Special Olympics World Summer Games in Los Angeles, California from July 24 to August 2, 2015.[6]Graz and Schladming, Austria will host the next Special Olympics World Winter Games from March 14-24, 2017.[7]

DEAFLYMPICS

The Deaflympics (previously called World Games for the Deaf, and International Games for the Deaf) are an International Olympic Committee (IOC)-sanctioned event at which deaf athletes compete at an elite level. However, unlike the athletes in other IOC-sanctioned events (i.e., the Olympics, the Paralympics, and the Special Olympics), the Deaflympians cannot be guided by sounds (i.e., the starter's guns, bullhorn commands or referee whistles). [1] The games have been organized by the Comité International des Sports des Sourds (CISS, "The International Committee of Sports for the Deaf") since the first event.

The Deaflympics are held every 4 years, and are the longest running multi-sport event excluding the Olympics themselves.[2] The first games, held in Paris in 1924, were also the first ever international sporting event for athletes with a disability.[3] The event has been held every four years since, apart from a break for World War II, and an

additional event, the Deaflympic Winter Games, was added in 1949.[4] The games began as a small gathering of 148 athletes from nine European nations competing in the International Silent Games in Paris, France, in 1924; now, they have grown into a global movement.[1]

Officially, the games were originally called the "International Games for the Deaf" from 1924 to 1965, but were sometimes referred to as the "International Silent Games". From 1966 to 1999 they were called the "World Games for the Deaf", and occasionally referred to as the "World Silent Games". From 2000, the games have been known by their current name "Deaflympics" (often mistakenly called the "Deaf Olympics").[4]

To qualify for the games, athletes must have a hearing loss of at least 55 db in their "better ear". Hearing aids, cochlear implants and the like are not allowed to be used in competition, to place all athletes on the same level.[4] Other examples of ways the games vary from hearing competitions are the manner in which they are officiated. To address the issue of Deaflympians not being able to be guided by sounds, certain sports use alternative methods of commencing the game. For example, the football referees wave a flag instead of blowing a whistle; on the track, races are started by using a light, instead of a starter pistol. It is also customary for spectators not to cheer or clap, but rather to wave – usually with both hands.

AKHADAS AND VYAMASHALA

In the year 1918-19, Hanuman club was renamed as 'Hanuman Vyayam Mandir' which than gradually formed an institute known as Hanuman Vyayam Prasarak Mandal alias as 'Akhada' or 'Vyayam shala'. The seed Ambadaspant bowed that time has been converted into a Giant tree whose branches are spread not only in Vidarbha but also in the India. It is said that 'All glory comes from daring to began'. The glory of Shree H.VP. Mandal is now spread in the world and is one of the renowned institutes.

YMCA AND ITS CONTRIBUTIONS

In post Independence physical education has developed as an integral curricular of educational institutions but the progress was not very fast. No doubt much is achieved by this discipline and much is yet to achieve.

Many committees, organizations came into existence to develop this field. But the institutions established before independent have contributed a lot and still contributing. Much apploudment goes to Mr. H.C. Buck who founded Y.M.C.A. College of Physical Education MADRAS in 1920 .In 1928 Hanuman Vyayam Prasarak Mandal, Amravati was founded, in 1931 Govt. College of physical Education Hyderabad, Christen College of physical Education Lucknow in 1932 were established.

It was with the origin of Y.M.C.A. in India that organised physical education came into existence. This was a turning point in the area of physical education in our country, which happened in the year 1920. Now professionally qualified teachers were appointed to train the students. Various games which have an American origin were being organised in India also. Various other institutions came into existence which used to provide knowledge relating to various physical activities. By getting education from these institutions, one could get the certificate and even degree. Various sports were properly organised by this institution which was done by making its rules. Now, various physical activities were organised in a well co-ordinated manner by following the proper rules set up by Y.M.C.A.

UNIT - 3 FOUNDATION OF PHYSICAL EDUCATION

WHAT IS PHILOSOPHY?

Philosophy is a field of inquiry that attempts to help man evaluate, in a satisfying and meaningful manner, his relationships to the universe. Philosophy seeks to help man evaluate himself and his world by giving him a basis with which to deal with the problems of life and death, good and evil, freedom and restraint, beauty and ugliness.

Aristotle said that philosophy is the grouping of the knowledge of the universals. A dictionary definition reports that it is the love of wisdom, the science that investigates the facts and principles of reality and of human nature and conduct. Copleston writes: "Philosophy ... is rooted in the desire to understand the world, in the desire to find an intelligible pattern in events and to answer problems which occur to the mind in connection with the world." In defining the word philosophy Websterf says: "Love of wisdom means the desire to search for the real facts and values in life and in the universe, and to evaluate and interpret these with an unbiased and unprejudiced mind." As can be seen from these definitions, philosophy offers an explanation of life and the principles that guide human lives.

In order to comprehend more clearly the meaning of philosophy, one should briefly examine the major components of which philosophy is composed.

PHILOSOPHY AND PHYSICAL EDUCATION

In today's changing society, there must be a sound philosophy of physical education in order for our profession to survive in the present educational system. We must ask ourselves such important questions as: What has value in today's society? and What is relevant to the needs of today's students? We must discover the answer to these questions and a philosophy will be the means to that end. A philosophy of physical education will serve the following functions.

A PHILOSOPHY OF PHYSICAL EDUCATION GUIDES ONE'S ACTIONS. In order for man to function as an intelligent being, he needs a philosophy of life that will guide his actions. One needs knowledge about what is right before he can create any program. A philosophy will help the teacher to decide what he wants to have happen to his students in the gymnasium.

A PHILOSOPHY OF PHYSICAL EDUCATION PROVIDES THE DIRECTION FOR THE PROFESSION. Today in physical education we find that many of our curriculums lack order and direction. A philosophy of physical education will help to give direction to our programs. When assumptions are made by the physical education teacher, for example, that physical education strengthens human relationships because children play together, they should be based on a system of reflective educational thinking that embraces logic and other philosophical components. A philosophy of physical education will help to provide this system.

A PHILOSOPHY OF PHYSICAL EDUCATION MAKES SOCIETY AWARE THAT PHYSICAL EDUCATION CONTRIBUTES TO ITS VALUES. Physical education in the coming decades is going to have to face the fact that people are not going to be satisfied with only such statements as: "Students who participate in physical education show improvement in endurance." This is important, but it doesn't go far enough. In today's changing society people want to know how physical education can contribute to the solution of such problems as student unrest and how physical education programs can help stem the tide of racial discrimination. A well-thought-through philosophy of physical

education will assist in interpreting those values important in society so that programs can be established to help solve the problems plaguing this nation.

A PHILOSOPHY OF PHYSICAL EDUCATION AIDS IN BRINGING THE MEMBERS OF THE PROFESSION CLOSER TOGETHER. Many members of the physical education profession are dissatisfied with what they see happening in their field today. A philosophy of physical education will enable the physical educator I to better determine how he can best contribute to mankind and to society and thus provide members of the profession the opportunity to work together in making such a contribution.

A PHILOSOPHY OF PHYSICAL EDUCATION EXPLAINS THE RELATIONSHIP BETWEEN PHYSICAL EDUCATION AND GENERAL EDUCATION. A philosophy of physical education will help in the development of a rationale showing that our field has objectives that are closely related to the objectives of general education. In our definition of physical education, we stress the importance of education "of and through the physical." Our goal, as in general education, is to develop the 0whole" student. A philosophy of physical education that enunciates our basic goals will give evidence that we have objectives that are related to the objectives of general education.

Physical educators must strive to develop their educational philosophies in a rational, logical, and systematic manner and to represent the best interests of all men. This means that scientific facts must be assembled and workable theories applied that support the worth of physical education as an important and necessary service to humanity.

SOME GENERAL PHILOSOPHIES

Five philosophies have prevailed down through the years and have influenced educational thinking. They are idealism, realism, pragmatism, naturalism and existentialism.

IDEALISM

The philosophy of idealism has come down to us through the ages as a heritage from the earliest Greek philosophers and thinkers. The key concepts of idealism follow.

- 1. A man's mind is the focus of his being. The idealist believes that the mind of man is more real than anything else that exists. Anything that is real is essentially a product of the mind and is equated by thoughts and ideas.
- 2. In the scheme of the universe, man is more important than nature. Because to the idealist the mind and spirit are the keys to life, the physical world plays a subordinate role to man. Man interprets nature in terms of his mind, his spirit, and his being.
- 3. Values exist independently of man and are permanent. Man is capable of exercising free will. Through the use of this power, man recognizes the existence in the world of good and evil, beauty and ugliness, freedom and restraint and interprets them in relation to himself. The idealist acknowledges that man may interpret values, but he says that these values are permanent and do not change in the light of varying interpretations.
- 4. Reasoning and intuition help man to arrive at the truth. Man's mind is considered to be the basic, creative force that helps him learn more about his world. But the idealist also believes that scientific methods of investigation and research are valuable aids in seeking the truth.

The Greek philosopher Plato is often referred to as the father of idealism. He believed that ideas had an enduring quality and that physical objects were ideas expressed in a lcss-than-perfect fashion. Plato said that there were, in fact, two classes of ideas: those that exist in the mind of men, and those that exist outside of man's mind. Aristotle expanded on Plato's philosophy and was responsible for the earliest origins of the scientific

method. Aristotle stressed arriving at the truth through reasoning and observation. Rene Descartes is one of the most famous of the idealist philosophers. His often cited quotation: "I think, therefore I am" is the essential element in the philosophy of the idealist. Both Baruch Spinoza and Gottfried W. Leibniz expressed the view that something enduring and unchanging exists beyond man's universe. While Spinoza referred to this phenomenon as a "substance," Leibniz termed it a "God." George Berkeley, Immanuel Kant, and George Hegel all espoused the belief that the mind of man is the key to all things. Some of the more modern idealists, whose views encompassed many of the same elements as the men who preceded them, were Louis Agassiz, Henry Barnard, Carl Follen, Francis Lieber, Henry Wadsworth Longfellow, and Horace Mann.

IDEALISM AND PHYSICAL EDUCATION

- 1. Physical education involves more than the "physical." Idealists believe that the body should be developed simultaneously with the mind. Physical education should contribute to the development of the individual's intellect. For example, the physical education teacher, after describing a difficult skill such as the "kip" on the low bar, can ask students questions such as: "What angle should the hands be in when they are grasping the bar?" According to idealists, physical education activities can and must help students think for themselves.
- 2. Strength and fitness activities contribute to the development of one's personality. The idealistic physical educator must make sure that the activities that he selects are related to important aspects of life. The idealist will accept vigorous exercise activities that emphasize development of strength and fitness because of the self-discipline and effort required. The idealistic physical educator will select such activities because they contribute to the development of one's personality; however, he will not select them if their sole aim is developing strength or fitness.
- 3. Physical education is centered around ideals. Idealists believe that activities must be offered that aid the student in developing the qualities of honesty, courage, creativity, and sportsmanship. The idealistic physical educator aims for perfection. He envisions the students becoming aware of what is true and genuine. He wants his students to develop strong moral character. The idealist will encourage student-created gymnastic routines because of the emphasis on creativity. The idealist will want "team sports" dominated by students. He will reject a basketball game dominated by the coach because the students will not get the opportunity to think for themselves. Idealistic physical educators stress the fact that students can only develop when they are playing an important part in the activity.
- 4. The teacher must be a model for his students. The idealistic physical education teacher must set a good example for his students. He will be the type of person whom students want to imitate. Through his personal example of vigorous health and personality, the idealistic physical educator will lead his students toward greater accomplishments.
- 5. The teacher is responsible for the effectiveness of the program. Idealism believes that the firm and rather paternalistic guidance of the teacher is more important in carrying out the program than are equipment and facilities available. The idealistic physical educator, believing he is responsible for the effectiveness of the program, does not confine himself to one way of teaching, The idealistic physical education teacher uses the question and answer, the lecture, the project, and other methods of teaching.
- 6. Education is for life. The idealistic physical education teacher believes that equally important to developing physical skills or having knowledge of a sport is thinking reflectively. The idealistic physical educator believes that the ability to analyze problems is as important as knowing the rules of a game. Idealism emphasizes a

well-organized, well-guided program that contributes to the full mental and physical development of the individual.

REALISM

Realism asserted itself as a distinct and separate philosophy during the late nine-teenth and early twentieth centuries. For many centuries preceding that time, realism was greatly overshadowed by idealism. The roots of realism date back as far as the origins of idealism, and it was, in fact, a philosophical revolt against idealism. The growth of scientific methods and the philosophy of modern realism emerged at about the same time. Realism has many subdivisions. Its adherents do not always agree on particular interpretations, but the key concepts of realism may be defined in general terms.

