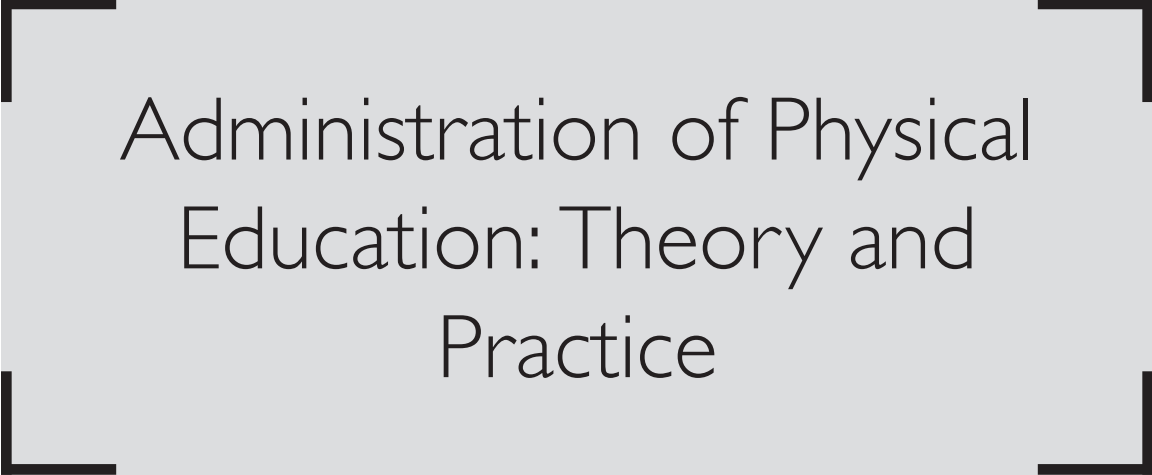


Administration of Physical Education

Theory and Practice

Anju Malhotra



Administration of Physical Education: Theory and Practice

Administration of Physical Education: Theory and Practice

Anju Malhotra



Published by Vidya Books,
305, Ajit Bhawan,
21 Ansari Road,
Daryaganj, Delhi 110002

Anju Malhotra
ISBN: 978-93-5429-191-3

© 2021 Vidya Books

This book contains information obtained from authentic and highly regarded sources. All chapters are published with permission under the Creative Commons Attribution Share Alike License or equivalent. A wide variety of references are listed. Permissions and sources are indicated; for detailed attributions, please refer to the permissions page. Reasonable efforts have been made to publish reliable data and information, but the authors, editors and publisher cannot assume any responsibility for the validity of all materials or the consequences of their use.

Trademark Notice: All trademarks used herein are the property of their respective owners. The use of any trademark in this text does not vest in the author or publisher any trademark ownership rights in such trademarks, nor does the use of such trademarks imply any affiliation with or endorsement of this book by such owners.

The publisher's policy is to use permanent paper from mills that operate a sustainable forestry policy. Furthermore, the publisher ensures that the text paper and cover boards used have met acceptable environmental accreditation standards.

Contents

Chapter 1	Administration of Teaching Physical Activities.....	1
Chapter 2	Meaning and Definition of Physical Education	7
Chapter 3	Educational Administration and Organized Planning	31
Chapter 4	Development of Physical Education in the Schools	46
Chapter 5	Physical Development and Condition of Children Education	62
Chapter 6	Challenge of Physical Education in a Defensible Position.....	75
Chapter 7	Achievement and Motivation in Sports	92

1

Administration of Teaching Physical Activities

PARTICIPATION IN PHYSICAL ACTIVITY

Participation in regular physical activity at a level sufficient to promote health-related physical fitness is an essential behaviour for professionals in all fields of physical activity at all levels (this includes coaches, K-12 teachers, physical education and kinesiology faculty in higher education, fitness professionals, athletes, all advocates of physically active lifestyles). From the beginning of the twentieth century to present times, authorities in our field have stressed the importance of modelling an active lifestyle and physical fitness for professionals in all fields related to physical activity.

A recent survey of physical activity-related professionals and pre-professionals shows that there is continued strong support for this view. Respondents agreed (4.56 on a 5-point Likert scale) that "role modelling is a powerful teaching tool for HPERD professionals." Several key aspects related to modelling in general, and modelling physical activity and fitness in particular, are presented here.

- The behaviours of models can influence the learning of others.

- Participation in regular physical activity is an essential behaviour of physical educators and professionals in physical activity as role models as well as for personal health-related wellness.
- Achievement and maintenance of health-related physical fitness (based on accepted criterion-referenced standards) is an appropriate expectation for all professionals in the field of physical activity.

Together these points provide support for the position statement. The behaviours of models can influence the learning of others. There is considerable research in diverse domains to support the tenets of social cognitive theory, pointing to the effectiveness of modelling as an important factor in altering human behaviours.

Modelling has been shown to be an effective method in working with negative eating behaviours, substance abuse (*e.g.*, alcohol, smoking), and influencing seat belt use. In the psychomotor domain, extensive research has found that modelling can play a major role in the acquisition of motor skills. The use of models can promote competence and feelings of self-confidence and self-efficacy. Research on modelling related to a physically active lifestyle indicates that children of physically active parents (parent models) are more likely to be active than children of sedentary parents.

Furthermore, the evidence suggests that children who are active with their parents are likely to be more active than children who do not exercise with their parents. Physical education teachers may be less powerful role models than parents, however, teachers are among the more important models for children and youth.

In a study of sixth through eighth grade school children, Gilmer, Speck, Bradley, Harrell, and Belyea (1996) found teachers and coaches to be the most frequently cited non-family member adult role models. Modelling a physically active lifestyle by physical education teachers could have effects on youth similar to those of parents.

**PHYSICAL EDUCATORS, COACHES,
AND ALL PROFESSIONALS IN FITNESS**

Models can influence attitudes and behaviours in many ways, including health practices, motor skill acquisition, and the adoption of physical activity patterns. Physical educators, coaches, and all professionals in fitness and physical activity have strong modelling status for many children and youth. Participation in regular physical activity is an essential behaviour of physical educators and other physical activity-related professionals as role models as well as for personal health-related wellness. Since a primary goal of the profession is to promote an active healthy lifestyle for everyone, those involved in professions related to physical activity and fitness should teach and model the most current “established” behaviours and processes for improving health and physical fitness. Presently, those behaviours include participating in a variety of physical activities as noted in the Physical Activity Pyramid.

The foundation of this model calls for an accumulation of at least 30 minutes of moderate “lifestyle physical activities” on all or most days of the week. To further guide the selection of physical activities, the model recommends moderate to vigorous aerobic activities 3 to 6 times per week, muscle fitness exercises 2 to 3 times per week, and flexibility or range of motion exercises 3 to 7 times per week. Physical activity professionals should demonstrate a personal understanding and appreciation of the basic physiological training principles such as warm-up, cool-down, gradual overload, progression, and the application of the principles of frequency, intensity, and time as they relate to improving and maintaining fitness. Modelling these principles in their own fitness endeavors will have a positive influence on those who expect fitness and exercise leaders to be leaders in their profession and to set a positive example for young people and the community.

Studies by Cardinal and Sachs have found that most people are more likely to adopt moderate intensity “lifestyle

physical activities” as opposed to traditional, more structured forms of exercise. This finding suggests that encouragement and modelling of “lifestyle physical activities” by fitness and exercise professionals and physical educators may be especially important to young people and a community that is already inclined to adopt moderate physical activity to improve the quality of life. In addition to the importance of a physical activity professional’s potential influence on others as a model, engaging in a physically active lifestyle is very important for personal reasons. There are studies that show that participation in organized fitness programmes (e.g., corporate fitness programmes) results in greater productivity, reduced absenteeism, lower health care costs, and greater job satisfaction among employees.

It is reasonable to assume that physical educators and other physical activity professionals who exhibit active lifestyles, similar to those of corporate employees involved in physical activity programmes, can expect to experience similar benefits. This was confirmed in one study conducted among 117 schoolteachers. Those involved in the school district’s experimental wellness programme demonstrated significantly greater improvements compared to those not involved in the wellness programme on a number of physiological variables, as well as general well-being, level of job satisfaction, and self-concept. Moreover, both self-and principal-ratings of the teachers’ stress management and performance were higher among those in the wellness programme compared to those not in the programme.

When children and youth see physical activity professionals participating in accordance with established activity guidelines, applying sound physiological training principles, and actively modelling a physically active lifestyle, it reinforces student learning and will likely lead some to adopt similar activity patterns. The active lifestyle of professionals promotes credibility among parents and colleagues and exemplifies evidence of the value of a physically active lifestyle.

Furthermore, the physical activity professionals who exercise regularly provide examples of the positive physiological, health-related effects of an active lifestyle. Achievement and maintenance of health-related physical fitness (based on accepted criterion referenced standards) is an appropriate expectation for all professionals in the field of physical activity. Throughout the years, leaders in our discipline have claimed that physical educators need to maintain acceptable physical fitness levels to be totally effective teachers. Physical educators also need to maintain and exhibit acceptable physical fitness levels to be totally effective fitness role models. Professionals and pre-service professionals are adamant that fitness is important and that the components of health-related fitness, cardio-vascular endurance, muscular endurance, muscular strength, flexibility, and body composition should be a measure of that fitness level.

Cardinal and Cardinal (2001) found that physical education professionals strongly believe, "it is important for health, physical education, recreation, and dance professionals to maintain a healthy body fat percentage." Those same people strongly concurred (4.4 on a 5-point scale) with the statement "involvement in regular physical activity at a level sufficient to promote health-related physical fitness is a desirable and recommended behaviour for physical education teachers." Such models are worthy of commendation if they are careful to keep long-term health considerations ahead of shorter-term performance ones. Administrators have also expressed that they value teacher fitness. School administrators have identified lack of teacher fitness as a barrier to implementing quality elementary physical education programmes. Surveys of individual's responsible for hiring physical educators have shown that applicants perceived to be unfit have a much-reduced chance of employment. Although these studies present a topic that requires further study, it should be noted that there has been little research undertaken to determine whether or not a teacher's fitness level actually affects student learning and behaviour or teacher effectiveness.

Implications: Although the physical activity professional's physical fitness level is only one of many characteristics which contribute to the learning process, modelling an appropriate fitness level and an active lifestyle needs to be considered a significant factor in encouraging young people, colleagues, and communities to do the same.

The level of physical fitness we model may have a powerful influence on youth and our success in the advocacy for our profession to the public.

2

Meaning and Definition of Physical Education

INTRODUCTION

Physical Education is the process by which changes in the individual are brought about through movement experiences. Physical Education aims not only at physical development but is also concerned with education of the whole person through physical activities. It would not be wrong if we say that Physical education is the play-way method of education.

Various Definitions of Physical Education are:

- Barrow defined Physical Education as an education of and through human movement where many of educational objectives are achieved by means of big muscle activities involving sports, games, gymnastic, dance and exercise.
- According to Webster's Dictionary Physical education is a part of education which gives instructions in the development and care of the body ranging from simple callisthenic exercises to a course of study providing training in hygiene, gymnastics and the performance and management of athletics games.

- Jackson R. Sharman points out that physical education is that part of education which takes place through activities, which involves the motor mechanism of human body which results in an individual's formulating behaviour patterns.
- Charles A. Bucher defines physical education, an integral part of total education process, is a field of endeavour which has as its aim the development of physically, mentally, emotionally and socially fit citizens through the medium of physical activities which have been selected with a view to realizing these outcomes."
- Central Advisory Board of physical Education and Recreation defines Physical education as an education through physical activities for the development of total personality of the child to its fullness and perfection in body, mind and spirit.

AIMS AND OBJECTIVES OF PHYSICAL EDUCATION

AIMS

The ultimate goal is final end aim of physical education, it the way and achieved some certain objectives. The general education like aim of physical education is to develop human personality in its totality well planned activity programmes. In physical education aim at the all round development of the personality of an individual or some development of human personality and it includes physical, mental, social, emotional and moral aspects to make an individual a good citizen. The physical education means at making an individual physical fit, mentally alert, emotionally balanced, socially well adjusted, morally true and spiritually uplifted.

The objectives of Physical Education are steps considered towards the attainment of the aim and the particular and precise means to realise an aim. An aim is achieved it become an objective in the action that goal on continuing. There some

objectives of physical education are the objective of physical fitness is essential to leading a happy, vigorous and abundant life. The second is the objective of social efficiency is concerned with one proper adaptation to group living and all these qualities help a person to make him a good citizen. Another objectives of physical education is culture, it aims at developing an understanding and appreciation of one own local environment as well as the environment and a person understand the history, culture, religious practices etc and the aesthetic values associated with these activities. So find the best step the ultimate goal in aims of physical education.

OBJECTIVES

Physical education is an important part of every school curriculum and a class every pupil awaits. Physical education is that segment of the daily timetable that every student eagerly waits to attend, as it is the only official time when the students can be on the grounds, engaged in their favourite sports. One of the main objectives of physical education is to bring in this element of joy to the academic orientation of schools. Physical education aims at dedicating a daily time for some physical activity for the students. The physical training class, as it is also called, involves sports, games, exercise and most importantly, a break from the sedentary learning indoors.

One of the other important objectives of physical education is to instill in the students the values and skills of maintaining a healthy lifestyle. Daily physical activity promotes an awareness of health and well being among students. It boosts them to engage in physical activities on a daily basis. It promotes them to lead a healthy life in adulthood. Physical education classes constitute programmes to promote physical fitness in students, train them in sports, help them understand rules and strategies in playing and teach them to work as a team. A very vital factor in physical education is to develop interpersonal skills in children. Sports aim at making them team players, developing a sportsman spirit in them and enhancing their competitive spirit. Sports that form a part of

physical education classes help the students invest time in fruitful and competitive activities. One of the other important objectives of physical education is to inculcate in the minds of the students, the importance of personal hygiene and cleanliness. Physical education classes aim at teaching the students, the habits of personal cleanliness and the importance of the maintenance of personal hygiene in life. Physical education classes also impart sex-education to the students, help them clarify their doubts and find answers to all the questions that occur to their minds. The sports, which are a part of the physical education class, help in developing motor skills in children. The ability to hold a racket or a bat, the ability to catch a ball and the ability to swing a bat are some examples of the motor abilities that can develop with the help of sports. The physical activity that is involved in physical education helps the students in bringing discipline to body posture and body movements.

Hitting a ball with a bat or a shuttle with a racket as also aiming a ball for a goal or catching it to get the opponent team out, are some of the commonly observed actions in sports and are extremely beneficial in improving hand-eye coordination. The very important objective of physical education is to encourage the upcoming sportsmen and women of the crowd. Physical education gives the budding sports people a platform to exhibit their talents. Those with a flair for sports get an opportunity to display their talent. Their small step on the school playground can eventually turn into a huge leap in the field of sports. Moreover, sports refresh the students' minds. Physical education class becomes enjoyable for the kids while proving helpful for their overall growth and development. Physical education is indeed one of the most fruitful activities of a school schedule.

NEED AND IMPORTANCE OF PHYSICAL EDUCATION

In the Present World of Space age and automation era, all human beings appear to be living a more and more inactive

life. They ride instead of walk, sit instead of stand and watches instead of participants. Such type of inactivity or sedentary life is detrimental to mental and physical health. Thus, there is great need for physical education as a part of balanced living. Physical education which is commonly a part of the curriculum at school level includes training in the development and care of the human body and maintaining physical fitness. Physical education is also about sharpening overall cognitive abilities and motor skills via athletics, exercise and various other physical activities like martial arts and dance. Here are some of the benefits that highlight the importance of physical education.

MAINTAINING SOUND PHYSICAL FITNESS

Physical fitness is one of the most important elements of leading a healthy lifestyle. Physical education promotes the importance of inclusion of a regular fitness activity in the routine. This helps the students to maintain their fitness, develop their muscular strength, increase their stamina and thus stretch their physical abilities to an optimum level. Physical fitness helps to inculcate the importance of maintaining a healthy body, which in turn keeps them happy and energized. Sound physical fitness promotes, increased absorption of nutrients, better functioning of digestion and all other physiological processes and hence results in all round fitness.

OVERALL CONFIDENCE BOOSTER

Indulging in sports be it team sports or dual and individual sports, leads to a major boost in self-confidence. The ability to go on the field and perform instills a sense of self-confidence, which is very important for the development of a person's character.

