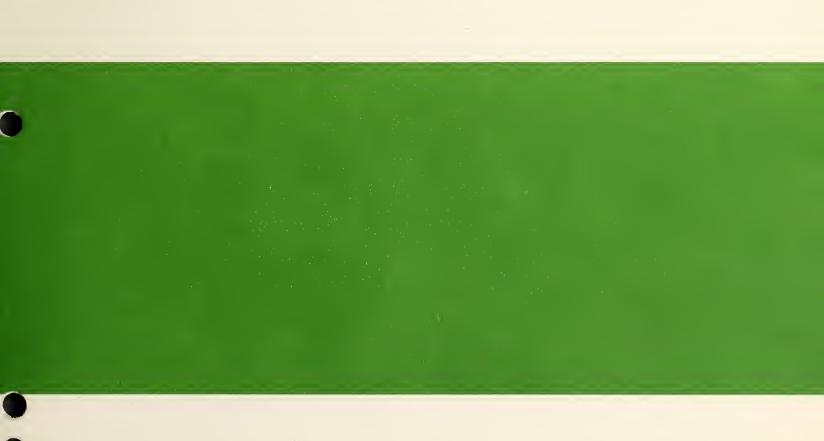


Physical and Health Education

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This interim guideline is published at a time when the Ministry of Education is reviewing curricula and patterns of organization within the Intermediate Division of Ontario schools. The document outlines new approaches and programs for study, for discussion, and for optional implementation during the review period.

The Ministry welcomes comments and suggestions for the improvement of future guidelines in this and other subject areas. To be considered in the current review, comments should be forwarded to the appropriate Regional Director by February 1974.

Introduction

Overall Goals

Physical and Health Education has two main goals. Through inherently enjoyable activities the student learns to move with poise and to participate in physical activities that will enrich his life. Second, by gaining a thorough understanding of how his body functions, the student in the Intermediate Division learns to cope with the many problems he faces as a result of the changes occurring in his body. Through a combination of these two goals the student will hopefully arrive at an understanding of the interrelatedness of the physical, social, emotional, and intellectual aspects of life, an awareness that will help him to live a healthy and fulfilling life.

While many specific aims can be generated from the overall goals, the following are pertinent suggestions:

- -to help the student perceive his body's capacities and limitations by providing examples of healthy human growth and development
- -to help the student react productively to stress by providing situations in which he can learn to cope with varying degrees of it
- -to help the student develop communication skills by providing interaction among students in movement, observation, speech, listening, writing, and reading, as well as carefully planned opportunities to react to the particular needs of others
- -to make the student aware of current health problems through a study of the processes of life, movement, attitudes and behaviour, the structure and function of the body, human needs, and the factors affecting growth and development such as diseases related to man's behaviour
- -to give the student the knowledge, attitudes, values, and habits that contribute to healthy living
- -to develop the student's ability to make decisions by allowing him to reach goals decided co-operatively with his teacher
- -to help the student improve in physical and motor fitness through activities designed to improve stamina, strength, endurance, flexibility, balance, speed, agility, co-ordination, and power
- -to develop the student's sensitivity to the beauty of skilled movement through observation of himself and others and through appreciation of the relatedness of movement and the arts
- -to help the student find satisfaction, enjoyment, and a sense of achievement in physical activity through a varied and challenging program that accommodates the individual needs of each student
- -to develop the student's skill in games, gymnastics, aquatics, dance, and track and field events by providing a balance of these activities
- -to develop facility in solving problems by considering problems as diverse as establishing an effective defence in basketball and suggesting a solution to a social problem related to mental health.

Organizational Considerations

Curricular planning proceeds from various levels within the educational hierarchy. The general framework that provides a philosophy and indicates a direction for developing the program comes from the Ministry of Education through guidelines. Any program that is outside the rationale of these guidelines must be treated as an innovative course and can only be introduced into the school if the procedures governing innovative courses are followed.

Guidelines are adapted and developed at the school level by the professional educators—classroom teachers, consultants (both of the board and of the Ministry), and administrators. A further step in development may take place at either the family-of-schools or at the board-area level. A family of schools consists of a secondary school plus the elementary schools that send the majority of their students to it. A board area is an administrative division that usually includes a number of families of schools. At either level curriculum committees may be formed to develop supplements to this guideline that will be relevant in terms of such local variables as the environment and the available resources and equipment.

Program specifics, however, will be developed at the individual school level. The total range of Physical and Health Education experiences as well as the total school curriculum should be taken into consideration. Thus teachers must be able to build upon the work done in elementary schools (set out in curriculum guideline *P1J1*) and to lead the students into the work of the Senior Division. Where a Physical and Health Education Department head or chairman exists, the development of the course of study should be conducted under his direction and co-ordination. Otherwise one of the Intermediate Division teachers should accept this particular responsibility.

The most critical curricular development is made by the individual teacher in co-operation with his class. Here the experiences of the course are individualized and made truly relevant in terms of innumerable factors. The teacher's knowledge of each of his students is the key to such program-planning. A general knowledge of early adolescence is essential. This includes recognition of the unevenness of physical growth, differences in body build, the degree of emotional turmoil, the intensity of interest in personal growth and development, and the varying interests of students related to sex differences and different stages of maturity. In general it is recommended that activity classes be taught to girls by a woman and to boys by a man. Health Education classes may be taught co-educationally as may such classes as folk dance.

One of the strongest influences on the student is that of his peers. This accounts in part for his interest in team activities and his desire to make sacrifices to achieve an accepted goal. The urge to conform is balanced by a sense of independence reflected in the desire to help plan the program and choose some of the activities.

Physical and Health Education classes offer opportunities for the student and teacher to discuss what they expect to accomplish through the program. Such discussions permit the teacher to relate the student's needs for growth and development to his purpose for taking the course. The teacher may discuss the program with students individually or in larger groups or classes. The student who needs special encouragement to seek appropriate goals may often be helped by the personal attention of his teacher.

More systematic observation of the student is also important. For example, social skills are readily observed in games classes. Here the student may function as a leader, a participator, an initiator, a follower, or as a non-participator. Throughout the course the teacher can observe a student's progress towards his objectives. These observations can give the teacher valuable information for devising relevant learning experiences.

Observation and discussion can be supplemented by more impersonal means of securing pertinent information. For example, standardized forms might be used to record the student's height, age, and weight. Together with cumulative medical records, this information can be used to plan appropriate activities for individual students.

Records of the nature and extent of the student's interest and participation in the program are valuable. A brief, selective, and easy-to-answer questionnaire can be used to obtain indications of preference for activities which may be incorporated into the program in the following term. Questionnaires can involve both the home and school in the preparation of courses that reflect the student's needs. They can also help the teacher evaluate his own effectiveness by revealing the student's level of comprehension of current health problems and physical activities.

The teacher should make use of all of the resources available. Individual teacher specialties can be exploited as can team-teaching. Large-group planning can make available to all students the varying strengths of all the teachers. The gymnasium, together with outdoor areas, can be used effectively for large-group instruction as well as for more individualized learning experiences. Many print and non-print materials may also be brought into the program.

When appropriate, the student should be made aware of the relationship between the Physical Education and the Health Education parts of the program. Some aspects of the program related to human growth and development lend themselves to even broader interdisciplinary approaches. Planning with teachers of such courses as Family Studies and Science can eliminate overlap of subject matter and enrich the resources available to the student. The methods of sharing the various aspects of the teaching load through team-teaching are numerous. However, it is important that each student experience the personal guidance of a competent and understanding teacher. This is needed to develop an atmosphere in which the student knows that he is perceived as an emotionally sensitive person who will receive the teacher's respect, his concern, and the best of his professional skill.

Teachers of Physical and Health Education should be sensitive to the many possibilities of integrating their programs with out-of-school education, which is by its very nature inter-disciplinary and integrated. Effective use should also be made of parents and the community. Strong attitudes towards the school and its programs are created in the home. Thus the support and interest of parents should be maintained.

Co-operation between the school and the community ensures that the student receives as much help as possible. Resources from the recreation program can be brought to the school; skilled participants from track, tennis, riding, sailing, or skating clubs can bring their talents to the student's program when the school deems it appropriate. In addition, the school program might make use of such community facilities as rinks, golf courses, and canoc and rowing clubs. Conversely, the community should be able to take advantage of the school's gymnasiums, pools, and track-and-field

areas. Sharing facilities and equipment in this way emphasizes the fact that the school belongs to the community and is part of its life.

Parental support of the school program may be won and maintained by giving information to parents about the philosophy upon which the program is predicated and about the way it is run. This may effectively involve parents in the program and allow them to supplement it with appropriate activities within the family. Communication with parents may be conducted through group discussion within the school, printed information, and the services of newspapers, radio, television, churches, clubs, and the business community. The aspirations and strengths of the community should be reflected in the total school program.

Physical Education

The Course of Study

A balanced, dynamic program should be planned to give students a wide range of experiences that go beyond information and skills. The student should develop attitudes, concepts, and values that will help him to solve problems in light of both his own goals and the values of his home and community. Learning experiences may take place in gymnasiums, classrooms, playing-fields, pools, or in out-of-school locations. Suitable outdoor activities should be planned for each season of the year.

The four years of the Intermediate Division should be considered as a unit. A core of activities may be planned for each year so that new sports are introduced at each level to provide a "survey" of the many physical education activities. A reasonable amount of time must be allowed for each activity. Students should be able to perform a skill sufficiently well to derive satisfaction from it. In order to continually challenge students, skills should be taught logically from the simple to the complex. A co-curricular program will provide the opportunity for interested and skilled students to take part in intramural or inter-school activities. The physical education program should endeavour to draw out the potential ability of each individual student.

The following topics are presented in order to assist the teacher to design learning activities that are effective and physically safe. The intention is to indicate patterns for planning, not plans for teaching.

Aquatics

Swimming, diving, and life-saving skills contribute to physical development and also constitute an essential aspect of public safety. The opportunity for students to be introduced to aquatics will depend upon the availability of facilities and trained staff. Only a teacher who has the necessary qualifications (under Public Health Act Respecting Public Swimming Pools, Ontario Regulation 113/71) may teach in a school pool.

An effective aquatics program requires that the teacher recognize individual student differences in a safe environment. Safety procedures must be established and practised at the beginning of the program and then incorporated into each successive lesson.