- 1. The physical world is a real world. The realist accepts the physical world, or world of nature, as it is. He does not contend that the world is man made but says that it is made up of matter. The physical world is in no way dependent on man's mind. The realist says that man comes to an understanding of his physical world through his senses and through experience.
- 2. All of the physical events that occur in the universe are the result of the laws of nature. The realist contends that forces within the universe, which are physical laws, control man's physical world. This belief has given rise to the physical sciences. The realist says that man's environment is a result of cause and effect and that good, morality, and beauty conform to the laws of nature. Those things that do not conform to the laws of nature are wrong, im moral, and ugly. Man perceives the physical world through observation.
- 3. The truth may be best determined through the scientific method. The realist does not hope for or anticipate full control or complete comprehension of everything in the physical world. He does expect to modify and understand it as well as he can through the tools of science. The realist feels that science and philosophy form the best method of arriving at the truth.
- 4. The mind and the body have a close and harmonious relationship. The realists have two views on the origin of human behavior. One school of thought says that that man's behavior may be a result of natural laws. A second opinion is that all of man's behavior may be a result of learning. Both sides agree, however, that the mind and the body are inseparable and that neither takes precedence over the other.
- 5. Religion and philosophy can coexist. The realist can hold religious beliefs with out compromising either religion or his philosophy. He may be a staunch atheist or a pantheist or hold beliefs anywhere between the two extremes. The philosophy of realism does not insist on any one position as being the correct one. The individual realist is free to coordinate his religious beliefs with his philosophical viewpoint.

Philosophers often lend their thinking to the shaping of more than one philosophy. Thus many of the men who helped to define idealism also adhered to elements of realistic thinking. The early realists were men who ascribed much to a belief in the powers of a supreme being, or God. Aristotle said that truth and reality were one and the same and that man's powers of reasoning made him unique. Because of this viewpoint, Aristotle is often referred to as the father of realism. St. Thomas Aquinas and Rene Descartes both said that matter was real and created by a God. Descartes' writing is believed to be the basis for the field of mathematical physics. Comenius, Spinoza, Kant, John Locke, and William James all helped to put forth clarifications of this philosophy.

REALISM AND PHYSICAL EDUCATION

- 1. Education is for life. The realist views physical education as a valuable part of the school curriculum. It is considered to be a unit of study that helps prepare the student to adjust to the world in which he lives/ Participation in physical activities is viewed as a means of learning to adjust, and the emphasis is placed on the outcome of the activity in terms of adjustment. For example, the emphasis in teaching basketball is to develop such qualities as fair play and sportsmanship as well as in teaching a student how to shoot a basket.
- 2. Physical fitness results in greater productivity. The realist physical educator emphasizes the values related to man's body. He places emphasis upon "physical fitness" because of its intrinsic value. The realist physical educator stresses the point that one who possesses a physically fit body is one who may be most productive in society.
- 3. Programs are based on scientific knowledge. The realist physical education teacher accomplishes his objectives through use of a scientifically formulated curriculum He selects activities on the basis of scientific evidence of their worth from a study of anatomy, physiology, or kinesiology. For example, in training a young man to be a "lineman" in football, it is necessary to be aware of the proper form, which provides optimum stability. Anatomical knowledge dealing with the question of "base of support" will yield this information. A physical educator cannot be an effective teacher unless he possesses knowledge of scientific movement principles.
- 4. *Drills play an important part in the learning process.* The realist physical educator uses drills extensively and breaks units of work down into orderly progressions. The teaching emphasis is placed on fundamentals of games and activities, with each skill broken down into its component parts. In this manner the realist hopes to develop habits in student responses. The realist believes that breaking down the elements of a sport like soccer into all its component parts will lead to correct responses in game situations.
- 5. Interscholastic athletic programs lead to desirable social behaviors. The realist approves of interscholastic athletic programs insofar as they teach desirable social behavior. The realist approves of a team sport like baseball particularly as it develops such qualities as sportsmanship, fair play, and tolerance. The realist physical educator will not be interested in having a baseball program that only emphasizes "winning."
- 6. Play and recreation aid in life adjustment. The physical educator who is a realist believes that students who participate in play and recreational activities are better able to function in society. Through such activities students are brought into contact with aspects of the "real world" of which they will become a part when they leave the school setting.

Pragmatism

Pragmatism emphasizes experience as a key to life. Rather than being concerned with reality, this philosophy is concerned with knowledge. Because of this view, pragmatism was, in its early stages, often called experimentalism. The term pragmatism was not coined until the late 1800's. In its modern concept, this philosophy is considered to be an American one.

1. The experience of man causes changes in the concept of reality. The pragmatist believes in change. He does not hold that ideas, values, or realities are inflexible. He contends, instead, that the experiences of man

cause ideas, values, and realities to be dynamic. The pragmatist says that experience is the only possible way to seek the truth and that that which is not experienced cannot be known or proved.

- 2. Success is the only criterion of the value and truth of a theory. Knowledge and experience help man to discover what is true. But truth is considered to be flexible, and today's truth may be tomorrow's falsehood. The pragmatist strongly believes in the scientific method of problem solving. He considers it the best way to gain knowledge. Knowledge itself is thought to be only a steppingstone on the path to further knowledge and experimentation. The pragmatist believes that a workable theory is a true theory and that the unworkable theory has been proved false.
- 3. Man is an integral part of a larger society, and his actions reflect on that society. The pragmatist contends that man and society must live harmoniously and that the actions of one directly affect the other. He believes in democracy, that is, the needs of a group must always incorporate the needs of each individual in the group. To the pragmatist, values are an individual matter. What is right or wrong depends on the judgment of the individual, his environment, and the circumstances. However, the result of any action by an individual is to be measured in terms of its worth to society as a whole.

Heraclitus was an early Greek exponent of pragmatism. He stated the belief, still held today, that the world and its values and ideas arc in a constant state of flux. Quintilian said that learning was a product of experience. Francis Bacon, an Englishman, put forth the theory that society and science must work together in order to achieve knowledge and that one cannot function effectively without the other. The first outstanding American pragmatist was Chftrlftl S. Pierce, He wrote that the practicality of a truth was the only criterion on which that truth could be measured. William James said that a theory was good if it worked and wrong if it was not practical. The most famous of the American pragmatists was John Dewey. At times, pragmatism is referred to as "Deweyism" because of the influence of Dcwey's thinking on the philosophy. Dewey brought forth the theory that everything we know is subject to change and can in no way be considered static. Dewey viewed life as a continuing, never-ending experiment. He felt that learning how to think was one of the most important goals in life. Dewey's philosophy had a most profound influence on the field of education.

PRAGMATISM AND PHYSICAL EDUCATION

- 1. More meaningful experiences are presented when there is a variety of activity. The pragmatic physical educator likes a varied program of physical education. He provides students with intriguing problems to solve and challenges to face in preparation for effective functioning in society. Creative activities such as dance and experiences in boating, camping, and outdoor living, as well as all types of sports, are highly valued. Through these activities the student not only learns by doing but also gains a measure of self-control and discipline and learns to cooperate with others.
- Activities are socializing in nature. The pragmatic approach to physical education is one of integrating the
 child and society. Any activity that has social value is acceptable. Team sports and group recreational
 activities are found to be satisfying to the pragmatist. Calisthcnic drills and exercises are largely discarded
 from the pragmatic physical education program. The pragmatist sees education as life. Sports, by providing
 emotional involvement, competition, and interaction, contribute to the socialization of the individual.
- 3. The curriculum is determined by the needs and interests of the learner. Learning is accomplished in the pragmatic curriculum by experiencing those things that have proved to be beneficial to the learner and that result from the learner's own interests. Activities that are challenging and creative are the major ones selected

by the students. Thus such activities as team sports, dance, and recreational activities are included in the pragmatist curriculum because they satisfy the needs and interests of the students.

- 4. Learning is accomplished through the problem-solving method. The pragmatic physical education teacher believes that problem solving helps to make learning more purposeful. The ability of students to recognize and solve problems encourages thinking. Dance activities prove to be very satisfying to the pragmatic physical educator because of the elements of creativity involved. Movement education, which emphasizes the problem-solving method, also is extremely valuable to the pragmatist because of the emphasis on self-discovery.
- 5. The teacher is a motivator. The pragmatic physical educator is a leader and motivator of his students. He encourages students to participate in activities that he feels are most beneficial to them. The pragmatic teacher guides his students in making the correct choices but does not direct them or tell them that they must do things his way. The pragmatic teacher employs the use of student leaders and tries to give as many students as possible a leadership experience.
- 6. Standardization is not a part of the program. The pragmatic physical education teacher dislikes standardization because he feels that such a practice makes all programs alike. Pragmatists place a higher value on evaluation than measurement. They are not as interested in measuring muscle strength as in determining whether or not students will be able to face the challenges that life will present to them. To the pragmatist, evaluating whether a student who participates in a baseball game learns the elements of fair play is equally us important as learning to hit a ball.

NATURALISM

Naturalism, pragmatism, and realism share many key concepts, although naturalism as a philosophy is the oldest one known to the Western world. Naturalism is often referred to as a materialistic philosophy, since it says that those things that actually and physically exist are the only things that have value.

- 1. Any reality that exists exists only within the physical realm of nature. To the naturalist, the physical world is the key to life. It contains all we see, observe, and think about, including the beauty or ugliness of a tree and the complexities of nuclear physics. The physical world is viewed as being in a constant state of growth and change, but it is considered to be a predictable and reliable force. Since the physical world is the key to life, the naturalist does not accept the existence of a God or any other supreme being. The philosophy of naturalism says that scientific methods are the best ways to gain knowledge about the world of nature.
- 2. *Nature is the source of value*. Because nature is omnipotent, anything that is of value exists only within nature and is predicated by nature. No values can exist separately from nature in any form. Like pragmatism, a thing is of value if it is workable.
- 3. The individual is more important than society. Naturalism does agree, however, that democracy comes from a group process, but it contends that each individual is more important than the group as a whole, society reaps the benefits of the Interaction of man and nature. Conversely, it is the individual who advances nature.
 - The men who first defined the philos-ophy of naturalism were in strong agreement that all things are derived from na-ture, including learning. This view was especially put forth by Democritus, Leucippus, Epicurus, and Comenius. In the eighteenth century, Rousseau, Basedow, and Pestalozzi set the foundations

for the naturalistic process in education. Rousseau is more of a prime source for these educational objectives, but Basedow put them into actual use. Herbert Spencer further defined education under naturalism and is mainly responsible for modern educational thought among the naturalists.

NATURALISM AND PHYSICAL EDUCATION

- 1. Physical activities are more than just "physical" in nature. Naturalists agree that physical activities do more than just develop strength and fitness: The naturalist be lieves that activity is the main source of development of the individual. Through physical activity, the naturalist believes the child learns to become a contributing member of a group, develops high moral standards, learns to express himself in an acceptable manner, and becomes an individual who has more nearly reached his full potential.
- 2. Learning is accofnplished through self-activity. Naturalists state that activity is the main source of the development of certain capabilities that have been imbedded in the individual by heredity. The need for security and recognition are such capabilities that are developed through self-activity. The naturalist offers a wide variety of activities to the child so that he will be able to adjust to his environment. The naturalist approves of all physical activity including team and individual sports and outdoor education. He introduces new activities only when students are ready for them and have a need for and interest in them. Naturalists stress the point that students can only learn when they are "ready" physiologically, psychologically, and sociologically.
- 3. Play is an important part of the educational process. Naturalist physical educators believe that play, resulting directly from the interests of the child, provides the starting point for teaching desirable social behaviors. Through play the child becomes aware of the world of which he is a part, permitting the teacher to introduce to him many of the essential features of social relationships. In the naturalist physical educator's program, students interact with one another in playful activities and develop social habits that will prove beneficial to them when they leave the school environment.
- 4. Highly competitive performance between individuals is discouraged. Self-improvement is encouraged in the naturalist physical education program, and evaluation goes on continuously/ The emphasis in evaluation is placed upon the individual's own performance. The naturalist does not approve of intense competition between groups. The child must be in competition against himself to better his performance and to improve in light of what he himself has done in past performances.
- 5. Physical education is concerned with the "whole man" According to naturalist physical educators, physical education has a mental aspects." In every physical activity one's volitional processes are at work. In a complex sport such as football, to be successful one constantly thinks and develops the correct responses. However, naturalists do not believe in making a student mentally fit and disregarding his physical fitness. Education is for the body as well as the mind. Physical education activities result in physical and mental development that prepares students to function well in society.