Every victory achieved on the field, helps to boost a person's self-confidence. Moreover, the ability to accept defeat on field and yet believe in your own capabilities brings a sense of positive attitude as well. Thus participation in sports, martial

arts or even dance and aerobics, is always a positive influence on a student's overall personality and character and works wonders for his/her self-confidence.

AWARENESS ABOUT IMPORTANT HEALTH AND NUTRITION ISSUES

Physical education classes are about participating in the physical fitness and recreation activities, but they are also about gaining knowledge about the overall aspects of physical health. For example in today's world the problems of obesity, or anemia and bulimia are rampant amongst teenagers. Physical education provides an excellent opportunity for teachers to promote the benefits of healthy and nutritious food and cite the ill effects of junk food.

INCULCATING SPORTSMANSHIP AND TEAM SPIRIT

Participation in team sports, or even dual sports helps to imbibe a sense of team spirit amongst the students. While participating in team sports, the children have to function as an entire team, and hence they learn how to organize themselves and function together.

This process of team building hones a person's overall communications skills and the ability to get along with different kind of people. Thus participating in team sports instills a sense of team spirit, which is a great value addition to anyone's personality and helps a lot in all the future endeavors.

DEVELOPMENT OF MOTOR SKILLS

The ability to concentrate, the ability to swing the racket just at the right time are some of the examples of development of motor skills in the physical education classes. Participation in sports and several physical education activities helps to sharpen the reflexes of the students. It also brings order and discipline to the body movements and helps in development of a sound body posture as well. The hand-eye co-ordination improves as well.

IMPORTANCE OF HYGIENE AND SEX EDUCATION

Physical education classes also include sessions about the importance of personal hygiene and importance of cleanliness. Thus the physical education classes help the students to know the important hygiene practices that must be practiced in order to maintain the health and well being throughout the life.

In addition to this, the physical education classes also cover an important aspect that the children have to deal with at the age of puberty. Physical education classes also impart sex-education and hence help the students deal with their queries and doubts about the subject of sexuality.

ENHANCING OVERALL COGNITIVE ABILITIES

Physical education classes help to enhance the overall cognitive abilities of the students, since they get a lot of knowledge about the different kinds of sports and physical activities that they indulge in. For example a person who is participating in a specific type of martial arts class, will also gain knowledge about the origins of the martial art, and the other practices and historical significance associated with it. Thus physical education helps to enrich the knowledge bank of the students.

ENCOURAGING BUDDING SPORTSMEN

Physical education classes are an excellent opportunity for all the budding sportsmen and sportswomen who wish to make their mark in the world of sports. Physical education classes allow the budding sportsmen and sportswomen to explore and experiment with several areas until they find what interests them. After this, physical education classes also allow the students to indulge the sport of their choice and then go ahead to participate in several tournaments and competitions, which help to give the students an exposure to the competitive world of sports.

A STRESS BUSTER AND SOURCE OF ENJOYMENT

In addition to the health benefits and the knowledge

benefits that the students get from the physical education classes, one important aspect of it remains to be recreation. Students, who are busy with their other subjects in the curriculum, often get exhausted with the listening, reading and writing pattern of studying and need a recreational activity as a source of recreation. Sports and other physical fitness activities offered in the physical education class are a welcome break for the students.

PROMOTING HEALTHY LIFESTYLE IN ADULTHOOD

Children, who learn the importance of health and hygiene in their early ages, tend to grow up to be responsible and healthy adults who are well aware of the benefits of a healthy lifestyle. Thus the overall physical education programme, that includes different types of physical activities and sports and also provides important information about hygiene and overall health, helps in creating well-informed pupils. A well-balanced and all-round physical education class helps to create responsible adults who know the importance of a healthy lifestyle.

AIM AND APPROACH OF THE CURRICULUM

The aim of physical education is to enable all students to enhance their quality of life through active living. The Physical Education 11 and 12 curriculum builds on and expands the curriculum developed for Kindergarten to Grade 10.

Physical Education 11 and 12 provides opportunities for students to experience a variety of recreational pursuits, career interests, and activities that promote lifelong, healthy living. Students focus their learning in areas of personal interest and participate in activities that promote social interaction, community responsibility, and skill development.

In Physical Education 11 and 12, teachers work with students to develop programmes to meet student needs and interests. Programmes are structured so that the duration,

intensity, and frequency of activities motivate students to meet their individual goals. Students participate in a balance of activities from the movement categories.

PHYSICAL EDUCATION CURRICULUM

The Physical Education 11 and 12 curriculum focusses on promoting healthy attitudes and regular physical activity as important parts of each student's lifestyle. It emphasizes analysing and improving physical competence, maintaining personal fitness, developing effective leadership and sports-management skills, and planning for careers.

In senior physical education programmes, students:

- apply the concepts of a balanced, healthy lifestyle to design programmes for themselves and others.
- apply the elements of movement and knowledge of fitness to improve personal functional levels of competence in a variety of activities and environments.
- demonstrate an appreciation of the needs of various groups and adapt activities for them.
- recognize an activity's impact on the environment.
- integrate safety practices and the prevention and management of sports injuries in a variety of physical activities and environments.
- apply knowledge and skills from certification programmes.
- model and apply leadership skills and positive personal qualities in volunteer work and physical activities at school and in the community.

CURRENT PHYSICAL EDUCATION CURRICULA

As in the past, the present curriculum focusses on the unique and significant contributions of physical education in

the development of every student. The previous curriculum (1987) organized important goal statements under three domains: affective (attitude), cognitive (knowledge), and psychomotor (skills).

The prescribed learning outcomes of the new curriculum are grouped under three curriculum organizers: Active Living, Movement, and Personal and Social Responsibility. In each organizer, the prescribed learning outcomes incorporate learning from the three domains.

In addition, the previous curriculum provided seven movement categories, while the new curriculum has only three.

Nature and Scope of Physical Education, Exercise Science, and Sport:

- What is “contemporary physical education?”
- How do different areas of physical education relate to the field overall?
- What is the importance of creating your personal philosophy of physical education, exercise science, and sport?

Goals for Physical Educators

- Access to physical education and sport for all, regardless of: age, gender, race, ethnicity, sexual orientation, disability status, income, educational level, geographic location and ability.
- Prevent disease and positively contribute to health and well-being of all participants.

Expansion of Physical Education, Exercise Science, and Sport:

Moved from the traditional school setting to:

- Community.
- Home.
- Worksite.

- Commercial and Medical Settings.
- Corporations.

Who says Physical Activity is Good?

- National Reports.
- "Physical Activity and Health: A Report of the Surgeon General."
- "Healthy People 2010."
- "Promoting Better Health for Young People through Physical Activity and Sports".

Definition: Physical Education

- Physical education.
- An educational process that uses physical activity as a means to help people acquire skills, fitness, knowledge, and attitudes that contribute to their optimal development and well-being.
- Contributes to the development of the whole person.
- Education.
- An on-going process that occurs throughout our lifespan.

Definition: Exercise Science

- Exercise Science.
- The scientific analysis of exercise or physical activity through theories from many different disciplines such as biology, biochemistry, physics, and psychology.

Definition: Sports

- Organized competitive activities governed by rules that standardize the competition and conditions so individuals can compete fairly.
- Competition against oneself or opponent(s).
- Strategy and skill play a significant role in the determination of the outcome.

Definition: Athletics

- Highly organized, competitive sports.
- Skillful participants.

Our Physical Activity Challenge

Improve Participation of Populations with Low Rates of Physical Activity: Current Participation Patterns:

- Women are generally less active than men at all ages.
- African Americans and Hispanics are generally less active than whites.
- People with low incomes are typically not as active as those with high incomes.
- People with less education are generally not as active as those with higher levels of education.
- Adults in the Northeast and South tend to be less active than adults in the North Central and Western States.
- People with disabilities are less physically active than people without disabilities.
- Participation in physical activity declines with age. By age 75, one in 3 men and one in two women engage in no physical activity.

U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. Washington, DC: U.S. Government Printing Office, November, 2000.

The Field (More than a Playing Surface!)

- Field: "A combination of a well-established discipline and one or more professions that deliver a social service and are focused on common goals." (Corbin).
- Discipline: "Organized body of knowledge embraced in a formal course of learning." (Henry).

Physical Education, Exercise Science and Sport: The Profession

- Profession.
- An occupation requiring specialized training in an intellectual field of study that is dedicated to the betterment of society through service to others.

Some examples of professional organizations:

Organizing the Profession

- With developing technologies, knowledge, and methods of enquiry from other disciplines in the 1960s, physical education, exercise science, and sport broadened its horizons to incorporate the fields of psychology and sociology.

The result:12 subdisciplines:

Sub-disciplines

- Exercise physiology.
- Sports medicine.
- Sport biomechanics.
- Sport philosophy.
- Sport history.
- Sport psychology.
- Motor development.
- Motor learning.
- Sport sociology.
- Sport pedagogy.
- Adapted physical activity.
- Sport management.

Exercise Physiology

- Impact of exercise and physical activity on the human body.

- Short-and long-term adaptations of the various systems of the body.
- Effects of physical activity and exercise on the health status of different populations.
- ACSM.

Sports Medicine

- Medical relationship between physical activity, sports-related injuries, and the human body.
- Prevention-the design of conditioning programmes, fitting of protective equipment, and counseling regarding proper nutrition.
- Treatment and rehabilitation-the assessment of injuries, administration of first aid, design and implementation of rehabilitation programme and treatment.

Sports Biomechanics

- Applies the methods of physics to the study of human motion and the motion of sport objects.
- Study the effects of force on the body and sport objects.
- Mechanical analysis of activities (production of power, leverage, and stability).
- Analysis of effectiveness and efficiency of movements.

Sports Philosophy

- Study of the nature of reality and values of movement for all participants.
- Debate critical issues, beliefs, and values relative to physical education and sport (i.e.What is the relationship between the mind and the body?).
- Influences thoughts, actions, and decisions in our professional endeavors and personal lives.

Sports History

- Critical examination of the past with a focus on events, people, and trends that influenced the direction of the field.
- The “who, what, when, where, how, and why of sport” is examined within the social context of the time.
- Looking into the past provides greater understanding of present events and insight with respect to the future.
- NASSH: North American Society for Sport History publishes the Journal of Sport History.

Sports and Exercise Psychology

- Uses principles from psychology to study human behaviour in sport to enhance performance.
- *Sport Areas*: achievement motivation, arousal regulation, goal setting, self-confidence, leadership, and team cohesion.
- *Exercise Areas*: exercise addiction, adherence, motivation, and satisfaction.

Sports and Exercise Psychology

- Sport areas:
- Achievement motivation.
- Arousal regulation.
- goal setting.
- Self-confidence.
- Leadership.
- Team cohesion.
- Exercise areas.
- Exercise addiction.
- Adherence to exercise.

- Motivation.
- Satisfaction.
- Uses principles from psychology to study human behaviour in sport to enhance performance.

Motor Development

- Interaction of genetic and environmental influences on movement and lifespan motor development.
- Use theories of development to design appropriate movement experiences for people of all ages and abilities.

Motor Learning

- Study of factors that influence an individual's acquisition and performance of skills, such as practice, experience, use of reinforcement, and condition of learning environment.
- Progression through stages of learning from a beginner to a highly skilled performer.

Sports Sociology

- Study of the role of sport in society.
- "What is the influence of society on sport?"
- "What is the influence of sport on society?"

Centre for the Study of Sport in Society at Northeastern University publishes the Journal of Sport and Social Issues.

Sports Pedagogy

- Study of teaching and learning.
- Creation of effective learning environments, instructional strategies, outcome assessment, and relationship of instructional process to learning.
- Development of effective practitioners through the analysis of the behaviours of teachers/coaches and students/athletes.

Adapted Physical Activity

- Providing individual programmes and services that encourage participation to the fullest extent by those with disabilities.

Sports Management

- Encompasses the managerial aspects of sport and sport enterprise.
- Facility and personnel management, budgeting, promotion of events, media relations, and programming.
- The Journal of Sport Management is the official journal of the North American Society for Sport Management (NASSM).

A New Name for the Field

- Physical Education-traditional, but too narrow; does not reflect the expanding nature of the field.
- Kinesiology-study of human movement, but the public is not familiar with the term.
- Exercise and Sport Science-reflects the broad emphasis of the field and easy to understand.
- Physical Education and Sport-traditional, familiar, and includes sport as a vital part.
- No common agreement as to the name of the field, but there is a growing central focus: Physical Activity.

Allied Fields

- Health.
- Health Instruction.
- Health Services.
- Environmental Health.
- Recreation.
- Dance.

These fields share many purposes with physical education, exercise science, and sport, but the content of the subject matter and methods to reach their goals are different.

Definition of Terms

- *Health*: A state of positive well-being associated with freedom from disease or illness.
- *Wellness*: A state of positive biological and psychological well-being that encompasses a sense of well-being and quality of life.

Definition of Terms

- *Holistic Health*: The physical, mental, emotional, spiritual, social, environmental, and genetic factors' influence on an individual's life. (similar to wellness).
- *Quality of Life*: Overall sense of well-being that has a different meaning for each individual.

Definition of Terms

- *Physical Activity*: Any bodily movement produced by the contraction of the skeletal muscles that increases energy expenditure above the baseline level.
- *Exercise*: physical activity that is planned, structured, and repetitive with the purpose of developing, improving, or maintaining physical fitness.

Definition of Terms

- *Physical Fitness*: The ability to perform daily tasks with vigour and without undue fatigue, and with sufficient energy to engage in leisure-time pursuits, to meet unforeseen emergencies, and the vitality to perform at one's fullest capacity.
- *Health-related and Performance-related physical fitness*: what are the components of each?

Physical Fitness

- Health-related Fitness.
- Cardiovascular endurance.
- Body composition.
- Flexibility.
- Muscular endurance.
- Muscular strength.
- Performance-related Fitness.
- Agility.
- Speed.
- Coordination.
- Power.
- Reaction time.
- Balance.

Philosophy

- "The love of wisdom" (Greek).
- A set of beliefs relating to a particular field.
- A system of values by which one lives and works.
- Helps individuals address the problems that confront them through the use of critical thinking, logical analysis, and reflective appraisal.

Branches of Philosophy

- Metaphysics-the ultimate nature of reality; what is real and exists.
- Epistemology-the nature of knowledge.
- Logic-Examines ideas in an orderly manner and systematic way.
- Axiology-the nature of values.
- Ethics: issues of right and wrong, responsibility, and standards of conduct.
- Aesthetics: the nature of beauty and art.

General Philosophies

- *Idealism*: The mind interprets events and creates reality; truth and values are absolute and universally shared.
- *Realism*: The physical world is the real world and it is governed by nature; science reveals the truth.
- *Pragmatism*: Reality and truth is determined by an individual's life experiences.
- *Naturalism*: Reality and life are governed by the laws of nature; the individual is more important than the society.
- *Existentialism*: Reality is based on human existence; individual experiences determine what is true.
- *Humanism*: Development of the full potential of each individual. Emphasized meeting the needs individuals' needs.

Philosophical Approaches

- "Education of the Physical."
- Focus on fitness development and acquisition of skills; the development of the body.
- "Education through the Physical."
- Focus on the development of the total person: Social, Emotional, Intellectual, and Physical development.

Sports Philosophy

- Study of the true meanings and actions of sport and how sport contributes to our lives.
- Eclectic philosophy of education (1875-1950).
- Comparative Systems Approach (1950-1965).
- Disciplinary Approach (1965-present).
- Sport philosophy offers us guidance in addressing inequities in physical activity opportunities experienced by underserved populations.

Why Develop Your Own Philosophy?

- Assists in the development and clarification of beliefs and values that guide your behaviours.
- Aids in decision-making.
- Helps determine goals, objectives, and methods of instruction and evaluation used in physical education programmes.

EDUCATION IN INDIA: SPORTS AND PHYSICAL FITNESS

If a career in sports and physical fitness holds your fancy, there are three main options you can choose from. Pursue the sport or game on a full time basis generally with sponsorship from an employer/promoter Become a trainer/instructor/coach for a game or sporting event. Finally use the experience acquired over years as a sports person to work in a related field, such as, sports journalism, sports goods manufacture/marketing or as commentator. To be a sports person one needs to be physically fit, energetic and enthusiastic. If aspiring to become a trainer or manager, a graduate degree in physical education can be pursued after Class XII (any stream with physical education).

Physical Fitness

General Fitness: In a more general meaning, physical fitness is a general state of good somatic health and abilities.

A handicapped person may nevertheless be physically fit. Fitness helps them to compensate disability.

