

ONTARIO DEPARTMENT OF EDUCATION

**CURRICULUM I-29** 

# PHYSICAL AND HEALTH EDUCATION INTERMEDIATE DIVISION



OFFICE OF THE SUPERINTENDENT OF CURRICULUM DIVISION



44 EGLINTON AVE. WEST TORONTO 12, ONTARIO

MEMORANDUM TO: Principals of Teachers Colleges

Deans of Colleges of Education

Directors and Superintendents

Inspectors of Schools

School Principals

Secretaries of Boards

RE: New Course of Study in Physical

and Health Education -

Curriculum I-29, Grades 7 to 10

Copies of the course outline are being distributed to you in advance of the general mailing to schools. It is not expected that the course be implemented in the school year 1966-67 but rather that teachers and department heads might use it in the development of their programs for 1967-68. In some systems teachers may be given approval by local school boards to incorporate parts of the course in their Physical Education and Health programs for the current year. It is hoped that, beginning in September, 1967, the outline may serve as a general guide for the courses of study being developed at the local level. The grade placement of topics, while not intended to be arbitrary, has been made upon the advice of practising teachers based upon their experience in presenting the topics and their knowledge of the growth and development of pupils in the Intermediate Division.

# Physical Education

The courses in Physical Education are essentially an updating of Curriculum I.5, 1952, including such changes as have been suggested in Departmental memoranda.

### Health

The courses in Health have been developed by a committee of teachers and inspectors on which representatives of the medical and the nursing professions have served as specialist consultants.

Attention is directed to the section of the Grade 9 course entitled, Understanding Changes Which Lead to Maturity and Parenthood (pages 29, 30). It is recognized that there is no public consensus concerning the most effective means of presenting such information. For that reason, the decision as to whether topics such as those in this section should be treated by the school or by parents, church, other agencies, or a combination of any of them, should be made at the local level. It is, therefore, recommended that the inspector and the principal should consult with the local school board and secure its approval of the policy to be adopted with respect to this section of the course.

A number of textbooks for the course are under development and these will be listed in Circular 14, Textbooks, after the usual evaluation and approval.

Comments by teachers, inspectors, and other school officials will be welcomed.

The Curriculum Committee in Health will be reconvened to continue its work in the development of courses for Grades II and 12.

M. B. Parnall, Superintendent,

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Curriculum Division.

August, 1966.

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### PHYSICAL EDUCATION

Physical Education is a phase of total education and contributes to the general objective of all education—the well-rounded development of all children and youth as responsible citizens in our democratic society. Physical Education seeks through selected physical activities and related experiences to assist the individual to develop skill, strength, endurance, and character to his fullest capacity.

### AIMS OF THE COURSE

- 1 To promote the healthy growth and physical fitness of the adolescent pupil.
- 2 To develop fundamental physical skills (eg. walking, running, jumping), derived skills peculiar to individual games and rhythmics, and good posture.
- 3 To encourage desirable attitudes and behaviour—especially in leadership, sportsmanship, cooperation.
- 4 To promote an interest in physical activity which will carry over into leisure time.
- 5 To increase knowledge of the principles of good health and to develop good personal health habits.

### HEALTH ASPECTS OF THE PROGRAM

Physical Education can contribute much to the health of the school child if the program presented is based on the needs of the individual. It is desirable that all children be medically examined before participating in physical activities. The provision of adequate health services to provide emergency treatment and to handle health problems should be considered.

To maintain a healthful environment physical activity periods should be conducted out-of-doors whenever weather and facilities permit. Attention should be given to the cleanliness of general purpose rooms, gymnasiums, locker roooms and showers, to ensure that poor health habits are not encouraged. Facilities should be provided to enable pupils to change to a suitable costume for activity periods.

Health instruction forms a necessary part of any Physical Education program. Physical Education teachers, by the very nature of their work, have a unique opportunity for influencing the thoughts, attitudes, and behaviour of their pupils. Instruction given during Physical Education periods should be concerned as much as possible with the present health of the pupils and their future growth and development.

### ORGANIZATION OF THE PROGRAM

Pupils should participate as much as possible in the organization and direction of the program under the supervision of the teacher. Physical Education provides numerous opportunities for students to lead groups, to make decisions, and to engage in cooperative activities. The development of responsible leaders within the class will greatly increase the effectiveness of the program. It is suggested that classes be divided into groups of suitable size for all activities. Small classes permit more efficient instruction.

The teacher should keep some record of individual achievement in order to evaluate the student's progress in the work. Such a record might show the results of objective tests conducted during the class period.

In addition to the regular instructional period, a complete program of Physical Education should include intramural competition, sports days, and play days. Organization of this extra-curricular program should be such that every pupil has an opportunity to participate.

# BOYS' PROGRAM GRADES 7 AND 8

Teachers are advised to be familiar with the work included in *Curriculum J:5* so that the program will be continuous through the grades. The teacher may wish to use some of the materials suggested in *Curriculum J:5* if the program in lower grades has been inadequate.

### INTRODUCTORY ACTIVITIES

These activities may be associated with other basic activities during the year's program.

### Conditioning Exercises

These exercises may precede strenuous activities such as tumbling, apparatus exercises, and track and field. They may also be used as an introduction to lessons in games, where time permits. Exercises selected should contribute to agility and endurance, and to the development of muscular strength in trunk, leg, and arm.

The following movements are suggested for inclusion in any table of exercises: low jumping; alternate high and low jumping; stride jumping with arms swinging overhead; trunk bending forward, backward, and sideward; situps and V-sitting from back-lying; jumping and swinging arms upward—from the squat position; stationary running; hopping run; knee raise run; straddle running

### Obstacle Course Training

Obstacle courses may be constructed indoors and on the playground. Training on these courses should be associated with such activities as tumbling, apparatus exercises, and track and field, since the equipment required to set up a course will be of the type used in these activities. The objectives of this training are the same as those of the apparatus and track and field programs, but the movements are required under more challenging condi-

tions, so that they tend to develop courage, endurance, agility and selfconfidence in the individual.

The course constructed should require the boys to: hurdle a low obstacle; crawl through a narrow opening; dodge and weave through obstacles; walk a narrow beam; climb over a high obstacle; jump down from a height; vault a bar; jump over a space; swing on a rope over obstacles.

Contests

These activities offer an opportunity for boys to test their physical abilities in competition with one another. Because of their close relationship to group games and self-testing stunts, they should be taken as an introduction to these activities, but may be used wherever desired as a warm-up activity or a break in the lesson.

The following contests are considered suitable: hand wrestle, leg wrestle, stick wrestle, tug of war, handkerchief fight, arm-lock wrestle, knee-slap boxing, line wrestle, back-to-back lift, squat rope jerk, hopping pull, hand pull, ring wrestle, rooster fight, poison, stepping on toes, storming the fort.

Rope Skipping Rope skipping improves agility and general physical condition.

The following are some fundamental exercises: running in place; jumping on both feet; hop, step, on alternate feet; running forward; hopping on one foot; cross-arm swinging; double jumping—two boys jump together using one rope; triple jumping—three boys jump together using one rope; rope circling forward and backward.

### GROUP GAMES AND RELAYS

Group games and relays provide activity for large groups in a limited space. Care should be taken to divide the class into small groups to ensure maximum participation. Group games and relays should follow the skills of the particular activity being covered in the program.

The following is an outline of games and relays suitable for these grades:

### Group Games

chain tag, broncho tag, maze tag, dodge and mark, circle race, leap-frog tag, two deep, spud, pull away, line rush, crows and cranes, stealing sticks, four-man circle chase, snatch ball, milling the man, jump the shot, pass and change, battle ball, bombardment, dodge ball, hand hockey, hit-pin ball, floor hockey.

### Relays

shuttle running, touch and attention, hopping relay, running on all fours, Chinaman's race, centipede race, skin the snake, low-bridge relay, jumpstick relay, pursuit relay, circle the post, obstacle relay, leap-frog relay, weave and crawl under, jump-ditch relay, rope skipping relay, zigzag relay, back-to-back lift and run, human hurdle, human wheelbarrow, carries—fireman's cross, single shoulder, arm, two-man seat.

Other group games and relays may be used during instruction in team games.

### INDIVIDUAL ATHLETIC ACTIVITIES

Tumbling and apparatus exercises develop body control and build muscular strength. Lessons in these activities provide opportunities to develop student leadership and to teach individual and group safety. Careful planning and some preliminary instruction by the teacher are necessary to achieve best results.

Track and field activities improve the students' speed, agility, and endurance. Classes may easily be divided into small groups for maximum participation. These activities are of a competitive nature, and each student should strive to improve his own standard.

A number of individual stunts and self-testing activities are included here, as they are of great interest to boys of this age group.

### **GYMNASTICS**

Teachers are advised to refer to Curriculum J:5 for suggestions concerning the Development Approach and Problem-Solving Method of Teaching.

### Tumbling Skills

forward roll; from full knee bend,
from stand
backward roll; from full knee bend,
from stand
sideward and shoulder rolls
dive; short dive, dive from stand,
running dive, dive over obstacle,
dive through circle
run, jump into air; quarter turns left
and right, land with control
run, jump into air; half turns left and

run, jump into air; nair turns ler right, land with control squat handbalance squat headstand headstand from crouch; kick up

jump through hands; from extended position on mat

handbalance against the wall

### Combination Movements

forward roll; backward roll; forward roll

short dive; backward roll, short dive squat handbalance; forward roll; short

forward roll; squat handbalance; headstand; roll to feet

### Team Rolling

team forward rolls across mat team backward rolls across mat rolling in succession from the end of the line rolling through each other from

opposite sides of the mat team shuttle dive over rolling ball

# Double Stunts

double rolls; forward and backward sideward roll and dive; two- or three-man shuffle

knee shoulder spring knee shoulder balance chest balance

### **Pyramids**

two-man combinations; two-man kneeling high, shoulder sitting supported handbalance, thigh stand

group pyramids; without equipment, with ladders and chairs

### Ropes or Poles

chin from hang; pull up
hang raise knees
hang raise legs
ordinary climb
climb without aid of feet
swing on rope; vaulting over obstacle
grasp rope or pole; swing body up and

vault over bar

TRACK AND FIELD ATHLETICS

Sprints and Runs

jogging, walking, short dashes starting; 15-yard sprints

practice running form; leg action,

body lean arm action sprints

relay running and baton passing

Hurdling

(2' 6" hurdles) hurdling for form

run 50 yards over three hurdles run 75 yards over five hurdles hurdling relays; shuttle style

Jumping and Vaulting

broad jumping for form; standing and

running approach

standing broad jump for distance running broad jump for distance

relay broad jumping

hop, step and jump for form hop, step and jump for distance

high jumping for form high jumping for height pole vaulting for form

Weight Throwing

shot put (8 lbs.) for form; without

the shot, with the shot putting the shot for distance

medicine ball throw; overhead, chest,

underhand relay throwing

Tabloid Meets teachers should consider the introduction of tabloid meets. A well organized tabloid meet provides a greater opportunity for mass participation than the more traditional organization.

Stunts and Self-testing Activities

jump stick jump over foot double heel click squat stand; ten seconds fish hawk dive knee bend holding

car balance bend standing high kick double broad jump squat thrusts

APPARATUS WORK

Tumbling box (approx. 2' 6") or rolled mats.

Cross

jump on; jump off

jump on; jump off with half turn

jump over

mount to kneel; jump off

squat vault on; jump off

squat vault over

squat vault over; forward roll side vaults right and left straddle vault on; jump off

straddle vault over

straddle over; forward roll

thief vault oblique vault

Long

jump on; jump off

jump on; jump off with half turn squat vault on; jump off jump on; straddle vault off squat vault on; straddle vault off vault to straddle seat; jump off side vault with half turn to reverse straddle

seat; jump off side

squat vault on; forward roll off

forward roll over

two touch straddle vault over

Combinations

(cross bench; mat; long box) squat vault over bench; roll on mat;

squat vault on; jump off

straddle vault on; jump on straddle vault over bench; roll on mat; squat on box; straddle vault off jump on bench; jump off with half turn; back roll; jump turn; vault to

straddle seat; jump off

mount to kneel; jump off; forward roll; jump to squat; forward roll off

(Position of apparatus may be changed to suit other combinations.)