A well-planned program will develop confidence in the students so that they will be competent both in shallow and deep water. They should develop an understanding of the principles of floatation, the ability to move through the water, an understanding of the principles of water safety and life-saving, and skill in water entries. A progressive, standardized award system may partially meet the individual needs of the students, but it should not exclude such activities as synchronized swimming, novelty and team games, stroke improvement, diving, life-saving, competitive swimming, skin- and scuba-diving, and survival swimming. Recreational activities such as canoe or kayak paddling and water polo may also be taught, as well as such safety activities as maintaining balance while in a life jacket and climbing into and out of a boat.

Teachers may wish to establish a sequence of skills to be acquired. This will permit students to progress at their own rate and appreciate their own accomplishments. Students may work in pairs for greater safety and mutual correction. On the other hand, if a particular student's needs differ from those of others in the class, he can pursue on his own a sequence of skills described on an assignment card prepared by the teacher. Under the teacher's guidance the student should decide on his appropriate ability level and on the order and speed at which he should progress.

The following procedures may be used to allow students the maximum opportunity to progress at their own rate:

- -simulated situations designed to develop knowledge, skills, and attitudes by allowing students to react physically in a safe, practical setting
- -reciprocal evaluation in which a student evaluates his partner's performance using specific criteria established by the teacher
- -individual program checklists containing a sequence of skills and activities that students are to pursue individually
- -assignment cards on which tasks or challenges are outlined by the teacher for individual student fulfilment
- -interest groups in which students select activities on the grounds of interest rather than ability (this could be organized using an assignment-card format)
- -discovery approaches that allow students the opportunity to experiment with alternatives in solving problems.

The following organization for teaching the surface dive from the horizontal swimming position uses some of these procedures.

The beginning of each class may be used to review the skills learned previously. In this case the students might have learned treading water with support from either a kickboard or life jacket. Before seeing a surface dive performed in the pool, students can develop safe exposure to the skill by touching various parts of the body to the bottom of the pool in shallow water; by executing a handstand in the pool first from a standing position and then from a crouch; by executing a handstand from a front-glide position.

After a demonstration of the surface dive, the students can begin practice by diving for a hockey puck. The teacher should control the position and movement of students at all times while they are in the pool or on the deck.

The teacher can end the class by supervising the execution of individual tasks requested by the students. The dismissal routine should include checking the pool to ensure that all students are out of the water and in the change room, returning all equipment to their appointed places, and locking the pool area.

Dance

Dancing offers excellent opportunities for the development of rhythmic abilities and is an enjoyable means of developing and maintaining physical fitness. It allows the student to express his emotional reactions to a variety of stimuli and gives him the opportunity for individual expression.

Historical and ethnic (folk) dances acquaint the student with certain aspects of tradition and the cultures of other countries. There are many possibilities here for lessons co-planned with teachers of History, Geography, Family Studies, Theatre Arts, English, and Modern Languages. Square-dancing provides opportunity for social interaction, while its robust good fun should be welcomed by the student. Modern jazz is popular with students and offers them strong rhythm and the opportunity to do their own choreographing. All of these forms of dancing, along with social and ballroom dancing, are well suited to co-educational classes.

Students like to dance and need little encouragement to actively participate in dance classes. The everyday happenings of daily life can provide excellent source material and, as in pantomime or dramatic improvisation, can draw the student into the spirit of self-expression. The following are some examples:

- -Emotions and postures stemming from personal and interpersonal situations—for example, joy, sorrow, aggression, fear, understanding, love, sympathy, gentleness, teasing, chasing, bullying, loneliness, rejection, acceptance, welcoming, parting, threatening, supporting, conforming, domineering, submitting, fighting—can stimulate mime and dance that illustrate the relationship between action and motive.
- -Occupations such as building (hammering, sawing, lifting, etc.) and waiting on table (manoeuvring, placing, smoothing, flicking, etc.) can inspire dances that rely on stylized action.

Whole sequences of events can be composed in mimemovement to assist students in recognizing and clarifying actions. As these actions are enlarged and abstracted, they become less realistic mime and more dance-like.

- -Stories, myths, and legends can stimulate mime that emphasizes character (withdrawn, affectionate, aggressive), mood (light-hearted, regal, solemn), or action and reaction (chase and escape, hit and dodge, beckon and follow).
- -Music (jazz, today's popular music, classical, movie themes, electronic), sculpture, film, and other expressive arts may act as stimuli for dance activity.
- -Natural phenomena such as volcanoes, storms, the elements, and the seasons are excellent stimuli. The natural phenomena chosen should have a high potential for movement. Thus Niagara Falls is a preferable choice to a still pond.

As the student's ability to communicate non-verbally grows, the teacher may assist by focusing class studies on movement themes. The following is a sample lesson-plan for a dance class. The lesson might explore such elements of dance as basic locomotor movements, movement of all body parts, continuity of movements, working with a partner, and passive and active movement.

The lesson should be preceded by introductory activity designed to prepare the student physiologically and psychologically for the study; to awaken the body as a sensitive instrument of expression; and to condition and discipline the body. Five or six locomotor movement and dance exercises

could be selected to stretch hamstring and shoulder muscles; to strengthen the abdomen, arms, legs, and feet; and to provide variations in the use of force, time, and space.

The aim of this lesson is to provide a structure in which the individual student can develop a dance sequence based upon previous learning experiences. The teacher can develop this aim by presenting words and phrases (such as "rise and fall" or "expand and contract") to which the students respond through movement. Percussive use of the voice or rhythmic repetition of a word or syllable can help a student react and move expressively to words. After the exercise, partner and group discussions can summarize the various reactions.

The teacher may then read a brief newspaper excerpt containing many movement words, such as stock-market reports, weather forecasts, or recipes. When the sequence of words is learned, students can work individually to create an interesting dance composition that portrays the words in movement. The following is a sample excerpt:

"After a slow opening, stock buyers emerged from their shells and brisk trading developed. Western oils moved strongly; there was an upsurge in commodity trading and industrials plodded forward methodically. There was, however, a sharp drop in metals as the day closed."

In succeeding lessons students may select their own newspaper excerpts, edit them, and prepare individual dances. Working in small groups, they may develop a dance based on a painting, a piece of sculpture, a short poem or prose passage. Further dance development may be based on movement conversations (quarrels, friendship, crises); character study (as in tragedy or comedy); or response to stimuli such as light, shadow, colour, design, or shape.

Games

Games naturally follow such activities as running, throwing, and catching. They provide enjoyment while at the same time they help to develop muscular skills and co-ordination. A progression of manipulative skills should be learned before the introduction of most games. These skills are found in the catching, throwing, and batting activities of the Primary and Junior Divisions. Games may include individual and dual sports, minor games (games of low organization), and team games.

Individual and dual sports receive more emphasis in the Senior Division, but some may be introduced here. These sports usually lead to popular social and recreational pastimes outside school and have wide appeal and value for students. Teachers may want to introduce only one or two of these sports at each grade level of this division in the time available. The choice of activities may depend upon the availability of facilities and equipment and upon the expertise of the teacher.

Minor games (games of low organization) help to develop co-operation. Unlike lead-up games, which are devised to teach the basic skills of other sports, minor games may be played for their own enjoyment. They include *invented games*, often devised by the students themselves, and *traditional minor games* such as pushball or dodgeball. The aim of minor games is maximum participation in a truly enjoyable activity without the restrictions of a complicated structure of rules and regulations.

Team games should be taught with accuracy and patience through a combination of skill progression and adequate practice. Game rules should be adapted in class instructional periods to allow for maximum participation. In team sports, improvised game-like situations or adjustment of

playing-court size will allow increased activity. Learning to officiate these games can be taught alongside the skills of the games.

Since many team games are seasonal, teachers are encouraged to use outdoor facilities whenever possible. Not all sports should be taught in any one year. Keeping in mind the physical development of the student and the degree of difficulty of the fundamental team skills, teachers should build a progression of skills from easy to difficult over the four years of the Intermediate Division. In addition, some team games are more appropriate for one sex than the other—for example, football for boys and speedball for girls. Safety should be the main concern in this connection. Team games require a high degree of fitness and should be a regular part of the daily class routine, but they should not be allowed to monopolize the Physical Education program.

Since volleyball is a popular game in schools, the following sample lesson teaches the open-hand spike. Before starting, the overhead volley should be reviewed in scatter formation with partner and ball. Stress should be placed on the ready position, the hand position, contact, and followthrough. The new skill (the open-hand spike) should be taught with emphasis on the approach, the take-off, contact, set, arm action, and landing. The class may be divided into pairs scattered around the gym, each with a ball. The ensuing practice may be observed both by the teacher and the group, with correction and criticism coming from teacher or student. If time allows, a modified game of volleyball could be played with points scored only after a spike. Follow-up in succeeding lessons may include the presentation of such skills as blocking, open and overhead serving, and the forearm pass.

Gymnastics

Gymnastics should help students to develop strength, flexibility, agility, stamina, and co-ordination. A well-designed program aids muscle tone which in turn promotes a healthy and attractive posture. Control, dexterity, confidence, versatility, adaptability, and self-discipline may all be gained through gymnastics. Thus skills and attributes learned here may be readily transferred to other activities.

Gymnastics classes should be tailored to the needs of the individual. For this purpose, both direct and indirect teaching methods may be used. In teaching the handstand, for example, the teacher might stress body positions that are necessary before balance can be achieved. The assumption here is that despite individual deviations, there is a right or wrong way of performing the skill. On the other hand, the lesson could be taught indirectly as an experience in problem-solving. In this case, the student is free to invent and select his own solution by exploring a variety of leg positions prior to placing his weight on his hands.

The gymnastics program will depend on the priorities and skills of the teacher and the availability of apparatus. Olympic gymnastics (the more formal, direct instruction) will require more apparatus that meets official specifications than will educational gymnastics (the indirect approach geared towards problem-solving). In any case, the program should continue the development begun in the Primary and Junior Divisions. This will involve:

- -less use of small apparatus than in the previous years -greater quality and control with higher standards of performance
- -a greater variety of more difficult tasks
- -combined tasks instead of simple tasks, e.g., flight and balance or vaulting and rolling

- -more and more sequence work, particularly in pairs and small groups
- -more imaginative use of apparatus
- -more complex arrangements of more advanced apparatus.