Physical fitness is usually a result of regular physical activity, *e.g.*, physical exercise, and proper nutrition. Cardio is a type of fitness designed to improve cardiovascular strength.

Task-oriented Fitness

A person may be said to be physically fit to perform a

particular task with a reasonable efficiency, for example, fit for military service.

Military Style

In recent years, Military-style fitness training programmes have become increasingly popular among civilians. Courses are available all over the US and Europe.

They are usually taught by ex-military personnel. Very often the instructors held highly regarded positions within various military organizations. Often times the instructors were formerly Drill instructors, Special Forces Operatives or held otherwise distinguished positions.

These courses always have some common elements. They often focus on military style calisthenics and group runs. The courses are often held very early in the morning and will meet in almost any weather. Students can expect push-ups, sit-ups, pullups, and jumping jacks, as well as more obscure drills such as flutter kicks, sun worshippers and flares. Almost invariably a workout will include short runs while longer runs are more scheduled. Special forces are renowned for their level of fitness and intensity of their workouts.

Personality Traits

- Sports persons are required to be energetic, enthusiastic and physically fit.
- All professionals in this field must be absolutely committed to the profession and the game.
- Coaches and instructors have several years of experience and training.
- Patience, perseverance and a sporting spirit are required to excel.
- In allied areas of work, communication and business skills are gaining importance and value.
- A sportsperson's work needs psychomotor and physical conditioning.

Courses/Training

Courses:

- Class XII-any subject with physical education.
- Graduate degree in Physical education; Postgraduate degree in Physical education. Jobs as Physical education trainers/ educators/therapists/coaches.
- Graduation in Physical Education followed by Post graduation for Trainers and Managers.
- Graduation/ Post graduation in Physical Education and B.Phy.Ed for teachers.

Admission Procedure: Sports can be pursued at any age, hence the trajectory gives information on the schemes for promoting talent. Sports talent can be spotted at the school level. The Sports Authority of India has been constituted at the National level to encourage and develop acumen in sports. SAI has State level branches to organise, manage and conduct a host of schemes intended to promote sports facilities and assistance for the talented. Sports Authority of India (SAI) is responsible for training coaches, R&D in sports, physical education, R&D in physical education, sports promotion, nurturing talent, and training of athletes.

- *Age 9-12 National Sports Talent Scheme:* Talent in swimming, athletics, gymnastics as well as ball and net games which include tennis, hockey, basketball, table tennis, football, volleyball, badminton and wrestling are supported under this scheme. Students in the 9 to 12 age can qualify tests conducted by the Sports Authority. The tests check general and specific physical skills required for each of the disciplines. Selected students undergo sports training along with school education in one of the SAI sponsored schools. The sponsorship includes all expenditures including tuition fee, boarding, lodging, incidental expenditures, sports kits maintenance allowances, medical facilities, travel etc. Coaches provide the

necessary training to students selected under this scheme, conduct evaluation tests and maintain performance records.

- *Age 16-20 years Students:* Can benefit from the Hostel scheme in sponsored institutions. Special Area Games Schemes operate for identifying and nurturing talent from all regions in the country.
- *Army:* Regimental training centres have schools where students with sporting talent from neighbouring areas are enrolled. Education, training in sports, and military training completes the curriculum.
- *Scholarships at Colleges/universities:* Students participating in national championships, inter-university tournaments are eligible for the Sports Talent Scholarship awarded by the Government of India, Department of Youth Affairs and Sports. Candidates are selected on the basis of merit, ascertained by a duly constituted Selection Committee.
- *Private Sponsorships:* SAI has six regional sports centres. Coaching facilities in popular sports such as badminton, tennis, hockey and cricket are provided. The facilities provided are of international standards. Special Sports Academies/Federations provide similar facilities. These are often privately sponsored and sportspersons with proven talent are supported by these academies.

3

Educational Administration and Organized Planning

Every person concerned with health and physical education needs to understand the principles of administration. The chairman or head of the department must use technical information as the basis of the organized planning, analyze problems according to their functional relationships to other affairs of the school and community, and plan a programme which begins with the situation as it exists and moves forward towards the realization of broader and more comprehensive goals. All members of the staff, including teachers and supervisors, have administrative functions to perform in the daily conduct of their work which contribute to the successful accomplishment of avowed educational outcomes. Thus mutual understanding and support of established administrative practices is the professional responsibility of each person employed in the programme.

The community has a right to expect of its teachers a broad background of preparation; of its supervisors, successful experience in addition to preparation. Teachers, supervisors and administrators must have personality, that intangible something which enables them to get along with people and to inspire confidence and respect. They must understand the philosophical, psychological, sociological, and political bases

of general education. They must possess a philosophy of health and physical education which clearly indicates the function of this programme in the complete education of youth. They must have ideals, but temper these ideals by expediency. They must be able to plan intelligently, take the programme where they find it, consider the needs and resources of the community, and, each in his own professional sphere, establish a working basis which gives direction to the programme for years to come. These are the essentials of administration.

A DEFINITION OF ADMINISTRATION

Administration means providing the necessary constructive leadership to direct the programme, and the establishment of such policies and procedures and enable the programme to function effectively. In a much narrower and more technical sense administration means organized authority.

BASIC BELIEFS OF HEALTH AND PHYSICAL EDUCATION

Every administrator must establish a *working philosophy* or a series of *basic beliefs* for his programme. These *basic beliefs* provide a foundation upon which the entire administrative structure is built. *Basic beliefs* for health education or physical education indicate the contributions of these special fields to all education and to life. But first, the administrator needs to have a *philosophy* of education which to him seems acceptable and satisfactory. Second, he needs to establish *basic beliefs* for his special programme which coincide with the general *philosophy*, and which show precisely how his special programme functions in the life of the child.

There are two reasonably easy ways of formulating *basic beliefs*. Some persons prefer to follow one method, some the other. The first method is to describe a youth, at a given age or grade level, who is health educated or physically educated. What does he look like? What does he know how to do? What

ideals, attitudes, skills and appreciations has he formed? In this description one is sure to reflect his philosophy of education and the contribution which health education or physical education makes to complete education. The second method is to write: "My Philosophy of Physical Education," or "My Basic Beliefs About Physical Education." Under this caption follows, "I believe that...", and the writer indicates what he does believe or stand for in his profession.

Policies and Procedures—After the list of basic beliefs has been prepared, the administrator is ready to establish *policies and procedures* for his programme. In fact *policies and procedures* flow naturally out of his basic beliefs. Administrative *policies* of health and physical education are general concepts or goals applicable to and consistent with all education. *Policies* reveal a person's ideals and hopes; ideals which he hopes to attain some day.

One might, for example, select the general accepted *policy*: "A programme of physical education that meets the inherent and individual needs of each child." Many administrators would approve another *policy*: "Credit towards promotion and graduation for health and physical education awarded on a basis comparable to academic education." Some persons do not believe in credit for health and physical education and would, therefore, exclude the second example. *Policies* are used in administration for the same purpose that aims are employed in constructing the course of study. A person may be guided and influenced by study but his basic beliefs and *policies* are his own, carved from the foundation of his biological and social inheritance and fashioned after the pattern of his education.

Administrative *procedures* are interpretations of policies in terms of time and place. Administrative *procedures* adapt policies to meet local conditions; the expedient thing to do for the present; plans which lead towards the fulfillment of policies. *Procedures* in administration are like objectives in curriculum building. A person might, for example, willingly accept the policy of providing a programme of physical education to meet

the needs of each child, but putting this policy into practice would involve *procedures* affecting the entire school system. Is the school organization of traditional type or does it follow the principle of individual needs? Were the teachers of physical education prepared in colleges or universities which emphasized formal gymnastics and calisthenics, or were they trained in schools using a more informal programme? Are students assigned to physical education classes on the basis of reasonably homogenous groups and in small numbers, or do the wide range of interests and abilities and huge class size restrict consideration for individual needs? Numerous factors relating to the local situation must be learned and taken into account in listing the *procedures* to be followed which lead to the accomplishment of the administrative policy.

Survey Technics—The *survey* is used to obtain information relative to existing local conditions and to provide the basis for intelligent future planning.

First, all pertinent data are collected; these may be designated as the *findings* of the surveyor. Second, proposals are made for improving conditions found; these are the *recommendations* of the surveyor. The *findings* tell what the conditions are, and the *recommendations* disclose what the investigator believes should be done to improve the situation.

Surveys may be classified into two types; the *general survey*, and the *special survey*. The *general survey* includes all parts of the programme such as facilities, personnel, finance, courses of study, health examinations, instruction, and others. The *special survey* is confined to one aspect of the programme. At the beginning the *general survey* is superior to the *special survey* because it gives a broader picture of the entire programme with interrelationships and implications shown in perspective. Later the *special survey* may be used to advantage for detailed study of one or more administrative activities.

Some years ago *survey* technics consisted of collecting pertinent information about affairs in the local situation, and comparing these data with established standards. Recommend-

ations were based on such comparisons. For example, the findings might show that each school nurse supervised 4000 children. Since a generally accepted standard is 1500 to 2000 school children per nurse, it would be recommended that the number of nurses be increased.

A more recent development in survey technic directs greater attention to the functional operation of the programme than to statistical comparison. Instead of comparing obtained data with established standards, the attempt is made to determine how well the school is accomplishing its avowed purposes. Followers of this plan believe that it is more significant for administrators to establish policies and procedures on a local functional basis, and to evaluate success in terms of the degree to which these goals are attained, than merely to compare conditions in the local situation with standards based principally on the law of averages. If the avowed purposes of the programme are adequate in meeting the needs of children the plan appears highly commendable. In either case the technics of collecting information are essentially the same. Surveying is a continuous process. Change is inevitable, and change in one school activity brings modification in others. The *continuous* survey conducted in one form or another provides the professional nourishment out of which the administrator's *basic beliefs*, *administrative policies*, *administrative procedures*, and *one-three-five-year programme* become functional.

One-Three-Five-Year Programme—We have seen how the administrator at the work first establishes *basic beliefs* about health and physical education which are in accord with his philosophy of general education. He next prepares *administrative policies* which represent goals he would like to accomplish. Through the *survey* he interprets his *administrative policies* into *administrative procedures* which connect desired goals with existing conditions.

The next step is to arrange administrative procedures into three groups: the first-year group; the third-year group; and

the fifth-year group. Into the first-year group will appear those procedures which may be completed during the first year. Those requiring more time will be assigned to the third- or fifth-year programme respectively.¹ Allocation of items to one year or another merely provides a definite plan for the administrator. Due to unforeseen developments certain items may be transferred from one year to another, either up or down the scale.

The question is sometimes asked, "How am I to know which year's programme best fits this particular item?" There are no hard and fast rules governing the assignment of procedures since the types of school organizations vary in different communities. Generally speaking items in the first-year programme will include those over which the department of health and physical education has control. Suppose, for example, the policy is established, "In-service training of personnel is a responsibility of the department." Let us further assume that the procedures are listed as: staff meetings; visitation; attendance at conventions and summer sessions; and others. Nearly all of these procedures could be effected by the department and hence belong to the first-year programme.

The third-year programme will include those items involving school interrelationships, *i.e.*, affairs beyond the administrative province of the department but confined to the school organization.

The following policy is an example: "Supervision of elementary classroom teachers should be regulated by appointment from the central office and upon request by the building principal rather than by the rotation-inspection method." The procedures might be listed as: approval of change by school superintendent and board of education; approval by supervisors; approval by building principals; approval by classroom teachers; reorganization of courses of study; start with one school where the plan will function smoothly; and others. Administration of functions involving school interrelationships takes time; such items belong in the third-year programme. The

fifth-year programme will contain those items concerned with community interrelationships. The following policy is an example: "When school children are not using physical education facilities and equipment they should be available for out-of-school recreational groups." Here the procedures include a wide range of people and interests. In establishing the procedures a number of questions must be answered. Does the board of education have legal right to loan these facilities to out-of-school groups? Perhaps certain groups will be allowed to use the school premises while others will not; what basis will be used to accept or reject requests? Shall outside groups be expected to provide adequate supervision of activities? Who will pay for or replace broken equipment? Administrative matters involving community interrelationships usually require a formulation of policy by the office of the school superintendent as well as by the department of health and physical education.

The one-three-five-year programme is an indispensable administrative aid. It gives direction to the programme. It requires serious preliminary thought followed by careful planning and organization. It is to be used as a guide. It is not to be followed slavishly, but reconstructed and organized in accordance with changes in the school or community. The successful administrator understands his community. He recognizes changes in the community and knows the reasons for these changes before they are apparent to the general public. He adapts his one-three-five-year programme to meet these changing conditions sometimes postponing a first-year procedure because of unusual developments, sometimes coming forward with a fifth-year procedure for the same reason. The one-three-five-year programme means looking ahead, planning for the future; it means efficiency.

A DEFINITION OF PHYSICAL EDUCATION

Definitions change with the ideas that express people's notions of values, of importance, of measures, and of life. The ideas of the time and place have ever shaped and fashioned all

parts of education. Thus, physical education has responded to dominant ideas. Perhaps the most influential ideas in shaping modern physical education in the United States are the concept of organismic unity, the doctrine of interdependence between organism and environment, and the clear recognition of social and emotional as well as physiologic outcomes of physical activities. As a result of these new orientations, physical education ceases to be merely a gymnastic technic, a series of steps, or a coordination; it becomes a rich and varied practice that has its focus not in the muscles but in the living of the individual. Although the physical is not neglected in this view, the chief outcome is not *always* perspiration; in some instances it may be the interests developed. The teacher of physical education can agree with other teachers who hope that young people will learn to like wholesome living.

From this point of view, "physical education is the sum of man's physical activities, selected as to kind, and conducted as to outcomes." Since physical education is to be considered as a means of education through physical activities rather than an education of the physical—how absurd the latter—the phrases "selected as to kind" and "conducted as to outcomes" assume considerable importance.

Selected as to kind implies at the very outset that activities differ, that there are kinds, and that a selection is indicated. Activities are of varying worth. What ones shall be chosen? Obviously some are better than others. A choice is required but, when one chooses, a standard is necessary. What standards should one have in selecting physical activities? The old ones of muscular development and strength are not to be discarded, but they need tremendously to be supplemented with skills and interests that not only contribute to wholesome leisure but also minister to the development of the personality in desirable ways. Any physical education that selects its activities on the basis of mere muscular development is doomed to disappointment and despair when the larger problems of social and individual adjustment in modern civilization are seriously faced.

It is the simplest matter of common sense to observe that individuals will carry into their free hours of leisure those activities in which they have found joy. Obviously, the school of tomorrow must enlarge tremendously its plant and facilities for leisure time education. A football field for a dozen boys and corridors and classrooms for the calisthenics of the school will be known for what it actually is—a tragedy and a despair. Physical education as a way of living requires then that we think of school days as days of opportunity for the education of youth in preferences for education in skills that bring joy as well as in skills that bring financial competence since man does not live by bread alone.

The second phrase, *conducted as to outcomes*, is equally significant. One is not to neglect the traditional outcomes in physiological results, in growth and developmental accruals, or in neuromuscular skills, but a proper emphasis in modern education is upon an education in interests and attitudes as well. It is precisely this emphasis that modern physical education is disposed to make. It is convinced that an education in physical activities may mean a real interest in whole-some recreation, that an attitude favouring play, dramatization, and art may touch lives that would otherwise be merely dull and dignified. This conviction is so real that we are ready to cast aside many of the traditional practices in physical education to the end that boys and girls may secure an education that will enrich and deepen life.

DEVELOPMENT OF THE TERM “PHYSICAL EDUCATION”

A changing terminology may reflect the vacillating moods of an interest that has no fundamental principles, or on the other hand, the growth and development of a movement that continually shifts to new grounds as it advances in its philosophy, technical achievements, and determined outcomes. The latter seems to be a fair explanation of what has taken place in health and physical education. The earliest efforts of physical education were primarily hygienic in character and

the prophylaxis of a practical hygiene was the motive force behind the imitation of such departments in colleges. Body building, body development, muscular symmetry were frequently mentioned, but these seemed justified by their advocates on grounds of health and general welfare. These motives that influenced the colleges to promote phases of health and physical education shaped the early purposes of the public schools in similar direction. As programmes developed and changing ideas altered the content and evolved new motives, the terminology was altered to express the new ideas. In the early beginnings of health and physical education, the terms "physical culture and hygiene" were used quite independently. The former had more vogue than the latter partly because it was an expressive phrase and had activities to offer. Hygiene was promoted by different groups but received its chief impetus from the status legislation requiring instruction in the schools regarding the "effects of alcohol and tobacco." The content of hygiene in the schools was enriched somewhat by the movement for medical inspection that began about 1894, but until after World War I, its status was essentially perfunctory, uncoordinated, and without vitality.