TEAM GAMES

Every student should have an opportunity to learn fundamental skills. It will be necessary, therefore, to divide classes into small groups for games and practice, and to make full use of all available equipment. Teachers should not attempt to teach skills which lead to specialization in games, but only those which contribute to learning to play the game. Students should have practice in officiating, so that they may learn to control their own games under the general supervision of the teacher.

While the teacher may allow reasonable freedom in the conduct of games, he must insist that they be played in accordance with the prescribed rules and in an orderly manner, so that they may make their full contribution to the development of the pupils.

Suggestions

After the skill has been introduced, emphasis should be placed on the particular point which seems to need attention. One thing should be corrected at a time. The need for practice, review, and progression should be kept in mind. All the equipment at your disposal should be used. It is not essential to have a regulation soccer ball to practise dribbling or a regulation basketball to practise passing; various balls of various sizes and types may be used. Monotony can be avoided by varying the formations used for practising the various skills. Competition should not be introduced until the skill is established.

SOCCER — FUNDAMENTAL SKILLS (See J:5)

Soccer should be included in the Physical Education program of all schools because:

- 1 It provides vigorous physical activity for all parts of the body;
- 2 It lends itself admirably to the teaching of the educational objective of good citizenship;
- 3 Both girls and boys can participate. Simplified Borden ball is a good alternative for girls;
- 4 Elaborate and costly equipment is not necessary.

Dribbling straight dribble; with one foot; with

both feet

dribbling around the post and back weaving dribble through obstacles

dribble races

**Passing** short passing; with the inside and the

> outside of the foot partner pass; standing

dribble and pass; in twos or threes

**Trapping** partner throw and trap

trap with the foot; with the body

Kicking kicking a stationary ball

> low kick; high kick kicking a moving ball kicking for accuracy kicking and trap in twos

Heading throw up and head to partner

> partner throw and head back leader throw; heading relay heading against the wall

Tackling one against one; dribble through

two against two

Soccer Games

Corner Kick Mass Soccer Soccer Long Base Soccer Snatch Ball Alley Soccer

Soccer with variations Soccer Dodgeball Head Volleyball Speedball

FOOTBALL — FUNDAMENTAL SKILLS

Passing forward pass (overarm)

> throwing to a stationary partner throwing to a running partner

throwing for accuracy throwing for distance throwing relays

Centre (snapping)

Pass passing to a partner

passing to a target for accuracy

passing relays

Lateral (underarm)

Pass one-hand throwing two-hand chest pass

lateral passing on the run; in twos

and threes

passing around a circle

passing relays

Catching receiving passes

> catching a pass standing catching a pass running

relavs

receiving punts

catching punts standing; running

Running with

dodging the man the ball changing the ball

weaving between obstacles shuttle running with ball

Kicking punting low; high; for accuracy; for

distance

punt and run the ball back place-kicking for accuracy; for

distance

drop-kicking for form; for accuracy,

for distance

Football Games

Borden Ball (European Handball) Touch Football (with variations)

Deadline

Punt Volleyball

Passball Rugger

BASKETBALL — FUNDAMENTAL SKILLS

two-hand; chest and overhead pass Passing

passing in pairs; in the air; bounce

passing

running pass in pairs

running circle pass; pass to the post

pass against the wall and receive

rebound

shuttle passing; corner spry

Dribbling running dribble straight

circle the post relay

weaving dribble around obstacles dribbling races; tag dribbling

dribble shuttle relay

Shooting one-hand lay-up; standing, dribbling in

> two-hand push shot shooting for accuracy dribble, stop and shoot free throws for accuracy receiving a pass and shooting

shooting relays, shooting against time

Basketball Games

Skittle Ball

Keep Away Captain Ball

Return Passes

Circle Tag Ball (two boys)

One O' Gang

One Goal Basketball or Goal Hi

Twenty-One Golf Basketball

Three-Man Basketball

VOLLEYBALL — FUNDAMENTAL SKILLS (See J:5)

Serving (underhand)

for form in pairs against wall

over the net into marked areas

for accuracy relay; shuttle style

Passing and Volleying

(underhand and overhand) throw up and pass in pairs throw to partner and pass back partner serve and pass back

pass around a circle

continuous volley against wall

partner volley over net

throw up and set up Setting up

partner pass and set up

circle keep it up

Volleyball Games

Shower Ball Bounce Ball Mass Volleyball

Three Touch Volleyball

Volleyball

Doubles Volleyball Four Court Volleyball HOCKEY — FUNDAMENTAL SKILLS (See J:5)

skate forward Skating

> turn and skate backward skating in a large figure eight skating backward relay skating around obstacles

Puck Carrying skating with the puck; relays carrying puck around obstacles sliding puck through opponent and

retrieving it

Passing

skating and passing in pairs pass against board and retrieve skating out and passing back

Shooting

shooting along the ice

lifting the puck

receiving a pass and shooting shooting at a mark for accuracy

SOFTBALL -- FUNDAMENTAL SKILLS (See J:5)

Teachers should take particular care to ensure organization for maximum activity.

Throwing and

partner throw and catch

Catching

throwing underhand and overhand catching high balls and low balls fielding ground balls and fly balls

shuttle throwing

throwing around bases fielding infield balls and throwing to

fielding outfield balls and throwing to

Batting

batting pitched ball back to partner batting out ground balls to different

position

batting out fly balls to fielders batting back relay; pepper batting

bunting pitched balls

Base Running

beat ball relay hit and run the bases base running relay spoke formation

base running against time team shuttle base running

Softball Games

Overtake Softball Throw Down Baseball

Far Base Rounders

Two-Pitch Softball Softball with variations Hit and Run Softball Rotation Softball Six-Man Baseball

### LACROSSE - FUNDAMENTAL SKILLS

Catching

Throwing and throwing over the shoulder against the

catching high balls and low balls partner throw and catch standing throwing to a running partner catching a ball while running running and throwing in pairs throwing at a target for accuracy running and throwing relays; shuttle

Picking up the ball

picking up rolling and bouncing balls

rolling ball relays

Carrying the ball

dodging an opponent side step; pivot; roll

weaving through obstacles

### Lacrosse Games

Three- or Four-Man Keep Away

Stop and Throw

Lacrosse (Seven-Man and Ten-Man)

### FOLK DANCE

Because of their simplicity, vigour, and compelling rhythm, folk dances are enjoyed by people young and old in every country of the world. The various steps and rhythms are traditional in the country of their origin, and they are still being danced in the home lands as well as in Canada. For example, the North American square dance, a type of folk dance peculiar to our own country, is becoming increasingly popular.

Participation in folk dancing develops sociability and an appreciation of the cultures and customs of other countries. Knowledge of the background of a people promotes understanding. Where possible, folk dancing should be correlated with other subjects; for example, with Social Studies, Art, and Home Economics.

Selection of dances: the use of the following basic locomotor activities (some activities from junior grade work might need reviewing):

Step Hop Schottische

Polka: forward, with a partner turning

Two Step Grape Vine Buzz Waltz

Basic Square Dance Steps

Dances should be selected with a view to representing a number of different countries. Examples: Tancuj, Virginia Reel, Feder Mikel, Doudlebska Polka, Mayim, Shibboleth Bassadeh, Veleta, Oslo Waltz, Black Forest Mazurka, Korobuska, Teton Mountain Stomp, Simple Square Dances, etc.

Teachers do not need to feel restricted by the above list. There are many other suitable dances, and those listed above are merely suggestions.

# GIRLS' PROGRAM GRADES 7 AND 8

### GAMES AND ATHLETICS

### INTRODUCTION

The development of the skills involved, and the drills and introductory games preliminary to the team games of volleyball, soccer, softball, and basketball can form a satisfactory basis for this unit. Many of the skills and drills should have been already acquired in the lower grades and may require only review and improvement. Others will require introductory teaching and practice.

Organized programs of interschool athletics are not recommended for Grades 7 and 8 because of the physical and psychical immaturity of the pupils. "Competitive work, though forming a necessary part of athletic practice and coaching, must always be treated with caution when applied to school children of any age, and great care should be exercised to prevent its excessive use in the general scheme of training."

In connection with field athletics the following considerations are important in developing a suitable program:

A Field Day is a program of activities including the traditional events of hurdles, dashes, relays, running high jump, etc. The participation is usually limited to a small, highly skilled group, who contend for individual championships. This type of program is not recommended for girls in Grades 7 and 8.

A Tabloid Meet (See J:5) is a program of activities in which the participants attempt to attain certain standards. Events might include some of the activities of the traditional field day. It offers an opportunity for participation and success by the students who are highly skilled.

A *Play Day* is an unrehearsed, informal, spontaneous activity, which emphasizes friendly competition between groups rather than individuals. This type of program is recommended for Grades 7 and 8. It differs from the field day in the following respects:

- 1 The events are chiefly games, skills and team games of low organization.
- 2 The emphasis is on competition *with*, rather than *against*, another school.

### 3 No individual championships are declared.

The teacher would be wise to give careful consideration before planning a sports day which combines junior and senior students. The program tends to be long, and the interest of the younger children decreases when their own events are over.

Participation in the events should be an out-growth of the activities of the Physical Education program.

Coaching must not be confined to children who show special ability, or who possess special skill for certain events. As in all forms of education, equal opportunities should be provided to all children so that all will benefit from the opportunities provided.

### GAMES

### SPECIFIC OBJECTIVES OF GAMES

- —to develop basic ball-handling skills, and to use them in the more highly organized team games of volleyball, soccer, softball and basketball;
- —to develop skill in the activities of field athletics; i.e., running, jumping, and throwing;
- —to offer opportunity for satisfaction of the competitive urge;
- —to develop through the playing of team games desirable social and personal qualities such as cooperation, fair play, tolerance, judgment.

### SOCCER — FUNDAMENTAL SKILLS (See J:5)

Dribbling straight dribble; with one foot; with both feet dribbling around the post and back weaving dribble through obstacles dribble races

Passing short passing; with the inside and the outside of the foot partner pass; standing dribble and pass; in two or threes

Trapping partner throw and trap trap with the foot; with the body

**Kicking** kicking a stationary ball

> low kick; high kick kicking a moving ball kicking for accuracy kick and trap in twos

Tackling

one against one; dribble through;

two against two

Soccer Games

**Rotation Soccer** Seven Player Soccer

VOLLEYBALL — FUNDAMENTAL SKILLS (See J:5)

Serving

(underhand)

for form in pairs against the wall over the net into marked areas

for accuracy relay; shuttle style

Passing and Volleying

(underhand and overhand) throw up and pass in pairs throw to partner and pass back partner serve and pass back

pass around a circle

continuous volley against wall partner volley over the net

Setting up

throw up and set up partner pass and set up

circle keep it up

Volleyball Games

Shower Ball Bounce Ball Mass Volleyball

Three Touch Volleyball

Volleyball

Catching

Doubles Volleyball Four Court Volleyball

BASKETBALL - FUNDAMENTAL SKILLS

catching while standing and running

and on the jump

Passing chest pass

two-hand underhand side

bounce pass

two-hand overhead

Shooting free throws for accuracy

one-hand lay up; standing; dribbling in

two-hand chest one-hand shoulder

Footwork

stance run and stop jump bounce

guarding pivot

Basketball Games

Circle Pole Ball Corner Ball Captain Ball One O' Gang

Captain Basketball Nine Court Basketball Basketball End Ball

SOFTBALL — FUNDAMENTAL SKILLS (See J:5)

NOTE:

Care must be taken to ensure that maximum activity is achieved in the development of softball skills.