EXISTENTIALISM

The chief concern of existentialism is the individuality of man. The existentialist fears that man is being forced to conform to society and is thus forfeiting his individuality. Existentialism, which received its impetus immediately after World War II, is entirely a modern philosophy in that it did not arise from any of the ancient

philosophies. Existentialism as a way of philosophical thought had its earliest beginnings in the mid-nineteenth century.

- 1. Man's existence is the only true reality. A man is what he causes himself to become, and no more and no less. He has the ultimate responsibility for his past, present, and future. He has the choice of accepting those things that exist outside his own experience, but if he does accept them, he forfeits a part of himself. The existentialist does not contend that God does or does not exist, but only that each man must decide the answer to this question himself in the light of an objective analysis of his own being.
- 2. Each man must determine his own system of values. Any value that a man has not fully decided upon for himself cannot be a real value for him. Any value that is dictated is a meaningless value. To accept a value that is not self-determined leads away from individuality. A man can respect himself only if his ideals and values are of his own choosing and, once decided upon, he is willing to accept the responsibility for them.
- 3. The individual is more important than society. The existentialist believes that society as a whole is indifferent to the individuals who compose it, The individual can make his mark and keep contact with reality only if he continually searches for his own place as an individual. Once a man subjugates his values, personality, and ideals to those of society, he ceases to function as a man.

Soren Kierkegaard, a nineteenth century theologian and philosopher, is considered to be the father of existentialist thought. He was concerned with seeking the meaning of each man's individuality. Most of the modern existentialist philosophers do not necessarily follow the guides set down by Kierkegaard, although they all place the major emphasis on the individual and his behavior. Jean-Paul Sartre is the outstanding atheistic existentialist. He denies that man will make any progress, and he sees the ultimate failure of both man and society. Karl Jaspers, Paul Tillich, and Reinhold Niebuhr are theistic existentialists and offer viewpoints that arc far more optimistic than Sartre's. They say that man, to reach the ultimate reality, must participate in life rather than be a mere spectator. Martin Heidegger has remained fairly clear of the atheist-theist controversy and instead writes that man cannot stop searching for the meaning in life, no matter what he may find that meaning to be.

EXISTENTIALISM AND PHYSICAL EDUCATION

- 1. There is freedom of choke. Physical education programs should provide some freedom of choice on the part of the student. This, however, presents some difficulties when exposed to the problem of implementation. For example, if the teacher practices complete freedom in determining the program, how can the student exercise the freedom of choice that is so vital to existentialism? And if the student is totally free to choose his own activities, does he have the ability to do so? Given absolute freedom of choice and decision making, it is conceivable that among a class of thirty students up to thirty different activities are selected for pursuit during a single class period. However, when a wide variety of individual and dual activities is offered, the existentialist aim can be carried out at least in part.
- 2. There should be a variety of activity. The existentialist physical educator provides a balanced and varied program that satisfies individual needs and interests. Within the activity selected, the student is expected to evaluate himself and, on this judgment, make a selection of the skills and activities he will pursue. It is the role of the teacher to provide the activities and to create an atmosphere in which the student learns to take the responsibility for himself, but only after he shows that he has the maturity to earn this privilege.

- 3. Play results in the development of creativity. Existentialist physical educators emphasize that when an individual is playing, he is involved in creativity. Existentialists emphasize individual and team sports; however, team sports whose only goal is winning are viewed as having little value. Dance and gymnastics fit into the existentialist curriculum because of the element of creativity involved.
- 4. Students "know themselves." The existentialist physical educator's student has a knowledge of himself, since it is necessary to have such an understanding in order to make choices that better himself and the rest of society. Through participation in individual and dual activities, the student gains knowledge about himself. Competition is acceptable; however, it is the effect of competition on the individual that is important. Existentialist physical educators also place emphasis on activities such as self-testing activities because they aid in the development of the individual's self-responsibility and require the student to "know himself."
- 5. The teacher is a counselor. The existentialist physical educator is personally concerned about his students. Students are made to feel more responsible in the existentialist physical education program than in other programs discussed. The teacher believes that it is most important to give students the opportunity to try out their judgments in activities presented to them. In such a manner, the existentialist physical educator's students develop the quality of self-responsibility. In the learning process the teacher acts in the role of a counselor and guide, explaining the various alternatives and giving direction so that the student does not flounder.

MEANING AND IMPORTANCE OF PHYSICAL FITNESS AND WELLNESS Meaning of Physical Fitness

The Physical fitness is considered as the ability of an individual to perform a specific physical task at a high level of effort. It not only covers the physical aspect but also has many other aspects on which the physical fitness varies. The statement issued by the American Medical Association clearly defines physical fitness as "fitness for living rests first of all upon a solid foundation of basis of basic good health fitness for living implies freedom from disease; enough strength, agility, endurance and skill to meet the demands of daily living; reserves sufficient to withstand ordinary stresses without strain; and mental and emotional adjustment appropriate to the nature of the individual. Physical fitness is but one element of total fitness."

Physical fitness is a combination of qualities that enable a person to perform well in vigorous physical activities. In other words, physical fitness refers to maximal functional capacity of all systems of the body. Every time when we move, we are exercising and keeping our body tuned and in good running order. The human body is framed in such a way that it can bend, stretch, run, jump, climb and do more tedious work. The body becomes stronger when it exerts more. The muscles' involvement matters a lot in shaping a body. When we do any work or exercise, it helps in improving our health and builds up our energy and stamina level.

The first and primary objective of physical education is to develop a good physique. Through physical training, the efficiency of organic systems like respiratory system, circulatory' system, digestive system, endocrine system, muscular system and neuro-muscular system improve. These organic developments lead to the development of physical fitness components. The physical fitness includes strength, speed, flexibility, agility and endurance. Physical fitness enables a person to perform vigorous activities. Generally, physical fitness and good health are considered the same, but it is wrong. A seemingly healthy person may be physically unfit because he may be lacking in any of the component of physical fitness. Regular vigorous exercise also increases the efficiency and capacity of an individual to lead a fruitful life. Therefore vigorous physical activities should be done for the physical growth and development.

According to David R. Lamb, "Physical fitness is defined herein as the capacity to meet the present and potential physical challenges of life with success".

The fitness of an individual depends upon frequency of exercise he does. Physical fitness is the capacity to work without getting fatigued.

MEANING OF WELLNESS

Fitness is described as a state of optimum healthful living. Earlier, health was considered as a state of a person who is away from all diseases. Right then being unhealthy was related with sickness only. But in a broader view, a physically fit person is considered as healthy who is balanced in all aspects of life including social, emotional, physical and mental aspect. Those individuals who adopt a healthy lifestyle may experience an optimal state of well-being while those who choose to practise an unhealthy lifestyle may be at an increased risk of being exposed to diseases. Wellness gives stress on each individual for making decisions that will lead not only to the prevention of diseases but to attain high level of health.

An individual's well-being caters to all aspects of his life which may range from physical, emotional, social to economic and even spiritual ones. In wellness, all factors that may affect an individual's health are taken into account by a holistic practitioner. These include heredity, nutrition, physical activity, stress, family relationship, medical care, spiritual health, living and working conditions. Holistic health is closely related to wellness. Wellness is based on the notion that an individual's health is affected by virtually all aspects of his life. Also physical, psychological, emotional, environmental, genetic and social factors interact to influence an individual's state of health. Thus all factors affect the wellness of an individual.

IMPORTANCE OF PHYSICAL FITNESS AND WELLNESS

Development of the body takes place through games and sports. A physically fit person can help others whenever his help is required. The various components of physical fitness are speed, strength, endurance, flexibility and agility. Physical fitness enables a person to perform vigorous activities.

(A) Quality of life

Physical fitness and wellness plays an important role in improving the quality of one's life. Many experiments have shown that regular exercises and fitness improve the quality of life. In our daily life, a physically fit person can manage the routine work efficiently and without getting fatigued, lie may overcome the difficult situations coming in his way. The totally fit person possesses not only physical well-being but also qualities such as good human relations, maturity and high ethical standards. That person satisfies such basic needs as love, affection security and self-respect.

(B) Prevention of diseases

The regular fitness work can prevent many diseases, especially those related to the heart. A physically fit person is less prone to coronary heart diseases because of low level of cholesterol in the body.

(C) Harmonious growth and development

Harmonious growth and development is the most important objective of physical education. All living things grow. A tiny seed can grow into a huge tree. Adult elephants are 60 times heavier than baby elephants. Every living organism consists of cells. The cells can multiply and divide to form other cells. Physical education also has relation with growth and development. Exercise may promote muscle strength. The regular physical training can improve the efficiency of various organs.

PHYSICAL FITNESS

COMPONENTS

COMPONENTS OF PHYSICAL FITNESS AND WELLNESS

Physical fitness has five components which are essential in the field of physical education. The exercises are planned in such a manner that all the components are developed simultaneously. The sports performance largely depends upon 'the physical fitness components'.

- Strength
 Speed
 Endurance
 Flexibility
- 5. Co-ordinative abilities

STRENGTH

Strength is necessary for good performance in various games and sports. There are many athletic events and games in which strength is most essential e.g. shotput, discus, hammer and javelin throw, wrestling, judo, weight lifting, etc.

The strength is defined as greatest amount of force that muscles can produce in a single effort. In other words, strength is considered as ability to overcome resistance. The strength can be divided into three parts:

Maximum Strength: Maximum strength is the ability of muscles to overcome against maximum resistance. Mainly maximum strength can be derived by voluntary actions. It is the ability of muscle or muscle group to apply maximum force against resistance in a single effort. Maximum strength is important in sports where heavy resistance is needed, e.g., weight lifting, throwing events, jumping event, etc.

Explosive Strength: Explosive strength is ability of the body to apply strength and high speed together. The sports where explosive strength is needed are listed below:

- (i) Take off in long jump, high jump, triple jump, etc.
- (ii) Crouch start in sprinting.
- (iii) Jumping in Basketball before taking rebound.
- (iv) Jumping in Volleyball while spiking.

Strength Endurance: Strength Endurance is the combination of two components as well i.e., strength and endurance. It is the ability of the muscles to overcome resistance under conditions of fatigue. The sports like judo and wrestling require strength endurance because in the last moments of the fight the players have to apply strength in spite of being fatigued. The long distance races also require strength endurance to finish the race. Many sports like swimming, road cycling (road races) etc., also require strength endurance.

SPEED

Speed is defined as the ability of an individual to perform similar movements consecutively at the fastest rate. Speed is different from mechanical speed because mechanical speed is calculated from distance covered per unit of time where as many sports perform speed activities without covering any distance e.g. gymnastic exercises performed on horizontal bar. According to G. Schnabel and G. Thiess, 'it is the performance pre-requisite to do motor actions under given conditions in minimum of time." Many sports require speedy movements which are listed below:

- (i) Fast break in Basketball.
- (ii) Running between the wickets while taking runs in cricket.

- (iii) Running fast while attacking, such as in hockey or football.
- (iv) Sprint races such as 100 m. 200 m and 400 m.
- (v) Generating speed before taking long jump and triple jump.

ENDURANCE

Endurance is also one of the important components of physical fitness. It is the ability of the body to work for a long time without getting fatigued.

According to D. Harre, "Endurance is the ability to resist fatigue." Endurance is basically divided into two parts.

- (a) Muscular Endurance: It is the capacity of the muscle to work under the condition of fatigue
- **(b) Cardiovascular Endurance :** It is the ability of cardio-respiratory system to provide oxygen even when the body is under the conditions of fatigue.

The various games and sports, especially athletics, have two types of activities like aerobic and anaerobic. Therefore endurance can be defined in this respect.

Aerobic Endurance : It is the ability to persist in the physical activities that rely heavily upon oxygen for energy production.

Anaerobic Endurance : It is the ability to persist in physical activities of short duration that require high rates of energy expenditure.

The athlete who runs long distance races requires more development of aerobic endurance whereas sprinters require development of anaerobic endurance. Most of the games require development of endurance because some games may consume more than 1 to 2 hours, e.g., a tennis match can last for several hours.

FLEXIBILITY

Flexibility is defined as the maximum range of movement possible at a joint. The flexibility is often overlooked but it is also an important component.

According to Edward L. Fox "Flexibility is defined as the range of motion about a joint (static flexibility); opposition or resistance of a joint to motion (dynamic flexibility)."

According to David R. Lamb, "flexibility is the range of motion of the body's joint."

The flexibility of the body largely depends upon the structure of joints, muscles, tendons and ligaments. Flexibility is important to perform daily routine work because it can prevent injury, especially low back pain. Flexibility is of two types.

- (i) Active flexibility: It is the ability of the body to perform movements with greater amplitude, and range without external help.
- (ii) Passive flexibility: It is the ability of the body to perform movements with greater amplitude and range with external help.