Individual movements in gymnastics should be combined to produce interesting routines. The linking together of already-mastered movements into continuous, logically flowing sequences may come about in three ways:

- -The sequences may be designed by the students from a combination of movements that they have already mastered. Here the teacher should emphasize the quality in the performance of the individual movements in the sequence and in the way these movements are joined together.
- -They may be based on *variations of one task* such as rolling, balancing, swinging, or vaulting.
- -They may be based on *variations of more than one task* such as rolling and balancing or swinging and holding.

A sequence or routine should have a definite starting position, a middle section, and a definite finishing position.

Early in a gymnastics program the teacher should conduct the lesson. He should use the bare floor and decide what movements of the whole body to include. Tasks should be worked out in one place on the floor before beginning more complex movement. Each student should be helped in joining short separate movements and positions into a co-ordinated whole.

As the student matures and becomes more skilful, the teacher must determine whether to continue with the informal method usually connected with educational gymnastics, to use the more formal method often used with Olympic gymnastics, or to use a combination of both approaches as the situation requires. Whichever approach is used, the class must be organized to maximize the opportunities for each student to achieve success and enjoyment. The ensuing class pattern should allow the teacher the greatest opportunity to be of direct assistance to each student.

Skating

Skating is an ideal activity for Canadian students. Because of the long winter, there are ice surfaces in the neighbourhood of most schools. In addition, skating and hockey are both part of our tradition and most students have skates of some kind. Thus students enjoy the sport and approach a skating class with built-in enthusiasm.

The following skills should be considered as immediate objectives: start position, skating stride, stopping, turning (coasting), sweep check position, cross-over, quick break, running sideways, stop and go (both sides), cutting (emphasize both sides).

When these skills have been acquired, students could start working on the following more advanced objectives: backward skating; skating circles; skating forward, stopping, and skating backward, skating backward, stopping, then skating forward; skating the square; skating backward and turning left or right; skating forward, making a jump turn, and skating backward; and making backward circles, then stopping, and skating forward.

Track and Field

Track-and-field skills provide enjoyable activity, promote fitness, and help each student to develop a better understanding of his body and of his specific abilities. The great

range of track-and-field activities allows each student to find events that provide a satisfying challenge.

Students should be prepared for track-and-field events by a well-planned conditioning program. Interval training, circuit training, power sprints, Paarlauf, Fartlek, weight training, rope climbing, and isometrics may all be used for conditioning.

The suitability of events must receive careful consideration in the case of each student. Some activities have age and sex limitations. The pole vault, the triple jump, and some other events are not considered suitable for girls. The distance that students run should be weighed in regard to their age and abilities. It is not recommended that javelin be taught in class situations.

Opportunities for those who want to compete with others should be provided, but the main emphasis should be on improving the student's own previous achievement.

There should be sufficient equipment and learning areas for all students to be involved. Equipment can be used in innovative ways.

For example, ropes or yarn can be stretched at varying heights around a landing area to make space available for a larger number to jump. Prior to the period of instruction, students might practise the skills they have learned. After a new skill has been demonstrated, students require sufficient practice space and time to practise the skill and to review previous ones.

In a sample lesson on the high jump, the teacher should first review the work of the previous class. Each student could then find a space large enough to execute some aspects of the new skill, remaining close enough to hear the teacher's suggestions for improvement. The teacher could then point out such details as the use of the straddle vs. the roll style to clear the bar. The class should conclude with the students practising the skills. Future classes could deal with such skills as hurdling, the long and triple jumps, pole-vaulting, and shotput.

A Note on Safety

Teachers should be aware of the potential dangers inherent in some activities. Recent research has shown that the following traditional exercises may be harmful or may not achieve the desired results:

- -full knee-bends (including duck walks)
- -forced toe-touches with straight knees
- -double leg-lifts from a back-lying position
- -sit-ups with straight knees
- -any exercise that forces hyperflexion of a joint.

Tackle football, rugger, baseball (rather than softball), wrestling, triple jump, pole vault, and Olympic ring and horizontal-bar activities in gymnastics are not recommended for the curricular program for girls. Boxing is considered an unsatisfactory activity in a school program.

Safety procedures should be emphasized early in the program and continually. Consideration should be given to:

- -suitable gym clothing
- -the removal of jewellery and potentially dangerous items
 -the condition of the gymnasium, the pool, and the outdoor
 field (attention should be paid to sharp corners, projections
 of heating and lighting controls and appliances, doors that
 swing into the area used, broken glass [actual and potential],
 slippery and uneven surfaces)

- -the use of protective equipment when required
- -the handling, spacing, and frequent inspection of equipment (the smooth finish and lubrication of wood and steel equipment, the tightening and covering of nuts and bolts) -clear, isolated field areas and definite, established pro-
- cedures for throwing events
 -adequate body-conditioning procedures.

Courtesy, respect, and concern for one another among students and teachers is basic to all safety.

Conditioning should be directly related to specific activities. Such conditioning prepares the student for the demands of the activity. The student should learn the principles of overload and realize the necessity for regular physical activity; he should also appreciate the importance of regular workouts in maintaining and improving the level of fitness and should acquire an understanding of the principles of progressive relaxation. Conditioning may include circuit training, weight training, power sprints, jogging, Paarlauf, isometrics, Fartlek, and interval training.

Health Education

Introduction

Health Education should be as relevant as possible for the student. He might be actively involved through material that is related to his personal experiences. While knowledge still plays a large role, Health Education experiences should be geared primarily towards the development of attitudes, values, and behaviour. Feelings, relationships with others, and the general affective and emotional components of health education should permeate the program and should be the continuing focus of both teacher and student. With this type of orientation, many of the traditional practices of evaluation may become inappropriate.

The basic objective of Health Education is to aid and support the student to develop (a) independence and a sense of responsibility, (b) an understanding of human sexuality, and (c) a personal value system. The course should help the student to achieve a positive self-image, that is, an understanding of who he is, what he is, and where he is going.

Content

The material chosen for the course should be sufficiently challenging to the student without being too difficult. It should not be too far removed from or threatening to the view he has of himself. The teacher should, therefore, have great understanding and empathy for his students as individuals and as a class.

The student might study his age group from the viewpoint of heredity and individual differences. This could include a review of the physical characteristics inherited from parents and a consideration of the Mendelian Theory. An investigation of genes and chromosomes could then involve the student in a consideration of some of the characteristics associated with heredity as well as irregularities and accelerated growth.

The adolescent has a special interest in his body's needs for growth and development. He should know about his body's metabolism in terms of protein, fats, carbohydrates, minerals, and vitamins. Often the student's concern for appearance can lead to the development of a regimen based on appropriate care of teeth, skin, hair, and nails.

The student should know that the body possesses internal controls of its own. The following topics should be considered:

- -the brain and nervous system, concentrating on the structure and function of nerve cells, nerve pathways, and the autonomic nerve system
- -automatic and conditioned reflexes
- -sensory processes such as stimulus and response and the initiation of voluntary movement
- -the endocrine system
- -the effect of the pituitary, thyroid, adrenal, and sex glands (gonads)
- -the effect of the pancreas.

Non-biological factors affecting health should also be studied. A study of emotions and their development might include an investigation of substances that can change feelings. This would include the effects of food, medications, inhalants, tobacco, alcohol, and other drugs. The effect of the student's home environment on his feelings and behaviour should also be examined.

Since the community can affect the student's development, it may also be considered. This may lead to a consideration of the community's organization and its health and safety policy, including the protective services provided by community health organizations and agencies to control communicable diseases such as hepatitis, mononucleosis, rabies, tetanus, and venereal disease. The social organizations formed to combat such degenerative diseases as arthritis and multiple sclerosis may also be considered.

The study of maturation and of his own developing sex characteristics is of great interest and value to the adolescent. The teacher might begin with the basic structure of the cell, leading to reproduction systems, development of a baby, and the normal birth process. The effects of the student's sexual growth on the development of his feelings and of his responsibilities to others should be pointed out. The implications of unwanted pregnancies and venereal disease, for example, are topics that relate to responsible behaviour. The advice and support of parents and other individuals and groups beyond the school will contribute to a learning environment that will help each student to live a healthy and happy life.

Ideally, the student entering the Intermediate Division should already possess a basic understanding of the following:

- -the life processes of plants, flowers, fish, birds, and animals
- -human families kinds, needs met by, and relationships, roles, and responsibilities within
- -individuality-self-awareness, uniqueness of each individual, the need for privacy, peers and individuality, developing independence and a sense of responsibility
- -anatomy and physiology-cell division and differentiation (heredity), tissues, organs, and systems, the human body's basic structure and function, dominant and recessive traits
- -human growth and development basic terminology, physical differences between males and females, patterns of development (physical, mental, social), menstruation (basic physiology and hygicne), conception, pre-natal development, normal birth process, multiple births, breast-feeding
- -sexuality-being male and being female, stereotyped versus valid sex roles, respect for others

- -dental health-structure (kinds of teeth and purposes), chemicals that benefit teeth, importance of diet, check-ups by dentist, brushing and flossing, cavities, halitosis
- -alcohol-types of alcohol, use, misuse, general understanding of effects
- -tobacco-understanding in some depth of its pharmacology, immediate health and physical effects, reasons for beginning use of, needs met by use of, use by adults, advertising (strategies, validity, etc.)
- -other drugs—benefits (medicinal, analgesics), use, misuse, and abuse, selected pharmacologies as appropriate, youth drug culture in school and community
- -safety-safe practices (home, school, community), accidents, medicines, indoors (poison, fires, appliances), outdoors (water, bicycle, skating)
- -first aid-poisons, cuts, bruises and sprains, insect bites, frostbite
- -nutrition basic positive health practices, general classes of nutrients, suitable foods for growing children, process of digestion, the effects of feelings and emotions on digestion
- -valuing and values clarification—integrated use of the basic processes and strategies of values clarification, basic understandings regarding decision-making and problem-solving
- -community health-community health and the environment, protecting the environment, community health helpers, school health services and individual children, introduction to human ecology.
- If the students in the first year of the Intermediate Division do not have these basic understandings, the teacher's first task is to develop them. In order to assess the extent of the students' knowledge, the following methods may be used:
- -class discussion
- -small-group discussion (buzz groups or brainstorming) with specific direction
- -a "health questions mailbox" in which students can deposit questions they would like answered or topics they would like to study in depth
- -a pre-test (a knowledge inventory)
- -short essay assignment
- -discussion with teachers of the lower grades
- -reading and becoming familiar with study guides and courses of study for the lower grades.