Catching ball above waist

ball below waist

fly ball

fielding ground ball fielding fly ball fielding the bunt

Throwing underhand and overhand throws

increasing underhand throw (i.e.,

pitch) to 30'

Batting position and stance; swing and follow

> through place hitting

bunt

base running

Footwork base running

outfield play infield play

Softball Games

Townball Speedball Triangle Ball Long Ball One Old Cat

TRACK AND FIELD - FUNDAMENTAL SKILLS

The following activities are included as parts of this unit: starts, sprinting, and running form, baton passing and relay running, standing broad jump, running broad jump, hurdles and high jumps.

NOTE:

To prevent injuries, a good jump should be 18 inches deep and filled with beach sand.

Tabloid Meets are often more valuable than the traditional track and field competition. (See J:5)

Sprints and

Runs

jogging, walking, short dashes

starting; 15-yard sprints

practice running form; leg action; body

lean; arm action

sprints run

relay running and baton passing

Hurdling

(2' 6" hurdles) hurdling for form

run 50 yards over three hurdles run 75 yards over five hurdles hurdling relays; shuttle style

Jumping and Vaulting

broad jumping for form; standing and

running approach standing broad jump for distance

running broad jump for distance

relay broad jumping

hop, step and jump for form hop, step and jump for distance high jumping for form; scissors

high jumping for height

Tabloid Meets

Class competition should be conducted using events listed above, and using a double standard scoring system.

### **GYMNASTICS** SPECIFIC OBJECTIVES OF GYMNASTICS

- —to attain the motor skills involved in controlling the body in the fundamental activities of running, jumping, climbing, hanging, vaulting and balancing, and to develop an understanding of standards of performance and safety;
- —to develop the ability to work efficiently within a
- —to develop such qualities as courage, confidence, initiative, self-reliance, perseverence, concentration, leadership, and a sense of responsibility for others;
- —to develop an appreciation and enjoyment of a skill well done and a desire to achieve and improve.

### NOTE:

### **DEVELOPMENTAL METHODS**

The major objective of this section is to provide the student with an opportunity to increase her agility and strength and to teach self-reliance.

Movements should be taught in a logical progression of difficulty and should be adaptable to the capability of the student.

The organization of the class should be such that maximum activity, commensurate with standard safety procedures, is achieved. The traditional four groups are not always the best way to achieve maximum activity.

Recent summer school graduates will be aware that teaching methods have changed. These teachers should feel free to use developmental methods and their knowledge of movement principles. Those teachers with a traditional background might include the activities listed on the following pages.

### EXERCISES WITH NO EQUIPMENT OR VERY LIMITED EQUIPMENT

The exercises included in the first section show that a program, although limited, can still be carried out with

very little equipment. The stunts and jumps listed are not intended to be all-inclusive; they serve only as examples of what can be done.

Individual Stunts

bunny jump, snail, back lying and situp, wring the dish cloth, the top, shoulder stand, kneel-stand up, cross sit and stand, blind balance, horizontal balance, tip up, walrus walk, roly-poly, foot clapping kneedip, courage jump

Couple Stunts

run the scale, twister, spinning, wheelbarrow, double spring seat, twin walk, churn the butter, pull up and sit, double walk

Group Stunts

leap-frog, skin the snake open and close, merry-go-round, walking chair

Combative Stunts

cock fight, push and pull, push back, tug-of-war

open sesame, crown lift spread the eagle, hand wrestling, Indian leg wrestle

Informal Jumps

giant strides, seven leaps, jump a moving rope

running jump over obstacle, bunny jumps over rope or line, bunny jumps along floor, rope skipping galloping over objects, up-springs,

jump a weighted rope

seven leaps and jumps into two circles, run and jump

with double take-off, jump a moving rope

Jumps with one assistant

(standing), upward jump to full extension; upward jump with leg parting, upward jump with knee raising

(standing), upward jump over one obstacle

(running), star jump, i.e., run and jump over one obstacle with leg parting

Jumps with two assistants (running approach), upward jump to full extension

with leg parting in forward stride with knee raising to crook with knee raising and leg stretching to long sit

### TUMBLING AND MAT WORK

Mat work offers unlimited opportunity for development of stunts and other tumbling movements which involve the big muscles of the body. They are selftesting and can be performed at home on the lawn or on a beach. Tumbling is a valuable background for many of our athletic activities, especially apparatus work. The pupil learns to perform movements which are transferred to the apparatus. She learns to control the body in falling, thus minimizing danger of injury from apparatus and everyday mishaps. The activities listed under jumps and vaults require only ropes, balance benches and landing mats.

### Tumbling

log roll; introduction to forward roll; forward roll continuous forward rolls; forward roll over mat introduction to backward roll; backward roll continuous backward roll; introduction to head stand head stand; introduction to hand stand; hand stand stomach balance; sitting balance double forward roll; double backward roll tiger stand; short arm balance on kneeling person hand stand on knees; box; angels

### JUMPS AND VAULTS

In all general activities the teacher should ensure that adequate safety procedures are followed. Some teachers may find it an advantage to form a leaders' corps for developing the ability to lead and to assume responsibility. The skills should be practised in small groups under pupil leaders.

Each year, pupils should improve in skill and in posture. The activities should increase in difficulty from year to year, but the same activities should be repeated and practised until there is improvement in form, control, precision, and ease of movement.

There should be marked growth in self-discipline and in the self-direction of activities under pupil leadership.

# Jumps and Vaults

informal jumps of lower division jumps with single or double take-off from a standing position and with various approaches various types of landings use of balance bench, i.e., jump along, over and across use of box horse at various heights

### DANCE

### SPECIFIC OBJECTIVES OF DANCE

- —to develop control in the basic skills of rhythmic activities introduced in the lower grades, i.e. walk, run, leap, skip, slide, gallop, etc.;
- —to develop an understanding of the basic principles of rhythms and rhythmic forms, i.e. time, phrasing, simple musical forms, etc;

- —to develop greater general control of the body through increasing flexibility of the joints, muscular strength and endurance;
- —to develop an understanding and awareness of body movements through the kinesthetic sense;
- —to provide opportunities for creative activity in dance;
- —to promote desirable social attitudes.

While skill in the performance of these fundamental movements leads to achievement in games and athletics, and in the promotion of physical fitness, its objectives can go beyond these, to develop the body as an instrument of movement where movement is an end in itself, as in dance. To most people, "walking", for example, is simply a means of conveying the body from one place to another. As such, this basic skill should be performed efficiently, that is, with the least expenditure of energy consistent with the work required. To certain individuals, walking has become a satisfying experience apart from its utilitarian objectives. To a very few, it is the means of the communication of an idea or mood; i.e. a walk of authority, of stealth, of haste, of worship, of fear, etc.

Whatever the objective, it is clearly essential to develop skill in this basic activity, as well as in all the many other fundamental body movements.

For the sake of clarity, the activities of the Dance Section have been placed in two groups.

### FOLK DANCE

Because of their simplicity, vigour, and compelling rhythm, folk dances are enjoyed by young and old in every country of the world. The various steps and rhythms are traditional in the country of their origin, and they are still being danced in the home lands as well as in Canada. For example, the North American Square Dance, a type of folk dance peculiar to our own country, is becoming increasingly popular.

Participation in folk dancing develops sociability, and an appreciation of the cultures and customs of other countries. Knowledge of the background of a people promotes understanding. Where possible, folk dancing should be correlated with other subjects; for example, with Social Studies, Art, and Home Economics.

Selection of dances: the use of the following basic locomotor activities (some activities from junior grade work might need reviewing):

Step Hop Schottische

Polka: forward, with a partner turning

Two Step Grape Vine

Buzz

Waltz

Basic Square Dance Steps

Dances should be selected with a view to represent-

ing a number of different countries. Examples, Tancuj, Virginia Reel, Feder Mikel, Doudleska Polka, Mayim, Shibboleth Bassadeh, Veleta, Oslo Waltz, Black Forest Mazurka, Korobuska, Teton Mountain Stomp, simple square dances, etc.

Teachers do not need to feel restricted by the above list. There are many suitable dances, and those listed above are merely suggestions.

### CREATIVE ACTIVITIES AND DANCE COMPOSITION

Children can be encouraged in creative activities through the study of fundamental movements and rhythms, and through imitative movements and dramatizations.

In all lessons it will be noted that, while the class is given a definite assignment at each stage of the lesson, the child is frequently left with a choice. Herein lie possibilities for creative activity. The assignment, however, must be clearly defined; i.e., the child must be given clear-cut guidelines at the beginning. If the directions are indefinite and leave too much choice, the child is likely to feel frustrated, and therefore, be unable to perform.

The chief aim is the development of an awareness of, and sensitivity to, what the body is doing, whether in bending, stretching, twisting, or turning; whether the movement is fast or slow; heavy or light; winding or straight.

A secondary aim in fundamental movements, also, is to provide opportunities for the satisfaction of the need to create, through solving movement problems, and the communication of ideas and feelings through the medium of movement.

The teacher is referred to the Dance Section of Curriculum J:5, pages 253 to 277, for examples of lessons using the following stimuli:

- 1 Movement Theme
- 2 Stress on Movement Experience
- 3 Stress on Dance Expression
- 4 Based on Dramatic Action
- 5 Dance Inspired by Passage of Music

Suggestions for the use of records and percussion are also found in J:5.

# BOYS' PROGRAM GRADES 9 AND 10

### INTRODUCTORY ACTIVITIES

### Basic Drill

Each class should be able to perform basic movements smartly. It is suggested that a short time be devoted to these activities at the beginning of each lesson until a high degree of efficiency is reached.

The class should be able to move quickly to a variety of basic formations; i.e., squad, "U", relay, shuttle, scatter, etc.

### Conditioning Exercises

These exercises should be related wherever possible to the major activity being taught during the period. It is not intended that whole periods be devoted to conditioning exercises. The following are suggested as a guide:

### **Gymnastics**

—low and high jumps; jumping and swinging the arms upward; bends; stride jumping; pushups, squat thrusts; V-sitting; situps

### Track and Field Athletics

—stretching and bending; pullups; run and jump upward; standing high kick; body movement for shot putting; arm and leg stretching for hurdling; standing broad jumps; hop, step and jump movement; stationary running with high knee raising.

### GAMES

Football

stationary running; high knee raising; trunk bending and twisting; crouch stance and short sprints; cross step run; straddle running; running backward, sideward and forward; short dashes

Soccer

stationary running; throw in position; trunk bending backward and forward with arms overhead; kicking

movements with right and left legs; zigzag running; skipping; jumping upward

Basketball

centre jump; running stride stop; pivoting; heel click jump; jumping and shooting position; medicine ball chest throwing; moving backward, forward and sideward in the guarding position; short dashes

Volleyball

jump and reach; trunk bending and stretching; serving movement; jump off both feet swinging arms upward

### NOTE

Such conditioning activities as circuit training, weight training, isometrics, and educational gymnastic methods may be incorporated to good advantage. In conditioning activities, motivation and accommodation for individual differences should always be a prime consideration. Continuity of effort rather than "stop and start" activity is desirable.

### **GYMNASTICS**

The following activities may be included as parts of this unit: tumbling, free calisthenics, vaulting or box horse, pommel horse, parallel bars, horizontal bars. With the approval of the local board of education, still rings and trampoline may be used.

- 1 The major objectives of this section are to provide the student with an opportunity to increase his agility and strength, and to teach him self-reliance.
- 2 Movements should be taught in a logical progression of difficulty and should be adaptable to the capability of the individual student.
- 3 The organization of the class should be such that maximum activity, commensurate with standard safety procedures, is achieved. While this may result in a unique class organization, it should not result in a loss of basic class control.

4 After a reasonable period of practice of the activities, some means should be provided which will allow the student to assess his performance and progress.