Flexibility is essential for games and sports like gymnastics, yoga, swimming and athletics.

CO-ORDINATIVE ABILITIES

The term co-ordinative ability was taken from the term 'agility'. The term agility was discarded because it was difficult to explain the meaning of it. The co-ordinative abilities mainly depend on central nervous system.

The neuro- muscular co-ordination is primarily dependent factor for co- ordinative abilities. A person possessing co-ordinative abilities can perform speedy and flexible movements. Kho-Kho is the best example of co- ordinative abilities. How a runner runs in zigzag manner and how an opponent chases the runner? The co-ordinative abilities are interrelated with motor skills. These abilities often lead to graceful movements.

The following activities include co-ordinative abilities:

- 1. Gymnastic exercise, especially floor exercises and beam exercises.
- 2. Kho-Kho game
- 3. Basketball offensive and defensive movements.

COMPONENTS OF WELLNESS

The wellness is not just absene of disease but also has several components like physical, emotional, social, intellectual, spiritual and occupational.

- (a) **Physical wellness:** This component of wellness involves the ability of a person to carry out daily tasks, develop cardiorespiratory fitness, enhance muscular fitness, maintain adequate nutrition and avoid drugs.
- **(b)Emotional wellness:** Emotional wellness is the ability to control stress, anxiety, and to express appropriately and comfortably. The emotionally well-adjusted person is able to live harmoniously with others and cope successfully with worries and tensions associated with modern urban living.
- **(c) Social wellness :** The social component of wellness creates the ability to interact successfully with different people. The traits like cooperation, tolerance, sympathy, helpfulness, group cohesion, truthfulness and loyalty make a person socially well-adjustable in the society.
- (d) Intellectual wellness: Mental alertness is one of the major components of wellness. It helps in acting quick and correct in any situation of life. This also helps to improve intellectual level, insight, thinking power and anticipation.
- **(e) Spiritual wellness:** The spiritual wellness makes a person ethically, morally justified and spiritually sound. This directs him to have positive attitude towards life that enables him to grow, learn and meet new challenges. This spiritual development with openness and respect for diversity, offers programmes that enhance personal integrity, family values and community ethics.
- **(f) Occupational wellness :** This aspect comprises of wellness that helps to achieve a balance between work and leisure so that it promotes health and sense of job satisfaction.

FACTORS AFFECTING PHYSICAL FITNESS AND WELLNESS

The physical fitness and wellness vary from person to person. The following factors affect the physical fitness and wellness:

- (a) **Heredity:** Heredity means passing on biological characteristics from one generation to another. The process of heredity is applicable to all living beings. Speed is mainly dependent on heredity that is why it is said 'sprinters are born, not made.' A person having more fast twitch fibers can be physically fit because he already inheres the ability of speed.
- **(b) Regular exercise:** Exercises generally improve the physical fitness and wellness. Regular training enables a person to stay fit. Although it is important to note that physical fitness and wellness are not the same but if a person does exercise regularly, he remains physically fit and healthy. On the other side, a healthy person can be physically unfit if he does not exercise regularly.

- (c) **Progressive overloading:** To increase the performance of an. athlete, progressive overloading is required but sometimes unsystematic overloading can be harmful for the athlete, that may lead to deterioration i of his performance capacity. The downfall of the physical fitness can be due to the following reasons:
 - (a) Insufficient rest/sleep
 - (b) Rapid increase in load
 - (c) Excessive load due to daily routine work like family's work, demand] put up by studies, mode of travelling, etc.
 - (d) Disproportion between intensity and recovery pause.
 - (e) Excessive incorrect practice and wrong teaching.
 - (f) Participation in too many competitions and absence of transition period.
- (d) Balanced diet: A good nutrition has an important role in developing 1 the fitness. A Dietician makes daily dietary requirement as per the training schedule. Improper diet can lead to fitness problems. To maintain physical fitness, careful attention to nutrition is necessary.
- **(e) Stress:** Each person experiences stress. It has both positive and negative effects. Sometimes, positive effect of stress can motivate a person to keep fit and on the other side, negative effect of stress can lead to many problems like asthma, headache, depression, ulcers, etc. These diseases can have adverse effects on fitness and wellness.
- **(f) Living style :** The habits and living style has also an impact on 'fitness and wellness. A person having good habits regarding exercise, diet j and personal hygiene, etc., is mostly physically fit and well.
- **(g) Cigarette smoking :** Cigarette smoking damages the lungs and blood vessels. It raises pulse rate and blood pressure. Smoking has adverse effect on fitness and wellness.
- **(h) Drugs:** Amphetamines, cocaine, nicotine, LSD and other hallucinogens are a great threat to fitness and well-being of an individual. Many athletes and weight lifters have started using drugs, especially anabolic steroids which have side effects. The use of these drugs can lead to fitness and wellness problems.
- (i) **Rest, relaxation and recreation :** These factors contribute a lot to health development. Relaxation is essential for better mental health which is important to attain Fitness and wellness.
- (j) Environment: The environment has also great impact on Fitness and wellness. A person residing in a polluted area may face problems of Fitness and wellness. A person residing on hills is often found to be more fit.

ROLE OF EDUCATION IN TODAY'S SOCIETY

The role of education in general and physical education in particular is constantly undergoing change. At one time education was left to the educators, but this is no longer the case, as characterized by parent committees, student curriculum groups, widespread teacher evaluation procedures, and constant reappraisal of educational policies.

Education contributes to the development, advancement, and perpetuation of the nation's culture. Educational institutions play a primary role in the development of the human resources of society. Schools, colleges, and universities are clearly the most powerful and effective institutions that this society has for the achievement of intellectual skill, knowledge, understanding, and appreciation

necessary to make wise decisions, good judgments, and logical analyses of problems. Directly or indirectly, these educational institutions are the chief agents of society's progress, whether it is progress concerned with knowledge, arts, technology, social conscience, or other areas essential to a nation's growth. Education must meet the challenges presented in society. In the present decade this means that the nation's schools and colleges should be concerned with the well-being of students in their preparation for a productive and happy life in which their potentialities as individuals are enlarged and fulfilled and in which freedom will be assured.

Physical education, as a phase of the total educational process, helps in achieving these purposes. It is one link in a chain of many influences that help to realize the country's ideals and contribute to the proper functioning of American society. It is continually striving for excellence, so that it can become an increasingly dynamic force in education.

UNIT - IV: BIOLOGICAL PRINCIPLES OF PHYSICAL EDUCATION

Meanings of Growth and Development

Generally word growth and development are used synonymously, however, there is a difference in the meanings of these concepts. Technically, growth of an individual means increase in mass, while development is the organization of that tissue into functional units or powers. Development of the child can be judged in part by growth, but growth may occur without a corresponding development.

Nutrition and various hygienic factors condition growth and development. While physical education influences growth, its chief interest is in development.

GROWTH

The process through which body increases in size and shape is known as growth. Process of growth is biological in nature. An increase in mass is termed as growth. From the first growth of the fertilized ovum until maturity of the individual is reached numerous forces determine growth. Some organs evens continue to grow in old age also. Thus, a quantitative increase in the size and shape of the body is termed as growth. When these organs changes in size and shape, it is known as physical growth. All the organs of body grow at different rate. For this reason, growth is considered a tangible biological process. In this process, various organs of the human body develop in respect of size, height and weight. There occurs an increase in the size of cells of body and muscles. In body structure, various kinds of changes take place and these changes are of quantitative nature.

DEVELOPMENT

A process which brings human body towards the point of maturity is known development. In other words, process of development is concerned with advancement of human body. The various kinds of qualitative changes that takes place in human body are considered development in true sense.

Process of development is more concerned with external factors. If all these external factors are not ensured properly, development will not take place properly. It can be said that the process under which capabilities of an individual get expanded which provide him with greater facility in functioning is known as development.

Although concepts of development and growth are different, but they are inter-related to each other. Growth is a means to achieve development. For the development of functional capacities of human beings, growth functions as a basis. At no stage, it is possible to acquire proper development with improper growth. Development of an individual is concerned with his mental, intellectual and social aspects. Development process consists of acquisition of skills and knowledge of various fields.

Thus it can be said that both the processes of growth and development are complimentary to each other and it is not possible to achieve one successfully without achieving another. Development is a life long procedure while growth is a limited period process. An human being grow upto a certain age or period in his life but process of development continues throughout the lifetime.

THE SEX AND AGE DIFFERENCES

Men and women differ with each other anatomically and physiolo- iogically. Since these differences are inherent ana unavoidable, as such the programme for both sexes should be completely diverse and divergent after

a certain period of growth. Specially theie are problems to women; in certain ways they seem to be hancicapped and have not been able to make remarkable performance in the field of games and sports, when compared to men.

If we look at the rate of growth and development in case of boys and girls we will see that at different stages of growth and development, there creep in invincible changes in boys and girls.

Until the age of puberty there are no significant differences in boys and girls. Afterwards the differences set in because of (i; anatomical and physiological differences or changes in them and (ii) object of their education must differ in the same degree because the boys must be brought up to be men, and girls to be women. The differences, it should be appreciated characterising sexes are not merely superficial but significant because even a layman considers them so profound that it is regarded as an insult to refer to a person to another sex than that to which he or she rightly belongs.

I. Anatomical Differences,

- (a) Size difference. Man surpasses woman in height and weight. This difference is even marked at birth also. The new born boy is on an average longer than the new' born girl. After puberty girls momentarily surpass boys in height and weight,* they mature earlier than boys. After her sixteenth year a woman grows slightly. A man's growth continues until his twenty third year.
- (b) The shape of the female body is less angular than that of the boy. Her parts of the body are softly and delicately formed due to the formation of weak bones and muscles. The skeleton is shorter in man, the bones are heavier and show marked muscle traces.
 - (c) Woman has a comparatively long body and short limbs.
 - (d) In women the centre of gravity lies lower than in men, owns to the shorter limbs.
- (e) The lumbar region of the spine is comparatively longer, the thoracic region comparatively shorter in women than in men.
 - (f) The thorax is thus shorter in women.
- (g) The pelvic region is also comparatively broader in women than in men. The pelvis itself is also actually more roomy in women than in men. This arrangement has been done automatically by Nature itself to facilitate the child in the uterus. Thus the abdominal wall which is the main support of the viscera, is a weak part in women especially in those women who have given birth to children. Much use of the lower extremities requires a firmly consolidated pelvic girdle that is to say, strong pelvic bones as firmly as possible united together. In this respect women are inferior to men.
- (h) The shoulder region is weaker in women than in men not only in regard to the muscles, but also in regard to the skeleton, the clavicles being comparatively long and slender. That's why women are inferior to men jn shoulder strength.
- (i) In women the lower extremities in all its parts are comparatively shorter than in men, the comparatively great convergence of the thigh bones results in the knees being turned strongly inward, and that crux, when the position of the femur is more vertical, as in running, points obliquely downward-outward. Because of this movement of their lower extremities will lose both force and precision.

II. Physiological Differences.

(a) Muscular strength. In muscle strength women are weaker to men and no^amount of weight training can reverse the order. An average man is much stronger than an average woman in grip strength, pulling and

pushing ability. Not only women are unfit for hard work but even with light work they have not the. same staying power as men. The Danish physiologist Asmussen has set the strength of the average female at 60% of the male figure, with only about a half of this deficiency being attribute to her shorter stature.

- (b) Blood circulation. Because of the smaller heart in women* there is low capacity of the heart to deliver blood to the regions and organs. Heart rate is rapid in women than in men.
- (c) Respiratory system. The thoracic cavity and lungs of the women are smaller than those of men. Hence the relative efficiency of the thorax is smaller in women which is unsuitable for activities requiring endurance.
- (d) Menstrual Circle. This brings a problem for a period of about five days each month. Although some Olympic records have been established and women have competed with men in long course swimming very successfully during the menstrual period, yet the doctors do not recommend heavy exercise during this period. In normal circumstances, atleast one woman in seven is liable to be menstruating on any given day, and it is thus an impossible task to arrange athletic competitions in such a way as to avoid periods.
- (e) Pregnancy period. During early phase of pregnancy heavy programme may be continued but gradually the load of work should be lessened. This fact also makes women inferior to men in carrying on the heavy work of activity throughout.

Since woman have all these difficulties and differences with men their programme should be separated from that of the men and they should not be made to compete with men. Since they have less arm strength, they should not be made to do hanging exercises, long horse exercises, and swinging exercises. The exercises like pole-vault which demand highly developed musculature, are prohibted for women. Women hare been found to be emotionally weak, that's why they should not be made to enter highly specialized fields of physical competition. This may also be pointed out that woman is not lacking in self-control. But once her self control has broken down and this happens more easily for them than for men, because the nervous system of the women will more easily be affected than that of men, the manifestation will be much stronger and more incalculable.