As can be seen from the previous discussion, the content of the Intermediate Division program should be a logical outgrowth of the Primary/Junior content. In many cases, not only the general areas but also the specific topics will be the same. It is the sophistication, specificity, and depth of treatment that will provide the basis for more advanced learning. The following list is intended as a guide in formulating an appropriate focus and direction for the material (the suggestions are not intended to be complete or all inclusive):

- -human families conflict (normal within limits); conflict (handling and resolving); parental authority versus peer pressure; communication within (generation gap); sibling rivalry
- -individuality-independence and sense of responsibility; unique worth of each person, personality, potential within each person; courage; individual needs; relationships with

- peers (privacy, respect, influences, needs met by); personal decisions concerning matters affecting health; adolescent health concerns (acne, obesity, physical development, appearance)
- -anatomy and physiology-digestion and excretion; circulation; respiration; senses (relating to health); endocrine system and endocrinology; genetics; nervous system
- -human growth and development-changes associated with puberty; early and late maturers; male and female anatomy; ovulation, menstruation, fertilization, pre-natal development (foetus and embryo), kinds of births; basic understandings of population problems and control; pre-marital pregnancies and births
- -sexuality-current styles of dress and grooming; boy-girl relationships; types of love; dating and courting, engagement
- -dental health bacterial plaque; flossing and brushing; dental accidents; protection in sports; periodontal diseases
- -alcohol-drinking patterns; drinking and driving (breathalyzers); alcohol and nutrution; alcoholism as a disease; effects on health (e.g., cirrhosis); alcohol and the law
- -tobacco-advertising; exemplars; costs; aesthetics; cardiorespiratory effects (smoking and athletic performance); morbidity and mortality factors; reasons for beginning use and continuing, ways of stopping; law; alternatives
- -other drugs-categories and selected pharmacologies; medicinal and legitimate use; society and drugs; mood modifiers (legal and illegal); sources and history; patterns of misuse and abuse; reasons for misuse and abuse; predictability; the subculture (in and out of school); alternatives; law
- -safety-car and traffic; guns; baby-sitting; gymnasium; summer outdoors (swimming, camping); winter outdoors (skiing, skating); machinery
- -first aid-general principles; artificial respiration; fractures; control of bleeding; muscle injuries; convulsions; shock
- -nutrition-understanding of calories; cultural patterns affecting food and eating; relationship to health, appearance, personality, and weight; facts from study of nutritional habits of Canadian adolescents
- -valuing and values clarification—introduction to the process of valuing; values games; more advanced strategies
- -community health—governmental and municipal health agencies; human ecology; effects of air, water, and soil pollution on health; ecology and the law; consumer health
- -physical fitness muscular fitness; cardio-respiratory fitness; weight control and obesity; exercise and recreation; principles of overload; fitness training methods; conditioning (appropriate exercises); influence of nutrition
- -venereal diseases basic epidemiology; mode of transmission; signs and symptoms; treatment (sources and nature); responsibility; law
- -stress-nature; good and bad aspects; effects; controlling or eliminating stressful situations; introduction to work of Hans Selye
- -communications—need for; nature of verbal and non-verbal forms; group interactions; relating to peers; relating to adults and families; in schools; rumour; perceptions.

The experience of Health Education should be integrated as much as possible into the student's total curricular life. Health and Physical Education are especially interrelated.

Interest and relevance are basic guides for the choice of content and for the emphasis and depth of treatment given that content. The following table indicates degrees of emphasis that might be given various areas of Health Education at specific divisions of the total school program. The table is only a guide; the ultimate decisions and responsibilities rest at the appropriate level of local educational jurisdiction.

Topic	Kindergarten/ Primary	Junior	Early Intermediate	Late Intermediate	Senior
1. "Non-human" life processes	I-B	Н	С	N	N
2. Human families	Ι	В	В	Н	Н
3. Individuality	Ι	В	Н	Н	С
4. Anatomy and physiology	Ι	В	Н	С	С
5. Human growth and development	I	В	Н	Н	С
6. Sexuality	I	В	В	Н	Н
7. Dental health	I	В	Н	С	N
8. Alcohol	N	I	В	Н	С
9. Tobacco	I	В-Н	Н	С	N
10. Other drugs	I	В	Н	С	С
11. Safety education	I	В	Н	С	N
12. First aid	N	I	В	Н	C
13. Nutrition	I	В	В	Н	С
14. Values clarification	N	I	В	Н	Н
15. Community health	I	В	Н	С	С
16. Physical fitness	N	N	I-B	Н	С
17. Venereal disease	N	N	I	В-Н	Н
18. Stress	N	N	I	В	Н
19. Communications	N	N	I-B	Н	С
Kay					

Key

- I Introduction
- B Basic development
- H Heaviest concentration
- C Continuing development
- No treatment

Methodology

A wide variety of teaching-learning methods should be used in the classroom. Some of the most effective methods are: case studies, guided discovery, large-group discussions, lectures, problem-solving, role-playing, simulation games, small group discussion (e.g., buzz groups and brainstorming), sociodrama, Socratic method.

The following support materials and activities can be used to make the techniques used in the classroom more effective: books, bulletin-board activities, cartoons, charts, collections, committees (task), debates, demonstrations, dial boards, essays, exhibits, experiments, field trips, filmstrips, filmstrips plus recording, filmstrips cut up and mounted as slides, flexible scheduling, films (8 mm. and 16 mm.), games, graphs, guest-speakers, health fairs, interviews, loop films, maps, models, newspaper clippings, notebooks, objects and specimens, panels, pictures mounted, picture lessons, posters, problem boards, programmed instruction, radio (tapings), records, reports, slides (35 mm.), slides and tapes, slogans, surveys, tapes (cassette and reel), teaching machines, team-teaching, television, tests, transparencies, X-rays.

Evaluation

Before beginning any learning experience, the student must know what is expected of him – what the activities in the course consist of, how long he will be doing them, and what he must do to complete them successfully. Evaluation will assist the student in self-appraisal. The teacher should help the student to set realistic goals, to work towards achieving them, to analyse the reasons for successes and failures, and to go on to establish new objectives.

Evaluation can also assist the teacher in self-appraisal. If student goals are not reached, the program may have to be adjusted. Problems may be found in the motivation given the students, in the standards required, or in the program itself.

Evaluation will help produce a mark or grade that will comply with administrative requirements. It can also help provide homogeneous groupings of students, if desired.

Evaluation may take a variety of forms:

- -continuous observation, with the teacher having specific objectives in mind
- -standardized skill tests
- -teacher-developed tests
- -a practical performance (subjective in nature)
- -written objective tests
- -inventory tests
- -improvement tests
- -self-evaluation and/or reciprocal tests
- -formal written examination
- -grade by contract.

The following cautions should be kept in mind:

- -The qualifications of those administering tests must always be considered.
- -Inconsistent standards render the results of tests invalid.
- -Test administration is time-consuming and requires a high degree of organization and planning.
- -It is not always appropriate to use the norms of other students as a yardstick.
- -The test must be designed to achieve the specific objectives established by the teacher.
- -There is always the possibility that a prolonged testing program will become a substitute Physical Education program. Testing for the sake of testing has no place in any course.

The shortcomings of tests must be realized. The number of times that a student hits a volleyball properly will not indicate whether the student can actually play volleyball. Similarly, the fact that the student comprehends facts about what constitutes a healthy and satisfying life is no assurance that he will develop such a lifestyle. Tests cannot measure such extremely valuable aspects of the course as the development of taste, style, and the neuro-muscular satisfaction of purposeful movement.

The manner in which either the student's achievements or the judgements made about them are recorded and reported should be determined locally. Some schools might choose to issue only an anecdotal report card. Others might complement this with a mark or grade. Whatever method is used, it should give as much information as possible.

Resources

- The teacher who wishes to gain more knowledge and professional competence may explore the following possibilities:
- -Program consultants in the regional offices of the Ontario Ministry of Education are available to teachers on a request basis.
- -Teachers may take part in Physical and/or Health Education curriculum development committees as working members.
- -Refresher courses are offered by the Ministry or by such bodies as university faculties of education.
- -Winter or summer courses leading to special certification in Physical and Health Education are run by the Ministry or by faculties of education.
- -Short courses or winter courses are often planned by boards of education.
- -A teacher may become a member of and attend conferences given by associations of professional physical and health educators.
- -The use of videotape and other audiovisual equipment in the gym, classroom, or athletic field may help a teacher assess his or her teaching methods and mode of organization.
- -The teacher may meet with and observe other teachers in action either in the same school or at another school.
- -Teacher exchanges are possible, especially on professional-development days. This is very useful between teachers of the earlier and later Intermediate years.
- -A planned series of workshops can grow out of an identified need. An isolated workshop is rarely of any great value. Planning and follow-up are essential.
- -The teacher may seek objective assessment of himself, the lesson or specific activity, of student performance, etc., from qualified persons.
- -Societies and associations working in specific health education and research areas such as the Cancer Society, the Heart Association, the Addiction Research Foundation, and the Canadian Health Education Specialists Society may all be helpful sources of information.
- The maple leaf indicates a Canadian publication.

- -Community people with a special related talent or skill may be able to help the teacher enrich the program.
- -The following annotated list of professional literature and resources should provide information on areas of interest.

Books

Aims and Objectives

Bilbrough, A., and Jones, P. *Physical Education in the Primary School*. 3rd ed. New York: International Publishers, 1968.

This book sets out the general principles of

This book sets out the general principles of educational gymnastics and the modern approach to game skills.

Knapp, Barbara. Skill in Sport. London: Routledge and Kegan Paul, 1964.

This book centres on a discussion of the psychology, physiology, and kinesiology that lead to proficiency in sports.

Le Boulch, Jean. L'éducation par le mouvement. Paris: Les Editions Sociales Françaises, 1969.

This text expresses the latest ideas in pedagogy. The ideas of mastery over the body, body relationships, time, space, integration of the different motor faculties, etc., as well as exercises that would be useful for realizing these objectives, are outlined clearly in this work. The text is in French.

Mauldon, Elizabeth, and Redfern, Hildred Betty. *Games Teaching*. London: MacDonald & Evans, 1969.