The activity programme at first was widely known as *physical culture*. This may be attributed to the influence of Delsarte, but in the colleges it parallels the use of the term, "culture," with respect to numerous other subjects of instruction. For example at Smith College in 1879, the catalogue lists courses in aesthetic culture, religious culture, social culture, physical culture, and intellectual culture.

In some institutions the term *physical training* began to be used and gained a wide acceptance due no doubt to the influence of the Land Grant Act of 1864. The German and Swedish systems of gymnastics that were introduced in the early part of the nineteenth century were military in character and promoted the training idea. During the period when programmes of activities were chiefly calisthenic and gymnastic in character, and were under the influence of foreign systems of gymnastics, the term "physical training" was

appropriate. There were many forces in social and educational developments that led to the present term *physical education*. The change in programme, the recognition that education takes place in various ways, and the declaration of physical educators to serve the larger purposes of education were doubtless influential factors. In a few places, the term “physical training” is still employed although physical culture has passed entirely out of the schools.

This shift, from physical culture through physical training to physical education is well shown by Elliott in her study of physical education in state universities. It should be noted that the term “physical education” was used before 1893 (Elliott gives data only on state universities). In fact, Lewis in the spring of 1861 established a training school for teachers in Boston which he called the Normal Institute for Physical Education.

IMPLICATIONS OF THE DEFINITION FOR ADMINISTRATION

The definition of physical education suggests three implications that need elaboration and discussion: (1) Physical education is an indispensable education; (2) physical education is an education *through* the physical rather than *of* the physical; and (3) physical education unifies school life.

PHYSICAL EDUCATION AN INDISPENSABLE EDUCATION

Physical education is indispensable in modern society. In the first place, aside from the influence of heredity and nutritive conditions, physical education is the sole source for the development of vitality. Organic power is dependent in large part upon the activities of youth and neglect of physical education in childhood produces abnormal adult types. Secondly, physical education is the sole organized means for the development of neuromuscular skills so essential for the proper functioning of the individual as a moving, motor mechanism. There are doubtless, also, vast contributions from

these skills to the complete orientation of the individual as a thinking, feeling, and acting organism.

Thirdly, physical education is indispensable today as the most important agency to develop attitudes towards play and to combat the sedentary life and its associated evils. No subject in the schools and no agency outside the schools is so well prepared to promote the idea that play is a part of the good life. There is no need to argue the necessity for such teaching. Society today gives numerous signs that play and recreation are essential. To keep alive the play motive requires education of people in skills that will provide satisfactions in the activities of recreation. Dubs do not enjoy activities in which they falter. Some excellence is necessary.

Fourthly, physical education is indispensable for setting up standards of sportsmanship. Games offer the laboratory where vital attitudes are formed and the teaching of these, so essential for sport, is equally demanded for the whole of life.

Physical Education an Education through the Physical.—No one can examine earnestly the implication of physical education without facing two questions. These are: Is physical education an education of the physical ? Is physical education an education through the physical ? It is clear that an education of the physical would have some concomitant learnings in addition, and also that an education through the physical would produce some distinct physical gains. Nevertheless, there are in these two questions two points of view, two emphases, two ways of looking at physical education.

Education of the physical is a familiar view. Its supporters are those who regard strong muscles and firm ligaments as the main outcomes. Curiously enough this restricted view is not heeded alone by physical educators but also by those who talk about educational values, objectives, and procedures. In effect, such a view is a physical culture and has the same validity that all narrow disciplines have had in the world. The cult of muscle is merely another view of the narrowness that fostered the cult of mind or the cult of spirit.

The desire to focus human effort on well defined objectives may lead to partial views. In educational endeavor, whether secular or religious, the partial view frequently obtains. The history of man is replete with records of special disciplines. Vestiges of the super sensual discipline that ruled Europe from the fourth to the fourteenth century remain in our Western world today. Speech, customs, beliefs, attitudes—all share in this heritage that found the only true reality in spirit. The cult of mind has never declared its principles so boldly, although its practice in schools and colleges for generations needs no descriptive statement. Probably the cult of muscle has been the most ridiculous of the three.

Physical education in its newer role seeks no single justification for its service to man. Army draft boards may reveal unparallel physical deterioration in our young men, but no modern physical educator, sensitive to the complex and varied needs of man will rush to the conclusion that strength is the sole value or that weight lifting affords an adequate programme. Neither "body" nor "mind" alone supplies an answer to the vexing problems of modern life. Science has taught too well! Physical education views man as a unity. Not yet knowing the possibilities of the physical, it follows Aristotle in declaring also that we shall never know until the physical finds its true function as instrument for the whole of which it is an indissoluble part. Materialism consists not in frank recognition of the physical, but in assigning it to a spurious supremacy. "There can be no materialism in utmost emphasis upon physical education," writes MacCunn, "so long as 'Body for the sake of soul is, as it was with Plato, the presiding principle of educational action."

This recasting of the scene for physical education is no superficial move but a tendency of deeper growth. It holds that we need to aim higher than health, than victorious teams, than strong muscles, than profuse perspiration. It sees physical education primarily as a way of living, and seeks to conduct its activities so as to set a standard that will surpass the average and the commonplace. There is in such a view something of

the loftier virtues of courage, endurance, and strength, the natural attributes of play, imagination, joyousness, and pride, and through it all the spirit of splendid living-honest, worthy, competent.

AUTOCRATIC AND DEMOCRATIC ADMINISTRATION

Administrators differ in many respects. Some are efficient in office routine. Others excel in formulating policies, delegating to subordinates the execution of details. Some prefer to direct personally the affairs of the department. Others place the responsibility on staff members. If the administrator in an autocratic disciplinarian he dictates the policies and procedures, asserts that he, as the administrator, knows best what should be one, claims the responsibility of his, and contends that since he is to be held responsible by higher authority he will determine the course of action. If he is imbued with the principles of democracy, the administrator shares responsibilities and conducts his department with greater freedom. Extreme examples of autocratic and democratic administration may be expressed as follows: Many years ago Jowett's advice to administrators was, "Never retract, never explain. Get it done. Let'em howl." A super-intendent in one of our largest cities has adopted the policy, "Administration should be organized in such a way that all persons affected by the decision shall share the responsibility in making the decision.

Many school superintendents, principals, or directors of health and physical education conduct their professional affairs according to one pattern or the other. Formerly the dictator type of administrator was most frequently encountered. In more recent years the trend has been in the opposite direction. Doubtless most administrators accept a middle-ground somewhere between the two extremes. One administrator may arrive at a decision, call a meeting of those persons affected by the decision, and try to get them to see his point of view. Through his salesmanship or fear of consequences the

subordinates accept the decision without question. At best this closely resembles the autocratic type of administration. Another administrator delays making a decision until the various interest groups have been given the opportunity to voice their opinions. After carefully weighing the evidence on all sides the administrator makes his decision which then becomes the departmental policy. Decisions arrived at by this method more closely approximate the democratic types of administration.

The training, personality and ability of the administrator largely determine the course which he will follow. There is no one best type of administration, although contemporary educational thought turns away from authoritarian doctrines and moves towards democratic freedom.

The administrator should experiment with many actual problems and choose the kind of administrative practice which seems most satisfactory to him. Unquestionably the plan employed by his superior officer, the superintendent or principal will guide him in making his decisions, since the conduct of affairs in health and physical education should follow the general plan of education established for the school system as a whole or by the principal as the chief executive officer of the building.

4

Development of Physical Education in the Schools

Until recently in the history of the United States, physical education has not been recognized as an important part of the educational process. Many factors were responsible for this social flag. The attitude towards play as exemplified by the Puritans who thought of it as being the work of the devil and that as such it should be shunned and the belief among the early schools in America that play was a frill and something which should not be included in a curriculum with the classics and the three R's are two such factors. The belief in scholasticism with its stress on book knowledge, the lack of adequately trained teachers, and the belief that money should be spent on aspects of the school plant other than gymnasiums and swimming pools were also cogent factors in retarding the progress of physical education.

More recently in our history, however, there has been a rapid advancement of physical education as a result such events as the introduction of the Swedish and German systems of gymnastics into the United States, the industrialization of the country, the increased number of children going to school, the recognition of the importance of training the "whole" child, the mushrooming of teacher training institutions, and the growth of athletics in colleges with the secondary schools aping

the higher educational institutions. These factors have resulted in an increased number of physical education buildings being added to school plants, legislation being passed providing for physical education in the schools, training of teachers of physical education, and an upgrading of the requirements of such teachers.

Physical education has taken its place alongside the other major subjects in the curricula of schools. No longer is it considered a frill, and no longer is it believed that physical education consists only of exercises done to command.

Instead, it has a major contribution to make in the growth and development of all youth. By reason of this fact, physical education personnel hold positions of high respect and prestige on school faculties and in community life.

CONTRIBUTIONS OF PHYSICAL EDUCATION TO GENERAL EDUCATION

A fuller description of the role of physical education in the educational process is needed at this point. For purposes of organization it seems that such a discussion may be grouped under four headings, which the Educational Policies Commission lists as being objectives towards which education is striving.

These are: (i) the objectives of self-realization, which are concerned with developing the individual to his fullest capacity in respect to such things as health, recreation, and philosophy of life; (ii) the objectives of human relationship, which refer to relationships among people on the family, group and society levels; (iii) the objectives of economic efficiency, which are interested in the individual as a producer, a consumer and an investor; and (iv) the objectives of civic responsibility, which stress the individual's relationship to his local, state, national, and international forms of government. Physical education, as a phase of the total educational process, contributes to each of these objectives.

THE OBJECTIVES OF SELF-REALIZATION

The objectives of self-realization are aimed at developing the individual so that he realizes his potentialities and becomes a well-adjusted member of society. 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 towards adult life. Physical education contributes to the objectives of self-realization by contributing to: (i) an enquiring mind, (ii) development in reading, writing and speaking, (iii) knowledge of health and disease, (iv) a desirable attitude towards family and community health, (v) skill as a participant and spectator in various sports, (vi) resources for utilizing leisure hours in mental pursuits, (vii) appreciation of beauty, and (viii) ability to purposefully direct one's life.

An enquiring mind is essential to the educated person. Only through curiosity is it possible to probe into the make-up of one's environment. The motor mechanism of the child enables 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 enquiring mind and aids in the solving of problems, which at times thwart the individual. As one grows older, 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 enquiring mind is active and he seeks the answers to his health and physical problems.

Physical education, through the various activities that it sponsors, helps an individual to speak, read and write with more effectiveness and clarity. Through the development of a healthy and physical fit body one has 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 which 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 his (Delsarte's) methods, combined them with their own ideas, and developed a system of exercises which contributed to health, poise, grace and beauty of face and figure. The ability to speak is recognized as being very worth while when it is realized that approximately 90 per cent of all communication is carried on via this method—through face-to-face conversation, telephone, radio, television, motion pictures and the like. In order to realize one's potentialities and achieve a satisfactory relationship with one's environment, the ability to speak effectively is imperative.

The ability to read efficiently is important 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 contributes to discrimination in reading by pointing out scientific materials, which are available in regard to the maintenance and promotion of one's health and physical fitness. It discounts the literature of health and physical culture "faddists", quacks, quick-cure artists, and medicine men who are exploiting the public. It refers students to sources of

information where scientific information may be obtained. It develops in the student a critical attitude towards 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 discriminatory reading, physical education contributes to self-realization.

Physical education aids an individual to write effectively. The ability to express one's views in a clear, concise manner is a medium, which 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 adhered to. 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.

KNOWLEDGE OF HEALTH AND DISEASE

The educated person has an understanding of the facts that are pertinent to 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 two or three days a week.

One cannot expect to achieve stardom in professional athletics without a physically strong and healthy body. One cannot aspire to a high-salaried position in radio, engineering, the ministry, education, advertising, law, medicine, or dentistry unless his body can stand the rigours of long hours of study and work. One cannot expect to achieve happiness in living unless he is in good health. A knowledge of health and disease, therefore, 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 as to the importance of nutrition, exercise, rest and sleep; by informing him of the preventive and control measures that exist to guard against disease; by providing opportunities for vigorous out-of-doors 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 programme, the objectives of self-realization are brought much closer to attainment.

Family and Community Health: The educated person protects his own health, his dependent's 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 obtains 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 improve 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 knows that health is everybody's business.

Physical education provides a programme of activity to improve the physical and mental health of the individual, his family, and the entire community. In the schools a planned programme of physical activity is offered as an essential to the optimum body functioning of youth during this developmental period of their lives. It enables them to experience many pleasurable emotions and to develop organic power, which is essential to a healthy, happy and interesting existence. The groundwork for adult years is laid during this formative

period. Recreational programmes provide facilities and opportunities for the adult to continue, after leaving school, adapted physical activity so essential to health maintenance. 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 programme is essential to the health of all.

SKILL AS A PARTICIPANT AND SPECTATOR IN SPORTS

The educated person participates and observes sports and other pastimes. The stress of modern-day living with its quest for material possessions, its machine-type labour, 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 bitten by a bug, which has destroyed to some extent his sense of values in regard to entertainment. Many no longer wish to find entertainment through their own resources but, instead, desire to have professionals satisfy these needs. Too frequently they turn to the nightclub, to the horse races, or to some 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 objective which is educationally sound and should be encouraged more and more by educators. The so-called recreational 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 programmes. Physical education not only develops skill in the participant but at the same time

develops an interest and knowledge of other activities which 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 amounts of time he will utilize as a participant and as a spectator.

The balance is destroyed if one 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.

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 gamut of activities, which are more inactive in their nature but which 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 in providing the material for interesting stories of great athletes, such as Bob Feller, Jackie Robinson, Glenn Cunningham and Ben Hogan.

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 insurmountable. Physical education offers photography and painting enthusiasts subjects for their pictures. All have 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 teeing flies. Many other examples could be listed. Physical education acts

as a stimulating influence in playing upon one's mental resources for the utilization of leisure hours. Furthermore, it provides trained personnel who supervise and direct many of these recreational activities.

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 human body that is perfectly proportioned and developed. Physical activity is one of the keys to a beautiful body. Also, there is a beauty of movement, which is developed through physical activity.

When one picks up an object from the floor, it can be done with a great deal of 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 which is beauty in action. Anyone who has seen Wes Santee run, Ben Hogan drive a golf ball, Mickey Mantel field a fly in deep centre, Sammy Lee dive, Tony Trabert hit a tennis ball, Tom Gola hook a shot through the net, or Ted Williams hit a home run knows what beauty of performance means. Such beauty comes only with practice and perfection.

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 he

will believe in. 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 he believes in 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 procedures, and standards of conduct. The child is a great imitator, 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.

THE IDEAL PHYSICAL EDUCATION PROGRAMME PLACES HUMAN RELATIONS

THE OBJECTIVES OF HUMAN RELATIONSHIPS

Human relationships may be defined as the relationship that exists between individuals. Good human relations may be summed up in the Golden Rule: "Do unto others as you would have others do unto you". Good human relations imply that people live together, work together and play together harmoniously. Each individual appreciates the other person's viewpoint and attempts to understand his actions. Good human relations are found in families where brother and sister, mother and father, father and son, and mother and daughter live cooperatively and happily together. They are found among friends who are willing to help each other in time of need, among classmates who share responsibilities,

among neighbours who thrill to the accomplishments of others, and among workers who help solve each other's problems. Poor human relations also exist. These occur when a business competitor seeks an unfair advantage, when a football player drives a cleated shoe into an opponent's face, when a boy shows disrespect for his parents, and when a fellow worker condemns a colleague.

The question of human relations is one of the most pressing problems of this day and age. Good human relations is the key to a happy and successful life and a peaceful world. Therefore, it is important that education play its role to the fullest extent in accomplishing the objectives of human relationships.

Physical education can make a worth-while contribution in this area of human relations. This can be done through the following means: (i) placing human relations first; (ii) enabling each individual to enjoy a rich, social experience through play; (iii) helping individuals play cooperatively with others; (vi) teaching courtesy, fair play, and good sportsmanship; and (v) contributing to home and family living.