### TRACK AND FIELD ATHLETICS

The following activities are included as parts of this unit: starts; sprinting and running form; baton passing and relay running; cross country running and hurdling; jumping, vaulting, weight-throwing\*.

The following points should be noted:

- 1 The teacher should examine the facilities of both the gymnasium and the outdoor activity area with a view to making maximum use of all available space and equipment for the conduct of track and field classes;
- 2 Essential skills for each activity should be selected, and suitable drills for each grade organized. For a reasonable period of practice of the activities, some means should be provided for the student to assess his performance and progress;
- 3 \*Instruction in javelin is not permitted in the curricular program. The discus should not be introduced unless there is sufficient space to allow for the enforcement of proper safety procedures.

### TEAM ACTIVITIES

The following games will vary with local conditions, but as a general rule the outdoor program of the fall term should not be repeated in the spring. The teacher should recognize that the development of skill should be related to the immediate objective in the game situation.

Football	passing, catching, running, punting, place-kicking, football-type games
Soccer	dribbling, passing, tapping, kicking, heading, tackling, soccer-type games
Speedball	soccer skills, basketball skills, kickup, punting, juggling, drop kicking
Basketball	passing, dribbling, shooting, pivoting, guarding, basketball-type games
Volleyball	serving, passing and volleying, setting up, spiking, net recovery, volleyball-type games
Hockey	skating, puck carrying, passing, shooting, hockey-type games
Lacrosse	throwing and catching, picking up the ball, carrying the ball, lacrosse-type

games

Rugger

passing, running, catching, kicking,

kicking for goal.

Rugger may be introduced, provided the local board of education has

given its approval

### INDIVIDUAL ACTIVITIES

Wrestling

stand-up wrestling should not be part

of the class program.

The skills attained at this level should involve positions on the mat; simple takedowns; simple breakdowns; simple pinning holds and simple

escapes.

Note: Wrestling may be introduced provided the local board of education has given its approval.

tion has given its approval.

Badminton

basic skills; grip, forehand and backhand, serve, clear, smash,

footwork

**Swimming** 

adjustment to the water, breathing, prone glide, fluttter kick, back glide, sculling

strokes—backstroke, breast stroke, side stroke, back crawl, crawl stroke

water entries, treading water, changing positions and drownproofing

water games, relays and stunts, water

safety knowledge

### NOTE:

The course in swimming must be adapted to local conditions. The primary objective is that every pupil may learn to swim, and gain a complete knowledge of water safety procedure. In schools where there are no swimming facilities, lectures and films on life-saving methods and water safety might be presented.

### SOCIAL DANCING

Social dancing may be included in the Physical Education program. Instruction in fundamental steps, positions, and deportment will afford the pupil much pleasure and social profit throughout his lifetime. This instruction should be carried over into after-school social activities.

# GIRLS' PROGRAM GRADES 9 AND 10

The appropriate division of time for the girls' program is outlined below:

Games		40 - 50%
Dance		15 - 20%
Gymnastics		15 - 20%
Fundamental	Movements	15 - 20%

Since no more than 50 per cent of the total time available should be devoted to games and track and field activities, it is strongly recommended that for Grades 9 and 10 no more than four or five different activities from this phase of the program be taken in any one year.

### NOTE:

If swimming is a part of the program, the time for each of the above mentioned activities should be reduced.

### GAMES - TEAM ACTIVITIES

Basketball	fundamental skills: catching and passing, shooting	
	individual tactics: starting, stopping, jumping, guarding, intercepting, bouncing, pivoting, feinting	
	team tactics: offensive and defensive play	
Volleyball	fundamental skills: volleying, serving, passing, setting, spiking, net recovery	
	team tactics: offensive and defensive	

play

fundamental skills: running, passing, throwing for goal

team tactics: offensive and defensive

play

Soccer

Field Ball

fundamental skills: kicking, stopping,

trapping, blocking

team tactics: offensive and defensive

play

Speedball fundamental skills: dribbling, trapping, blocking, catching and passing, converting ground balls to

aerial, punting

team tactics: offensive and defensive

play

Field Hockey fundamental skills: grip, dribbling,

drive, scoop, push pass, flick,

lunge, jab

team tactics: offensive and defensive

play

GAMES - INDIVIDUAL ACTIVITIES

Tennis fundamental skills: serve, forehand

stroke, backhand stroke, volley court tactics: singles and doubles

games

Badminton fundamental skills: forehand grip,

serve, backhand grip, clear smash

footwork

Skating fundamental skills: gliding (forward

and backward), right and left inside and outside edges, fundamental figures (three, eight, spiral, spin)

Skiing fundamental skills: need for proper

equipment, turning on the level, step turn, kick turn, getting up, snow plow, downhill skiing, straight

run position

NOTE:

In the extra-curricular program intramural games should have precedence over interschool games.

It is felt that interschool games have a definite value, provided they do not monopolize the school facilities, and the teacher's time and interest; and provided that every girl in the school has an adequate opportunity to

participate in intramural games. An elimination tournament is not considered adequate for the intramural program.

### TRACK AND FIELD ATHLETICS

The following activities are included as parts of this unit: starts, sprinting and running form, baton passing and relay running, hurdling, jumping, weight throwing.\*

The following points should be noted:

- 1 The teacher should examine the facilities of both the gymnasium and the outdoor activity area with a view to making maximum use of all available space and equipment for the conduct of track and field classes;
- 2 Essential skills for each activity should be selected, and suitable drills for each grade organized. For a reasonable period during the practice of these activities some means should be provided for the student to assess his performance and progress;
- 3 \*Instruction in javelin is not permitted in the curricular program. The discus should not be introduced unless there is sufficient space to allow for the enforcement of proper safety procedures.

### FUNDAMENTAL MOVEMENTS

This course is basic to the entire Physical Education program. In it, an attempt is made to educate the girls through the development of good body movement. The chief aim is the development of an awareness of, and sensitivity to, what the body is doing; whether in bending, stretching, twisting or turning; whether the movement is fast or slow, heavy or light, high or low, winding or straight.

A secondary aim, in fundamental movements also, is to provide opportunities for the satisfaction of the need to create, through solving movement problems, and in the communication of ideas and feelings through the medium of movement.

In order to realize the above objectives, it is necessary for the girls to experiment with the principal factors of movement—mechanical, spatial, and qualitative, and through exploration and selection to become aware of the associated physical, emotional, and mental overtones inherent in each movement. It is also necessary to practice specific techniques to further prepare the body for movements demanding a high degree of strength and flexibility, both stationary and in locomotor activities.

It is essential, as in the case of gymnastics, for the teacher to experience a good background in the fundamentals of movement before she can teach this course effectively. Teachers who have not had such a background, therefore, are advised to attend a gymnastics workshop at the earliest opportunity.

### FUNDAMENTAL MOVEMENTS LESSON

Warm-up activity (3-5 minutes) light locomotor; running, skipping, etc. arm, leg, or trunk swings stretches

Exercises for strength (5-10 minutes) stressing legs and feet; abdominal and upper back

1 Locomotor skills (10-15 minutes) run, jump, leap, gallop, slide, skip, polka, waltz, and variations of these

OR

2 Creative Activity experience in movement factors (mechanical, spatial, quality, rhythmic), to develop body awareness of these factors problems based on movement factors leading to creative or modern dancing

### DANCE

Folk Dance—includes North American square dancing
Ballroom Dancing

- 1 Folk dances are enjoyed by young and old in every country in the world, because of their simplicity, vigour, and compelling rhythms. The various steps and music are traditional in the country of their origin, and they are still being danced in their home lands as well as in Canada.
- 2 Participation in folk dance develops sociability and an appreciation of the cultures and customs of other countries. Knowledge of the background of a people promotes understanding. Where possible, folk dancing should be correlated with other subjects; for example, with Social Studies, Art, and Home Economics.

### **GYMNASTICS**

Apparatus Activities—balance benches, Olympic beam, box horse, pommel horse (side horse), uneven parallel bars, ropes, tumbling. With the approval of the local board of education, still rings and trampoline may be used.

There are two basic approaches to the teaching of gymnastics in the secondary school program for girls, the traditional or the direct method, which is followed by the majority of teachers; and the indirect approach (or "the educational approach" as it is sometimes called), with which recent graduates are experimenting.

The basic difference between the two methods is that in the direct (or traditional) approach, specific skills are taught and demonstrated and then practised by the pupils, with spotters standing by. In the indirect method there is no demonstration, no specific skills are taught, and there are no spotters. The girls are set

to movement tasks in the working-out of which they gain a body awareness of basic movement principles. These principles are then applied in the working-out of problems involving the apparatus. Each girl will in all probability come up with a different solution through body movement, according to her individual capacity. No demonstrations are used, as many different answers will be expected. No spotters are needed, for each girl will have chosen a movement within her own range of ability.

### 1 Direct Method

- a) Warm-up Activity (3-5 minutes)
  This activity would be similar to that of the warm-up section in the fundamental lesson.
- b) New skills presented by the teacher to whole group (1-3 minutes)
  - Graded skills (i.e. simple to difficult at each station, with teacher coaching each group in turn. The groups rotate at intervals.)

### 2 Indirect Method

- a) Floor work without apparatus (5-10 minutes)
  Experimentation in movement principles to
  develop body awareness and control
- b) Work with apparatus
  Application of these principles in solving
  problems involving the apparatus

### NOTE:

The untrained teacher would be wise to be most selective in choosing activities for the program. She is strongly advised to attend a course or workshop, or to seek direct assistance from a qualified teacher.

### **SWIMMING**

Strokes

crawl, elementary back stroke, back crawl, breast stroke, side stroke

Diving

basic dives

Water Safety

emergency measures: reaching assists, changing from back to front and front to back positions, treading water, drownproofing, relieving cramps while floating, lift out of deep water at edge of pool, surface dive for objects of different weights.

### SYNCHRONIZED SWIMMING

### NOTE:

- 1 where a pool is not available, the mimetics of the swimming strokes can be taught, so that the pupils may practice intelligently when the opportunity arises;
- 2 every pupil should learn water safety measures as a routine safety precaution.

Reference books for teachers of this course are listed below. There are many other books available which will also serve as excellent reference materials.

# GRADES 7 and 8 GYMNASTICS

- Educational Gymnastics—London County Council, 1963; Canadian Folk Dance Service, 605 King Street West, Toronto 2B
- Teaching Gymnastics—Mauldron, E., and Layson, J., Macdonald and Evans Ltd., England; Canadian Folk Dance Service, Toronto
- Basic Movement—Randall, M., G. Bell & Sons, 1963; Clarke, Irwin and Co., Ltd., Toronto
- Educational Gymnastics—Morrison, R., 1956, (Pamphlet); Canadian Folk Dance Service, Toronto
- Educational Gymnastics for Secondary Schools—Morrison, R., 1960; Canadian Folk Dance Service, Toronto
- Pure and Applied Gymnastics—Munrow, A., 1955; Arnold, England; House of Grant, Toronto

### GAMES

- Basic Physical Skills—Purdy, D. S., Copp Clark, 1953 Intra-Murals – Their Organization and Administration—Meers, L. E., 1963; Prentice-Hall, Toronto
- The Know the Game Series—Ontario Federation of School Athletic Associations (OFSAA), 559 Jarvis Street, Toronto 5
- How to Improve Series—Ontario Federation of School Athletic Associations (OFSAA), Toronto
- Current Rule Books—Ontario Federation of School Athletic Associations (OFSAA), Toronto

### TRACK AND FIELD

- Schoolgirl Athletics—Woodeson, P., and Watts, D., Stanley Paul Publishers, 1966; Canadian Folk Dance Service, Toronto
- Athletics for Schools—Dyson, G., and Edmundson, J., University of London Press, 1964; Musson Book Co., Toronto

Know the Game (Coach Yourself) Series—Ontario Federation of School Athletic Associations, Toronto.