This unusual approach to teaching games to ten- and eleven-year-olds can also be very useful with players.

Mosston, Muska. *Teaching Physical Education: From Command to Discovery*. Columbus: Charles E. Merrill Publishing Co., 1966.

This book presents an evolutionary approach to teaching physical education through both individualized learning and the cognitive process.

Stanley, Sheila. *Physical Education:* A Movement Orientation. Toronto: McGraw-Hill Co. of Canada, 1969.

This is a modern educational approach to teaching techniques, methods, and concepts in dance, games, and gymnastics.

Aquatics

Amateur Swimming Association. *Manual On Diving*. 5th ed. London: Educational Productions, 1963.

This well-illustrated book covers the basic rules, regulations, dimensions, and organization of diving.

Canadian Manual of Synchronized Swimming. Ottawa: Canadian Amateur Synchronized Swimming Association, 1970. (Available from Mr. Julian Carrol, 33 River Road, Ottawa.)

This manual gives illustrations of the formations used in Canadian competition and offers hints on teaching, composition, and music for each.

Canadian Red Cross Society, Water Safety Service. *Instructor's Guide and Reference*. Toronto: Canadian Red Cross Society, 460 Jarvis Street, 1966.

Counsilman, James E. *The Science of Swimming*. Englewood Cliffs, N.J.: Prentice-Hall, 1968.

While this book is concerned mainly with competitive swimming, it gives a breakdown of each of the major swimming strokes.

Fairbanks, Anne Ross. *Teaching Spring-board Diving*. Englewood Cliffs, N.J.: Prentice-Hall, 1963.

This book gives information on teaching springboard diving to a beginner and on progressions for the five groups of diving on the one- and three-metre boards. It emphasizes diving fundamentals rather than competitive diving.

Lanoue, Fred R. *Drownproofing: A New Technique for Water Safety*. Englewood Cliffs, N.J.: Prentice-Hall, 1963.

This short book deals with how to overcome fear of swimming, how to deal with cramps and injuries in water, and with rescue methods. Practical suggestions are given for many other aquatic skills including surface diving and underwater swimming.

The Royal Life-Saving Society of Canada. *Canadian Life-Saving Manual*. 2nd ed. Toronto: RLSSC, 1970.

This series of five booklets covers aspects of life-saving, swimming strokes, basic diving, and synchronized skills necessary in any instructional swimming program.

Conditioning and Training

Hooks, Gene. *Application of Weight Training to Athletics*. Englewood Cliffs, N.J.: Prentice-Hall, 1962.

The purpose of the book is to present the use of weight training to develop strength and muscle tone for a number of individual and team sports as well as for competitive lifting.

Kelley, Frederick Gilbert. *Isometric Drills* for Strength and Power in Athletics. Englewood Cliffs, N.J.: Prentice-Hall, 1967. Basic explanations of conditioning and weight control are the main features of this book. There are many good exercises.

Klafs, Carl E., and Arnheim, Daniel D. *Modern Principles of Athletic Training*. 2nd ed. St. Louis: C. V. Mosby Co., 1969. This is the most practical, up-to-date book on the subject with a good chapter on special considerations for girls in athletics.

Mott, Jane A. Conditioning and Basic Movement Concepts. Dubuque: William C. Brown, 1968.

This well-written, concise examination of movement and conditioning contains a good analysis of exercises.

Rasch, Phillip J., and Burke, Roger K. *Kinesiology and Applied Anatomy*. 4th ed. Philadelphia: Lea and Febiger, 1971. This is one of the most practical and informative books on the subject.

Robb, Margaret D. *The Dynamics of Motor-Skill Acquisition*. Englewood Cliffs, N.J.: Prentice-Hall, 1972.

This book makes a connection between psychology and physical education. While the author has a rich theoretical background, she has also spent many years participating in and teaching sport and activity skills. Extensive attention is given to the examination of the skilled task per se.

Singer, Robert N. *Motor Learning* and *Human Performance*. New York: Macmillan Co., 1968.

Motor learning is applied to the performance of athletic skills.

Wessel, Janet A. *Movement Fundamentals:* Figure, Form, Fun. 3rd ed. Englewood Cliffs, N.J.: Prentice-Hall, 1970.

This book is intended for use by women students to help them develop a desire to assume personal responsibility for their own self-development and educational growth.

Dance

Carroll, Jean, and Lofthouse, Peter. *Creative Dance for Boys*. 2nd ed. London: MacDonald & Evans, 1969.

This book deals with suggestions for teaching creative dance to boys. It stresses ways of stimulating young boys to learn creative dance.

Harris, Jane, *et al. Dance a While*. Rev. ed. Minneapolis: Burgess Publishing Co., 1968.

This book includes material on the origin of folk dance, an analysis of step action, record sources and methods, and advice on organization for effective teaching.

Hayes, Elizabeth R. An Introduction to the Teaching of Dance. New York: Ronald Press, 1964.

This practical book gives teaching suggestions for all dance forms. Special attention is given to modern dance.

Kraus, Richard G. *Folk Dancing*. New York: Macmillan Co., 1962.

This book provides practical methods and materials on folk dance including classification of dances, analysis of step action, bibliographies, record sources, and detailed illustrations. There is complete instruction for 110 popular folk dances.

Lockhart, Aileene Simpson, et al. Modern Dance: Building and Teaching Lessons. 3rd ed. Dubuque, Iowa: William C. Brown Co., 1966.

In a structured approach, techniques are described and suggestions for applying them are given.

Mettler, Barbara. *Materials of Dance as a Creative Art Activity*. Tuscon: Mettler Studios, Box 4456, University Station, n.d. This book approaches dance as a form of movement that provides problems to be solved. It includes useful lesson material.

Mynatt, Constance Virginia, and Kaimian, Bernard D. Folk Dancing for Students and Teachers. Dubuque, Iowa: William C. Brown Co., 1969.

This book offers 65 dance descriptions from twenty countries including partner and non-partner dances, mixers, and novelty dances. Dances are described so that each dance step can be readily understood.

Preston-Dunlop, Valerie Monthland. A Handbook for Modern Educational Dance. London: MacDonald & Evans, 1969. Sixteen themes are presented. Various ways of treating them are explained and suggestions are given to aid the teacher with dance classes.

Russell, Joan. *Creative Dance in the Secondary School*. London: MacDonald & Evans, 1969.

This suggested syllabus is based on Laban's sixteen movement themes.

Games

All-Stars Hockey Guidebook. New York: McGraw-Hill Book Co., 1967.

This book is designed to aid young hockey players in developing fundamentals in all aspects of the game.

Athletic Institute. *How to Improve your Sports Series*. Chicago: The Athletic Institute.

This is a set of instruction booklets available on over thirty different popular sports. Each booklet, designed and written by experts in each sport, contains step-by-step picture demonstrations on how to improve form and skill.

Bjorn, Kjellstrom. *The Orienteering Handbook: Be Expert with Map and Compass.*LaPorte, Ind.: American Orienteering Service, 1967. (Available from Folk Dance Service & Audio Visual, 185 Spadina Ave., Toronto.)

This book provides a series of projects and exercises whereby a person inexperienced in the sport of orienteering can prepare himself to introduce the activity in a school. A training scheme makes map-reading and compass work interesting and exciting.

Blake, O. William, and Volp, Anne M. *Lead-up Games to Team Sports*. Englewood Cliffs, N.J.: Prentice-Hall, 1964.

Lead-up games to basketball, field hockey, lacrosse, soccer, softball, speedball, speed-a-way, touch football, and volleyball are arranged progressively from simple to complex.

Canadian Women's Field Hockey Rules and Umpiring Guide with Official Rules and Interpretations, September 1971 to September 1973. Ottawa: Canadian Field Hockey Council, Sport Administration Centre, 1971.

Disley, John. *Orienteering*. London: Faber & Faber, 1967. (Available from Folk Dance Service & Audio Visual, 185 Spadina Ave., Toronto.)

This is one of the best books written in English on competitive orienteering. It is a guide for the serious competitor, coach, or teacher covering the basics of orienteering, types of competitions, competitive techniques, fitness training, organization of meets, and course-setting.

Garvie, Gordon T. Let's Wrestle: A Handbook for Young Wrestlers and Instructors. Galt: Collier-Macmillan Canada Ltd., 1972.

This book is designed to help the novice teacher in setting up a wrestling program. In addition to illustrating wrestling manoeuvres, the book tells instructors how to judge and set up tournaments. It is the first of a series of books on different sports.

Hindman, Darwin. Complete Book of Games and Stunts. Englewood Cliffs, N.J.: Prentice-Hall, 1956.

Indoor and outdoor games and stunts of low organization are described. Rules are included for about 2000 selections.

Hughes, Eric. Gymnastics for Men: A Competitive Approach for Teacher and Coach. New York: Ronald Press, 1966.

Teaching and spotting techniques are included in this book.

Ideas for Badminton Instruction: Fundamental Techniques. Washington: American Association for Health, Physical Education and Recreation, 1966.

This teacher's guide to badminton instruction includes ideas for teaching the skill and for testing procedures.

Jacobs, Helen Hull. *Young Sportsman's Guide to Tennis*. Camden: Thomas Nelson & Sons, 1963.

This is a beginner's guide to the basic strokes, strategy, and tactics of tennis.

Johnson, Perry, and Stolberg, Don, eds. *Prentice-Hall Sports Series*. Englewood Cliffs, N.J.: Prentice-Hall, 1971.

Designed to meet the needs of both the beginner and the advanced sports participant, each volume presents the facilities, mechanics, psychology, and physiology of a particular sport. Accompanying the series is a teacher's manual that contains suggestions for class presentations and tests and an extensive film reference list.

Lindeberg, Franklin Alfred. *How to Play and Teach Basketball*. Rev. ed. New York: Assocation Press, 1967.

This book describes the administration of coaching and the fundamentals of playing basketball.

Lockhart, Aileene, ed. *Physical Education Activities*. Dubuque, Iowa: William C. Brown Co. 1964.

Each title in this series is a basic presentation of a recreational, physical, or sports activity, together with its history, methods of play, fundamental skills, strategy, and rules of play. The series contains at least forty titles which are constantly being revised.

McVicar, J. Wesley. *Athletic Handbook with Rules*. Toronto: National Council of the YMCA of Canada, 1968.

This handbook of rules and supporting material for a variety of sports is useful to physical directors, coaches, and recreation leaders.

