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Establishing a Gymnastics Program for Soap Lake Schools

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ESTABLISHING A GYMNASTICS PROGRAM
FOR SOAP LAKE SCHOOLS

A Research Paper
Presented to
the Graduate Faculty
Central Washington State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
Norman F. Lehman

July 1962

THIS PAPER IS APPROVED AS MEETING
THE PLAN 2 REQUIREMENT FOR THE
COMPLETION OF A RESEARCH PAPER.

Eric Beardsley
FOR THE GRADUATE FACULTY

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CHAPTER I

INTRODUCTION

The importance of the physical education program to the over-all education of the student cannot be stressed too highly.

Broady and French point out that

No asset is so valuable as physical fitness. The handicap of poor health is almost insurmountable. Many agencies of the government require physical fitness tests; from airline companies to school boards, physical fitness is stressed as a condition of employment. Physical fitness means efficiency in terms of working ability, capacity for enjoyment, and the ability to stand up under strains and pressures (3:2).

I. THE PROBLEM

This study proposed to set up a gymnastics program for Soap Lake Junior-Senior High School at Soap Lake, Washington. The program was to be so designed as to conform with the existing facilities and be within the capability range of the students.

II. IMPORTANCE OF THE STUDY

The value of the study lies in the potential contribution of gymnastics to the physical education program. It is not only a means of increasing student fitness but also of adding variety to the yearly

program. The study will attempt to show that such a program can be conducted in most high schools with existing facilities or with little additional equipment purchased by the school district. As noted from the administration of a physical fitness program in a small Utah community, gymnastics can contribute much to the over-all physical education programs. "Participants in the Sandy Program score 120% to 150% in the White House Test of Physical Fitness" (25:27). The Sandy Program was based entirely on gymnastics.

Procedure. The methods used to acquire the necessary information for setting up a gymnastics program included gathering information from printed sources, consulting people in the field, and taking course work in basic gymnastic stunts. Research into the stunts (method and skills involved and necessary safety factors) was invaluable. This knowledge should provide the author with the necessary background and experience to adequately establish gymnastics as a portion of the total physical education program in the Soap Lake schools.

Limitations. This study was designed for the facilities available at Soap Lake Junior-Senior High School. However, as mentioned previously, most schools could conduct a program of

gymnastics even with limited facilities. Several forms of gymnastic activity have been left out of the study due to lack of proper equipment; these were parallel bars, side horse, balance beam, and rings.

The program was set up specifically for physical education, with no intention of conducting a competitive or varsity program in gymnastics. As this is a new program for Soap Lake, the progression of stunts initially will be the same for all classes. In future years more advanced students will be allowed to progress into more difficult stunts.

III. DEFINITION OF TERMS USED

Gymnastics. This may be defined as controlled muscular movement to achieve a desired stunt on the mat, on the ground, or on an apparatus. The stunts must be performed in a precise sequence through a desired pattern (10:159).

Tumbling. This is a basic motor skill which covers extensively the mechanics of rolling turning, springing, and twisting (18:17).

Trampolining. This refers to rebound tumbling with the aid of specially designed equipment.

Rope climb. It is basically the activity of climbing up and down a vertical rope suspended from a support overhead (18:183).

Horizontal bar. This is use of a steel bar suspended at a height of 8 feet for purposes of performing.

Balancing. This is an inverted support position of the body in which the weight is borne by the hands, upper arms, forearms, or head (24:23).

Soap Lake Junior-Senior High School. Located at Soap Lake, Washington, the school consists of grades 7-12 with approximate enrollment of 250.

Spotting. This is the process of assisting another person to safely accomplish a stunt (10:160).

Stations. This refers to the location of particular type of apparatus for squad performance. In this program there are five stations: trampoline, tumbling, balancing, rope, and horizontal bar.

CHAPTER II

REVIEW OF THE LITERATURE

Literature in the area of physical education is becoming increasingly abundant, testifying to the importance of physical education to a good school program. In a paper of this type, selection of proper material from the wealth of information available has been of great importance.

I. PHILOSOPHY

The relationship of physical education to the total program is clearly stated by Bucher, Koenig, and Barkhard:

Physical education is one phase of the total process of education. Physical education has the same goal and aim as education--a well rounded development and growth for all children and youth in a democratic society. Its immediate and general objectives contribute to the aims of modern education (1:104).

The philosophy stated by the President's Council on Fitness includes the following ideas: it is essential that all students learn to attain and appreciate a high level of physical development so that foundation skills of sports and other activities are engaged in with confidence and pleasure; success of a program comes when a student

freely participates in school sports programs or later as an adult participates in vigorous recreational activities; and the individual should learn to enjoy taking part in an active physical program appropriate to his age and general ability (34:4).

Nixon and Cozens write that physical education should aim to make the maximum contribution to the development of the individual's highest potentialities in all phases of life. This is to be done by placing the student in an environment as favorable as possible to the promotion of muscular and related responses or activities that will best serve his purpose (7:56).

II. AIMS AND OBJECTIVES OF GYMNASTICS

The aims and objectives of gymnastics are very similar to and coincide with aims of the over-all physical education program. As stated by Hunter and others, the objectives of a gymnastic program are:

1. To develop organic vigor and muscular strength.
2. To develop mental alertness.
3. To develop dexterity, balance, and poise.
4. To build up courage and endurance.
5. To provide opportunity to satisfy the biological urge of climbing, hanging, lifting, swinging, jumping, and rolling.

6. To provide opportunity for socializing experience in cooperation, self-evaluation, initiative, followership, and leadership (16:113).