The human being is the most valuable and the most important consideration of anything in this life. Nothing is more important than human life. One human life is worth more than a handful of diamonds or any other abundance of material possessions that could be accumulated. It rates at the top of all the values in the world. Such being the case, then human welfare should receive careful consideration in all walks of life. When a new law is passed by Congress, there should be due consideration for its effect on human welfare; when a machine is invented, we should take into consideration if it will affect human beings beneficially or adversely; and when an accusation is made, the effect on human welfare should be considered. The more human welfare is considered the happier the living for all.

The ideal physical education programme places human welfare first on its list. When an activity is planned, it takes

into considered the needs and welfare of the participants; when a rule or regulation is made, the player's welfare is considered; when a student is reprimanded, his welfare and that of others are considered. The desire or convenience of the teacher is not the first consideration. The physical education programme takes into consideration the weak and the less skilled and makes sure adequate arrangements have been made for such individuals. It is a student-centred programme with the attention focused on the individuals for whom the programme exists. Throughout the entire procedure there is prevalent among students, teachers, and administrators the thought that the human aspects are the most important consideration. Through the media of precept and example, consideration of others is the keynote of the programme. When the student plays, he considers the welfare of others; and when the teacher plans, he considers the welfare of all. By placing human relations first, a spirit of good will, fellowship and joyous cooperation exists.

Play experiences offer an opportunity for a rich social experience. This experience can help greatly in rounding out a child's personality, in helping him to adapt to the group situation, in developing proper standards of conduct, in creating a feeling of "belonging", and in developing a sound code of ethics.

Children need the social experience that can be gained through association with other children in a play atmosphere. Many live in cities, in slum areas, and in communities where delinquency runs rampant, where their parents do not know the next door neighbour, and where the environment is not conducive to a rich social experience. In such neighbourhoods the school is one place where children have an opportunity to mingle and physical education offers a place where they have opportunity to play together. The potentialities are limitless in planning social experiences through "tag" and "it" games, rhythms, games of low organization, and the more highly organized games. Here the child learns behaviour traits, which are characteristic of a democratic society. Because of his drive

for play, he will be more willing to abide by the rules, accept responsibility, contribute to the welfare of the group and respect the rights of others.

The physical education programme should stress cooperation as the basis for achieving the goals an individual or group desires. Each member of the group must work as though he were a part of a machine. The machine must run smoothly, and this is possible only if every part does its share of the work. Pulling together and working together bring results that never are obtained if everyone goes his separate way. Former President Truman, in a speech delivered at Madison, Wisconsin, stressed the effectiveness of cooperation in our day-to-day living, citing such examples as farm cooperatives, cooperative stores and the bringing of electricity to rural areas through cooperative means. He then went on to stress that world peace is possible only through cooperation among the nations of the world and that the problems confronting the nations of the world today will be solved only through working together.

A physical education programme that would teach individuals to play cooperatively should stress leadership and followership traits. The success of any venture depends on good leadership and good workers or followers. Everyone cannot be a captain on a basketball, relay, or soccer team. Everyone does not have leadership ability. Those who are good leaders should also be good followers. A leader in one activity might possibly make a better follower in another activity. These are a few of the points that should be brought out. The important thing to stress is that both leaders and followers are needed for the accomplishment of any enterprise. All contribute to the undertaking.

All deserve commendation for work well done. All should reap the rewards. The question might be raised as to the advisability of the practice that is sometimes followed of using the class cut-up, the bully, the "Mickey McGuire", as the captain of the team. This is one procedure that is sometimes utilized

for eliminating a discipline problem. Leadership, it seems, should be earned as a result of eliminating a discipline problem. Leadership, it seems, should be earned as a result of contributing to a group, of earning the respect of a group, and of proving oneself a good follower. To place the "Mickey McGuire", in such a coveted position seems to encourage rather than discourage antisocial behaviour.

A physical education programme that would teach individuals to play cooperatively should stress cooperation as the first consideration, rather than competition. Competition is good, but it seems that cooperation is the first concern of education. Students in our schools compete for grades, to make the honour roll, to receive a bid to certain societies, to be a member of the squad, and to be an officer of their class. This may be good if conducted according to proper procedures; but in many of our schools it breeds discontent, cheating, and cliques and results in nervous breakdowns and personality maladjustments. The person who takes home the honours, accumulates the prizes, and grabs the headlines is too often the hero in the eyes of the public, whereas the diligent, hard-working, quiet individual who cooperates to his utmost for the success of a group enterprise receives nothing for his efforts. The success of the democratic way of life depends on cooperation among members of society and not on the exploits of a few who seek honour, prestige and glory. The "all for one and one for all" motto will accomplish much more than the "all for me" motto. In adult life people follow many of the objectives that were formulated in their youth. If competition rather than cooperation receives the main consideration in school, it will aggravate the competitive "survival of the fittest" existence that is so characteristic of modern-day living. Cooperation is the secret of successful living.

The amenities of social behaviour are a part of the repertoire of every educated person. They have developed as part of our culture just as the playing of baseball, eating "hot dogs", and democratic living have. Some individuals in our societies are referred to as "ladies" and "gentlemen", whereas

others are called "hussies" and "rowdies". Many times such courtesies as saying "please" or "thank you", tipping one's hat, offering a lady your arm, and acting in a polite, quiet manner have made the difference in these labels attached to certain individuals.

Courtesy and politeness are characteristic of good family training just as fair play and sportsmanship are characteristic of good training in physical education activities. On the one hand, it reflects the character of the parent or guardian and, on the other, the teacher or coach. When a player kicks his opponent in the groin, trips him up, or does not play according to the rules, he reflects the spirit of his leader. Some coaches and teachers will use any means to win a game or achieve a goal. Others feel that winning is not the prime objective. Instead, their main objective is to provide an experience, which will help the members of a group realize values that will help them live an enriched life.

Courtesy, fair play and sportsmanship contribute to good human relations. The player who is a gentleman on the field is usually a gentleman off the field as well. Such an individual makes friends easily, builds good will, and inspires trust among those with whom he comes in contact. Others know that he believes in playing according to the rules, that he will not take unfair advantage, that he assumes responsibility, and that he is considerate of others. These characteristics should be developed in every child who visits a physical education class or tries out for any athletic team.

Physical education has a contribution to make to family and home living. The make-up of a child depends to a great extent on the type of family and home environment he lives in. Many times such an environment determines whether an individual is kind or mean, quiet or boisterous, or polite or rude. In view of the imprint of the home and family upon the child, the school has the educational responsibility to improve and nurture the child, to interpret society to him in its correct light, and to strengthen family ties. Physical education can

assume part of this responsibility. The coach and the physical education teacher are many times individuals in whom a child puts his trust and confidence and whom he desires to emulate. The nature of physical education work and its appeal to youth probably are the causal factors of such practice. Consequently, physical education personnel should utilize their advantageous position to become better acquainted with the youth and his home and family life. Many times divorce and separation have affected children's lives. A change from rural to urban life with the difficulties of adjustment might be an experience through which a child is passing. There may be a lack of "belonging" or a protected existence, which causes anxiety and worry. By having knowledge of the whole problem, the teacher or coach will be able to help in the adjustment process and in making for better home and family living. This could be done through proper counselling and guidance, helping youth to experience success in play activities, talks with parents and home visitations.

The increased complications of family living, because of such factors as the prevalence of divorce, the desire for careers on the part of women, the turmoil of urban existence, and juvenile delinquency, place more responsibility upon education to help children make proper life adjustments. Physical educators, because of their programme in which children have a natural desire to engage and because children look to them for guidance and help, can contribute considerably in these adjustments.

5

Physical Development and Condition of Children Education

SCHOOL PHYSICIAN

The second chief function of the school physician is the annual assessment of the physical development and physical condition of school children. Children present number of growth disturbances, developmental abnormalities, and remediable defects that should be detected and corrected. The relationship of physical defects to school attendance has been noted many times in the literature. Experience shows that school attendance is more irregular among those children suffering from defects. In addition to the routine examination of all pupils, the school physician must examine boys and girls trying out for places on school athletic teams. The physician's decision in these cases should be accepted as final.

Children seeking working certificates are required by law to pass a medical examination before the papers are issued. This examination is the duty of the school physician. The physician should know the hazards of different occupations and be prepared to advise and decide accordingly.

A third function of the school medical advisor is to plan a procedure for follow-up and treatment of cases of defect. The

purpose of the examination is not the history of defects but the correction of remediable conditions. A policy regarding treatment of pupils should be established and plans evolved for handling indigent cases. As a general rule the school does not give treatments. This policy is perhaps justified since the school is not equipped for therapeutic services rather than because social effort of this kind is undesirable. As a matter of fact this policy is frequently violated. School physicians treat whole classes for ringworm, pediculosis, impetigo, and scabies¹ and are justified in doing so by the extreme contagiousness of these skin infections. Nevertheless, until a policy of socialized medical care is evolved that will win the support of public opinion, it is best for schools to refrain from treatments as routine procedure and to seek the enlargement of clinical services that will care for those children unable to secure private medical attention.

It is obvious that more than notification is required. Hence, there has developed the practice of following up these cases by the school nurse in home visitation. Success with this procedure is variable. Some communities yields as many corrections without home visitation as others do with it. The practice, however, has other justifications. Health and economic conditions are related. The nurse serves as an excellent contact for clinics and hospitals and is quite indispensable for those families that must rely upon charitable agencies. Close cooperation of the school physician's staff with social agencies is vital in this connection.

CORRECTION THROUGH PUBLIC HEALTH AGENCIES

This method, either free or at nominal cost, is an approved health service procedure. Through the school nurse these services are brought to the attention of families unable to pay for the attention of a private physician. The principle of ability to pay is exceedingly difficult to administer and requires the full cooperation of school, health and welfare authorities. In many instances the nurse aids in taking the child to the hospital

or clinic, often makes the appointment, and is always ready to bring confidence to the unformed parent in matters of this kind. The hospital with a clinic service or a special clinic or health center comprises the usual type that furnishes free medical care. These may be endowed institutions operating on a budget supplied by private funds or public or semipublic institutions supported in whole or in part by public funds.

This is an admirable form of correction especially for certain types of defects. Its great advantage is the unity possible in the organization. Detection and correction go together. Examples of this type of correction are dental clinics, nutrition classes, special openair classes, and postural classes. The Cleveland Public Schools conduct an excellent Division of Mouth Hygiene in the Department of Physical Welfare. Dental clinics in many cities are conducted by the schools out of funds received from the city. In St. Augustine, Florida, a dental clinic for all children is an endowed institution with some support from the city through the funds of the board of education.

Special classes for malnourished, and pretuber-cular children and special instruction for postural cases are common practices in many public school systems. In the former food is given the children as an aid in correction of the defects present. The practice of providing an organization within the school that will meet the needs of children is well established.

SUPERVISION OF THE HEALTH OF TEACHERS AND SCHOOL OFFICIALS

The fourth function of the school physician in the health service is the supervision of the health of teachers and school officials. This function should operate mainly, though not exclusively, in the selection and certification of teachers so that persons of good health will be admitted into the profession. The examination of all school officials should exclude cases of tuberculosis. To this end, the x-ray is increasingly used. In addition to examining teachers for positions in the schools, the physicians should be available for periodic health

examinations of teachers in service. Industry and business organizations find it profitable to conduct such examinations for employees and the time will soon come when such examinations for teachers will be a well-established practice. It is now required in some communities of all persons handling food in the school cafeteria. Teachers and school officials returning to school after illness should be examined and this is particularly important in communities where the board does not permit sick leave on full or partial salary.

In a summary of the studies made on the health of the teacher, the Metropolitan Life Insurance Company reports as follows: Men are absent less frequently and for shorter periods than women. This disparity is greater in the teaching profession than among other groups of employed men and women.

Great inconsistency is shown in the relation of sickness rate of age. In one city the rate increased steadily with age; in another there seemed to be no correlation between age and illness; and in another the rate declined with increase in age. The proportion of teachers absent on account of sickness in a year varies widely. No generalization can be made, except that this proportion compares favourably with absences among industrial and mercantile workers.

Long, expensive illnesses are relatively rare among teachers. A succession of minor ailments in a life comparatively free from serious risks is the way in which one report sums up the teachers' health situation. Colds and influenza are the chief causes of absences in all investigations. Yet, teachers have a lower rate in respiratory disturbances than have other indoor workers. The opportunity for contagion in the classroom makes the incidence of colds more serious among teachers than among workers in shops and offices.

Tonsillitis is a common cause of absence among teachers. Contrary to previous opinion, the rate for tuberculosis among teachers is comparatively low. Nervous disorders are a chief cause of long and expensive cases of absence. These are conspicuously more common among women than among men

and absences due to nervous disorder increase with advancing years. Although we do not know the definite effect of the teachers' nervousness upon the health of children, it may be assumed that the effect of some types is serious. If the teacher is to contribute effectively to the mental health of children she must have mental and emotional control and balance.

Relatively good chances for a long life and comparatively low sickness rates are revealed in comparison with workers in other fields. This is offset by the fact that the effects upon pupils of even slight illnesses on the part of teachers is the most serious side of the teachers' health situation. The active causes of health disturbance among teachers that are related to the vocation are many. Teachers as a group reflect the hazards of a sedentary group and, although well educated, exhibit generally habitual violation of many health laws. A relation may exist between the teacher's health and the temperature of the classroom, and fatigue may be a factor in some nervous disorders. Large classes and the strain of such situations doubtless impair the health of many teachers.

Boards of education in some cities offer assistance to teachers in the correction of physical defects. Usually this takes the form of examinations and advice. While assistance of this kind is important, much more could be done by: (1) thorough and more rigid examinations for appointment; (2) improving the living conditions through adequate salaries; (3) establishing rest homes with provision for some remuneration during periods of recuperation and convalescence; (4) offering sickness insurance on a group basis; (5) providing adequate retirement allowances; and (6) furnishing some recreational facilities and encouraging outdoor recreational activities among teachers.

Salary of the School Physician—There are no standards at present. Different communities use various bases in arriving at compensation. Payment by the hour, the visit, or number of pupils is quite unsatisfactory. From the school standpoint an annual salary is the best arrangement. Efforts to secure the fulltime services of a physician and to permit no private

practice are highly commendable. Rogers reports an increase in the salaries of full-time physicians in the decade 1930-40. In 1940, 32 cities of 100,000 or more population paid \$4000 a year; in 1930 only 6 of this group paid as much.

The School Nurse—The school nurse is such a valuable member of the school staff that even before the health education movement spread widely through the schools, the nurse in many communities had established herself as an indispensable educational worker. The 1945 census of Public Health Nurses reports 4,321 nurses employed by local boards of education; approximately the same number give part-time to school nursing as employees of local boards of health, local voluntary health agencies, and commercial groups.

While boards of education have employed more nurses in recent years, both the general education and the public health preparation have fallen below the percentage of 1941. This is probably a temporary wartime situation, and it is hoped that standards will be raised to a level even higher than the pre-war standard.

To perform satisfactorily her duties, the school nurse needs more than the nursing training given in a hospital. The latter is indispensable of course, but not adequate for school work. In addition the school nurse should be graduated from a public health nursing course that is approved by the National Organization of Public Health Nursing. The nurse should receive instruction in the teaching of health.

Duties of the School Nurse—The duties of the school nurse vary in different communities, and depend upon the organization of the work, the service of outside agencies, and the coordinated relationship of the departments of health and boards of education. The duties and functions of the school nurse have been clearly described in *The Nurse in the School*, a report of the Joint Committee on Health Problems in Education with the cooperation of the Education Committee of the School nursing section of the National Organization for Public Health Nursing.

Administrative Considerations in School Nursing—The administrator should select a staff whose qualifications are adequate for the functions to be performed. Some means of certification should be required. At present all states do offer certification for school nurses. There is great variability in this matter; the only uniform requirement in the states is registration. After selection of the nurse personnel, the position of the nurse in the school organization should be made clear. This is particularly important if the nurse is employed by the board of health and gives parttime service in the schools. Regardless of the nurse's affiliations outside the school, nursing service in the schools should be under the direction of board of education officials. This is particularly important with Red Cross nurses, tuberculosis nurses, and nurses from commercial or industrial groups.

The administrator should select a competent supervisor and arrange for all nurses to have staff instruction and professional stimulation and growth through attendance at professional meetings. The National Organization of Public Health Nursing recommends that nurses who are not making definite plans to extend their education through continuous preparation should not be selected for school positions. At five-year intervals this organization publishes "Minimum Qualifications for Those Appointed to Positions in Public Health Nursing." An organization that seeks high competence in its members should have the full cooperation of administrators.