Marx, Erich. *The Ball Primary Book for Schools and Clubs*. 6th ed. Hamburg: W. V. House, 1962 (Canadian F.D.S. Audio Visual Book Department, 185 Spadina Ave., Toronto.)

This inexpensive book contains many drills and activities using play balls of different sizes.

Means, Louis Edgar, and Jack, K. Harold. *Physical Education Activities*, *Sports and Games*. 3rd ed. Dubuque, Iowa: William C. Brown Co., 1971.

This is a general source book for high school students of both sexes. It gives a general explanation of the basics of twenty-four sports and games.

Ontario Federation of School Athletics Associations. *Know the Game Series*. London: Niblick Publishing Co. (Toronto: OFSAA).

This is a series of books that covers a wide range of sport activities from aquatics to scuba diving. Each book is written by an expert in his field and is constantly revised.

Pinholster, Garland F. *Illustrated Basket-ball Coaching Techniques*. Englewood Cliffs, N.J.: Prentice-Hall, 1960.

This is a good description and illustration of ball-handling techniques and of offensive and defensive tactics suitable for both boys' and girls' games. Drill is included.

Slaymaker, Thomas, and Brown, Virginia H. *Power Volleyball*. Philadelphia: W. B. Saunders Company, 1970.

Members of the U.S. Olympic team show how to execute the underhand pass, spikes, and other shots.

Sullivan, George. *Better Ice Hockey for Boys*. New York: Dodd, Mead & Co., 1965. The author describes many aspects of playing hockey.

Vannier, Maryhelen, and Poindexter, Halley Beth. *Individual and Team Sports for Girls and Women*. 2nd ed. Philadelphia: W. B. Saunders, 1968.

This book stresses the methods of teaching individual and team sports. It includes skill analysis, plans for organizing large classes, and sample lesson plans.

Volpe, Nicholas P. *Modern Canadian Football*. Vanier City, Ottawa: CAHPER, 1966.

This book describes the fundamentals of Canadian football. The author includes a brief history of the game, choosing and conditioning (card training) of a team, and the offensive and defensive skills of the game.

Wade, Allen. *The F.A. Guide to Training and Coaching*. London: Heinemann, 1967. All aspects of the game of soccer–from simple skills such as dribbling and passing to team strategy—are described. Diagrams support the explanations.

West, Barbara. *Practices for Hockey Players*. Brampton, England: M. Pollard, n.d. (Folk Dance Service & Audio Visual, 185 Spadina Ave., Toronto).

Suggestions for field arrangements for novice hockey coaches are included.

Winterbottom, Walter. *Modern Soccer*. London: Educational Productions, 1958. Winterbottom, Walter. *Skilful Soccer*. London: Educational Productions, 1956. Written by an ex-professional footballer, these books provide a well-illustrated guide to soccer skills and tactics.

Gymnastics

Carter, Ernestine Russell. *Gymnastics for Girls and Women*. Englewood Cliffs, N.J.: Prentice-Hall, 1969.

This is a well-illustrated text that not only covers basic routines from fundamental exercises to ballet and creative body movement but also includes judging techniques.

Cooper, Phyllis. *Feminine Gymnastics*. Minneapolis: Burgess Publishing Co., 1968.

This is a good description of gymnastics for women. The book suggests lead-up skills, main teaching points, common errors to avoid, and progressions.

Cope, John. *Discovery Methods in Physical Education*. London: Thomas Nelson and Sons Ltd., 1967.

This volume can assist the teacher in the teaching of gymnastics to exploit the full potential of the student.

De Carlo, Thom. *Handbook of Progressive Gymnastics*. Englewood Cliffs, N.J.: Prentice-Hall, 1963.

This is a well-illustrated book that discusses gymnastics suitable for both beginners and competitors. It contains suggestions for spotting and for promoting a gymnastics team, and lists suitable teaching aids.

Edwards, Vannie. *Tumbling*. Philadelphia: W. B. Saunders Co., 1969.

Descriptions and diagrams of most tumbling moves are given in detail.

Hughes, Eric, ed. *Gymnastics for Girls: A Competitive Approach for Teacher and Coach*. 2nd ed. New York: Ronald Press Co., 1971.

Useful ideas for class work and suggestions for routines in all four Olympic events and rebound tumbling are included in this book.

Kjeldsen, Kitty. *Women's Gymnastics*. Boston: Allyn & Bacon, 1969.

This is a good exposition of the application of mechanical principles to basic movement.

The Level System of Gynnastics (Charts). Toronto: The Book Society of Canada.

This series consists of eight charts designed for an individualized gymnastics program in tumbling, parallel bars, horizontal bars, vaulting horse, still rings, trampoline, calisthenics, and pommel horse. It is accompanied by a teacher's manual and instructional chart.

Mauldon, Elizabeth, and Layson, June. *Teaching Gymnastics*. London: MacDonald & Evans, 1965.

Movement-education principles are applied to gymnastics. Indirect teaching methodology is used. The book stresses mixed classes of ten- to eleven-year-olds but could be adapted for older students. It discusses each gymnastic theme from three aspects: material, teaching, and apparatus.

McPherson, James D. *The Project Method for Teaching Gymnastics*. Port Colborne, Ontario: Farmac Publishing Enterprises, 1969.

This book and the accompanying charts for student use in the gymnasium stress the mastery of fundamental skills to help the student perform routines on various pieces of apparatus.

Morison, Ruth. *A Movement Approach to Educational Gymnastics*. London: J. M. Dent and Sons, 1969.

The purposes, principles, and material, along with planning, teaching, and observation, provide an interesting source of information on modern work.

Munrow, A. D. *Pure and Applied Gymnastics*. 2nd ed. Baltimore: Williams and Wilkins, 1963.

This book deals with anatomy and physiology as related to gymnastics; it illustrates the fallacies of certain exercises and looks at various types of applied gymnastics.

Pallett, G. Doreen. *Modern Education Gymnastics*. Elmsford, N.Y.: Pergamon Press, 1966.

Movement principles are applied to gymnastics. The book is written for girls but probably could be adapted to boys' gymnastics as well. It stresses the development of themes.

Track and Field

Cooper, John Miller. *Track and Field for Coach and Athlete*. 2nd ed. Englewood Cliffs, N.J.: Prentice-Hall, 1970.

This book offers complete coverage of practically all track and field events, gives sample workout schedules, explains clearly the best way to perform an event, and gives helpful hints to performers.

Department of National Health and Welfare, Fitness and Amateur Sports Directorate. *Track and Field Pamphlets*. Ottawa: Information Canada.

This is an excellent series of fold-out posters on the fundamentals of various track-and-field events. The charts could be mounted on classroom or gymnasium walls.

Dyson, Geoffrey. *Mechanics of Athletics*. 5th ed. London: University of London Press, 1971.

Written for the teacher who wants to know about the "why" and "how" of athletics, this book deals with the mechanical principles of athletics using gymnastics, diving, and trampoline as examples.

Jackson, Nell C. *Track and Field for Girls and Women*. Minneapolis: Burgess Publishing Co., 1968.

The author is a physical education teacher and a former Olympic competitor and coach. She explains mechanical principles through the use of good diagrams.

Marlow, Bill. *Sprinting and Relay Racing*. Rev. ed. London: Amateur Athletic Association, 1966.

This book includes (1) the A.A.A. rules for competition; (2) "Long Jump and Triple

Jump" by D. C. V. Watts; and (3) "Shot Putting" by J. Le Mesurier.

Detailed information on all aspects of an event is accompanied by sequential pictures and training suggestions. All are up to date and written by contemporary national and international coaches.

Powell, John T. *Track and Field Fundamentals for Teacher and Coach.* 3rd ed. Champaign, Ill.: Stipes Publishing Co., 1971.

Track-and-field fundamentals and common faults in performance are described; ways of correcting these faults are suggested.

Scott, Phebe M., and Crafts, Virginia R. *Track and Field for Girls and Women*. New York: Appleton-Century Crofts, 1964. This book gives detailed information for teachers and girl competitors. It covers

teachers and girl competitors. It covers running, relay hurdles, jumping, ball throwing, discus, shot-put, javelin throw, conditioning, and planning track meets.

Woodeson, Peggy J., and Watts, Denis C. *Schoolgirl Athletics*. London: Stanley Paul & Co., 1966.

One of the few books on the subject specifically written for girls as well as for the classroom teacher, this edition features excellent sequential pictures.

Health

Anderson, Wayne J. *Design for Family Living*. Minneapolis: T. S. Denison and Co., 1964.

Many sub-topics are dealt with from a firm philosophical base. Values and priorities are in evidence here and would stimulate discussion

Best, Charles H., and Taylor, Norman B. *The Human Body: Its Anatomy and Physiology*. 4th ed. New York: Holt, Rinehart & Winston, 1963.

This is one of the best standard textbooks on the physiology of the human body.

Beyrer, Mary K., et al. A Directory of Selected References and Resources for Health Instruction. Minneapolis: Burgess Publishing Co. Biennial.

This book lists curriculum-development resources for health instruction.

Blanzaco, Andre. V.D.: Facts You Should Know. Glenview, Ill.: Scott, Foresman & Company, 1970.

Written by a practising physician, this booklet informs the reader of the dangers of venereal disease through the use of questions and answers. It is informative without creating apprehension in the reader.

Cohen, Sidney. *Drug Dilemma*. New York: McGraw-Hill Book Co., 1969.

Prepared for parents, teachers, and students, much of this material has been developed from student questions.

Cratty, Bryant J. Social Dimensions of Physical Activity. Englewood Cliffs, N.J.: Prentice-Hall, 1967.

A unique approach to physical education, this book discusses the sociological aspects of the discipline. It contains such topics as group interaction, competition, leadership, and status.

Duvall, Evelyn Millis. Why Wait till Marriage? Au Clair, Wis.: E. M. Hale Co., 1965.

This frank approach to the problem of pre-marital chastity discusses questions raised by young people regarding moral standards, conformity, self-respect, religious taboos, and the problems of illegitimacy.

Health Education Curriculum Guide. Kitchener: Grant Erwin Educational Products, 1971.

This document concerns itself with conceptual learning in health education at all levels.

Hofsten, Sadie, and Bauer, William Walds. The Human Story: Facts on Birth, Growth, and Reproduction. Glenview, Ill.: Scott, Foresman & Company, 1969.