HEREDITY AND ENVIRONMENT

Heredity is the transfer of characteristics from parent to offspring, either through their genes or through the social institution called inheritance (for example, a title of nobility is passed from individual to individual according to relevant customs and/or laws). Heredity determines what an organism may become, not what it will become. Knowledge of the heredity or inheritance of plants and animals is important in many phases of our life. What an organism becomes depends on both its heredity and environment. Heredity determines the individual's potential. Environment influences to what degree one reaches that potential

Heredity is very complex, and a geneticist cannot possibly analyze all the traits of an organism at once. Instead, he studies only a few traits at a time. Many other traits are present. As the geneticists work out the solution to each hereditary mystery, the geneticist must not forget that all organisms live in a complex environment. The environment may affect the degree to which a hereditary trait develops. The geneticist must try to find out which of the many parts of the environment may affect his results.

The modern science of genetics started with the work of Gregor Mendel. He found that a certain factor in a plant cell determined the traits the plant would have. Thirty years after his discovery this determines was given the name gene. Of the traits Mendel studied, he called dominant those at showed up in the offspring and recessive those , the question I will ask is: how much of the variability observed between different individuals is due to hereditary differences between them, and how much to differences in the environments under which the individuals developed?

In most organisms, including man, genetics information is transmitted from mother to daughter cells and from one generation to the next by deoxyribonucleic acid (DNA). The question is: How much of the variability observed between different individuals is due to hereditary differences between them, and how much to differences in the environments under which the individuals developed? It is elucidate by the discussion on "Heredity And Environment" which is to help students learn more about themselves. They will learn why they develop into the kind of individual they are. The functional aspects of these are DNA and Chromosomes. Genes and DNA

DNA, short for deoxyribonucleic acid, makes up the genes that transmit hereditary traits. The DNA molecule looks like a long, twisted rope ladder. This is called the double helix. The ladder is made up of two coiled strands with rungs between them. The rungs are composed of pairs of chemicals in different combinations. Each combination carries instructions like the dot and dashes of the Morse Code. Each gene in the body is a DNA section with full set of instructions for guiding the formation of just one particular protein. The different proteins made by the genes direct the body's functions throughout a person's life.

Chromosomes

Genes and chromosomes provide the genetic link between generations. Chromosomes are strands of DNA and protein found in the nucleus of virtually every cell, but with few exceptions seen only during the process of cell division. The number of chromosomes in a cell is characteristic of the species. Some have very few, whereas others may have more than a hundred. Ordinarily, every cell in the body of an organism contains the same number of chromosomes. The most important exception is found in the case of gametes where half the usual number is found. Human beings have 46 chromosomes in each cell, with the exception of the spermatozoa in males and the ova in females, each of which has 23 chromosomes. Human chromosomes occur in pairs, the total 46 consisting of 23 pairs; 22 pairs of autosomes which are non-sex determining chromosomes. The member of a pair are essentially identical, with the exception of sex chromosomes in males, and each pair is different from any other pair. Plants and animals inherit chromosomes from their parents. Each plant and animal cell has a set of chromosomes. Chromosomes, then, control the heredity of an organism. They carry the blueprint that determines what kind of organism will develop.

Relationship between Heredity and Environment

Heredity is not the only thing that effects development. The environment also has an important effect. Organisms can transmit some hereditary conditions to their offspring even if the parents do not show the trait. Some traits do not appear to be affected by the environment. One of the first hereditary traits studied in humans was polydactyly. An individual with polydactyly has more than ten figures or toes. This trait does not seem to be affected by the environment at all. Other human traits like color blindness, baldness, blood type, skin color, the ability to taste certain substances, the presence or absence of hairs on the middle of the fingers, and free or attached ear lobes do not seem to be influenced by the environment.

BODY TYPE

"William Sheldon (1898-1977) was an American psychologist who devoted his life to observing the variety of human bodies and temperaments. He was a keen observer of animals and birds as a child, and he turned this talent to good effect by becoming an avid people-watcher, and out of his observations he gradually elaborated his typology." From Tracking the Elusive Human In the 1940s, Sheldon developed a theory that there are three basic body types, or somatotypes (based on the three tissue layers: endoderm, mesoderm, and ectoderm), each associated with personality characteristics, representing a correlation between physique and temperament.

To further categorize a person's somatotype, an individual is given a rating from 1 to 7 on each of the three body types. 1 = very low; 7 = very high. For example:

- a stereotypical basketballer 1-1-7 (ectomorph)
- Mohammed Ali 1-7-1 (mesomorph)
- a pear-shaped person 7-1-1 (endomorph)

More typically, however, the person in the street could be something like:

- a slightly lanky person 5-2-3 (a bit ecomorphic)
- a person of average height who is moderately muscular 4-5-3 (a bit mesomorphic)
- a person who is slightly heavy-set 3-3-5 (a bit endomorphic)

Sheldon measured the proportions of hundreds of juvenile delinquent boys and concluded that they were generally mesomorphs (Ornstein, 1993).

Sheldon's Somatotype	Character	Shape	Picture
l. Endomorph	2. Relaxed, Sociable, Tolerant, Comfort- loving, Peaceful	3. Plump, Buxom, Developed Visceral Structure	4.
5. Mesomorph	5. Active, Assertive, Vigorous, Combative	7. Muscular	8.
9. Ectomorph	10. Quiet, Fragile, Restrained, Non-assertive, Sensitive	11. Thin flat chest delicate build, Y oung appearance, Tall lightly muscled delicate, Poor muscles	12.

Endomorph

- (1) They have better digestive system and can digest hard food. This gives them more energy.
- (2) They have large roundhead with broad face square jaw and small ears.

- (3) Their abdomen is large ,full above the navel.
- (4) They have short and thick neck, chest with fatty breasts.
- (5) Their palms are broad with short fingers.
- (6) Their feet are also broad with low arch.
- (7) They have thick and hairy type of skin.
- (8) They act first and think after wards.
- (9) They are less secretive and are fond of making speeches in public places.
- (10) They have heavy buttocks and heavy legs.
- (11) They are very social and like social gathering. Ready to help the people when they are in trouble.
- (12) They always overestimate their abilities.
- (13) They remain in relaxed mood and do not feel irritated over small issues.
- (14) They have butterfly tendencies and cannot stick to their day to day affairs.
- (15) In games and sports they take up the activities such as power-lifting, heavy-weight wrestling, throwing events and even short distance running.

Mesomorphy

- 1. They are medium type of individuals and known as athletic type persons.
- 2. They are heavy, hard and rectangular in outline with large and prominent bones.
- 3. Their face bones are prominent and long and has the shape of a long oval.
- 4. Their neck is strong and long, shoulders are broad with heavy and prominent clavicle bones.
- 5. Their abdomen is large with low waist.
- 6. They have heavy buttocks with heavy fore legs.
- 7. Their skin is rough and the complexion is not so good.
- 8. They are quite dominant, assertive, energetic and action packed, and love to take risks.
- 9. They are bold, brave and take actions quickly whenever they face any problem.
- 10. They are courageous and open-minded and show directness in any kind of work.

Ectomorph

- 1. They have poor digestive system and the energy output is also less.
- 2. They have delicate body structure.
- 3. Their face is small, forehead and chin is pointed and nose is sharp.
- 4. They have long slender neck, long narrow thorax, drooping and hanging shoulders with long arms.
- 5. Their abdomen is flat with hollow above navel.
- 6. They have thin buttock and log thin legs.
- 7. Their hands are small but fingers and toes are long.

8. Their feet are also long with high arch.

- 9. They are tall and thin built with poor vital capacity
- 10. Their skin is soft but with more hairy growth.
- 11. Their reflections are quick but actions are very slow.
- 12. They always under estimate their abilities but want to lead an ambitious life.
- 13. They feel irritated, over-tensed and excited whenever they face any trouble and want to be left alone.
- 14. They are very submissive and one track minded and solve their problems more at the mental level with less use of energy.
- 15. They take up sports activities like basket ball, volley ball, and even long duration events.

It is suggested that the above mentioned body types do not always provide authentic information. Therefore, other factors such a sage, physical maturity, interest aptitude, skill, strength, physical fitness combined with understanding of body types may be used in making judgments.

Kretschmer Classification

Kretschmer is also known for developing a classification system that can be seen as one of the earliest exponents of a constitutional (the total plan or philosophy on which something is constructed) approach. His classification system was based on three main body types: asthenic/leptosomic (thin, small, weak), athletic (muscular, large-boned), and pyknic (stocky, fat). (The athletic category was later combined into the category asthenic/leptosomic.) Each of these body types was associated with certain personality traits and, in a more extreme form, psychopathologies. Kretschmer believed that pyknic persons were friendly, interpersonally dependent, and gregarious. In a more extreme version of these traits, this would mean for example that the obese are predisposed toward manic-depressive illness. Thin types were associated with introversion and timidity. This was seen as a milder form of the negative symptoms exhibited by withdrawn schizophrenics. However, the idea of the association of body types with personality traits is no longer influential in personality theory.

DIFFERENCES IN BOYS AND GIRLS.

The physical educator should be cognizant of certain differences in the physical makeup of boys and girls. The pelvic girdlo of the female is much broader than that of the male and does not completely develop until in the twenties. This means that activities that would result in any pull on this region should be guarded against. Boys are stronger than girls, especially in the shoulder girdle region. The thigh bones of girls join the pelvis at a more oblique angle than that of boys. The center of gravity is lower in girls. In respect to body weight the muscular strength of girls is lower than in boys.

In respect to strength, research has indicated that the female is less responsive to training than the male. It has been found that the body temperature of the female rises 2° to 3° C. higher than the males before the sweating and cooling off process begins. Such a factor must be taken into consideration in dealing with vigorous physical activities, such as swimming in hot weather. Other differences include a more stable knee joint in girls than in boys, greater length of bones in boys than girls, and, on the average, greater height and weight in boys than girls. The skeletal structure of the female makes her more susceptible to athletic injuries than the male. Injuries involving overstraining, such as in foot deficiencies and tendon inflammations, have been found to be more common in the female.

Activities that arc provided for girls and women should be selected in light of psychological as well as physiological considerations. Those that emphasize feminine qualities such as grace and rhythm and involve a minimum of body contact should receive priority. Furthermore, regularity in engaging in physical activity should be stressed, even during the menstrual period, if there are no harmful results.

Age and Sex Differences in Relation to Physical Activities and Sports

Physical education teachers should be aware of the fact that some differences in boys and girls are of great importance. Up to puberty boys and girls are hardly distinguished but as they cross this stage, marked differences become evident in their sexes. These differences are important in structuring and formulating activity programme for both sexes. These differences are not only biologically prominent, but social factors also impinge upon as men and women have to take up different roles. So while activity programme it is necessary that marked differences in boys and girls are taken into consideration not again saying the fact that there should be separate programmes.

Anatomical and Physiological Differences between Male and Female

	Female		Male
1.	Girls grow faster up to the age of early adolescence and slow down after the age of 14 years	1.	Before the adolescence age, growth in boys is slow and they grow faster after the age of 14 -16 years.
2.	Girls are smaller in size i.e. height and they attain maturity in early age.	2.	Boys are generally taller in size i.e. height and maturity comes in the late stage.
3.	Female has broader and shallow pelvis which causes difficulty in running.	3.	Male has narrow pelvis (Hips). They can perform better in running events.
4.	Women have large body for swimming.	4.	Man has shorter trunk and long legs. Their centre of gravity is high; this results in unstable position. They are more frequent in shifting exercise and jumping but have disadvantage in balancing events as gymnastics.
5.	Female's shoulders are weaker strength and narrow, their bones and cartilages are also weak. They have disadvantage in throwing events, lifting activities, and hanging movements in gymnastics.	5.	Male has broader and strong shoulders with strong bones and cartilages. They can perform better throwing events, rope climbing, pole valt, and circling activities e.g. Roman rings in Gymnastics.
6.	Female stops growing in height around the age of 18 to 20 years.	6.	Boys generally continue to grow until the age of about 20 to 23 years.
7.	Their muscular strength is less because of different structure of muscles and thereby comparatively cannot improve muscle power even with weight training and cannot perform better in pulling, pushing, punching and lifting activities.	7.	Men have more muscle power, due to their muscle structure, they have better ability in performing, slapping, putting, puslading, pushing, striking, kicking and squeezing activities.
8.	Women have smaller heart and faster pulse rate resulting in more rapid increase in pulse rate at the beginning of the exercise and recovery is much slow after the exercise.	8.	Man has large heart because of more muscle tissues, circulation is better and the pulse rate is slow.