### DANCE

### a) Creative:

- Modern Dance in Education—Russell, J., 1958, Macdonald & Evans, England; Canadian Folk Dance Service, Toronto
- Records: Listen and Move—Canadian Folk Dance Service, Toronto

### b) Folk:

Folk Dances for All—arranged by Michael Herman; Barnes & Noble Incorporated, Ontario Federation of School Athletic Associations (OFSAA), Toronto

Records: Records for Individual Dances—Canadian Folk Dance Service, Toronto

# GRADES 9 and 10 GYMNASTICS

- Gymnastic Apparatus for Girls—Babbitt and Hass, Ronald Press, New York, 1965; Ontario Federation of School Athletic Associations (OFSAA), Toronto
- Gymnastics for Girls—Hughes, E., Ronald Press, New York; Ontario Federation of School Athletic Associations (OFSAA), Toronto
- Handbook of Progressive Gymnastics—De Carlo, Prentice-Hall, Toronto
- Fitness Training Methods—Howell and Morford; Canadian Association for Health, Physical Education and Recreation, 703 Spadina Avenue, Toronto

### GAMES and TRACK AND FIELD

- How to Play and Teach Volley Ball—Welch, J. E., Ontario Federation of School Athletic Associations (OFSAA), Toronto
- Complete Book of High School Wrestling—Brown, R. L., Ober, D. K.; Prentice-Hall, Toronto
- Encyclopedia of Basket Ball Drills—Pinholster, G. F., Coaches' Book Club of Englewood Cliffs, New Jersey; Ontario Federation of School Athletic Associations (OFSAA), Toronto

- Winning Football Drills—Allen, G. H., Coaches' Book Club of Englewood Cliffs, New Jersey; Ontario Federation of School Athletic Associations (OFS-AA), Toronto
- Circuit Training—Morgan and Adamson; Clarke, Irwin, Toronto
- Basic Wrestling—Yuhasz, Leyshon, and Salter, Canadian Association for Health, Physical Education and Recreation, 703 Spadina Avenue, Toronto
- Individual Sports for Girls and Women—(Revised);
  Ainsworth et al; Saunders Publishers, Toronto
- Team Sports for Girls and Women—Meyer and Schwartz; Saunders Publishers, Toronto
- How to Improve Series—Ontario Federation of School Athletic Associations (OFSAA), Toronto
- Coaching High School Track and Field—Brother Luke; Prentice-Hall, Toronto
- Fundamentals of Track and Field for Coaches and Teachers—Powell, J., Department of Athletics, University of Guelph, Ontario
- Applications of Weight Training to Athletics—Hooks, W. G., Prentice-Hall, Toronto

### DANCE

- Introduction to Teaching of Dance—Hayes, E. R., Ronald Press, New York; Ontario Federation of School Athletic Associations (OFSAA), Toronto
- Modern Dance (Building and Teaching Lessons)— Lockhart, A., and Pease, E. E., Wm. C. Brown Company Publishers, 135 South Locust Street, Dubuque, Iowa; Ontario Federation of School Athletic Associations (OFSAA), Toronto
- Folk Dance (Revised Edition)—Kraus, R., Macmillan Co. of Canada, Toronto
- Dance Awhile—Pitman, Harris et al, Ontario Federation of School Athletic Associations (OFSAA),
  Toronto

# HEALTH EDUCATION INTERMEDIATE DIVISION GRADES 7, 8, 9, AND 10

AIMS, ORGANIZATION, AND PRESENTATION OF THE HEALTH PROGRAM

The World Health Organization defines health as "... a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity."

Health should not be looked upon as an isolated subject for study but rather as a philosophy which must pervade the whole curriculum.

Because of its unique opportunities to influence children, the school has a particular responsibility to teach a "living, functioning health program . . . in a planned, sequential manner, from Kindergarten right through Grade 12."

The specific aim of this course is to influence each child to adopt the principles and practices of healthful living as a natural part of his everyday life, so that he may continue into adult life as a happy, healthy citizen, capable of making intelligent decisions, ready to accept responsibility, and able to make a contribution to society.

The course has been organized around the idea of normal health, with emphasis on an understanding of function and the ways and means of attaining greater efficiency of the body mechanisms. Detailed physiology or histology is not usually necessary for such an understanding.

The titles given to each grade level, "Growth and Change" in Grade 7, "Understanding Early Adolescence" in Grade 8, "Further Study of Adolescence" in Grade 9 and "Controlling the Body" in Grade 10, are solely a guide to the general orientation of the work of each grade level.

Teachers should be aware of the work covered in previous grades. A glance at the summary will show that the course is a developing one and that the work of any one grade level presupposes certain knowledge.

It is suggested that these courses be taught to boys and girls in separate classes. Scheduling a health class for girls and a physical education class for boys at the same time will allow for this separation and make maximum use of facilities.

### LOCAL CONSULTATIVE COMMITTEES

The school environment and the physical and mental health of the teachers are of prime importance in a successful health program. Furthermore, the most effective health teaching will take place when there is close cooperation between existing educational and health agencies and the home. To help these groups carry out their responsibilities and to give additional focus to the total health program, a school may decide, with the approval of the board, to organize a Consultative Committee. In a small school, such a committee might consist of the principal or assistant principal, a teacher, a member of the board, a representative of the local public health services, and a representative of the Home and School Association, or the Parent-Teacher Association. In a larger school, departmental representatives chosen particularly from the Home Economics, Science, Physical Education, and Guidance Departments might be added.

## **GRADE SEVEN GROWTH AND CHANGE**

### **FOREWORD**

Children at this grade level often exhibit identifiable behavioural and physical characteristics.

Concern about the wide range of physical growth evident within the age group

The less mature, but otherwise normal student needs assurance that the apparent slowness in growth and development is normal and has its compensations. The fast-growing pupils need to be reconciled to the temporary awkwardness of their bodies. Both groups require information regarding rapid growth and body changes.

Occasional boisterous or uncooperative behaviour often characterizing a striving for independence

The need to belong to a team, group or "gang"

The standards of these peer groups tend to take precedence over any other standards. Not infrequently this leads to an overloaded and unbalanced schedule of living.

Tendency of girls to be taller and more mature than

The need to understand the value of activity.

### **INHERITANCE**

This unit on heredity is included so that the pupil may understand that certain physical and other characteristics are inherited. Teachers should discuss only the simple mechanisms of inheritance with the class. If, however, individual pupils have concern about some of the topics, the teacher should answer the questions or direct the pupil's attention to the various sources of information available.

A simple explanation of cell structure, union of

sperm and ovum, and the function of genes may be included.

Brief description of single-celled animals.

Brief discussion of higher animals

specialization of cells.

Inheritance – physical and other characteristics inherited from parents.

A detailed description of cell structure, cell division, fertilization, gene location, etc., is not to be taught at this level. Do not discuss inherited diseases or defects.

### GROWTH

Common patterns of growth from babyhood to adulthood

### Infancy

-by five months - doubles birth weight -by one year - trebles birth weight

— 50 per cent over birth length - four times birth weight -by two years

Pre-school

-growing slowly: therefore, has small appetite

Younger school age

-relatively moderate and constant growth rate until just before puberty

### Growth spurt

- -one to two years of rapid growth at puberty, usually between 11 and 13 years of age for girls, usually 13 to 14 years of age for boys
- -little increase in height after this spurt of growth
- -variations in age of growth spurt are normal
- -many girls are taller than many boys in Grade 7
- -boys nearly always grow more rapidly than girls at puberty and eventually are taller

The parts of the body keep pace during growth

-General discussion of growth, emphasizing that the internal organs keep pace with the growth of the body as a whole

### Adult stage

-Constant renewal and replacement of tissue from birth throughout life

### CONTROL OF GROWTH AND CHANGE

What the body does for itself

 brief, simple description of function of endocrine and other glands

It is not intended that this will be a detailed outline. It is only to orient the student to an understanding of the Pituitary Gland and its role in growth. There is a further study of glands in Grade 10.

Blood as a transport medium for hormones (brief outline)

### Pituitary gland

- -size
- -position
- -function do not discuss the numerous hormones of this gland

### Growth hormone

-other hormones affecting growth and development at puberty

Only normal production of growth hormones is to be discussed. Discussion of abnormalities, which are rare, is to be avoided.

### Other factors affecting growth

- \_food
- -exercise
- -rest and sleep
  - -all physical and mental functions slow down during sleep
  - -fatigue makes one more suspectible to infection

### Effects of illness

- -temporary decrease in growth rate
- -with recovery nearly always regain normal rate
- -repeated infection may limit growth
- -if essential organ permanently damaged, growth may be reduced —a rare occurrence

### Minimizing infection

### Good health habits

- -wash hands before eating or handling food and after
- -other personal cleanliness habits
- -avoid exposure to those obviously suffering from an infectious disease
- -drink only safe water and milk

### Immunization against infectious disease

Emphasis on early medical attention

### How good citizens work together

- -community health program
- -school health program
- -voluntary health organizations

### OBVIOUS SIGNS OF GROWTH

In keeping with the general topic "Growth and Change", the teacher should stress the continual growth of the child. Emphasis should be placed on the normalcy of differing rates of growth in different individuals, and on what a pupil can do to ensure healthy growth. Stress should be placed on anatomy only to understand function better. Many of these topics can easily be related to activities in the gymnasium or out-of-doors.

(Girls only) Menstruation and Personal Hygiene

### Growth of bones, joints and muscles

### Growth of bones

- -before birth
- -after birth (stress growth near ends of long bones)
- -fusion of epiphysis and cessation of growth
- -example of growth of bone (long bones, skull, appearance and increase in size of wrist and ankle)
- -contact sport and the epiphysis

Students should understand that bones are living structures and, therefore, have the same needs as all other living structures.

### Foods, especially needed for bone growth

- -milk and cheese (calcium) --Vitamin D
- -meat and eggs and other sources of protein

### Benefits of activity

-increased blood flow, better calcification

### Function of bones

- -body shape and support
- -levers for movement
- -protection (brain, spinal cord, lungs, etc.)
- -available storehouse for calcium
- -production of many types of blood cells

### Growth of movable joints (Simple details only)

- -parallel growth of bones
- -parts of a joint capsule, ligament, smooth cartilage on bony surface, synovial fluid

### Growth and health of skeletal muscle

Brief description of how a muscle works

- -minute fibres constant in number
- -contraction and relaxation
- -opposition
- -attachment to bones
- -nervous control

Foods especially needed for good muscle development

-protein (milk, meats, eggs, fish, poultry)

### Growth in size and control

- -how muscles grow
- -progressive co-ordination from baby to child
- —learning muscle control
- -how well-developed muscles are attained

### Advantages of good muscle development

- -strength to work with vigour
- -sufficient endurance to continue activity for long period
- -well developed muscles are more efficient
- -sufficient physical skill to move more efficiently
- -good functional posture
- -flexibility
- -sense of well being

### Exercise

- —helps muscles maintain appropriate development in both boys and girls
- -helps to control appetite
- -the relationship between diet and exercise

### Safeguards against injuries in sports

- -age and weight groupings
- -correct skills and techniques leading to more efficient, safer performance quick response of fit muscles
- -rules for body protection and safety
- -protective equipment
- -emphasis on desirable practices and sportsmanship

### FIRST AID

Physical activity may occasionally result in injuries to bones, muscles or joints. Lifting a heavy article incorrectly, catching a ball improperly, or falling from a bicycle are common examples. This section is not to make the student a fully qualified first-aider, but to give him an understanding of some of the most common injuries so that in time of emergency he will not be completely helpless.