This tasteful description of the biological process whereby boys and girls become young men and women and eventually parents includes a teacher's guide that discusses the need for teacher-parent consultation before embarking on such a delicate subject.

Kalant, Harold, and Kalant, Oriano J. Drugs, Society and Personal Choice.
Toronto: Musson (Paperbacks), 1971.
This book is designed to help people arrive at fully informed, balanced, reasonable decisions about drugs. It is a factual, objective report by a member of the Research Division of the Alcohol and Drug Addic-

tion Research Foundation of Ontario.

Kaplan, Robert, ed. *Contemporary Topics in Health Science Series*. Dubuque, Iowa: William C. Brown Co., 1970.

This series of pamphlets deals with subjects relevant to the health of today's youth. Topics include smoking, alcohol, communicable diseases, venereal disease, and environmental health.

₩ Keyl, Anne. V.D.: The People To People Diseases. Toronto: House of Anansi Press, 1972.

Dr. Keyl describes venereal disease in a straightforward and clinical fashion. She explains what venereal disease is, gives a brief history of it, and goes on to describe the cause, diagnosis, and treatment of the disease.

Laycock, Samuel Ralph. Family
Living and Sex Education. 3rd ed. Ottawa:
Canadian Health Education Specialists
Society, 1967.

Sex is viewed primarily as an aspect of growth and development. The author is concerned throughout with moral values associated with sexuality.

Mayer, Jean. Overweight: Causes, Cost and Control. Englewood Cliffs, N.J.: Prentice-Hall, 1968.

This book contains a comprehensive discussion of the current knowledge about obesity and weight control. Based on the latest scientific evidence, it shows the teacher how obesity can often be corrected, controlled, or avoided.

Mayshark, Cyprus. Health Education in Secondary Schools: Integrating the Critical Incident Technique. 3rd ed. St. Louis: C. V. Mosby Co., 1972.

Mueller, Conrad George, and Rudolph, Mae. *Light and Vision*. New York: Time-Life Books, 1966.

One of the Life-Science series, this well-illustrated book explains the theories of light, optics, and perception. Others in the same series are *Growth*, *The Cell*, *Food and Nutrition*, *Sound and Hearing*, *Health and Disease*, *The Mind*, and *The Body and Drugs*.

Palko, Michael E., ed. Annotated Guide to Health Instruction Materials in Canada. 3rd ed. Ottawa: Canadian Health Education Specialists Society, 1971.

Schulz, Esther D., and Williams, Sally R. *Family Life and Sex Education*. New York: Harcourt Brace Jovanovich, 1969.

The contents for various age levels is given as the basis for development of local courses of study.

Smith, Kline, and French Laboratories, Philadelphia. *Drug Abuse: Escape to Nowhere*. Rev. ed. Washington: American Association for Health, Physical Education and Recreation, 1969.

This book provides teachers with information about drugs and other chemical products subject to abuse. It is an information source, not a plan for teaching.

Somerville, Rose M. Family Insights through the Short Story. New York: Bureau of Publications, Teachers' College, Columbia University, 1964. (Available from the Guidance Centre, Toronto.)

Prepared for teachers and workshop leaders, this book provides a guide to using imaginative literature in an attempt to combat and prevent "further deterioration in family relationships". There are two stories for each of the ten general problems identified by the authors.

Turner, Clair Elsmere. *Planning For Health Education In Schools*. New York: UNESCO, 1966.

This book is designed to help teachers plan health-education programs that are adapted to meet local conditions. It draws on the experience of the co-operative programs of *UNESCO* and *WHO*.

Westlake, Helen Gum. *Relationships: A Study in Human Behavior*. Boston: Ginn & Co., 1969.

The focus is on the individual as he strives to understand himself and his relations with others, both now and in the future. The graphic cartoons present a wealth of situations that would both stimulate class discussion and motivate individual study of the book.

Whitaker, Reginald. *Drugs and the Law: The Canadian Scene*. Toronto: Methuen, 1969.

Factual knowledge and attitudes are constantly changing. Although it is a recent publication, this book's value may soon be seen as a resource for the *luistory* of the problem in Canada.

Organization and Administration

Bale, Robert O. *Outdoor Living*. Minneapolis: Burgess Publishing Co., 1961. The aim of this book is wise use of the environment in camping and outdoor living. It includes information on the use of camp tools, tool skills, fire-building, shelters, packs, camps, first aid, winter camping, survival kits and camping, and edible wild plants.

Bruel, C. 400 jeux pour jeunes filles et enfants classés du point de vue éducatif.
Paris: Chiron, 1958. (Montréal: Hachette)
This text of games is intended for children of all ages. The games are classified in a logical order. The manual is written in French and is easy to use.

Clarke, Henry Harrison, and Clarke, David H. *Developmental and Adapted Physical Education*. Englewood Cliffs, N.J.: Prentice-Hall, 1963.

This book is written for teachers whose students have chronic or functional handicaps or other inadequacies that interfere with participation in physical activities.

Ecole normale supérieure d'éducation physique. Amicale des anciens élèves. *Premier degré d'éducation physique*. Paris: Armand Colin Bourrelier, 1961. (Montréal: Hachette)

This work enables the educator to draw on the most well-known educational methods. It includes selected exercises that represent all the valid kinds of formative movement from basic exercise to educational games.

Johnson, P. B., et al. Physical Education: A Problem-Solving Approach to Health and Fitness. New York: Holt, Rinehart & Winston, 1970.

The authors of this book suggest ways to meet the biological need of every human for regular, vigorous physical activity. The book presents the scientific bases of health and fitness, thereby preparing a basis upon which students can make intelligent decisions relating to their physical well-being.

Kraus, R. G. *Recreation Leaders' Handbook*. New York: McGraw-Hill Book Company, 1955.

This is a practical handbook of methods and materials for recreation leaders working with groups of various sizes.

Means, Louis E. *Intramurals: Their Organization and Administration*. Englewood Cliffs, N.J.: Prentice-Hall, 1963.

Meyer, Harold Diedrich, et al. Community Recreation. 4th ed. Englewood Cliffs, N.J.: Prentice-Hall, 1969.

Detailed methods are presented for the organization and administration of community recreation services.

Parker, Terry, ed. An Approach to Outdoor Activities. London: Pelham Books, 1970. This book shows how outdoor activities can be introduced and developed. It includes advice on ways to embark upon mountaineering, camping, caving, orienteering, skiing, canoeing, and sailing.

Snow, Kathleen M., and Hauck, Philomena. Canadian Materials for Schools.
Toronto: McClelland & Stewart, 1970.
This book is written to help resource specialists and teachers to find Canadian learning resource materials. Materials in

the French language are not covered.

Van Vliet, Maurice Lewis, and Howell, M. L. Physical Education Activities for

Macmillan Co., 1967. A wide range of activities is covered in this book with a brief outline of the approach, skill techniques, and rules appropriate to each activity.

Secondary Schools. Rev. ed. Toronto:

Philosophy

Byler, Ruth V., et al. Teach Us What We Want to Know. New York: Mental Health Materials Centre, 1969.

The author makes an effective plea for relating physical and health education to the real needs of children.

Brown, Roscoe Conkling, and Cratty, Bryant J. New Perspectives of Man in Action. Englewood Cliffs, N.J.: Prentice-Hall, 1969. This book is intended to give the teacher an overview of the relation of various academic disciplines to the study of physical activity.

Hoover, Kenncth H. *Learning and Teaching in the Secondary School*. Boston: Allyn & Bacon, 1968.

This book is based on the premise that thinking is the key to educational method. Suggestions are included for planning educational objectives and using various teaching techniques. Special help is given for teachers who find themselves in a teamteaching situation.

Raths, Louis, et al. Values and Teaching. Columbus: Charles E. Merrill Books, 1966. Outlined in this book are a theory of values, a methodology for its clarification, the operation of the theory, and the procedures that grow from it.

Slusher, Howard S., and Lockhart, Aileene. Anthology of Contemporary Readings: An Introduction to Physical Education. 2nd ed. Dubuque, Iowa: William C. Brown Co., 1970.

This book considers a host of ideas and issues relevant to contemporary physical education, including a discussion of the relationship of health, physical education, and recreation.

Tyler, Ralph W. *Basic Principles of Curriculum and Instruction*. Chicago: The University of Chicago Press, 1969.

This book attempts to give a rationale for viewing, analysing, and interpreting the curriculum and instructional program of an educational institution.

▼ Van Vliet, Maurice Lewis. *Physical Education in Canada*. Toronto: Prentice-Hall of Canada, 1965.

The current state of physical education in Canada is examined from various aspects, including historical development, geographical differences, basic philosophies, the nature of programs, and international influences.

Tests and Measurements

Clarke, Henry Harrison. *Application of Measurement to Health and Physical Education*. 4th ed. Englewood Cliffs, N.J.: Prentice-Hall, 1967.

This book shows how measurement of ability can be an effective tool in the development of health and physical education programs from elementary school through college. A total of 111 tests can actually be given and scored from the text and 127 other tests are described and evaluated.

Corbin, Charles B., et al. Concepts in Physical Education with Laboratories and Experiments. Dubuque, Iowa: William C. Brown Co., 1970.

This book presents concepts of exercise and physical activity that contribute to general good health. The laboratory part of the book enables each student to evaluate his own personal physical fitness and suggests remedial techniques.

Haskins, Mary Jane. Evaluation in Physical Education. Dubuque, Iowa: William C. Brown Co., 1971.

This simple but useful approach to evaluation is accompanied by a teacher's handbook.

Scott, M. Gladys, and French, Esther. *Measurement and Evaluation in Physical Education*. Dubuque, Iowa: William C. Brown Co., 1959.

This book is particularly useful for the evaluation of girls' activities.

Film Catalogue Sources

Addiction Research Foundation, 33 Russell Street, Toronto, Ontario

All American Productions, P.O. Box 801, Riverside, California

Canadian Film Institute, 1762 Carling Avenue, Ottawa, Ontario

Coronet Instructional Films, 2 Thorncliffe Park Drive, Don Mills, Ontario

Ealing Scientific Ltd., 719 Lajoie Avenue, Dorval, Quebec

Educational Film Distributors Ltd., 191 Eglinton Avenue East, Toronto, Ontario This company distributes material from Churchill Films, Society for Visual Education, and other producers.