	Female		Male
9.	Women have slower reaction time and movement time.	9.	Man has better reaction time and movement time.
10.	Women are emotionally weak; the effect of defeat, victory, accident and injury on them is for longer time and they cannot recover from the shocks easily.	10.	Men are emotionally stronger; defeat, victory, accident etc. do not have much effect on them. They overcome such shocks easily.
11.	Menstruation in women is a biological activity, and has little effect on physical activists. It is more psychological; than physiological, hard training should be avoided.	11.	Men do not have such biological activity and can perform any type of activity.
12.	Women breathe more shallowly with the upper part of the chest.	12.	Men tend to breathe deeper and hence more diagragmatically.

RECIPROCAL INNERVATIONS

Reciprocal innervations refer to the part that antagonistic muscles play in performing coordinated movements. This principle works on the theory that whenever a group of muscles contracts to perform a movement, the antagonistic muscles relax, so that a coordinated, smooth, rhythmical movement results. A good example of this principle is the movement of flexing the aim. The biceps contracts and the antagonistic muscle, or triceps, relaxes, resulting in free and easy action. When a person is a novice in a game, he quite often performs in an awkward and uncoordinated manner because his antagonistic muscles do not relax and allow for free and easy movement. The proper coordinations between the muscle groups have not been established. René Descartes (1596-1650) was one of the first to conceive a model of reciprocal innervation (in 1626) as the principle that provides for the control of agonist and antagonist muscles. Reciprocal innervation describes skeletal muscles as existing in antagonistic pairs, with contraction of one muscle producing forces opposite to those generated by contraction of the other. For example, in the human arm, the triceps acts to extend the lower arm outward while the biceps acts to flex the lower arm inward. In order to reach optimum efficiency, contraction of opposing muscles must be inhibited while muscles with the desired action are excited. This reciprocal innervation occurs so that the contraction of a muscle results in the simultaneous relaxation of its corresponding antagonist.

UNIT - V: PSYCHOLOGICAL & SOCIOLOGICAL PRINCIPLES OF PHYSICAL EDUCATION

Psychology:

The subject of psychology is very old but the name given to it, is fairly new. It was Rudolf Geocle who used this name first time in 1590. The repeated world psychology orginated from two Greek words. Psyche and Logos, the former meaning soul and the latter 'talk about' or 'science'. Thus psychology, in its ordinary sense means the science of soul. The old philosophers were very much interested in the study of human nature especially his soul and hence psychology was also studied alongwith philosophy. But this concept suffers from extreme vagueness as it cannot define soul. Soul has no physical existence. Neither it can be seen nor touched. It has neither weight nor Volume.

From soul the concept shifted to mind. And it was said 'psycholgy is the study of mind', but the same trouble of obscurity came forward as to 'what is mind'. Mind is not an organ of the body like brain or heart. It is only a process of nervous system which results into a behaviour. So it is also far from perfection. Once a laughing philosopher said, "What is mind?' No matter.' What is matter?' Never mind.'

According to Descartes (1596—1650) the essence of mind was 'consciousness'. Hence since that time psychology bad been defined as the study of consciousness. Consciousness means awareness. This definition was also discarded because consciouness could not be studied objectively for it is most personal and subjective. The subject can only study himself while he is conscious and that too through introspection. Later on, the school of psycho-analysis gave a crumbling jolt to this concept because they came forward with the theory of unconsciousness. They contended that the function of the brain or mind continues even if we are a sleep. This school led by Freud proposed that psychology is the study of mental processes—conscious and unconscious.

The modern school of behaviourists pioneered by Watson, defined psychology as the science of behaviour. Behaviour stands for all the visible activities of an individual which can be put to an experiment or analysis. Behaviour can be observed objectively. Therefore this definition of Psychology as the science of behaviour was changed to the study of behaviour which is positive, experimental and objective in its nature.

MEANING OF SOCIOLOGY

⁷ Sociology word is derived from Latin word 'Societus' meaning society and Greek word "Logos' meaning study or science. This means sociology is the science of society. In other words sociology is the study of man's behaviour in group or of the inter-action among human beings, of social relationships and the processes by which human activity takes place.

Definition — "Sociology is the science of society or of social phenomena" by L.F. Ward. "The subject-matter of sociology is the inter-action of human mind. By L.T. Hobhouse.

WHAT IS SOCIALIZATION?

Socialization is an active process of learning and social development, which occurs as we interact with one another and become acquainted with the social world in which we live. It involves the formation of ideas about who we are and what is important in our lives. We are not simply passive learners in the socialization process. We actively participate in our own socialization as we influence those who influence us. We actively interpret what we see and hear, and we accept, resist, or revise the massages we receive about who we are, about the world, and about what we should do as we make our way in the world. Therefore, socialization is not a one way process of social influence through which we are moulded and shaped. Instead, it is an interactive process through which we actively connect with others, synthesize information, and make decisions that shape out own lives and the social world around us.

This definition of socialization, which I use to guide my research, is based on a combination of critical and interactions theories. Therefore, not all sociologists would agree with it. Those using functionalist or conflict theory approaches, for example, would define socialization in slightly different terms. Their definitions have an impact on how they do research and the questions they ask about sports and socialization.

New Approaches to Socialization

Many sociologists have become dissatisfied with the assumptions inherent in the internalization model of socialization use in research by functionalists and conflict theoretics. They are not comfortable with the idea that we humans are either products of society and its system needs or are victims of economic forces. Therefore, many researchers have turned to interrelations models of socialization and use new methods to study socialization processes.

LEARNING - DEFINITION AND MEANING

Learning is acquiring new, or modifying and reinforcing, existing knowledge, behaviors, skills, values, or preferences and may involve synthesizing different types of information. The ability to learn is possessed by humans, animals and some machines. Progress over time tends to follow learning curves. Learning is not compulsory; it is contextual. It does not happen all at once, but builds upon and is shaped by what we already know. To that end, learning may be viewed as a process, rather than a collection of factual and procedural knowledge. Learning produces changes in the organism and the changes produced are relatively permanent.

Human learning may occur as part of education, personal development, schooling, or training. It may be goal-oriented and may be aided by motivation. The study of how learning occurs is part of neuropsychology, educational psychology, learning theory, and pedagogy. Learning may occur as a result of habituation or classical conditioning, seen in many animal species, or as a result of more complex activities such as play, seen only in relatively intelligent animals. Learning may occur consciously or without conscious awareness. Learning that an aversive event can't be avoided nor escaped is called learned helplessness. There is evidence for human behavioral learning prenatally, in which habituation has been observed as early as 32 weeks into gestation, indicating that the central nervous system is sufficiently developed and primed for learning and memory to occur very early on in development.

Play has been approached by several theorists as the first form of learning. Children experiment with the world, learn the rules, and learn to interact through play. Lev Vygotsky agrees that play is pivotal for children's development, since they make meaning of their environment through play. 85 percent of brain development occurs during the first five years of a child's life The context of conversation based on moral reasoning offers some proper observations on the responsibilities of parents.

PAVLOV: CLASSICAL CONDITIONING - CONDITION RESPONSE THEORY

The beginning of the modern, scientific study of learning may be found in the work of Ivan P. Pavlov, a Russian physiologist. Pavlov, known as the "Father of Learning Theory," He was the first to make the relationship between stimulus and response explicit. He is primarily responsible for the theory of classical conditioning. Classical conditioning occurs when a stimulus that elicits a response is paired with another stimulus that initially does not elicit a response in its own. Over time, this second stimulus causes a similar response because it is associated with the first stimulus.

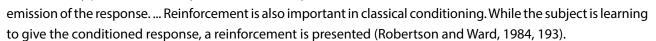
Pavlov's famous experiment in which a dog is conditioned to salivate in the absence of food: He noticed that his dogs would salivate at the sight of food at feeding time. Thus, Pavlov spoke of an unconditioned stimulus (UCS)

S-S vs. S-R Connections?

S-S?

(food) eliciting an unconditioned response (UCR). He conducted a number of conditioning trials by pairing a neutral stimulus (a bell) with a stimulus known to cause a salivation response in dogs. Over time, his dogs learned to salivate at the sound of the bell alone. This bell is a conditioned stimulus (CS), and the salivation a conditioned response (CR) (Robertson, Zielinski and Ward, 1984, 193).

Classical conditioning utilizes an innate response. Learners are essentially passive, since they do not consciously control the



<u>Unconditioned Stimulus (US)</u> - stimulus naturally triggers a response

<u>Unconditioned Response (UR)</u> - unlearned, natural response to the UCS

<u>Conditioned Stimulus (CS)</u> - previously neutral stimulus triggers a response

<u>Conditioned Response (CR)</u> - learned response to a neutral stimulus

COMPONENTS OF CLASSICAL CONDITIONING

The easiest place to start is with a little example.

Consider a hungry dog who sees a bowl of food. Something like this might happen:

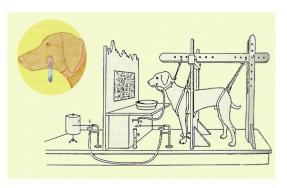
Food —> Salivation

The dog is hungry, the dog sees the food, and the dog salivates. This is a natural sequence of events, an unconscious, uncontrolled, and unlearned relationship. See the food, and then salivate. Ring a bell when presenting the food to the hungry dog (and before the dog salivates). Thus, when repeat this action (food and bell given simultaneously) at several meals. Every time the dog sees the food, the dog also hears the bell. Ding-dong, Alpo.

The bell elicits the same response the sight of the food gets. Over repeated trials, the dog has learned to associate the bell with the food and now the bell has the power to produce the same response as the food. This is the essence of Classical Conditioning. It really is that simple. Start with two things that are already connected with each other (food and salivation). Then add a third thing (bell) for several trials. Eventually, this third thing may become so strongly associated that it has the power to produce the old behavior.

The following diagrams are self explained the term of conditioning

- Food —————— > Salivation
- Unconditioned Stimulus —> Unconditioned Response



"Unconditioned" simply means that the stimulus and the response are naturally connected. They just came that way, hard wired together like a horse and carriage and love and marriage as the song goes. "Unconditioned" means that this connection was already present before we got there and started messing around with the dog or the child or the spouse.

"Stimulus" simply means the thing that starts it while "response" means the thing that ends it. A stimulus elicits and a response is elicited. (This is circular reasoning, true, but hang in there.) Another diagram,

- **Conditioning Stimulus**
- Bell
- with
- Food -------> Salivation
- Unconditioned Stimulus———> Unconditioned Response

We already know that "Unconditioned" means unlearned, untaught, preexisting, already-present-beforewe-got-there. "Conditioning" just means the opposite. It means that we are trying to associate, connect, bond, link something new with the old relationship. And we want this new thing to elicit (rather than be elicited) so it will be a stimulus and not a response. Finally, after many trials we hope for,

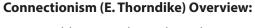
- Bell ——————————> Salivation
- Conditioned Stimulus —> Conditioned Response

Let's review these concepts.

- 1. Unconditioned Stimulus: a thing that can already elicit a response.
- 2. Unconditioned Response: a thing that is already elicited by a stimulus.
- 3. Unconditioned Relationship: an existing stimulus-response connection.
- 4. Conditioning Stimulus: a new stimulus we deliver the same time we give the old stimulus.
- Conditioned Relationship: the new stimulus-response relationship we created by associating a new stimulus 5. with an old response.

There are two key parts. First, we start with an existing relationship, Unconditioned Stimulus —> Unconditioned Response. Second, we pair a new thing (Conditioning Stimulus) with the existing elationship, until the new thing has the power to elicit the old response.

Thorndike: Trail and Error theory of Learning (Instrumental Conditioning) relationship



In addition to classical conditioning, instrumental conditioning is the other major approach to learning. Laboratory and theoretical analyses of instrumental conditioning begin in earnest with the work of E. L. Thorndike in 1898. Thorndike's original intent was to study animal intelligence (Domjan and Burkhard, 1986, 102). The learning theory of

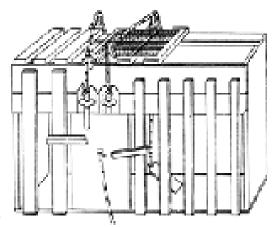
Edward L. Thorndike Thorndike represents the original S-R framework of behavioral psychology: Learning is the

result of associations forming between stimuli and responses. Such associations or "habits" become strengthened or weakened by the nature and frequency of the S-R pairings. The paradigm for S-R theory was trial and error learning in which certain responses come to dominate others due to **r**ewards. The hallmark of connectionism (like all behavioral theory) was that learning could be adequately explained without referring to any unobservable internal states.