# Injuries - causes and aids to identification

### Bones (fractures)

- -causes: direct blow; indirect force; muscle action
- -signs: pain, swelling, loss of power, deformity

### Joints (sprains and dislocations)

- -causes: wrenching of joint beyond its normal range of movement
- -sprains: muscles and tendons around joints are torn or stretched
- -dislocations: one bone forced out of joint socket
- -signs: sprain pain, swelling, subsequent discolouration; dislocations pain, deformity (may be hidden by swelling)
- -In both cases a fracture may be present

### Muscles (strains and charley horse)

-causes: tearing of muscle fibres (strain)

- deep bruising and crushing of muscle fibres (charley horse)
- -signs: pain, possible swelling

Head and back injuries may result in serious complications. Great caution must be observed in the care of such injuries, and the services of a doctor obtained immediately.

### Head (bruises, fractures, concussion)

- -causes: minor blow resulting in a bruise a severe blow resulting in a fracture of skull or damage to brain
- -signs: loss or disturbance of consciousness (concussion), convulsions, bleeding from the ear
- —all these signs are dangerous

### Back (severe bruising of muscles, fracture)

- -causes: numerous, any injury to the spinal column which causes dislocation or fracture of vertebrae carries with it a great danger of injury to the spinal cord
- extreme caution must be exercised in all back injuries
  do not move the patient

### Cessation of breathing

—if breathing has stopped artificial respiration must be administered at once

Pupils should understand and practice the steps in mouth-to-mouth artificial respiration. It is suggested that the final step, direct contact, should be taught in theory only.

# General principles to observe in the initial care of injuries

- -move patient only if necessary if the patient must be moved, immobilize possible fractures (note section on "Back")
- -make patient comfortable
- -control bleeding by direct pressure, except in head injuries accompanied by blood-stained fluid from the ear

Emphasize the importance of medical attention for all injuries which are not trivial.

### SMOKING AND HEALTH

### Why people smoke

- -social reasons to be like many others
- —influence of commercial advertising

### Why people should not smoke

- relationship of smoking to chronic bronchitis
  - athletes and endurance
- lung cancer and heart disease
- -habit forming
- -dulls taste buds
- -may be offensive to others
- -extra expense

# GRADE EIGHT UNDERSTANDING EARLY ADOLESCENCE

### FOREWORD

At this stage of their development students are becoming more aware of the opposite sex. This awakening boy-girl consciousness will lead to the development of "crushes" and "hero-worship". Boys in particular begin to realize that social skills need improvement.

Many children are concerned with what they consider to be their "unattractive" appearance. While there is often a tendency to "spruce up", certain aspects of appearance are often forgotten. One of the main objectives of the Grade 8 course is to point out that personal appearance is important because it is often one of the bases upon which individuals form early judgments. In addition, knowledge that they have an acceptable appearance will give children much needed confidence and poise. It should also be emphasized that this is an age when children must assume more personal responsibility for their appearance.

The student has a need for a feeling of security. He is aware of his limitations and sometimes has a feeling of inferiority. As he strives for an understanding of himself and his place in society he may be boisterous, moody, rebellious and periodically critical of parents, teachers and himself.

As in Grade 7, it is not intended that the teacher ask the class to master the detailed anatomy or physiology of any system, organ or tissue. It is necessary only to give the student the information in regard to structure that will assist him in understanding the function and care of his body.

### CHANGES ASSOCIATED WITH PUBERTY

Physical changes associated with puberty

### Girls

- -changes in body contours
- -menstruation
- -distribution of body hair
- —normal increase in weight (related to carbohydrates and fat)

### Boys

- -changes in body contour
- -voice changes
- -distribution of body hair
- -influence of these physical changes on the growing individual

It should be stressed that some concern and changing feelings are shared by most persons in this age group.

- -increased importance of physical appearance and prowess
- -increased interest in opposite sex (emphasize great variation from one individual to another)
- temporary clumsiness in some students possibly due to rapid growth

### PERSONALITY

It is not intended that those teaching the principles of good health should endeavour to give students of Grade 8 a short course on the psychology of personality. Rather, in line with the title of the Grade 8 course, "Understanding Early Adolescence" we wish to indicate to the student that each child has a different background and different inherited characteristics, and that each child is, therefore, different. This is true, of course, for siblings as well as individuals chosen at random. We wish to assure children of this age that it is perfectly normal to be different, but that there are also certain attributes that all individuals share.

### What is Personality?

Everything the individual is.

- -characteristics, habits, likes and dislikes
- -as others see the individual
- -has many facets varying with situation; e.g., boy at home, same boy playing basketball, same boy at graduation

### Factors affecting personality

-individual differences in: body build, facial features, temperament, mental ability, health and fitness, rural and urban residence, school, peer group, family atmosphere

(Class discussion may be developed by bringing in other areas of differences.)

### Family differences in

-ethnic background, income, status, outlook (serious, fun-loving, or a combination of these), parental sharing of responsibilities, interests, standards of conduct

### Families are alike in fundamentals

-love and affection, intimacy, sense of belonging, security and support, protection, food and shelter, provision of necessities during school years, some standards of conduct

### MENTAL HEALTH

Needs of an individual

### Confidence and security in

- -personal ability
- -relationships with friends
- -relationships with family
- -faith and ideals

### Desires of adolescents

- -desire for acceptance and recognition (to be liked and commended)
- -conformity with peer groups (to be like the crowd)
- -desire for independence from adult controls

Although on the surface each of us may display complete self-confidence, we all have certain strengths and weaknesses. The immediate objective of this unit is to point out to children moving into young adult-hood the naturalness of feelings of apprehension or insecurity. Once this has been recognized, the transition should be less of a strain on the child. The second objective is to indicate that successful accomplishment is probably the most effective way to move to a position of security and to give the child some socially acceptable guide lines to follow.

Those who do not have security or do not feel confident react by:

- -making excuses and blaming others
- -boasting and showing off; e.g., extremes in dress, bullying, swearing, smoking
- -adopting a "don't care" attitude, leading to lack of cooperation or apparent resentment
- -withdrawing from the group

### Suggestions for security building

- -know yourself
- participation and achievement in: school activities, hobbies, social accomplishments, clubs, community service

### SKIN

### Importance

### Protection

- -tough, semi-waterproof, elastic (note role of sebaceous glands)
- -protects against bacteria and other harmful substances
- -works best when clean and unbroken
- -absorbs some poisons; e.g., carbon tetrachloride
- —continually shedding repair after injury and constant replacement

### Factor in control of body temperature

- —evaporation of perspiration
- dilation or contraction of surface blood vessels and the effects on radiation of heat
- —the effect of the insulating layer of fat

### Production of vitamin D

- -ultra violet rays act on waxy material in skin to produce vitamin D and tan the skin
- -importance of vitamin D in bone and tooth development

### Care of the skin:

### Why clean the skin?

- —improves protection
- -social acceptance appearance, perspiration

### Cleansing agents

-soap, cleansing creams and cosmetics

### Understanding the secretory function

- —oil and perspiration
- areas of excessive perspiration which become active after puberty
- —emotion, stress and perspiration
- perspiration and clean clothing

### Skin problems:

### Helping to prevent skin problems

- -good health outdoor exercise
- -good food
- -sleep
- -peace of mind
- -proper cleansing

### Blackheads

- —oil from overactive oil glands and loose surface skin cells plug hair follicle
- -gentle removal with extractor to prevent pimple formation

### Pimples and how to control them

—hormone changes cause over-production of oil and surface skin cells

- -oil breaks out of oil gland, causing inflammation
- -hereditary factor
- -washing with soap and warm water three times daily
- -may need to omit some foods
- -frequent shampoos keep hair off forehead
- -avoidance of oily creams and hair oil
- -medical attention is required if pimples are persistent and severe

### Moles and freckles

Understanding infectious skin diseases

- Impetigo bacterial infection, should be treated by a doctor
- —Plantar warts caused by a virus
- -Athlete's foot caused by a fungus
- -Boils caused by bacterial infection should be treated by a doctor personal hygiene is important

First aid for the skin (bruises and abrasions)

- -causes: bumps, scrapes, friction
- -treatment: skin broken wash with soap and water; if needed to ensure cleanliness, apply clean, dry dressing

Special first aid for the skin

- -insect bites
- -blisters
- -ivy poisoning
- -chafing
- -sunburn

HAIR

Structure and growth of the hair (brief)

Care of the hair:

### Washing

- -frequency
- -shampoos
- -rinsing
- -drying

### Styling

- -stress avoidance of adverse reactions by following directions for home permanent; use carefully
- -stress appropriateness for school and social situations

### Dyeing

- -indicate possibility of adverse reactions
- -hair spray and excessive use of oils
- —simple explanations of *Food and Drugs Act* as related to safety and cosmetics

### Hair problems:

### Dandruff

- -shedding of scales from scalp
- -regular shampooing, combing and brushing helps to control it

### Baldness

- -hereditary, a normal process
- -no cure known

### Graying

- -normal process of age
- -hereditary factors

### Unwanted hair

- -no significance if otherwise healthy
- -varies in location, arm or upper lip
- -medical advice is important when considering removal

### **NAILS**

Structure and growth of nails (brief)

Care of nails:

Common-sense attitude

- -cleanliness
- -length and proper cutting or filing

### Nail problems

- -hangnails
- -paronychia (infection beside nail, also known as a felon or a whitlow)
- -ingrown toe nails
- -improperly fitted shoes and stockings

### TEETH

### Growth

- -review work taken in Grades 1-6
- -continuous growth from birth to early adult life

Effects of decay and loss of teeth:

Malocclusion

-correction

### Further decay

- -poor appearance
- -inability to chew food properly
- -possibility of poor speech
- -pain and harmful effects on general health of tooth decay

Tooth Decay – How to Reduce it

The Vipeholm Test\* summary may prove to be a motivational factor.

Reducing tooth decay

- -regular and correct brushing after meals and before retiring
- \* The Vipeholm Tcst. A five-year study on over 400 young Swedish adults which showed that eating certain kinds of candies during the day increased the number of dental cavities.

- -rinsing mouth with water if impossible to brush
- -chewing hard food: helps jaw to develop; helps clean the teeth
- water fluoridation, fluoridated tooth paste or professional application of fluoride

### Regular dental care:

Susceptibility to decay varies

- -less decay with proper care
- -professional care every six months

### REFERENCES:

Nikiforuk, G.: The Vipeholm Study on Dental Caries, Journal of the Canadian Dental Association, December 1956, p.p. 705-711.

Davies, N.Z.: The Need for More Dentists – a Service Profession, Dental Journal, 1955, Vol. 50: 153.

### **EYES**

Explanation of the operation of the eye (brief)

### Care of eyes

-why wear glasses

far sightedness (Hypermetropia) short sightedness (Myopia)

Astigmatism

- -contact lenses
- -illumination

### Eye problems

- -stves
- -pink eye
- -snow and sunglare

sunglasses

- -chlorine in swimming pools
- -injury emphasize immediate medical care

### EARS

Explanation of the operation of the ear (brief)

(Indicate connection with throat)

- -wax
- -infection
- -pressure changes airplanes, scuba diving
- -small objects

### FOODS FOR TEENAGERS

The topics listed below lend themselves to class discussion. Children of this age group often have an inadequate diet and poor eating habits. Canada's Food Guide is an appropriate reference. It is not necessary to spend a period on each topic.

- -vitamins in our foods what they are; what they do
- -adequate breakfasts
- -school lunches
- -training table for athletes
- -figure control

- —food prejudices
- -snacks, coffee and pop breaks
- -unnecessary drugstore vitamins
- -commercial advertising of foods
- -effects of smoking on appetite
- -swimming after meals

# MEDICAL DISCOVERIES THAT HAVE EXTENDED OUR LIFE SPAN

It should not be the intention of the teacher to detail the discoveries or the hardships involved. The students should have an understanding that they are the benefactors of a legacy of dedication to the pursuit of knowledge, and that the future holds even greater promises.