E. J. Piggott Enterprises Limited, Audio-Visual Division, 40-42 Lombard Street, Toronto, Ontario

Holt, Rinehart & Winston, 55 Horner Avenue, Toronto, Ontario This company distributes Bailey Film

Associates material.

International Educational Films Ltd., 1500 Rue Stanley, CH 501, Montreal, Quebec

International Tele-Film Enterprises, Audio Visual Centre, 221 Victoria Street, Toronto, Ontario

This company distributes material for Pyramid Films and other producers.

Johnson and Johnson, 2155 Boulevard Pie IX, Montreal, Quebec

McGraw-Hill Films, 330 Progress Avenue, Scarborough, Ontario

McIntyre Educational Media Ltd., 3501 Dufferin Street, Downsview, Ontario

Metropolitan Film Library, 559 Avenue Road, Toronto, Ontario

Moreland-Latchford Productions Ltd., 43 Dundas Street West, Toronto, Ontario

National Film Board of Canada Distribution Branch, 1 Lombard Street, Toronto, Ontario

T.V. Bonded Services, 205 Richmond Street West, Toronto, Ontario

Track and Field News, Box 296, Los Altos, California

Visual Education Centre, 95 Berkeley Street, Toronto, Ontario

Filmstrip Catalogue Sources

The Athletic Institute, Merchandise Mart, Room 805, Chicago, Illinois

Canadian Film Institute, 1762 Carling Avenue, Ottawa, Ontario

Canadian FDS Audio Visual, 185 Spadina Avenue, Toronto, Ontario

Educational Film Distributors Ltd., 191 Eglinton Avenue East, Toronto, Ontario This company distributes material from Churchill Films, Society for Visual Education, and other producers.

E. J. Piggott Enterprises Ltd., 40-42 Lombard Street, Toronto, Ontario

McGraw-Hill Filmstrips, 330 Progress Avenue, Scarborough, Ontario

Pamphlet Sources

Addiction Research Foundation, 33 Russell Street, Toronto, Ontario

The American Association for Health, Physical Education and Recreation (AAHPER), National Education Association Building, 1201 16th St. N.W., Washington, D.C. 20036

American Cancer Society, 219E 42nd St., New York, N.Y. 10017

American Institute of Family Relations, 5287 Sunset Blvd., Los Angeles, Calif. 90027

American Medical Association, Order Department, 353 N. Bearborn St., Chicago, Ill. 60610

American Social Health Association, 1790 Broadway Ave., New York, N.Y. 10019

Blue Cross, Ontario Hospital Association, 24 Ferrand Dr., Don Mills, Ontario

Boreal Biological Laboratories Ltd., 1820 Mattawa Ave., Cooksville, Ontario

Bureau of Narcotics and Dangerous Drugs, U.S. Department of Justice, Washington, D.C. 20537

Canada Department of National Health and Welfare, Information Canada, 171 Slater Street, Ottawa, Ontario, K1A 0S9

Canadian Arthritis and Rheumatism Society, 60 Overlea Blvd., Toronto, Ontario

The Canadian Association for Health, Physical Education and Recreation (CAHPER), 333 River Road, Vanier City, Ontario, K1L 839

Canadian Cancer Society, Metropolitan Toronto District, 222 Davisville Ave., Toronto, Ontario

Canadian Dental Association, 234 St. George Street, Toronto, Ontario

Canadian Diabetic Association, 1491 Yonge St., Toronto, Ontario

Canadian Health Education Specialists Society, P.O. Box 2305, Station D, Ottawa,
Ontario

Canadian Hearing Society, 60 Bedford Road, Toronto, Ontario

Canadian Heart Foundation, 270 Laurier Ave. W., Ottawa, Ontario

Canadian Mental Health Association, 232 Merton St., Toronto, Ontario

Canadian National Institute for the Blind, 1929 Bayview Ave., Toronto, Ontario

Canadian Red Cross Society, 460 Jarvis St., Toronto, Ontario

Canadian Tampax Corporation Limited, P.O. Box 627, Barrie, Ontario

Canadian Tuberculosis Association, 343 O'Connor Street, Ottawa, Ontario

Canadian Welfare Council, Division of Maternal and Child Hygiene, 55 Parkdale Avenue, Ottawa, Ontario

Carnation Company Ltd., 4174 Dundas Street West, Toronto, Ontario

Child Study Association of America, 9 East 89th Street, New York, N.Y. 10028

Consumers' Service Department, American Institute of Banking, 400 East Ontario Street, Chicago, Illinois

Department of Agriculture, Consumer Section, Marketing Service, Ottawa, Ontario

Department of Fisheries, Home Economics Section, Ottawa, Ontario

Department of Public Printing and Stationery, Information Canada, Ottawa, Ontario

Health League of Canada, 111 Avenue Road, Toronto, Ontario

Institute of Child Study, University of Toronto, 45 Walmer Road, Toronto, Ontario

Johnson and Johnson Ltd., 2155 Boulevard Pie IX, Montreal, Quebec

Kimberley-Clark Products, 2 Carlton Street, Toronto, Ontario

Licensed Beverage Industries, 155 East 44th Street, New York, N.Y.

Mental Health Material Centre, 1790 Broadway, New York, N.Y.

Metropolitan Life Insurance Co., 180 Wellington Street, Ottawa, Ontario

Milex (Central) Ltd., 1730 Avenue Road, Toronto, Ontario

Milk Foundation of Ontario, 40 Park Road, Toronto, Ontario

National Dairy Council, 111 North Canal Street, Chicago 60606, Illinois

Ontario Association for the Mentally Retarded, 77 York Street, Toronto, Ontario Ontario Association for Retarded Children, 137 Wellington Street West, Toronto, Ontario

Ontario Dental Association, 230 St. George Street, Toronto, Ontario

Ontario Ministry of Agriculture, Parliament Buildings, Toronto, Ontario

Ontario Ministry of Health, Office of Publications, Parliament Buildings, Toronto, Ontario

Ontario Ministry of Community and Social Services, Hepburn Block, Queen's Park, Toronto, Ontario

Ontario Federation of Home and School Associations Inc., 10 Adelaide Street East, Toronto, Ontario

Ontario Federation of School Athletic Associations, 559 Jarvis Street, Toronto, Ontario

Ontario Heart Foundation, 247 Davenport Road, Toronto, Ontario

Ontario Hospital Association, 24 Ferrand Drive, Toronto, Ontario

Ontario Interdepartmental Nutrition Committee, 150 College Street, Toronto, Ontario

Ontario Tuberculosis and Respiratory Disease Association, 157 Willowdale Avenue, Toronto, Ontario

Ortho Pharmaceutical Corp., 19 Green Belt Drive, Don Mills, Ontario

Public Affairs Committee Inc., 381 Park Avenue South, New York, N.Y. 10016

Public Affairs Pamphlets, 22 E. 38th Street, New York, N.Y.

Registered Nurses Association of Ontario, 33 Price Street, Toronto, Ontario

Rehabilitation Foundation for the Disabled (Ontario), 12 Overlea Blvd., Toronto, Ontario

St. John Ambulance Association, 46 Wellesley Street East, Toronto, Ontario

Science Research Associates, 57 W. Grand Avenue, Chicago, Illinois

Sex Information and Education Council of Canada (SIECCAN), Suite 2, 20 St. Joseph Street, Toronto, Ontario

Sex Information and Education Council of the United States, 1855 Broadway, New York, N.Y. 10023

Sun Life Assurance Co. of Canada, 200 University Avenue, Toronto, Ontario

Periodicals

Athletic Journal, Athletic Journal Publishing Co., 1719 Howard St., Evanston, Illinois 60602

British Journal of Physical Education, Ling House, 10 Nottingham Place, London, WIM 4AX

CAHPER Journal, CAHPER, Place Vanier, 333 River Road, Vanier City, Ontario

Canadian Field Hockey News, Canadian Field Hockey Council (Men-Women), Sport Administration Centre, 333 River Road, Vanier City, Ottawa K1L 8B9

Health, Health League of Canada, 111 Avenue Road, Toronto, Ontario

Health Education, Department of National Health and Welfare, Queen's Printer, Ottawa

Journal of Health, Physical Education and Recreation (JOHPER), AAHPER, 1201 Sixteenth St. N.W., Washington, D.C. 20036

Journal of School Health, American School Health Association, 515 East Main Street, Kent, Ohio 44240

Journal of Sports, Medicine & Physical Fitness, Minerva Medica Pub. Co., Turin, Italy

Mademoiselle Gymnast, P.O. Box 777, Santa Monica, California 90406

The Modern Gymnast, Sundley Publishing Co., Box 777, Santa Monica, California 90406

The Physical Educator, Phi Epsilon Kappa Fraternity, 3747 North Linwood Ave., Indianapolis, Indiana 46218

Scholastic Coacli, 7 East 12th Street, New York, N.Y.

The Spiker, Canadian Volleyball Association Publications, 78 Tedford Drive, Scarborough, Ontario

Sport, Central Council Physical Recreation, 26-29 Park Crescent, London, England

Sports Illustrated, Sports Illustrated Co., 540 Michigan Avenue, Chicago, Illinois 60611

Today's Healtli, The American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610

Record Catalogue Sources

Bowlus: Laguna Beach Books, P.O. Box 441, Laguna Beach, California

Canadian FDS Audio Visual, 185 Spadina Avenue, Toronto, Ontario

Capitol Records (Canada) Ltd., 3109 American Drive, Malton, Ontario

Ginn and Company Publishers, 35 Mobile Drive, Toronto, Ontario

House of Grant (Canada) Ltd., 100 Scarsdale Road, Toronto, Ontario

J. M. Dent and Sons (Canada) Ltd., 100 Scarsdale Road, Toronto, Ontario

Johnson and Johnson, 2155 Boulevard Pie IX, Montreal, Quebec

Ling Book Store, Ling House, 10 Nottingham Place, London, W1M 4AX, England

Quality Records Limited, 380 Birchmount Road, Toronto, Ontario

R. C. A. Limited – Record Sales, 1450 Castlefield Road, Toronto, Ontario

Transparencies

Central Scientific Company, 2200 South Sheridan Way, Clarkson, Ontario

Keuffel and Esser Company, 15 Civic Road, Scarborough, Ontario

Science Borealis Limited, 1820 Mattawa Avenue, Cooksville, Ontario