In a classic behaviorist Edward L. Thorndike (1913), conducted an experiment to investigate animals' response in certain situations. In his study, hungry cats had to learn to pull a string hanging in a "puzzle box" in order for a door to open that let them escape and get food. What was involved in learning to escape in this manner? Thorndike concluded that the cats did not think about how to escape and then do it; instead, they engaged in trial-and-error behavior; see Box 1.1. Sometimes a cat in the puzzle box accidentally pulled the strings while playing and the door opened, allowing the cat to escape. But this event did not appear to produce an insight on the part of the cat because, when placed in the puzzle box again, the cat did not immediately pull the string to escape. Instead, it took a number of trials for the cats to learn through trial and error. Thorndike argued that rewards (e.g., food) increased the strength of connections between stimuli and responses. The explanation of what appeared to be complex problem-solving phenomena as escaping from a complicated puzzle box could thus be explained without recourse to unobservable mental events, such as thinking.

BOX 1.1 A Cat's Learning

"When cat put into the box, the cat would show evident signs of discomfort and impulse to escape from confinement. It tries to squeeze through any opening; it claws and bites at the wire; it thrusts its paws out through any opening and claws at everything it reaches. . . . It does not pay very much attention to the food outside but seems simply to strive instinctively to escape from confinement. . . . The cat that is clawing all over the box in her impulsive struggle will probably claw the string or loop or button so as to open the door. And gradually all the other unsuccessful impulses will be stamped out and the particular



impulse leading to the successful act will be stamped in by the resulting pleasure, until, after many trials, the cat will, when put in the box, immediately claw the button or loop in a definite way" (Thorndike, 1913:13).

Thorndike interpreted the results of his studies as reflecting the learning of an association. He believed that such successful escapes led to the learning of an association between the stimuli inside the puzzle box and the escape response. As the association, or connection, between the box and the successful responses became stronger, the cat came to make those responses whenever it was confined in the cage. The consequence of the successful responses — escaping the cage —strengthened the association between the box stimuli and those responses (Domjan and Burkhard, 1986, 103).

Imitation

Bandura has brought out the role of imitation in learning. According to Bandura learning is a consequence of social interaction and imitation. The general tendency to imitate is naturally found in children. This general tendency helps the children in varieties of learning with reference to 1. Language growth 2. Skill development 3. Formation of social and moral attitudes. Generally the children acquire large units of behaviour by watching and imitating others such as parents, teachers, peers, and famous people. Watching and imitation, such modeling not only lead to modification of existing behaviour also copying an entirely new response pattern not early known to them. So the parents and teachers are in need of placing good models before children to learn by imitation. In addition with this, the parents and teachers themselves are being worthy examples of imitative earning. As per Bandura concept, teacher's model of social behaviour in the class room such as calmness, friendliness, cooperativeness or aggressiveness and aloofness will act as initiator of behaviour changes in children or will trigger off similar behaviour patterns in them.

INSIGHT LEARNING

Insight is the understanding that the whole is more than the sum of the parts. Learning by insight occurs when the learner suddenly grasps the way elements of a problem situation are connected. The term describes a person's unplanned discovery of a solution to a problem — often referred to as the "ah-ha" phenomenon. That phenomenon results from a mental reorganization of ideas and concepts rather than from simple trial and error. Some individuals gain insight more rapidly than others. Individual backgrounds affect each learner's ability to gain insight, as does the sequence in which you present basic learning experiences. To help students gain insight, you must stimulate thinking. Use appropriate questions to get their minds working. Encourage thought rather than rote memorization by using questions that require associations, comparisons, and contrasts.

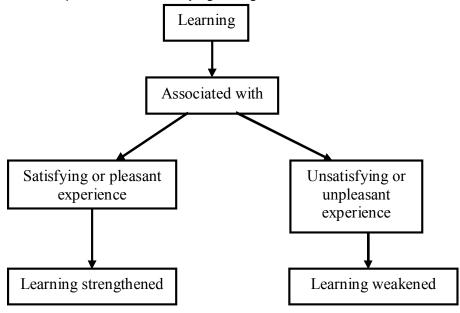
LAWS OF LEARNING

Laws of learning are attempts to define the fundamental conditions of the learning process. The classic example of Thorndike's S-R theory was a cat learning to escape from a "puzzle box" by pressing a lever inside the box. After much trial and error behavior, the cat learns to associate pressing the lever (S) with opening the door (R). This S-R connection is established because it results in a satisfying state of affairs (escape from the box). Based on the results of the experiment, Thorndike formulated the laws of learning. Thorndike's theory consists of three primary laws as law of effect, law of exercise, law of readiness. The law of exercise specifies that the connection was established because the S-R pairing occurred many times (the law of effect) and was rewarded (law of effect) as well as forming a single sequence (law of readiness). Each of these laws has common sense applications based on lessons people have learned over the years. Mastery of these applications will greatly enhance the ability to

influence the students to learn and perform at a high level.

The Law of Effect:

The law of effect is that learning accompanied a pleasant or satisfying feeling is strengthened, but that learning associated with unpleasant and unsatisfying feeling is weakened.



This principle pertains to the feeling or emotional state following the learning experience. When a child finds correct solution to the question, he feels pleased about his achievement and the connections between stimulus and response are consequently strengthened. If the incorrect solutions finds to the question he feels annoyance about his effort. These associated feelings of annoyance tend to rub about the connection that has been made. Pupils avoid problems and circumstances that have annoyed them and approach with interest situations in which they have had satisfying experiences. Thus experiences and feelings that accompany the responses develop mental set for future behavior, as well as strengthening or weakening the response with which they are associated.

Law of readiness:

Law of readiness refers the principle of readiness, described by saying that "when a person feels ready to act ready to learn he acts more effectively and efficiently he learns more efficiently and effectively and with greater satisfaction than when not ready" If a person feels ready to act and is prevented from doing so, he feels annoyed. A synonymous term for readiness is mental set. A student has a mental set to do his lessons when he is disposed to work at the. Other stimuli do not then distract him. He is interested in lessons. Therefore willing to concentrate on the tasks toward which his attention is directed. As he continues, his mind-set may weaken and the time is reached when continuing to act in a direction that earlier was satisfying becomes annoying. If a student has no mental-set when he is directed to do a task, he will not learn easily. If however, the lesson proves interesting and captures his attention his learning efficiency will improved and reach a high point.

Much of the passive and unprofitable studying done by pupils is due to the fact that they have no mindset

for work but merely approach it in a routine and perfunctory way. A readiness to master a problem is equivalent to a desire to do so. One of the fundamental duties of a teacher is to develop a readiness in children to learn their lessons. A good assignment should raise the interesting questions among the students. It helps them to be anxious to study. A teacher who is specific in her assignments and asks interesting questions for the students to solve arouses their curiosity and develops in them a favorable mind-set toward the assignment. On the other hand, the teacher who perfunctory takes up one lesson after the other in mechanical order fails to develop the pupil's readiness for their lessons.

Law of use and disuse

Law of readiness refers that when reread our lessons a number of times in order to learn them. Drill is also based on the principle that repetition fixes the facts to be learned. Children spending much time repeating arithmetic combinations, writing the words of spelling lessons a number of times in order to establish their meaning. Lack of practice cause the memory of learned materials to weaken: and in general the longer periods of disuse, the greater the loss.

The Law of Exercise:

All changes that are produced in human intellect, character and skill happen in accord with and as a result of, certain fundamental laws of change. The first is the Law of Exercise, that, other things being equal, the oftener or more emphatically a given response is connected with a certain situation, the more likely it is to be made to that situation in the future.... This law may be more briefly stated as: 'Other things being equal, exercise strengthens the bond between situation and response.' (Thorndike, 1912, pp.95-96). Connections become strengthened with practice and weakened when practice is discontinued.

TYPES OF LEARNING

Primary learning

The primary learning consists of the facts, principles, theories etc. that are the main core of the lessons in particular and the curriculum in general. Illustrate the primary learning. Let us assume that the lessons being studied are the Track and Field rules and skills. The primary learning drill consists of knowledge of rules, movements and mechanics. The basic and traditional facts constitute the primary learning.

Associate Learning

While studying the rules and fundamental skills of Track and field, the student become interested in the history of the section. They relate its historical development to Track and field events characteristics. They also become interested in other aspects related to athletes dominant in events and the topography conditions. Many related historical, economic and geographical facts will be learned. Such related facts are called associated learning.

Concomitant learning

In studying the rules and skills of track and field, certain attitudes and points of view are sure to develop. Certainly the students will appreciate the healthy life as outcomes from participation in track and field, having the social, psychological, and social psychological development from learning the rules and skills of track field. These are known as concomitant learning.

TRANSFER OF LEARNING

Transfer is the process of applying past learning to new but somewhat similar situations. The theory suggests that transfer of learning depends upon the presence of identical elements in the original and new learning situations; i.e., transfer is always specific, never general. In later versions of the theory, the concept of "belongingness" was introduced; connections are more readily established if the person perceives that stimuli or responses go together (c.f. Gestalt principles). Another concept introduced was "polarity" which specifies that connections occur more easily in the direction in which they were originally formed than the opposite. Thorndike also introduced the "spread of effect" idea, i.e., rewards affect not only the connection that produced them but temporally adjacent connections as well.

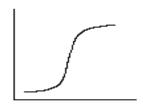
LEARNING CURVE:

Learning curves vary from person to person, from school subject to school subject, according to whether the learning period is short or long, the materials hard or easy. Even though there is great variation, certain characteristics of the course of learning should be discussed as general principles. In a general way the curve of the learning may be divided into three sections.

- 1. the beginning
- 2. the end
- 3. the period between the beginning and the end

Slow Initial Start: Inorder to have something concrete to describe it has to discuss two simple learning curves.

The initial progress according to figure show. Apparently, little is gained at the beginning.



Concave & convex

Factors and conditions affecting the curves of learning and levels of performance:

Curves refer the development and acquisition of learners follows interesting courses. Curves showing growth and development may represent a composite of many abilities, or they may represent the growth of more specific abilities. Curves depicting their increase in speed and accuracy show definite trends. In the attempts of persons/player to develop ability in games and sports, the course of learning can be depicted and described graphically. The learners would so through various characteristics experiences. In the beginning, their progress might vary. Initial learning would be slow in some instances and more rapid in others. In the course of all learning at a time has reached when no progress is made for a time, or when the learner seems to be at a dead level. Generally, he improves and emerges from the period of no growth to reach eventually a point where no matter how hard he tries he can improve no further.

If a chart is made day-by-day on learning and performance greater variations in efficiency will be found. On one day, a player will be twice as efficient as on another, problems that are difficult at one time will be much easier at another.

Fluctuations in individual abilities are characteristic of all and can not be avoided. Volleyball player spiking, serving and ball handling perform themselves better at different times. They vary in their efficiency from day to day and in general players learn more readily on some occasions than no others.

COGNITIVE DOMAIN

This domain includes knowledge, comprehension, application, analysis, synthesis and evaluation, which are responsible for the development of intellectual ability and skill. This objective is concerned with increasing the knowledge, improving problem solving abilities, clarifying understandings, and developing and identifying concepts. As intellectual, physical and emotional developments are closely related, the physical education programmes contribute to cognitive development by providing knowledge and modifying behaviour in regard to good health practices, by promoting physical fitness and by aiding in the process of social and emotional development which leads to a more positive self-concept.

It has been found that a child's earliest learning movements such as walking, running, reaching etc. are motor in nature and form the foundations of subsequent learnings which require knowledge in order to co-ordinate the mind with the muscles. Learning of any skill requires mental alterness, awareness and efforts.

During competitive situations an athlete has to face many tough situations and problems, and has to adopt strategies and moves to' counter the same. This effort requires further intellectual abilities permitting him to comprehend and analyse the situation and then to apply the accumulated knowledge. From these come th ability to interpret, evaluate, think and make judgements.

INTELLIGENCE: Intelligence is the aggregate mental capacity or energy of an individual to act purposefully, to think rationally, and to deal effectively with one's environment, Intelligence involves awareness, is goal directed, and has value. It is an ability to undertake the activities that are difficult, complex, and which lead to the creation of something new and different, Intelligence of an individual plays an important role in effecting physical performance. The more complex and the more interpretative the movement, the greater the amount of intelligence necessary to comprehend. Sports activities involve complex skilled actions. Since all skilled behavour is intelligent behaviour, relationship between sports performance and intelligence cannot be denied.