A brief mention of the discovery and the importance to society of:

- -Insulin
- -Sulfa drugs
- -Penicillin
- -Polio Vaccine
- -Vitamin B<sub>12</sub>
- -Electrocardiograms
- -Heart surgery
- -Plastic surgery
- -Heart lung machines
- -Hypothermia
- -Anaesthesia
- -Electroencephalograms
- -Mental illness treatments

### WATER SAFETY

### Boating

# GRADE NINE FURTHER STUDY OF ADOLESCENCE

### FOREWORD

In Grades seven and eight, the age group characterized by the onset of puberty and consequent wide variations in pubertal development, the students have been given an understanding of the changes that are taking place both in their physical development and in their social outlook. This knowledge should have prepared them to assume some personal responsibility for their health practices.

The secondary school student is usually given considerable freedom concerning health habits. Parents now look upon their offspring as young adults rather than as children. The organization of the school often removes the child from the home environment for long periods of time, and forces him to make decisions.

An obvious example is the school lunch. The timetable often makes it impractical for the student to go home for lunch. The variety of foods available at school cafeteria or local restaurants leads the student to opportunities for decision-making which are perhaps new to him. In the same way the social club and athletic activities give the student further opportunities to use his new measure of independence.

The teacher has great opportunities to assist in the development of appropriate attitudes towards personal responsibility for health in its broadest concept.

### **FITNESS**

### Total fitness

- —combination of physical, intellectual, emotional, social factors
- -discussion of a definition

### Physical fitness

- —why one should be physically fit
- —discussion and evaluation of present level of physical fitness:
  - how fitness may be measured (this may relate to gymnasium activities)
- -factors which affect present level of fitness: influence of exercise

influence of nutrition influence of daily regimen

 opportunities to build and improve physical fitness: during physical education classes in the extra-curricular program at home in the community

-weight control: food selection exercise

obesity

### UNDERSTANDING CIRCULATION

Brief description of the heart and blood vessels

Heart as a four-chamber double pump — double circulation

heart to lungs heart to body

Muscular walls of arteries, arterioles

-capillaries - permeable wall allowing exchange of gases, liquids and solids

Venules and veins (indicate valves)

Lymph and lymph vessels

Brief outline emphasizing

- -lymph surrounds every cell
- -lymph escapes from capillaries
- -excess lymph taken to veins in lymph vessels
- —lymph nodes act as filters

### The Blood:

Review work of Grade 7 – blood as a transport medium

Blood, what it is and what it does

- —food transport in the body
- —oxygen transport in the body
- -clotting simple explanation
- —hormones
- -major control of body temperature

### Blood and infection

- -white cells and antibodies
- -lymph and lymph nodes
- -tonsils and adenoids

### Blood and waste materials

- -excess carbon dioxide
- -nitrogen compounds and the kidneys

### Factors affecting the efficiency of the system

- -adequate rest and sleep
- vigorous physical activity
   heart more efficient with training
   active muscles help venous and lymph return
   reduction of possibility of coronary disease
- -smoking
- -food
  - need for food rich in iron and protein the heart and excess weight
- -pep pills and athletics stress need to rely on own resources

### Changes from the normal state

- -anaemia
   iron deficiency
   too little haemoglobin per unit of blood other types (little detail)
- —fainting
- -haemorrhage
- doctors' methods of determining changes blood tests the stethoscope blood pressure tests and other tests

### UNDERSTANDING RESPIRATION

### Brief outline of the mechanism of breathing:

- -mechanical operation
- -gaseous exchange in the lungs
- -exchange in the cell
- -importance of haemoglobin
- -carbon dioxide mainly in the plasma

### Factors affecting the efficiency of respiration:

### The kind of air we breathe

- -inhaled tobacco smoke
- -air pollution
- -carbon monoxide

### Respiratory infections

- —the common cold and its possible complications
- -tuberculosis of the lungs

### Vigorous activity

-oxygen debt

### Areas for discussion

- -how we speak
- -artificial respiration (review)
- -allergies hay fever asthma
- -tuberculosis, and the reduction in incidence

# UNDERSTANDING CHANGES WHICH LEAD TO MATURITY AND PARENTHOOD

The onset of puberty, with its significant emotional and physical changes, presents the child with many questions. Answers may be available from several sources: the home, the church, and the school. Too often, however, the source of information is the peer group. Information obtained from this source is often inadequate and misguiding.

The purpose of this section is to give the pupil a simple explanation of the reproductive system and the process of reproduction, and to provide an acceptable vocabulary relating to the reproductive organs.

The inclusion of this section, as part of the Health Course, is left to the discretion of the principal, in consultation with the local school board. It may be decided to seek the advice of the local Consultative Committee on Health (see page 20).

Many teachers of Physical and Health Education will feel competent to present the information to their classes of boys or girls. Alternative methods of presentation might include:

- 1 A series of talks by the local Medical Officer of Health or a medical doctor; the Ontario Medical Association approves the suggestion that local educational authorities might compile lists of doctors willing to assist in the presentation of these topics in the schools of their communities;
- 2 the use of such films as Boy to Man or Girl to Woman available from Audio-Visual Section of the Department of Education; these films, each of 18 minutes' duration, are produced by Churchill Films; they are distributed in Canada by Educational Film distributors, 191 Eglinton Avenue East, Toronto;
- 3 panel presentations involving representatives of the local public health services or regional medical associations.

Another procedure which has been followed by some Ontario communities is to organize parent and pupil meetings at the school, where a film might be shown, and where a medical doctor is invited to give a brief talk and to act as a resource person during the discussion period.

The policy decisions as to the manner in which this section of the course is presented can be in accord with the above suggestions or as determined by the local education authority.

The presentation of this unit within a biological set-

ting is in accordance with the recommendation of many medical authorities.

Brief review of Grades 7 and 8 work:

Changes associated with puberty

- -awareness of self
- -reactions to home and others
- -physical changes
- -emotional preparations for independence and responsibility

Review "cell specialization" - Grade 7

Review "hormones affecting growth and development at puberty" — Grade 7.

Reproduction in lower animals:

Examples of asexual and sexual reproduction

- -amoeba binary division
- -hydra asexual and sexual (testes, ovary, fertilization)
- -frog spermatazoa and ovum
- -mammals fertilization and development of offspring within the female

The difference between families of animals and humans

-marriage and the family unit as the central core of our society.

Brief outline of the male reproductive system related to changes associated with physical maturity

Brief explanation of female reproductive system related to changes associated with physical maturity

The normal birth process

- -how the ovum is fertilized by the sperm
- -development of the baby
- -brief outline of normal birth process

A discussion related to responsibility within the family and the adolescent's responsibility to the family.

WATER SAFETY

- -swimming
- -diving
- -scuba diving

INTRODUCTION TO THE STUDY OF ALCOHOL

Nature and composition of alcohol

NOTE: The teacher may introduce this topic by briefly discussing the various types of alcohol: medical, beverage, and industrial, and outlining the various methods of production.

Effects of alcohol in the individual:

How the body absorbs and eliminates alcohol

Factors affecting alcohol concentration in the blood

Effects on various functions and behaviour

- -coordination
- -judgment
- -inhibitions
- -vision
- -speech

NOTE: This area can be related to driving and athletics.

Alcohol and nutrition

- -alcohol as food
- -the effect of alcohol on appetite

The pros and cons of drinking:

Why some people drink

- -Social custom
- -religious ritual
- -special celebrations
- -taste appeal
- -as an appetizer
- -as a sedative
- -relief of tension
- -prestige
- -business

Why some people do not drink

- -family tradition
- -religious conviction
- -to control behaviour
- -dislike of taste
- -personal health
- -considered harmful
- -recovery from alcoholism
- -example to others
- -economy

Class discussion of suitable alternatives to drinking

# GRADE TEN CONTROLLING THE BODY

### LEARNING A PHYSICAL SKILL

How the brain and nerves work together to make muscles move bones

The mechanisms of movement (review of Grade 7 work)

- -brain and nerves
- -muscles
- -bones and joints

### Significance of:

- -stimulus (desire) and response
- -nerve cell (neuron)
- -nerve pathways spinal cord, synapse
- interpretation and initiation of voluntary movement by brain

### Reflex action

### Effect of training

-confirms pathways (stress importance of correct techniques)

Sources of energy for movement (simple explanation and common examples)

- -carbohydrates
- -fat
- -protein
- -other substances to allow release of energy minerals and vitamins

Discussion of the Autonomic Nervous System should be mentioned, but discussion will be delayed until later in Grade 10.

### ORGANIC PROBLEMS OF THE NERVOUS SYSTEM

### Stroke

-common cause: damage to brain cells because of interference with blood supply

- -may result in temporary or permanent blindness
- —importance of rehabilitation techniques

### Convulsions

- a rapid uncontrolled jerking of muscles, blueness due to oxygen deficiency, associated with unconsciousness
- -variety of causes
- -fairly common in babies and young children suffering from acute infections in the body
- -medical care need to treat infection

### Epilepsy

- -usually controlled by adequate treatment
- -petit mal
  - mildest form
  - momentary loss of consciousness (staring spell, hardly noticeable)
- -grand mal
  - severe, jerky muscle movements, blueness loss of consciousness often froth at the mouth

### **Poliomyelitis**

- -control is an example of success of medical research and public health measures
- -virus disease that damages or destroys nerve cells in brain or spinal cord
- -may result in temporary or permanent paralysis
- -importance of rehabilitation techniques
- immunization as best defense stress importance of booster doses and good health practices

### Rabies

- -virus disease that damages or destroys nerve cells in brain and spinal cord
- -transmitted via infected animals usually a bite
- -vaccination of household pets and avoidance of contact with strange animals
- -stress importance of notifying Department of Health if animal suspected

### THE SENSATIONS

### Sight

- -visual stimulus
- -visual pathway retina

optic nerve

cortex of the brain

- -importance of sight in relation to movement
- -appreciation of role played by vision and practice in judging such elements as distance and speed (stork stand, eyes opened and closed)

importance of correction of eye defects
 contact lenses—need for proper fitting by eye physician
 glaucoma

-eye safety face guards

masks in industry and sport

-the eye and the automobile peripheral vision colour vision night vision driving glasses

### Hearing

- -auditory stimulus
- -auditory pathway
  cilia in cochlea
  auditory nerve
  cortex of the brain
- -importance of hearing in relation to physical movement

rhythmic interpretation reaction to sound — starting gun, siren

-impaired hearing

may be temporary or permanent review Grade 8 — ear problems wax, infection, disease, injury stress need for professional care in diagnosis and treatment

—detection of hearing loss spoken voice, audiometer

 -accommodation to impaired hearing seat placement hearing aids – simple explanation lip reading

### Equilibrium

equilibrium stimulus
 change in head position
 semi-circular canals — compare to spirit level
 nerve
 cortex of the brain

- -importance of balance in relation to physical movement
- -motion sickness
- discuss special classes for those with sight and hearing defects

### Other Senses

The following, while not necessarily related to physical skills, play an important role in the control of body processes.