The administrator should develop a policy regarding the nurse as a teacher. In the elementary school the problem rarely arises because of the general agreement that the teaching of health is the duty of the classroom teacher. In the high school the nurse is often called upon to teach units in home nursing, child care, growth and development of infants, care of injuries, prevention and control of communicable diseases, causes of illness, and accident prevention in home, school, and community. At times responsibilities in teaching are placed upon the nurse for which she is not prepared. It is the function

of the administrator to determine whether or not the nurse is prepared for teaching, has time to do so, and has the necessary equipment.

In preparation the nurse should possess qualifications that are comparable to those held by other teachers in the school. She should be judged as are teachers by the standards of good teaching. The time factor is difficult. When she is teaching she cannot carry on the individual conferences with pupils that are such a substantial part of her contribution. Often she is not trained for teaching and hence her efforts in this direction may be much less productive than her services in the work for which she is prepared.

Equipment is essential for much of the technical instruction that the nurse might give. In most of the units listed above which the nurse may be prepared to teach, technical equipment is necessary. Home nursing and child care are really laboratory courses. The nurse in the high school has a range of duties somewhat more extensive than a staff nurse assigned to an examination and follow-up schedule. Generally, they fall into six fields of service.

She will:

1. Be in charge of the dispensary or infirmary, and hence will be responsible for the management of emergencies. This may involve only first-aid care or reference to home or hospital.
2. Aid in the examinations, arrange schedules, notify parents, and generally organize these services. She will actually conduct some part of the examination herself, under the direction of the physician.
3. Advise the principal regarding school hygiene, the hygiene, of instruction; advise the teachers with reference to health problems of certain students. In some schools she is selected as the health counselor, a position involving the centering of the supervision of all health activities in one person.

4. Advise the principal, when the facts warrant her comment, regarding the effect upon pupil health of school dances, examinations, pupil load, the school lunch, and other general matters.
5. Establish effective measures for the control of communicable diseases.
6. Help according to her ability in providing instruction in health but will be responsible for instruction in infant care, first aid, and care of the sick.

Salaries of School Nurses—The salary of school nurses varies according to geographical location, duties, training and experience. The usual salary ranges from \$900 per year to \$3500, with perhaps a fair average approximating \$1800 to \$2000. Supervising nurses should receive a salary comparable to other supervisors in the school system, based upon equivalent training and experience. The school nurse may be employed for the school term or calendar year, preferably the latter. The number of pupils to each school nurse varies greatly. Rogers in the 1940 survey reports means of 2,600 for cities of 100,000 or more population and means of 2,800 for cities from 30,000 to 99,999 population. This is a reduction of from three to seven hundred pupils per nurse from the means of 1930.

Transportation of the School Nurse—There is no standard procedure with respect to transportation in urban centers. In rural areas, the automobile is used nearly everywhere. Most cities do not furnish automobiles although it is common practice to allow a monthly sum for maintenance.

The nurse should plan her schedule carefully by informing herself about the area to be covered in her district and the best route to follow to expedite her work.

The Uniform and Bag of the School Nurse—Obviously the nurse should wear a distinctive uniform while in school service. The traditional white uniform and hospital cap are not to be used; they suggest illness and a hospital. A white smock or a gray uniform is to be preferred. Whatever the decision may be

regarding form or colour, the nurse should be consistent in the use of the type chosen. For home visiting, a smock, which can be carried in the nurse's bag, is practicable.

THE PSYCHOLOGIST AND PSYCHIATRIC SERVICE

The school psychologist is ordinarily not considered a member of the staff of the health service and yet his duties and services are often of great import to those responsible for protecting and promoting the health of children. Psychologic records should be available for this purpose. Psychiatric service in the schools is a recent development in school administration. Its purpose is often restricted to the problems of the special case in which maladjustment has occurred. The mental hygiene programme should be regarded as more comprehensive than mere control of problem children. The school psychiatrist requires special training. The medical degree alone is not a sufficient indication of ability to diagnose disturbance and to guide youth in the perplexing problems of adjustment. This service will doubtless increase markedly in the future because of growing recognition of its usefulness in harmonizing individual adjustment problems, and because the number of children requiring psychiatric guidance will increase. The growth in mental and nervous disturbances in the adult population reflects a social condition that will eventually involve more children.

RELATIONSHIP OF SCHOOL ADMINISTRATORS TO THE HEALTH SERVICE

It is well established in practice that superintendents, supervising principals, and principals are the chief administrative officers of the schools. They correspond to the line officers of an army and have similar executive functions. Staff officers comprise those who are in charge of special services—in the army, officers of the medical corps, nurses, engineers, supply and transport officials. In the schools, the staff officers are the physicians, nurses, supervisors, janitors,

and others. The work of the staff is expert in the several fields, but the specialized character of expert service demands integration and coordination. This is one vital function of the school administrator. It is not his responsibility to determine the value of technical matters, but as an executive of the line to secure integration of the various lines of effort to the end that the various units of school activity shall contribute to a common educational purpose.

Those principle is well established in the school with respect to various divisions. It should be thoroughly applied in the conduct of health services. Staff officers, such as school physicians, aim therefore to give expert medical and educational aid to the solution of health problems; line officers, such as superintendents or principals, aim to coordinate the efforts of various staffs, to utilize the findings of the experts, so that the basic purposes for which schools are conducted shall be realized. To perform his functions a superintendent or principal requires competent staff officers. And likewise, the progress of the health work, for example, depends upon the executive activity of the officers of the line.

The Health room in Schools—It is desirable to place the health suite of officers, examining room, and rest rooms in proximity to the physical education unit. It is not absolutely essential but the rapid growth of the coordinated programme does bring these departments into closer relationship. If the health unit is close to the gymnasium, it will be easier to take pupils in gymnasium costume directly from physical education classes for their examinations.

In the modern school building, a room for the nurse where the health services can be cared for adequately is considered as essential as classrooms, laboratories, or gymnasiums. It should be large enough to accommodate the physician in making his examinations and at least 22 feet in length or width to provide space for tests of visual acuity. For the latter function, good lighting, preferably on the north side, is required and unless natural lighting is adequate, it should be artificially

illuminated. A telephone connection is indispensable. Standard equipment of desk, filing cabinet, and chairs will be provided. In addition to these general items certain special equipment is needed.

These are:

- Snellen eye charts for testing vision or materials for the Massachusetts Vision Test. For children who do not know their letters, the Snellen E chart is desirable.
- Yarns of different colours for testing colour perception and Ishihara type colour charts.
- An audiometer for testing hearing is preferable to the use of a watch on the whispered voice. The latter two vary with the make and volume respectively.
- Scales of approved design and equipped with stadiometer for measuring the height are indispensable. The scales should be placed so that it is unnecessary to move them after they are adjusted properly. In this way the chances of faulty action are minimized.
- A full length mirror for postural corrections should be attached to the wall, although movable mirrors may be used.
- At least one cot is needed. This should be of rattan construction to serve the purposes of an examination table. If the latter is available, the cot may be of the canvas type.
- A gas or electric heater for sterilizing.
- Running hot and cold water.
- A supply cabinet of sanitary type should contain the following: scissors, forceps and tweezers; sterile gauze and sterile absorbent cotton; adhesive plaster in several sizes; gauze roller bandages of one and two inch widths; triangular bandages and splints; wooden tongue blades, wooden applicators and

toothpicks; three glasscovered jars (one for tongue depressor, one for sterile gauze, and one for sterile cotton); two clinical thermometers; several glass medicine droppers; tincture of green soap, and a saturated solution of boric acid; tincture of iodine or mercurio-chrome in glassstoppered bottles; unguentine, or vaseline for burns; culture tubes and sterile swabs; lysol and 60 per cent alcohol solutions; and white enamel basins.

The Rest Room—The rest room is to be regarded as a part of the health service equipment and placed in the same suite of rooms assigned to this function in the school. Surroundings should be quiet. A north room with little light but with good ventilation is desirable. Cots equipped with blankets and mattresses, several chairs, and a table with mirror constitute the movable equipment. Figure 20 shows a record card used in administration of the quiet room.

6

Challenge of Physical Education in a Defensible Position

Physical education is not in a desirably defensible position at the present time. Evidence of this is the lack of answers to the following question. At what grade or age level should each of the activities that comprise the physical education programme be introduced for optimum learning efficiency? What are the individual achievement standards in activities at various age and grade levels? What are the scientific evaluative instruments available for measuring the importance of physical education activities in developing good human relations? How effective is physical education in developing interpretive thinking?

These are a few of the many questions which physical education cannot answer. If the profession is to serve the individual and society in the best way possible, and if it is to be interpreted to the public in its correct light, the answers to these and many other questions should be secured. The scientific process of selection, evaluation, and adaptation of activities is the heart of the physical education profession and yet remains largely unsolved. Desired levels of accomplishment in organic skill, knowledge, and adaptation for each age and grade level should be clearly defined. The student who is interested in delving into research will find many opportunities

for utilizing his talents. Research in physical education is becoming increasingly important, and students in professional schools today will be the ones to find many of the answers needed to place physical education in a truly defensible position.

THE CHALLENGE OF LEADERSHIP

Physical education desperately needs qualified leadership. This is the key to the realization of many of the potentialities of physical education. Students going into this work as a career should realize that, in order to be an asset to the profession, they should be enthusiastic and interested in their work; possess the competencies, knowledges, and attitudes necessary to do a good job; and accept the challenges and responsibilities that go with their positions. This type of leadership does not exist in sufficient amount at the present time. Standards must be established which allow only qualified individuals to become members of the profession. This challenge must be met if physical education is to be a respected profession and one in which the public has faith and can place its trust.

THE CHALLENGE OF RE-EVALUATING THE SCHOOL CURRICULUM

The educational system, to a great degree, has failed to accomplish many of the objectives which it has established, namely, health, ethical character, worthy use of leisure, worthy home membership, and citizenship. The increased number of cases of mental illness in this country, the evidence supplied on the extent of crime and immorality in the United States, the quest for material rather than spiritual values, public indifference to public administration, increased divorce rates, and juvenile delinquency are problems which show that the whole educational structure of this country needs reevaluating.

The belief that a knowledge of facts will result in successful living seems to have been the premise upon which the present

educational structure rests, and this has proved to be a fallacy. Education should result in changed behaviour and in social, physical, mental, and emotional betterment. The re-evidence, however, does not point to such an accomplishment. Therefore, the re-evaluation of the whole educational structure should be made to determine what is the best type of education for successful living.

In such a re-evaluation it seems that consideration should be given to determining what the physical mental, emotional, and social needs of individuals are and then to including experiences in the curriculum which will meet these needs. Through such a study it might be discovered that many of the present offerings do not contribute to meeting such needs. Perhaps some of those that are being slighted in many of our schools at the present time would be found to be of much more value than previously determined. Under existing conditions, although health is listed as the first objective, how many schools adequately provide the proper health service, healthful school living, and health instruction for their students? How many schools provide planned instruction in physical activities suited to the sex, grade, ability, and special needs of pupils? How many schools place the same high priority on the physical mental, emotional, and social health of the individual as they do on his ability to acquire facts in mathematics, English, Latin, history, etc.?

A thorough re-evaluation should bring to light the important role that physical education can play in the educational process. Students should recognize this challenge and aggressively agitate for re-evaluation of the educational system. In this way they will be helping physical education to realize its potentialities.

THE CHALLENGE OF A “SOFT” AMERICA

Some experts say that America's high standard of living is making her “soft”. Recent research has suggested that lack of activity is resulting in a weak and physically unfit

population. This is a matter of concern to the President of the United States. The resources of physical education must be mobilized to meet the needs created by this "Soft" condition. This country is passing through troubled times when every profession, organization, and individual must contribute to the welfare and strength of the nation. Physical education, by its very nature, has much to contribute.

In order to contribute to the maximum degree of effectiveness, vigorous physical education programmes must be instituted which provide ample opportunities for successful experiences and fun, and which stimulate physical, mental, emotional, and social fitness.

If these goals are to be accomplished, elementary school physical education must be well organized in terms of children's needs, interests, and abilities. Adequate time, facilities, and leadership must be provided to meet these essentials. On the high school level, all pupils should have a daily period of instruction which allows for a vigorous workout, adequate instruction, showers, and the realization of social, emotional, and mental objectives. In schools and agencies where limitations enter the picture, a continuous effort should be made to overcome these difficulties and accomplish the goals. On the college level activities should be offered which develop sufficient strength, endurance, stamina, and vitality together with mental and emotional fitness to withstand the increased stresses of military and civilian life. In the adult population every effort should be put forth to develop individuals who possess total fitness for their duties during the unstable times through which they are passing.

Participants in physical education programmes should be classified in such a manner that provision can be made for individual differences and capacities. A well-rounded programme should be engaged in by all. Aquatic skill should be emphasized. Athletics for all, through intramural and interscholastic sports, should be an important part of the programme. Provision for the handicapped should be made.

Boards of education should provide funds for the essentials with which to conduct such programmes, nonschool and school resources should be utilized, physical fitness achievement standards should be met, and everything else should be done that will help in establishing a healthier and a more totally fit population.

Physical education should accept this challenges with firm resolve and recognize that this is an opportunity where it can realize many of its potentialities and where it can render a great service to the nation and to the world.

THE CHALLENGE PRESENTED BY INTERSCHOOL ATHLETICS

The interschool athletic programme in some schools, at the present time, is not aiding in the achievement of educational objectives. The stress on winning games at the expense of the welfare of the players, emphasis on gate receipts, antisocial traits displayed in hard-fought contests, transfer of the setting for athletic contests from the school environment to sports arenas, uncertain tenure of coaches, extended periods of training, pressures exerted by alumni, sports writers, and public-spirited citizens, desire to please the spectator, gambling on outcomes of contests, and players' accepting bribes are a few indications which point to the fact that the athletic programme in many ways is detrimental to the cause of physical education.

Athletics, with the appeal they have for youth, should be the heart of the physical education programme. They should be an integral part of the programme and aid in attaining goals which will help to enrich living for all who experience such programmes.

The challenge presented by interschool athletics is one which all physical education personnel should recognize. The challenge can be met and resolved if physical educators aggressively bring to the attention of administrators, school

faculties, and the public the true purposes of athletics in a physical education programme. Such points should be stressed as the need for having an interschool athletic programme which meets the needs of all, rather than one planned for a select few; which is organized and administered with the welfare of the individual in mind; which is conducted in light of educational objectives that are not compromised when exposed to pressures from sports writers, alumni, and townspeople; and which requires leadership trained in physical education work.

The interschool athletic programme can be a dynamic and worth-while experience for all youth if physical educators will accept the challenge and work diligently towards eliminating the evils that have infested many programmes. The professional student of physical education can help considerably in meeting this challenge.

ON ANALYTICAL PHILOSOPHY OF EDUCATION AND PHYSICAL EDUCATION

Before embarking on an account of the nature of physical education, and its knowledge and values claims, it is necessary to first take a short detour and second, offer an apology. First, it is necessary—if we are to have a reflective view of the philosophical terrain in which sense can be made of the concept of physical education—to understand a little of the nature of philosophical thinking. Second, the account here is itself situated within a particular tradition of thought. It is not speak of continental philosophy where there might be rich seams indeed for philosophers of physical education to plough. In particular, the works of phenomenologists and hermeneuticists have tremendous potential to offer understandings of our experiences in the activities that comprise physical education.

The manner in which this 'new' philosophy took a foothold in the UK and the USA—what came to be known as analytical philosophy of education—was nothing short of remarkable. The classic UK texts of the 1960s and 1970s bear testimony to it:

Dearden's *Philosophy of Primary Education*, Hirst and Peters' *The Logic of Education* and Peters' *Ethics and Education* are paradigmatic. A cursory glance at their contents pages indicates their subject matter. Each philosopher bore down on their subject matter with microscopic linguistic scrutiny; precisely what was meant by concepts so central to education as 'authority', 'democracy', 'discipline', 'initiation', 'knowledge', 'learning', and so on. No educational concepts escaped their analytical scrutiny. A very similar movement was carrying the day in the USA where philosophers of education centrally saw themselves engaged in the same enterprise—and with surprisingly similar results given the cultural and geographical distance that set them apart.