ATTITUDE: Attitudes are about thoughts and feelings. Attitude is often thought to predict behaviour. Attitudinal responses are also evaluative in nature. They are significant in deciding the kind and extent of the learning that takes place and reflect the likes and dislikes concerning a specified object of action. For example, if a child says "I like running", it reflects his attitude towards running, and if a child says, "I don't like running" it shows this child's attitude towards running. Attitudes involve knowledge and beliefs. Attitudes are developed through direct experience and interpersonal communication. Positive beliefs and values concerning physical activity result in development of good and positive attitudes, enabling the athlete to strive hard for better performance.

EMOTIONAL DEVELOPMENT -- Process of bringing emotional stability in child is an equally essential function of family as others. This function includes the aspects like love, affection, anger, competition, cooperation etc which must be controlled efficiently. Proper care and guidance of children by parents (family) develop the emotional status. Emotional stability is required to play effective role in society controlling of emotions in children highly depends upon the family atmosphere.

EMOTIONAL BALANCE

Sports psychology analysis an athlete s emotional states and feelings that indicate the degree to which he/she is ready to perform in the competitions. Sports psychology helps in bring balanced emotional state of an athlete. It provides opportunities and studies to make plays emotionally fit and ready for competitions.

INTEREST OF AN ATHLETE

An athlete can learn of perform good skills until he/ she is not interested in learning or performing sports psychology analysis an individuals interest, so that the same individual can proceed further to learn game of its interest. Sport psychology assist in maintaining the desired interest in order to learn and perform well.

CULTURE AND CIVILIZATION: CULTURE

Culture is one of the important concepts in social sciences. It is commonly used in psychology', physical education and Sports. It is the main concept in Anthropology and a fundamental one. In sociology. The study of society or any aspect of it becomes incomplete without culture. Culture and society go together. They are inseparable. Of all the animals, human being alone is cultural. What distinguishes man from animal, human society from animal society is culture. That way, culture is an ingredient of human society. The concept of cultureless human society is unthinkable and non-existent.

Meaning of Culture: The term Culture simply means "a design for living" Culture refers to both, "way of thinking and living" or "traditional practices In otherwords, culture means, "an advanced stale of civilisation ".Culture is something internal. It refers to intrinsic values "Culture is what we are. civilization is what we have". Both are man made. One is for his comfort and luxury and the other for his satisfaction and happiness. Culture is the breeding ground of civilization. Civilization represents "material c allure" and culture implies "non-material culture".

Definition of Culture:

- 1. B. Malinowski has defined culture as the "cumulative creation of man". He also regards culture as the handiwork of man and the medium through which he achieves his ends.
- 2. Graham Wallas, an English sociologist has defined culture "as an accumulation of thoughts, values and objects; it is the social heritage acquired by us from preceding generations through, learning, as distinguished from the biological heritage acquired by us from preceding generations through learning, as distinguished from the biological heritage which is passed on to us automatically through the genes".
- 3. C.C. North is of the opinion that culture "consists in the instruments constituted by man to assist him in satisfying his wants".
- 4. Robert Bierstedt is of the opinion that "culture is the complex whole that consists of all the ways we think and do and everything we have as members of society".
- 5. E.V. de Roberty regards culture as "the body of thoughts and knowledge, both theoretical and practical, which only man can possess".

SOCIAL ACCEPTANCE AND RECOGNITION

Participation in the physical education activities provides opportunities for the development of desirable social traits needed for adjustment to the social life in general. Some worth while traits are:

- -friendliness
- -cooperation

- -respect for the rights of others
- -good sports worship
- -honesty in group competition

The objectives of physical education are often more specific than the goal, or aim, and purpose and are comprised of particular outcomes. Usually plural, in combination they result in the achievement of a purpose and an aim. Professional colleagues and the general public often learn about physical education's worth through an examination of its objectives and their fulfilment.

Dudley Sargent, a recognized leader in physical education for college students in the late 1800s and early 1900s, was an authority in teacher training and in anthropocentric measurements of the positive effects of exercise on the body. He suggested that physical education achieved hygienic, educative, recreative, and remedial objectives. Outcomes that he noted in his programs included improved health, fun, remediation of illness and injury, one of the "new physical educators," helped lead in the transition from exercising methodically to developing the entire person. In 1910, he recommended that physical education programs seek organic, psychomotor, character, and intellectual objective.

In 1934, Physical Education Association's Committee on objectives listed physical fitness, mental health and efficiency, social-moral character, emotional expression and control, and appreciations as the desired objectives. In 1950, these were restated by the profession: to develop and to maintain maximum physical efficiency, to develop useful skills, to conduct oneself in socially useful ways, and to enjoy wholesome recreation.

In 1965, the Association for Health, Physical Education and Recreation stated five major objectives:

- 1. To help children move in a skilful and effective manner in all the selected activities in which they engage, in the physical education program, and also in those situation that they will experience during their lifetime.
- 2. To develop an understanding and appreciation of movement in children and youth so that their lives will become more meaningful propulsive, and productive.
- 3. To develop an understanding and appreciation of certain scientific principles concerned with movement that relate to such factors as time, space, force, and mass-energy relationships.
- 4. To develop through the medium of games and sports better interpersonal relationships.,
- 5. To develop the various organic systems of the body so they will respond in a healthful way to the increased demands placed on them.

Before examining physical education's objectives in greater detail, it is essential to understand how they relate to those of education.

LEADERSHIP AND GROUP DYNAMICS

A leader have magnet in heart and compass in head. LEADERSHIP

"Leadership is the ability to score desirable actions from a group of followers voluntarily without the use of coercion." — Alfordand Beaty

"Leadership is the activity of influencing people to strive willingly for group objectives". — George Terry

Leadership is a dynamic ability of influencing group ion a particular situation for obtaining group objectives. It is an art, a science of enabling follow men to proceed together for the desired purpose. Leadership is a personal quality.

LEADERSHIP QUALITIES

Following are some of the qualities needed in a leader:-

1. PERSONALITY

Fine personality includes good physical fitness and mental alertness.

2. LOYALTY

Loyalty is the highly needed quality in any leader. Good citizenship and patriotism is resulted due to loyalty.

3. SINCERITY

Leader must be sincere enough towards the responsibility.

4. COOPERATIVE AND COORDINATIVE

Qualities of good cooperation and coordinative abilities are desirable in leader.

5. DISCIPLINE OR DUTYFULNESS

For effective leadership discipline dutifulness is essentially required for making productive effort by a leader.

6. PATIENCE

With patience good self control or calmly performing/working increases the performance and help to proceed for better output.

7. IMPARTIALITY

Unbiased decisions, unfavourable behaviour is essentially needed in any leader to work effectively with group.

8. TACTFULNESS INTELLIGENCY INDUS-TRIOUSNESS

Leader must have the tactics to make everyone validly happy and the skills to overcome hurdles tactfully, intelligently with a creative effort.

9. RELIABLE THINKING OR REALISTIC

Reliable thinking or realistic approach motivates leaders to choose the right and acceptable ways to move ahead as a team for achieving goal.

10. ENGAGING PERSONALITY AND ENDURANCE (WORK POWER)

A desire to learn more and always involved himself for one or the other require work is desirable in any leader. This is actually the quality of working ability and good utilization of leisure time.

11. MOTOR ABILITIES AND PHYSICAL SKILLS Good Motor capacity and physical skills makes

leadership more influencing. Physical Education need these abilities mainly for displaying good demonstrations to groups.

12. PUBLIC RELATIONS

Development of any kind is impossible in isolation. Leaders must always be in good and friendly public relations. Recognition, influence on others is only gained if one has good and wide public relations.

There are number of leadership qualities need in a leader. In short the word 'LEADER' itself assists us in remembering those qualities.

- L Loving nature loyalty
- E Enthusiasm
- A Alertness, Ability to handle situational load
- D Dedicative, Dutifulness, Discipline.
- E -Engaging personality
- R Reasonable thinking, Reliability
- S -Sincerity, Self control, Social ability
- H Hardworking, Honesty
- I Industriousness, Interest in related work/task
- P Personality, Physical skills.

SOCIALIZATION AND ITS ROLE IN NATIONAL INTEGRATION

Socialization is a popular topic today in discussions about sports. When we ask any of the following questions, we are concerned about sports and socialization issues:

- A. What impact do sport and sport participation have on people's lives, characters, behaviours, thoughts, relationships, and careers?
 - B. When and why do people stop playing competitive sports, and what happens to them when they do?
- C. How and why do some people see themselves at athletes and dedicate themselves to playing particular sports?
- D. Why are some peoples fanatically interested in playing and/or watching sports, while others don't seem to care about sports?

Many of us in the sociology of sport have done research to find answers to one or more of these questions. The search for answers has taken in different directions, depending on the theoretical frameworks we have used to guide out thinking about sports and sport participation. The influence of theoretical perspectives will be discussed in the first section of this chapter. Then we will consider three topics that are central to discussions of sports and socialization:

- A. The impact of being involved in sports.
- B. The process of changing or ending sport participation.
- C. The process of becoming involved and staying involved in sports.

In connection with these topics, I will explain how the questions previously listed have been answered in the sociology of sport. As you read the chapter, you will see that most of the answers are incomplete and may others are so complex that discussions about them will carry over into other chapters.

The chapter closes with information about new approaches to socialization. These approaches are based on critical theories that emphasize socialization as a community and cultural process rather than an individual and personal process.

COHESIVENESS IN SPORT

Anyone who has been involved in any team sport knows the value of cohesiveness. Coaches try to develop cohesiveness in their teams because they believe cohesive teams win more games. Surely you have heard spectators and sports announcers as well as coaches and players praise the unity, teamwork and cohesiveness of successful teams, especially when the teams win without individual superstars. Conversely lack of cohesion or team dissension is often cited when a team of talented invididuals fails to meet expectations. Given the popularity of cohesiveness in sports talk it is not suprising that cohesiveness is a popular research topic. Many

sport psychologists have examined the relatibnship between cohesiveness and team performance, and according to the results we can answer the question 'Do cohesive teams win more games'" with "yes" "No" and "may be".

Some evidence does indicate a positive relationship between team cohesiveness and team success. One of the most extensive and representative investigations in the sport cohesiveness literature, involving over 1,200 male intra mural basket ball players on 144 teams provides strong evidence that team cohesiveness and success are positively related. In the first study of the overall investigation marterms (1972) looked at the in team success are positively related. In the previous study of the overall investigation martens and peterson (1971) examined the influence of pre season cohesiveness on team success and reported that highly cohesive teams won more games than teams with low cohesiveness. In the third study perterson and martens (1972) looked at the influence of team success on post season cohesiveness and observed that successful teams were more cohesive than less successful teams.

Obviously, further research does not always clarify or help us to understand a phenomenon especially if the research is haphazard with no systematic progression that builds upon and extends previous work. As carron (1982) notes to date the overall stragegy of sport cohesiveness research can be described as a generally erratic "shotgun" approach, no overall conceptual model has emerged to integrate the findings in any meaningful way, and as with the sport personality research discussed in. chapter 3, the findings are as diverse as the studies themselves. Although the sport cohesiveness literature is some what less diverse and more "cohesive" than the sport personality research, the absence of an intergrating framework and clear standard definitions and measures continues to be a major problem.

Team cohesiveness and performance in sport.

Arron's conceptual system raises numerous research possibilities but so far sport cohesiveness research has focused almost exclusively on the cohesiveness / performance relationship. Conflicting findings on cohesiveness and performance are cited.

The first step in sorting out the literature is to consider the definition and measurement of cohesiveness in the research most of the sport cohesiveness studies used the same measure the sport cohesiveness questionnaire (martens landers & Loy, 1972), thus providing a basis for comparing findings the martens et al. Questionnare includes two c ategories of items: (a) direct ratings of closeness or attraction to the group and (b) interpersonal attraction or friendship ratings the direct items and friendship ratings are not highly related to each other and they often relate differently to team performance. When the research findings as sorted out by type of measure some consistency emerges. Most of the positive relationships involve direct cohesiveness ratings and most of the negative relationship are found with interpersonal attraction measures. All of the major studies reporting negative relationships used an interpersonal attraction measure Fielder 1954 Lander & Lueschen 1974 Lank 1969 Me Grath 1962). In several studies with mixed results positive relationships were found when direct measurement were used but not when friendship ratings were used (Landers & Grwon 1971 martens & peterson, 1971 widmeyer & martens 1978).

A second approach to dratying the literature on cohesiveness and performance is to consider key mediating variables particularly the team factors from currpn's conceptual system of the team factors listed, the one receiving the most attention and the one that seems to have the most impact on the sport cohesiveness / performance relationship is the nature of the group task. Positive cohesiveness / performance relationships are reported most often for team sports that require extensive interaction and cooperation among players, such as basket ball and volley ball with sports that require independent performances and little interaction. Such as bouling and rifle teams, cohesiveness may relate negatively to performance.