### Taste

- -four basic tastes: salty, sweet, bitter, sour
- -taste buds, nerve to brain
- -acceptance of various tastes as evidence of maturity

### Smell

- nerve endings above upper part of nose olfactory nerve, brain
- -relationship of taste and smell
- -rapid reduction of awareness to certain smells

### Skin sensations

- -touch, pain, heat, cold, pressure
- -receptors in skin nerve brain
- -reflex action (review)

### CHEMICAL CONTROLS OF THE BODY

### Hormones

- -definition of a hormone
- -production of hormones

### Effects of hormones

- -complicated
- -sometimes stimulate, sometimes retard (activities of various organs)
- -normal function is automatic
- -work as a team, stimulating and checking each other as needed

### Typical endocrine glands:

### Pituitary gland (team captain)

- -master gland
- -anterior section produces at least eight hormones produces growth hormone hormones that stimulate thyroid, cortex of the adrenal gland, and sex glands
- —posterior section produces other hormones

### Thyroid gland

-produces thyroxin, which controls rate of metabolism

### Adrenal gland

- -two parts, inner and outer
- -cortex (outer) produces corticoids:
  helps control use of salt, water, carbohydrates, and
  other substances in the body
  produces male sex hormones in both sexes
- medulla (inner) produces adrenalin (epinephrine)
   connected with the sympathetic nervous system
   increase in secretion when frightened or angry (stress)

### **Pancreas**

- -two-purpose gland endocrine, exocrine
- -produces hormones and digestive juices
- -main hormone is insulin, which controls use of carbohydrates in the body

### Sex glands

- -two-purpose glands
- -produce hormones and appropriate sex cells
- —help to cause changes in adolescence (secondary sex characteristics)

### Feedback

- -term to explain manner in which endocrine glands stimulate and check each other
- -use of ACTH (adrenal cortical stimulating hormone) as example

### AUTONOMIC NERVOUS CONTROL

- -need for such control
- examples circulation, respiration, digestion, body temperature control
- relationship of two divisions sympathetic parasympathetic

heart beat as an example

running — increase in heart beat — sympathetic action sleeping — decrease in heart beat — parasympathetic action

### STRESS

- -physiological and emotional reactions of the body triggered by various situations (happiness, work, excitement, fear, infection, anger, accidents, success)
- —emphasis on the fact that a degree of stress is normal and essential and that individuals vary in their reaction to stress

The teacher should use a positive approach in indicating how teenagers may cope with typical extra stress situations at home, at school, in sports, or with the peer group. Discuss such solutions as facing the problem, "working it off", sensible recreation, discussion with a mature person.

### DENTAL HEALTH

In previous grades the student has been exposed to information on teeth. It is now appropriate to take time to reinforce the previous information and to discuss topics pertinent to the interests of teenagers.

- -teeth, appearance and individual responsibility
- -teeth and the economy of preventive dental care
- —teeth and new advances in dentistry
- -high speed drills
- -replanting
- -control of periodontal diseases

### SAFETY

The teacher should emphasize the need to develop skill in recognizing and in meeting potentially dangerous situations. Stress should also be placed on the need for constant vigilance and the responsibility of every member of society. The type of community may indicate a particular emphasis on certain topics.

### Safe practices in traffic

- -vehicle speed and reaction time
- -maintenance of equipment
- -mental attitude (defensive driving)
- -respect for the rights of others
- —pedestrian responsibilities
- -crosswalk and crossing guards
- -hitch-hiking

### Safe practices in industry

- —working with machines safety devices safe practice
- -working with materials
   metals; e.g., lead
   solvents; e.g., benzol, carbon tetrachloride
   gases; e.g., chlorine, insecticides, carbon monoxide
- discussion of dermatitis (skin irritation) and allergies as a result of exposure to some industrial materials
- discussion of employee-employer relationship in maintaining high safety standards
- -government enforcement of standards under Department of Labour, Department of Mines, etc.

### Safe practices in the home

Most children of this age are given opportunities to "baby-sit" either with younger siblings or other children. The topic of safe practices in the home might be discussed, with emphasis on the responsibilities of baby-sitting. The topic should be taught to both sexes.

### Prevention of:

- -falls
- -burns
- —poisoning (drugs, household products)
- -electrocution

### First Aid

### Insensibility with convulsions

-refer to recognized first aid manuals

### Insensibility without convulsions

- -head injuries
- —fainting
- -sun or heatstroke

### When breathing is absent

- —possible causes
- -review direct-method artificial respiration

### ALCOHOL

### Brief history

- -primitive, Biblical, early North American
- -temperance movements
- -contemporary society

### Why talk about alcohol?

- -prevalence of drinking
  - importance to young adults of developing appropriate attitudes toward drinking, drunkenness, and alcoholism the problem to the parents of adolescents
- -prevalence of alcoholism a public health problem
- -facts and fallacies about alcohol and its effects
- -what do you know about alcohol? (motivating quiz)

### Young people and alcoholism

- -studies of teenage drinking
- -frequent and intensive drinking not typical
- -symbol of adulthood
- -mirrors the drinking patterns of parents
- -local differences (as between communities, and as between schools)

### Alcohol and road safety

- -relationships between drinking, alcoholism, and traffic accidents
- -effects of alcohol in the body related to driving
- -Ontario laws

Reasons underlying dependency on alcohol and other "chemical comforts".

It is not the purpose of this unit to make a study of specific chemicals, which should be administered only under medical supervision. The purpose is to outline to the student the value of certain chemicals when used properly, and to outline the nature of dependency that might arise when these are used improperly.

- -discussion of nature, effect and use of tranquilizers, pep pills, sedatives
- -under medical supervision
- -the dangers of self-medication, addiction, overdose, masking the underlying cause of discomfort NOTE: Further discussion will be found in Grade 11.

### UNDERSTANDING DIGESTION

Simple explanations of structure relating to function:

Breakdown of food into simple substances

- -mechanical
- -chemical

Brief outline of breakdown of carbohydrates, fats and proteins

Need for such a breakdown for:

- -absorption
- -transportation
- —final utilization by body cells

Excretion of indigestible materials

The water absorption and elimination cycle

Helping digestion

- -exercise
- -chewing
- -sleep
- -food and pleasant environment

Problems of the digestive system

- -constipation
- -hepatitis
- -appenticitis
- -vomiting
- -food poisoning

The teacher should stress the dangers of self-medication and the importance of personal hygiene. The necessity for proper food handling, refrigeration, and the use of safe water should be emphasized

UNDERSTANDING EXCRETION (the urinary system)

Brief description of the function of the kidneys

- -regulation of the conditions in the blood
- -function of the bladder, ureter, urethra
- -importance of urinalysis
- -artificial kidneys and kidney transplant

Protection in sports

General teacher references for this course are listed below. There are many other books which will serve as excellent reference material for the teacher

The first three publications mentioned will provide the teacher with names of sources of Health Instruction materials.

The films of the Audio Visual Education Section of the Department of Education are available through the principal.

Each teacher should endeavour to develop a personal library of educational references.

Annotated Guide to Health Instruction Materials in Canada — Canadian Health Education Specialist Society, P.O. Box 2305, Postal Station D, Ottawa

Health Education Publications, 1965 — Information and Publicity Branch, Ontario Department of Health, 67 College Street, Toronto

Alcoholism and Drug Addiction Research Foundation Materials — Education Division, 221 Elizabeth Street, Toronto 2

Basic Physiology and Anatomy — Chaffee and Greisheimer; J. B. Lippincott Company, Medical Department — Montreal

Health in Childhood – Ellis, Penguin; Longmans Canada Limited

Wonders of the Human Body — Ravielli, Viking; Macmillan Company of Canada Limited

Health Education – National Education Association; American Medical Association; Canadian Association for Health, Physical Education and Recreation

The Growing Years – Adolescence – National Education Association; American Medical Association; Canadian Association for Health, Physical Education and Recreation

Education and Physical Growth - Tanner; Clarke, Irwin & Company Limited

Film Catalogue, 1965 — Audio Visual Education Division; available from your principal

Reference books for teachers for this course are listed below. There are many other reference books available which will also serve as excellent reference materials.

### GRADES 7 and 8

### **GYMNASTICS**

Educational Gymnastics — London County Council, 1963; Canadian Folk Dance Service, 605 King Street West, Toronto 2B

Teaching Gymnastics — Mauldron, E., and Layson, J., Macdonald and Evans Ltd., England; Canadian Folk Dance Service, Toronto

Basic Movement — Randall, M., G. Bell & Sons, 1963; Clarke, Irwin & Co. Ltd., Toronto

Educational Gymnastics – Morrison, R., 1956 (pamphlet), Canadian Folk Dance Service, Toronto

Educational Gymnastics for Secondary Schools - Morrison, R., 1960; Canadian Folk Dance Service, Toronto

Pure and Applied Gymnastics – Munrow, A., 1955, Arnold, England; House of Grant, Toronto

### **GAMES**

Basic Physical Skills – Purdy, D. S., Copp Clark, 1952 Intra-Murals – Their Organization and Administration – Meers, L. E., 1963; Prentice-Hall, Toronto

The Know the Game Series — Ontario Federation of School Athletic Associations (OFSAA), 559 Jarvis Street, Toronto 5

How to Improve Series — Ontario Federation of School Athletic Associations (OFSAA), Toronto

Current Rule Books - Ontario Federation of School Athletic Associations (OFSAA), Toronto

### TRACK AND FIELD

Schoolgirl Athletics — Woodeson, P., and Watts, D., Stanley Paul Publishers, 1966, Canadian Folk Dance Service, Toronto

Athletics for Schools — Dyson, G., and Edmundson, J., University of London Press, 1964; Musson Book Co., Toronto

Know the Game (Coach Yourself) Series — Ontario Federation of School Athletic Associations (OFSAA), Toronto

### DANCE

### (a) Creative:

Modern Dance in Education — Russell, J., 1958, Macdonald & Evans, England; Canadian Folk Dance Service, Toronto

Records: Listen and Move - Canadian Folk Dance Service, Toronto

### (b) Folk:

Folk Dances for All—arranged by Michael Herman; Barnes & Noble Incorporated; Ontario Federation of School Athletic Associations (OFSAA), Toronto

Records: Records for Individual Dances – Canadian Folk Dance Service, Toronto

### GRADES 9 and 10

### **GYMNASTICS**

Gymnastic Apparatus for Girls – Babbitt and Hass, Ronald Press, New York, 1965; Ontario Federation of School Athletic Associations (OFSAA), Toronto

Gymnastics for Girls – Hughes, E., Ronald Press, New York; Ontario Federation of School Athletic Associations (OFSAA), Toronto

Handbook of Progressive Gymnastics — De Carlo, Prentice-Hall, Toronto

Fitness Training Methods — Howell and Morford; Canadian Association for Health, Physical Education and Recreation, 703 Spadina Avenue, Toronto

### GAMES and TRACK AND FIELD

How to Play and Teach Volley Ball – Welch, J. E. Ontario Federation of School Athletic Associations (OFSAA), Toronto

Complete Book of High School Wrestling — Brown, R. L., Ober, D. K., Prentice-Hall, Toronto

Encyclopedia of Basketball Drills – Pinholster, G. F., Coaches' Book Club of Englewood Cliffs, New Jersey; Ontario Federation of School Athletic Associations (OFSAA), Toronto

Winning Football Drills — Allen, G. H., Coaches' Book Club of Englewood Cliffs, New Jersey; Ontario Federation of School Athletic Associations (OFSAA), Toronto

Circuit Training - Morgan and Adamson; Clarke, Irwin, Toronto

Basic Wrestling — Yuhasz, Leyshon, and Salter, Canadian Association for Health, Physical Education and Recreation, 703 Spadina Avenue, Toronto

Individual Sports for Girls and Women – (Revised), Ainsworth et al; Saunders Publishers, Toronto

Team Sports for Girls and Women – Meyer and Schwartz, Saunders Publishers, Toronto

How to Improve Series - Ontario Federation of School Athletic Associations (OFSAA), Toronto

Coaching High School Track and Field — Brother Luke, Prentice-Hall, Toronto

Fundamentals of Track for Coaches and Teachers — Powell, J., Department of Athletics, University of Guelph, Ontario

Application of Weight Training to Athletics — Hooks, W. G. Prentice-Hall, Toronto

### DANCE

Introduction to the Teaching of Dance – Hayes, E. R., Ronald Press, New York; Ontario Federation of School Athletic Associations (OFSAA), Toronto

Modern Dance (Building and Teaching Lessons) — Lockhart, A., and Pease, E. E., Wm. C. Brown Company, Publishers, 135 South Locust Street, Dubuque, Iowa; Ontario Federation of School Athletic Associations (OFSAA), Toronto

Folk Dance (Revised Edition) – Kraus, R., Macmillan Co. of Canada, Toronto

Dance Awhile — Pitman, Harris et al, Ontario Federation of School Athletic Associations (OFSAA),
Toronto