Despite the time that has elapsed since this highly original work, it is genuinely worthwhile to revisit their positions in order to better understand how to think philosophically about physical education as an educational enterprise. In the UK, Richard Peters developed the most powerful statement about the nature of education. In his inaugural lecture in 1965, he put forward a thesis that was to reach literally across the world through the old British Empire—many of whose educational lecturers were still taught in British universities—that education must be viewed, by all those who seriously investigate its nature, to comprise a certain logical geography. Briefly, his thesis was that education, properly conceived, referred to the initiation of the unlearned into those intrinsically worthwhile forms of knowledge that were constitutive of rational mind. Its shorthand was that education referred essentially to the development of rationality.

Despite the hugely influential educational effects of muscular Christianity, physical education enjoyed little more than a Cinderella existence, even in British education, throughout the twentieth century. And now, it was surely not to be invited to the ball. The hegemony of that great thesis cast physical education well and truly into the educational hinterland. we shall now consider that thesis in a little detail.

The particular picture of education favoured by analytical philosophers of education, then, is that of the British philosopher of education Richard Peters and, to a lesser extent, his close colleague Paul Hirst. We shall refer to their theses collectively as the Petersian conception of education. It is familiar enough to anyone who read any English language philosophy of education from 1965 to 1985. For Peters, the many uses of the word 'education' might be reduced to the central case and the philosophical task was to tease out criteria implicit in that case.

This led Peters to develop his sophisticated account of education as the transmission of what was intrinsically worthwhile in order to open the eyes of initiates to a vaster and more variegated existence. That same worthwhile knowledge was continuous with the various forms of knowledge that Hirst had delineated by his own set of epistemological criteria. The Petersian thesis was summarised thus: _ 'education' implies the transmission of what is worthwhile to those who become committed to it; _ 'education' must involve knowledge and understanding and some kind of cognitive perspective, which are not inert; and _ 'education' at least rules out some procedures of transmission, on the grounds that they lack wittingness and voluntariness on the part of the learner.

The first two conditions have been referred to as the axiological and epistemological conditions by two other philosophers, Andrew Reid and David Carr, both of who have sought to conceptualise physical education in similar ways, but who have come to rather different conclusions about its educational potential. The third criterion refers to the processes by which such transmission was ethically acceptable. It will comment on the analytical and epistemological dimension of Carr's and Reid's articles and then examine the axiological dimension of Reid's work which is the bedrock of his justification for the educational status of physical education. What is of significance in Reid is the idea that education, as conceived in the Petersian mould, is narrow and restrictive.

Despite a lack of argumentation, he signifies a broader conception of education than is found in the accounts of philosophers such as Peters, Hirst, and Barrow or, for that matter, anyone housed within the liberal tradition. These philosophers of education conceive of education as the development of individual, rationally autonomous, learners. In their writings they sharply distinguish education from other learning-related concepts such as 'socialisation', 'training' and 'vocation' in terms of their content, scope, value and application.

Reid's conceptualisation of a broader account rests on the position of John White in his book *Education and the Good Life* where educators aim towards the development of personal well-being grounded in rationally informed desires of both a theoretical and practical kind. Education is thus subservient to, and continuous with, the kinds of development that enable an individual to choose activities, experiences and relationships that are affirmations of those informed choices. By contrast, Carr is more traditional in his account of education and therefore physical education. Like Barrow and Peters before him, he marks the education training distinction by a thesis about mind. For the earlier writers in liberal philosophy of education, all educational activities were broader and richer in scope than mere training which was a form of instruction with limited, focused ends. Education properly conceived, they argued, aimed at something much richer and more variegated. The educated mind did not focus on things limited in scope, such as training for the world of work, but rather helped learners to better understand their world, and their place within it.

As it was often said, education had no specific destination or goal as such; it was rather to travel with a new, enlarged view. Necessarily, this educated view was informed by an initiation into the forms of knowledge or rationality; aesthetic, mathematical, philosophical, scientific, religious, and so on. These were simply what being educated consisted in. Despite the fact that Carr recognises the value of practical as well as

theoretical rationality, he undermines Reid's thesis about the importance of physical education conceived of as practical knowledge, and is driven back to the old liberal ground: The key idea here is the traditionalist one that certain forms of knowledge and understanding enter into the ecology of human development and formation—not as theories of a scientist or the skills of a golfer, but as the horizon of significance against which we are able to form some coherent picture of how the world is, our place in it and how it is appropriate for us to relate to others.

Strictly speaking, it matters not a hoot on the traditionalist picture whether such received wisdom is theoretical or practical or located at some point in between; what matters is that there should be—in the name of education—some substantial initiation into this realm of human significance alongside any training in vocational or domestic or merely recreational skills. This is not to deny any proper normative conception of the latter, or that any pursuit of such skills may involve considerable rational judgement and discrimination; it is rather to insist that the sort of rationality they do exhibit may not and need not have anything much to do with education. Very roughly, one might put the point of the liberal-traditionalist distinction between educational and non-educational knowledge by observing that the former is knowledge which informs rather than merely uses the mind.

Thus, Carr's account is little more than a brave leap back to the Petersian position. Now, as with all philosophical argument, one can dispute a position on its own terms, one can deny the presuppositions of those terms or one can either assert or argue for a counter position. The middle option can be seen in any of a legion of writers who attacked the liberal position for its normative presuppositions. Under the banner of ideological neutrality, it seemed to smuggle in an awful lot of values. Moreover, nearly every self-respecting sociologist of education cried that it entailed little more than a crystallisation of the kind of curriculum favoured by British grammar and public schools in the UK over the last 100 years

or so. There is a point of considerable agreement between Carr and Reid that is typical of the liberal theory of education, and it is one that is typically used against the educational advocates of physical education. Both writers are keen to hold on to the liberal ideal that education has its own ends. This of course cuts across the grain of 'common sense' thinking that it is the job of education to effect socialisation, or produce a more efficient workforce, and so on. Reid says that a broader view of what education entails—the introduction to cultural resources—must not simply be thought of as the development of qualities of mind: The idea of introduction to cultural resources is to be taken here as an abbreviated way of referring to the complex and lengthy processes associated with the knowledge condition of education, with the teaching and learning which are required for effective appreciation and use of those resources.

The sports and games which figure in physical education, then, are to be distinguished from work, the arts, intellectual illumination and so on in terms of their fundamentally hedonic orientation, but not in terms of their role as major cultural institutions, and thus in terms of their educational importance.

It seems, therefore, that Reid is not unhappy with the general model of education as initiation into sports and games as major cultural institutions. As we have seen, Carr parts company with Reid on epistemological issues to do with the development of rational mind, though not only there. Despite recognising the value of such initiation, Carr pejoratively refers to sports and games as merely a valuable part of one's schooling—but, note, not education.

Carr's logical geography is restricted to the Petersian-liberal continent. Like many others before him, Reid wants to shift the ground of education away from the development of intellect as the sole basis and look also to a kind of 'pleasure principle'. Reid suggests that the nature and value of physical education is best characterised by a 'fundamentally hedonic orientation'. We shall consider these points in that order.

EPISTEMOLOGICAL ASPECTS

One major strand in physical education teachers' collective insecurity complex is to be found in epistemological aspects of their subject which, in the UK at least, has undergone significant professional changes. Central among those changes is the emergence of a graduate profession armed with a greater breadth and depth of theoretical knowledge. There are three suspicions about such claims.

First, we are simply not sure if it is true that the development of an all-graduate profession has produced a teacher base that is characterised as having a broader and deeper knowledge base and we know of no empirical study to dis/prove the claim. Second, even if this were true, it does not follow necessarily that this would bring about better learning and teaching in physical education lessons. Third, over the last 20 years or so we have seen witnessed the introduction of significant elements of propositional knowledge into the school subject which has been incorporated systematically into syllabi, culminating in examinations. Yet, it is not the mere snobbery of the physics or maths teacher that is problematic here. Carr, gives it its most pithy statement: education comprises those forms of knowledge that do not merely use but, rather, inform rational mind.

The distinction is both clear and elegantly put. But what follows from it? The answer is 'nothing necessarily'. Further exploration is required. Reid claims that the family of activities of physical education are best conceived of as expressions of 'knowing how', to use Gilbert Ryle's famous phrase. That is to say, the activities and their knowledge contents are not merely the handmaiden of theoretical knowledge, but a species of knowledge in their own right.

They are better captured under the title 'practical knowledge'. Similarly, Parry claims that it is the practical knowledge required for successful participation in physical education activities that satisfies the epistemological criterion of education. On a technical point, it could be argued that the

phrase 'epistemological criterion' requires correction. Peters' remarks on the epistemological criteria of education are better subdivided thus:

- The development of knowledge and understanding which are not inert; and that.
- Such knowledge and understanding must be framed in some 'cognitive perspective'.

This distinction is important since, among other objections, one could argue that the knowledge and understanding of the activities of physical education may well come to characterise part of one's way of viewing the world. The phrase 'having a healthy and active lifestyle' might well capture the idea of a person considered physically educated; one whose knowledge was tied to action in important respects.

It could be said that most adults 'know' what a healthier and more active lifestyle looks like but they are unable to incorporate it into their lives. On the stronger epistemological account, one could not be said properly to know this whilst acting in a contrary way. But it is really the second epistemological aspect—the cognitive perspective—that offends both Peters' and Carr's rationalism. Lest it be said that it is erecting a straw man, consider Peters' construction of the value of theoretical knowledge.

Note that it is in contrast to theoretical knowledge that he dismisses, among other things, sports and games: To get attached to pets, people or possessions is a bad bet *sub specie aeternitatis*; for there is one thing we know about them—they will die or become worn out with use or age. No such fate awaits the objects of theoretical activities; for as long as there is an order of the world there will always be further things to find out about it.

In so far as knowledge is involved in games and pastimes, this is limited to the hived off end of the activity which may be morally indifferent. A man may know a great deal about cricket if he is a devotee of the game; but it would be fanciful to pretend that his concern to find out things is linked with any serious

purpose, unless the game is viewed under an aesthetic or moral purpose. Cricket is classed as a game because its end is morally unimportant. Indeed an end has almost to be invented to make possible the various manifestations of skill.) In a passage that should be etched on the hearts and minds of all physical education student teachers, he continues: Curriculum activities, on the other hand, such as science or history, literary appreciation, and poetry are 'serious' in that they illuminate other areas of life and contribute much to the quality of living.

They have, secondly, a wide ranging cognitive content which distinguishes them from games. Skills, for instance, do not have a wide ranging cognitive content. There is very little to know about riding bicycles, swimming, or golf. It is largely a matter of knowing how rather than of 'knowing that', of knack rather than of understanding. Furthermore, what there is to know throws little light on much else? While Reid, therefore, presents a sophisticated account of practical knowledge and reasoning, he fails to attack the proper target and to give an account for the specific epistemological aspects of the activities of physical education. It would seem to me that a more fruitful place to start would be to interrogate Peters' account of 'seriousness' which is used to demarcate knowledge considered educational from that which is not. Two brief sets of points can be made here.

In what sense is the illumination of things other than themselves a necessary condition for what is said to be 'serious'? Why, furthermore, should wide-ranging cognitive content similarly be viewed as a logically necessary condition of educational activities? The criterion does indeed distinguish practices such as science from sport but, again, what follows from this? Second, note how the notion that certain ranges of knowledge contribute to the quality of living, gets sidelined thereafter. Surely this is one of the palpable claims that all physical educators would make as a hypothetical justification of the subject? As a matter of fact, one could survey the millions of people for whom sports and related practices are central to their quality of living. As a justification, of course, this form of

argument is hypothetical since its success is contingent upon the satisfactions enjoyed by those persons. We should not need reminding that many children simply detest sports and games just as others come to love and care for them.

If we agree the philosophical point that to be physically educated, what one knows must characterise the way one acts in the world, then as physical educators, it is our duty to both habituate children into patterns of activity and engagement with social practices such as hockey and basketball, and to open up to our students the significant sporting inheritance of our cultures so that they too may come to savour its joys and frustrations and to know a little about that aspect of the cultures which sporting practices instantiate. Thus Reid's exploration of the underlying logic of practical knowledge is, despite Parry's assertion, a worthwhile task. But Reid fails significantly to take that analysis further.

This omission is manifest in his observation that there are profoundly complex kinds of practical knowledge required, for example, in playing Tchaikovsky or flying a plane. However these examples are used to illustrate the potential complexity of forms of practical knowledge; they are not representative of the kinds of knowledge definitive of physical education. Nor can they be used helpfully as analogues in such an argument. There is a further complication, moreover, in the contrast between the serious forms of knowledge and sports and games which relates to the ease with which children are initiated into cultural practices. Like physical education, the 'serious' educational subjects too have easy skills and techniques at their onset, yet these are the first steps in practices of immense rational sophistication in range and depth. Sports do not possess this range of cognitive complexity and it would be folly to argue that they do. Yet there is more to them than mere knack: a forward roll is a skill and so is a double twisting back somersault but compare the range of complexity.

The capacity to generate immensely technical skills aligned to perceptive judgement and anticipation in a time-compressed manner is typical of any invasion game. Sports

skills are not comparable in density or range to classical music or philosophy. This is why Tchaikovsky's concertos or landing aeroplanes are inappropriate analogues. It might, however, be profitable to explore other areas of the curriculum that embody overt performative knowledge as opposed to intellectual ones with respect to the embodiment of that knowledge. What has to be acknowledged in this debate is the exceptional difficulty in talking about sporting experiences especially where they refer significantly to the emotional dimension that accompanies success and failure.

It is not so much that one can give a full account of action if only sports people were linguistically sophisticated; the point is that these descriptions occupy different worlds. A phenomenological account simply does not try to do the same thing as, say, a physiological or biomechanical one. But that is a discussion for another day. This entire area has been largely neglected in the philosophy of physical education since David Best's and David Carr's work in the 1970s. Reid has done the profession a service by reminding us of their importance.

Characteristic of early analytical philosophers of education, however, Reid proceeds as if the logic of his philosophical analysis carries itself forward to a conclusion in the minds of any reasonable person. Like so much earlier work in analytical philosophy of education Reid fails to accord sufficient weight to contextual particulars and specifically the power-related discourses of the school-as-institution and the dominance of the academic therein.

Reid merely gestures towards this problematic. Despite the clarity of his arguments regarding physical education, it is the widespread experiences of physical education teachers who have been demeaned by the hierarchical dominance, or positioning, of propositional over performative knowledge. The core root of the professional insecurity that has always characterised the physical education profession, and which has culminated in the apparent is academicisation of our profession. Finally, the greatest weakness in the epistemological

aspect of Reid's account of physical education as education is his failure to offer a value argument for the kinds of knowledge representative of physical education.

It is a point that Peters flagged up 30 years ago: 'It is one thing to point to characteristics of activities that are usually thought to be worthwhile; it is quite another to show why these sorts of characteristics make them worthwhile'. Like any philosophical thesis, one may challenge the Petersian position by rejecting the manner in which it is presented rather than looking for inconsistencies or incoherence within it. One could, so to speak, reject the paradigm completely; that is to say, reject the very terms in which it is presented and the bases it presupposes. In doing so we could reconceptualise some or all of the notions of 'rationality', 'knowledge' or 'education' to find an account more conducive to physical education and its claims to proper educational status.

Despite making a case for the necessary existence of practical rationality in educational matters, on Reid's case, physical educationists would still be left to argue whether the activities of physical education were productive of practical rationality and why the particular practical rationality employed or exemplified in the activities were of particular value. Equally unfortunate, we have seen how Carr's position appears little more than a retrenchment into a broadly Petersian education. Reid's best hopes appear to be based on the pluralism of value conferred by the range of activities, but particularly in reference to their essentially hedonic character. While we think that it is clear that the range of activities represent a family we think the policies of both Carr and Reid are misguided. It is, therefore, to issues of axiology and physical education.

7

Achievement and Motivation in Sports

ACHIEVEMENT MOTIVE

Striving for success is often seen as a manifestation of an achievement motive (or motivation), something that induces a person to direct his or her behaviour towards the attainment of certain goals.

Motive is from *motus*, Latin for move. When that motive becomes established in a set of moral principles and regarded as a virtuous rule of conduct, it becomes an achievement ethic. The whole field of sports is guided by an achievement ethic: victory is sought after and defeat is to be avoided in every endeavor. Competitors are energized by an achievement motive in the sense that they personally seek success rather than failure and are prepared to defeat others in their pursuit of that goal. The motive and the ethic coexist, of course: were victory and the striving for it not seen as worthy, the motive to pursue it would have little purchase. As it is, sports have prospered in cultures that have honoured success.

It is no accident that cultures that extol the virtues of competition and rivalry have produced high achievement-motivated individuals who excel in sports. There is unlikely to be an achievement motive at an individual level outside cultures that do not value success over failure. The influential

research of John W. Atkinson—especially with D.C. McClelland, R.A. Clark and E.C. Lowell, in *The Achievement Motive*, published in 1953—sheds light on the composition of the achievement motive. It is the combination of two personality constructs: the motive to approach success and the motive to avoid failure. Atkinson, all humans have both; it is the way in which they combine which affects whether one person will be achievement-motivated.

Atkinson's research involved testing subjects for both the motive to succeed and the motive to avoid failure. For example, would they look for challenges, show persistence, remain unafraid to lose and blame themselves when making the attribution for success or failure? Or would they try to avoid failure, dodge challenges—preferring to compete against easy opponents—dislike being evaluated by others and attribute their performance to external factors, such as luck or hard opponents? Those who scored big on the first scale were said to have an achievement motive. Situations also factor into Atkinson's model, which rates probability of success from 0 (no chance) to 1.00 (certainty) and builds in an incentive value (the lower the chance of success, the greater the incentive). An achievement-motivated kicker faced with a 50-yard field goal chance to win a game and no time left on the clock would relish the opportunity. A kicker without a strong motive would prefer either an easier, more certain task, such as a 25-yard attempt, or an impossibly tough kick from outside field goal range to avoid being blamed for the failure.

So the type of situation determines whether the behavioural tendencies of the achievement-motivated player will come to the fore. As many situations in sport have a mid-range chance of success without a very high incentive value, the high achievement-motivated athlete is not always an asset; many situations demand a more conservative performer—a 'safe pair of hands.'

M.L. Maehr and J.G. Nicholls rejected many of Atkinson's assumptions about the invariance and objectivity of success

and failure. Instead, they proposed that they are much more subjective, based on the perception of reaching or not reaching goals. In other words, success and failure will be viewed differently in different cultures. While they do not examine the relationship between the achievement ethic and the achievement motive, Maehr and Nicholls acknowledge that it is necessary to understand the meanings of achievement rather than assume there is a single definition that holds good for all. Their interest was in exploring how, for example, winning may be the only criterion of achievement for some, while pleasing a coach by performing well may constitute achievement for others. Different goals give rise to different perceptions of success and failure. But, significantly, all individuals use goals of some kind to evaluate their achievements.

Achievement goals can be grouped into three kinds, just as to Maehr and Nicholls:

1. To demonstrate ability;
2. To be task-involved (mastering a competence rather than assessing oneself against others);
2. To seek social approval. The same competitor may have a different goal for each different sport, or at different times in his or her life, or may even have several goals at once.

Michael Jordan was presumably motivated to achieve a successful outcome during his basketball career but, while his venture into baseball was generally considered a failure, he may well have set himself a different goal, perhaps to master the sport rather than win anything.

MOTIVATIONAL TECHNIQUES FOR COACHES AND ATHLETES

Goal Setting

- Athletes should be encouraged to set a few ambitious but achievable long-term goals; perhaps to represent their country in a major championship in three or

four years. Through empowering athletes to set their own goals, they are more likely to accept the challenges that lie ahead and pursue the goals with enthusiasm;

- To keep athletes on track with their long-term goals, they should also set appropriate medium-term goals. For example, following a bronze medal-winning performance at the 2004 Athens Olympics, UK heptathlete Kelly Sotherton set herself the medium-term goal of winning the 2006 Commonwealth title in Melbourne en route to pursuing her long-term goal to be crowned Olympic champion at the 2008 Beijing Games;
- By far the most important goals in practical terms are those for the short-term, as it is these that keep athletes focused on the checkmarks which are seminal to achieving superior performance. Therefore, short-term goals should be predominantly process-oriented. For example, when Manchester United's Wayne Rooney injured a metatarsal six weeks before the start of the soccer World Cup, he set a series of process goals in his race to regain full fitness. These included daily physiotherapy sessions, remedial exercises in an oxygen chamber, non weight-bearing aerobic activities, monitoring of nutritional intake and so on;
- Goals need to be monitored and revised on a regular basis. One of the biggest mistakes that coaches make in setting goals is that they are often too rigid in their approach. The goal setting process works best when there is some flexibility and the individual athlete or team take ownership of each goal. Thus, coaches and managers are better off exercising some democracy when setting goals, particularly if working with more experienced athletes.

Using Extrinsic Rewards

SDT, the key aspect in using extrinsic rewards effectively is that they reinforce an athlete's sense of competence and self-

worth. Thus, a reward should be informational in nature rather than controlling. If a reward comes to be controlling, it can significantly undermine intrinsic motivation. For a reward to be informational, it is advisable that it has relatively little monetary worth such as a 'woman of the match' or 'athlete of the tour' title. Also, the reward should be presented to an athlete in front of all potential recipients with some emphasis placed on the prestige associated with it. Other popular ways of using token rewards include etching athletes' names on annual honours boards for their contributions, or awarding a special item of clothing.

Motivational Music

A particularly good way to motivate athletes in training and prior to competition is through the use of music they perceive to be inspirational. Sydney Olympics rowing gold medallist, Tim Foster, now a respected coach, uses music to punctuate all of the indoor training sessions that he leads. Specifically, during circuit training or rowing ergometre intervals, he puts on loud/fast music, while during *recovery* periods he plays soft/slow music. Therefore, work and recovery times are regulated by music. Research from Brunel University indicates that this approach increases work output, reduces perceived exertion and improves in-task affect – the pleasure experienced during the activity.

THE MOTIVATIONAL DYNAMICS OF SPORT

Motivation is an internal energy force that determines all aspects of our behaviour; it also impacts on how we think, feel and interact with others. In sport, high motivation is widely accepted as an essential prerequisite in getting athletes to fulfil their potential. However, given its inherently abstract nature, it is a force that is often difficult to exploit fully. Some coaches, like Portugal manager Luiz Felipe 'Big Phil' Scolari, appear to have a 'magic touch', being able to get a great deal more out of a team than the sum of its individual parts; others find

motivation to be an elusive concept they are forever struggling to master. What is it that makes individuals like the 45-year-old sprinter Merlene Ottey, who competed in her seventh Olympics in Athens 2004, churn out outstanding performances year in, year out? Elite athletes such as Ottey have developed an ability to channel their energies extremely effectively. Indeed, motivation is essentially about the direction of effort over a prolonged period of time.

There are numerous approaches to the study of motivation. Some are based on schedules of positive and negative reinforcement while others focus on an individual's sense of mastery over a set of circumstances. Some of the key findings from recent literature and provide four evidence-based techniques relating to the enhancement of motivation. You will be able to tailor the motivational techniques to enhance your participation in sport or the performance of others. You will learn that motivation is a dynamic and multifaceted phenomenon that can be manipulated, to some degree at least, in the pursuit of superior sporting performance.

DIFFERENT TYPES OF MOTIVATION

One of the most popular and widely tested approaches to motivation in sport and other achievement domains is self-determination theory. This theory is based on a number of motives or regulations, which vary in terms of the degree of self-determination they reflect. Self-determination has to do with the degree to which your behaviours are chosen and self-initiated. The behavioural regulations can be placed on a self-determination continuum. From the least to the most self-determined they are amotivation, external regulation, introjected regulation, identified regulation, integrated regulation and intrinsic motivation.

A motivation represents a lack of intention to engage in a behaviour. It is accompanied by feelings of incompetence and a lack of connection between one's behaviour and the expected outcome. For example, an amotivated athlete might be heard

saying, 'I can't see the point in training any more – it just tires me out' or 'I just don't get any buzz out of competition whatsoever'.

Such athletes exhibit a sense of helplessness and often require counselling, as they are highly prone to dropping out. External and introjected regulations represent non-self-determined or controlling types of extrinsic motivation because athletes do not sense that their behaviour is choiceful and, as a consequence, they experience psychological pressure. Participating in sport to receive prize money, win a trophy or a gold medal typifies external regulation. Participating to avoid punishment or negative evaluation is also external. Introjection is an internal pressure under which athletes might participate out of feelings of guilt or to achieve recognition.

Identified and integrated regulations represent self-determined types of extrinsic motivation because behaviour is initiated out of choice, although it is not necessarily perceived to be enjoyable. These types of regulation account for why some athletes devote hundreds of hours to repeating mundane drills; they realise that such activity will ultimately help them to improve. Identified regulation represents engagement in a behaviour because it is highly valued, whereas when a behaviour becomes integrated it is in harmony with one's sense of self and almost entirely self-determined.

Completing daily flexibility exercises because you realise they are part of an overarching goal of enhanced performance might be an example of integrated regulation. Intrinsic motivation comes from within, is fully self-determined and characterised by interest in, and enjoyment derived from, sports participation.

There are three types of intrinsic motivation, namely intrinsic motivation to know, intrinsic motivation to accomplish and intrinsic motivation to experience stimulation. Intrinsic motivation is considered to be the healthiest type of motivation and reflects an athlete's motivation to perform an activity simply for the reward inherent in their participation.

Flow: The Ultimate Motivational State

Mihalyi Csikszentmihalyi, the highest level of intrinsic motivation is flow state. Flow is characterised by complete immersion in an activity, to the degree that nothing else matters. Central to the attainment of flow is a situation in which there is a perfect match between the perceived demands of an activity and an athlete's perceived ability or skills. During flow, self-consciousness is lost and athletes become one with the activity. For example, a World champion canoeist I work with often describes how the paddle feels like an extension of her arms while she is in flow.

An overbearing or unrealistic challenge can cause excess anxiety, which means that coaches need to ensure that athletes set realistic goals. Conversely, if athletes bring a high level of skill to an activity and the challenge that it provides is relatively low, such as Barcelona and Brazil's Ronaldinho playing in a minor football league, this can result in boredom. To promote flow, it is important to find challenges that are going to stretch athletes just a touch further than they have been stretched before.

Recent Motivation Research based on SDT

A study examining the relationship between athletes' goal orientations and their levels of intrinsic and extrinsic motivation indicated that British collegiate athletes with task-related or personal mastery goals were far more likely to report high self-determination than athletes with ego-orientated or social comparison-type goals. The study provided tentative support for the proposition that focusing on personal mastery and self-referenced goals promotes intrinsic motivation to a greater degree than focusing on winning and demonstrating superiority over others.

This has important implications for practitioners who work with children, given the wealth of evidence that suggests that a focus on personal mastery and intrinsic motivation brings the most positive motivation outcomes. A very recent study

showed that during competition deemed to be important, intrinsically motivated athletes developed task-oriented coping strategies. Conversely, extrinsically motivated athletes tended to avoid dealing with key issues and were far less likely to achieve their goals. In another study, researchers adopted a qualitative approach to answer the question 'why does the "fire" of elite athletes burn so brightly?'. They sought to demystify the differences between high achievers and also-rans in the world of sport.

Their interviews with 10 elite Australian track and field athletes revealed three overarching themes:

1. Elite athletes set personal goals that were based on both self-determined and extrinsic motives;
2. They had a high self-belief in their ability to succeed;
3. Track and field was central to their lives – everything rotated around their involvement in the sport.

Using a statistical procedure known as 'cluster analysis', colleagues and I have identified two types of 'motivation profile'. The first was characterised by high levels of both controlling and self-determined types of behavioural regulations and the second by high self-determined and low controlling motivation. A comparison of the two profiles on the motivation outcomes of enjoyment, effort, positive and negative affect, attitude towards sport, strength and the quality of behavioural intentions, satisfaction, and frequency of attendance showed that participants in the first profile reported higher levels on all eight positive consequences when compared to those in the second profile. This finding suggests that the simultaneous presence of high extrinsic and high intrinsic motivation is likely to yield the most positive benefits for adult athletes.

However, it is critical that extrinsic motives are nurtured on a firm foundation of high intrinsic motivation. Without high intrinsic motivation, athletes are likely to drop out when they encounter problems such as injury, non-selection or demotion. We conducted a follow-up study confirming the profiles

identified in 2000 and came up with a similar solution using a new sample of adult athletes. Importantly, we found that participants in cluster 1 also reported better concentration on the task at hand.

PHYSICAL EDUCATION, SPORT AND PRO-SOCIAL BEHAVIOUR

Historically, claims have also been made about Physical Education and sport in relation to positive social development and particularly, pro-social behaviour outcomes. In relation to social outcomes arising from Physical Education and sport, and specifically, positive social development, Bailey was clear that the research evidence is 'equivocal'. A positive association between participation and pro-social behaviour is by no means assured and furthermore, 'there is evidence that in some circumstances behaviour actually worsens'. Bailey also reported, however, that 'numerous studies have demonstrated that appropriately structured and presented activities can make a contribution to the development of prosocial behaviour, and can even combat antisocial and criminal behaviours in youth', adding that 'the most encouraging findings come from school based studies, especially those focusing on PES curriculum programs'.

Once again, targeted intervention studies directed towards the achievement of specific social behaviour outcomes, have proved successful: Intervention studies have produced generally positive results, including improvements in moral reasoning, fair play and sports person ship, and personal responsibility.

It also seems that the most promising contexts for developing social skills and values are those mediated by suitably trained teachers and coaches who focus on situations that arise naturally through activities, by asking questions of students and by modeling appropriate responses though their own behaviour. Bailey similarly identified mixed research

evidence in relation to the extent to which Physical Education and sport can be regarded as aiding social inclusion. He reported that some writers contend that Physical Education and sport 'not only reflects but can also contribute to some groups' social exclusion', but also acknowledged that ...positive experiences do seem to have the potential to, at least, contribute to the process of inclusion by bringing individuals from a variety of social and economic background together in a shared interest, offering a sense of belonging to a team or a club, providing opportunities for the development of valued capabilities and competencies, and developing social networks, community cohesion, and civic pride.

Undoubtedly, some of the most significant research and curriculum development work to be undertaken in relation to these issues is that associated with Sport Education and derivatives of it.

Since Siedentop's original work in 1994, a comprehensive international body of research, with many contributions from Australia, has demonstrated that Sport Education can provide a curriculum and pedagogical model via which self-management and inter-personal skills, personal and social responsibility can be very effectively addressed—while at the same time, also linkages are made to learning in other areas of the curriculum.

At the heart of Sport Education is a focus on positive learning and participation experiences and inclusivity. With this emphasis, it has proved a means via which to effectively enhance students' sense of belonging, personal and social responsibility, and perceived competency. Notably, these positive outcomes are reported in relation to students who would otherwise be disengaged and/or excluded from physical education, sport or schooling.

The relationship between Physical Education and Sport and students' attitudes towards schooling, academic development and/or academic achievements are all matters of growing interest.

PHYSICAL EDUCATION, SPORT AND ATTITUDES TOWARDS SCHOOLING

In relation to attitudes towards schooling, Bailey identified that evidence of Physical Education and sport having any positive influence is limited and has arisen from small-scale studies and/or is based on anecdotal evidence. Bailey also reported, however, that in some studies improvements in attendance have been shown to follow the introduction of Physical Education and sport initiatives, and 'there is evidence from studies of pupils at risk of exclusion from school that an increase in the availability of PES programmes would make the school experience more attractive'. The Physical Education and School Sport project in England, developed by the Qualifications and Curriculum Authority in partnership with primary, secondary, special schools and community sport providers has pursued affective outcomes of PESS. The QCA report that case studies of schools and partnerships have shown that as a result of investing in PESS, 'schools are happier, healthier and more successful: pupils have greater confidence and self-esteem'.

The QCA identified that the greatest strengths identified in students experiencing quality physical education and school sport were: 'commitment, skillfulness, willingness to get involved and enjoyment'. The QCA also reported that development of PESS has been successfully linked to efforts to specifically increase attendance at school and to targeting behavioural issues. Further, all of the schools involved in the PESS investigation are reported to have seen improvements in pupils' confidence, self-esteem, desire to learn, concentration and time on task as a result of investing in PESS.

Afternoon lessons are identified as more productive after an active lunchtime, with less disruption and students ready to learn. The significance of the PESS findings is their relevance to whole schools and all teachers—not only those in Physical Education! There remains, however, a need for caution in relation to claims about psycho-social and attitudinal outcomes

arising from Physical Education and sport experiences. It is essential to acknowledge the individuality of experiences and thus, their effect. As Bailey has highlighted, it would be misleading to suggest any assured impact of Physical Education in terms of attitudes towards school and/or learning on the part of all children, simply because provision, and particularly inappropriate provision, can have precisely the opposite outcomes to those intended, including disengagement and/or disillusionment.