In comparison, the objectives of physical education stated by Trusler are quite identical:

1. Provide for the normal growth and development of all the pupils in our schools.
2. Provide adequate training in the fundamental motor responses.
3. Provide adequate instruction in activities that will serve the individual as an aid to worthwhile leisure occupation of a recreational nature.
4. Provide for the development of proper ideals, attitudes, and habits pertaining to life situations.
5. Develop high standards of social conduct.
6. Institute measures to develop health and organic vigor (31:29)

The above statements indicate the vital role of gymnastics in the total physical education program.

III. VALUES OF GYMNASTICS

A good gymnastics program has many values. Loken and Willoughby point out that the movements in gymnastics are fundamentally big muscle movements and will develop greatly the muscle groups in the arms, shoulders, chest, and abdomen--areas so often neglected in other

sports. Tumbling and trampolining aid in building up the legs and also increase agility, flexibility, coordination, and balance. Development in alertness, daring, and precision are mentioned. It helps instill such character traits as self-confidence, perseverance, and self-discipline. The opportunities for creativity are limited only by the student himself. All of these, coupled with the fact that size is not important, tend to make gymnastics a program for many who cannot successfully compete in varsity sports. Finally, fun and enjoyment are gained from participating and successfully completing a stunt (18:3-4).

Ryser, discussing the values of gymnastics, further enlarges the list. It can be used as a conditioner for competitive sports. It offers some physically handicapped individuals a chance to participate in and enjoy competitive sports. Poor eyesight, for example, would not lower efficiency. A number who have suffered infantile paralysis in the lower body have become champions. One star performer has only one leg. Ryser also mentions the carry-over value into family life. Father and son can do many of the partner balance stunts right at home, or serve as spotters in the more difficult single stunts (24:6-7).

Childs and Baley in a more recent work stressed such values as encouragement of self-disciplines, allowing student to progress at

his own rate, opportunity for creative expression, variety of activities increases chance for success, gymnastics are challenging, and they encourage performance by the indications of personal improvement in agility and strength (5:29).

Physical education makes its contributions to general education through the use of motor movements--games, sports, dances, and other activities which comprise the program of a good system (27:60).

IV. HISTORY AND TRENDS OF GYMNASTICS

There is evidence that gymnastics was developed in ancient societies for the purpose of disciplining the body. The word gymnastics is derived from the Greek language. The early performers were scantily clad, hence the definition gymnastics, naked. The use of gymnastics spread to the Romans and, following the Renaissance, throughout the rest of Europe. The individual given the greatest credit for present-day gymnastics is Friedrich Jahn, a German, who invented many of the apparatus used throughout our present-day gymnastics program. The Turnvereins, German athletic clubs, also did much to stimulate interest in this type of activity (23:123-124).

Gymnastics in American schools was composed almost entirely of formalized instruction throughout the late nineteenth and

early twentieth centuries. Following the first World War there was a trend away from formal activity of any type in physical education. As a result, gymnastics gave way to less formalized activity. Recently, however, gymnastics of a less formalized nature, taught by capable instructors, has gained much popularity in the United States (10:157-158).

CHAPTER III

PRESENT ORGANIZATION OF THE PHYSICAL EDUCATION PROGRAM AT SOAP LAKE HIGH SCHOOL

I. THE PRESENT REQUIREMENT

The students at Soap Lake Junior-Senior High School follow the requirement set forth in the state school manual. The state law prescribes that students in the Junior-Senior High School should have a minimum of ninety minutes of physical education weekly (28:128). Under present scheduling, the school follows more closely the recommendation of many leading physical educators: physical education should be a daily requirement of all Junior-Senior High School students (15:27; 8:210). Students at Soap Lake Junior-Senior High School are scheduled for a fifty-five minute period daily in physical education activity.

II. THE SCHEDULE

Physical education activities offered at Soap Lake can be shown by the following chart:

Weeks of School Year	Activity to be conducted	Weeks of School Year	Activity to be conducted
1	Class Organization	19	Gymnastics
2	Fitness Tests	20	Gymnastics
3	Football	21	Gymnastics
4	Football	22	Gymnastics
5	Football	23	Volley Ball
6	Soccer	24	Recreational and Social Badminton--Rhythms
7	Soccer	25	Recreational and Social Badminton--Rhythms
8	Soccer	26	Recreational and Social Badminton--Rhythms
9	Volley Ball	27	Track
10	Volley Ball	28	Track
11	Wrestling	29	Track
12	Wrestling	30	Archery--Tennis
13	Wrestling	31	Archery--Tennis
14	Basketball	32	Gymnastics
15	Basketball	33	Fitness Tests
16	Basketball	34	Swimming
17	Basketball	35	Swimming
18	Fitness Tests	36	Softball

As will be noted from this chart, a block of time consisting of four weeks has been set aside for teaching gymnastics. The approximate time in the schedule will be late in January when the students are required by weather to be indoors. There is also a short block of time allowed in the late spring for review of gymnastic activities out of doors.

It is felt that this organization of activities meets as completely as possible those set down by Bookwalter and Bookwalter in Fitness for Secondary School Youth. In discussing the criteria for sound organization they emphasize the following six points:

1. Progression--Activities must progress from simple to complex.
2. Variety--If student needs and capacities are to be met, greater variety is essential.
3. Seasonality--Proper observance of seasonal interests, student interests, community interests, and climatic conditions improves the readiness of students for activities.
4. Practice for mastery--Sufficient skill should be acquired to enable the student to perform in a number of activities with ease.
5. Feasibility--The good leader can do much by making complete use of existing facilities in the school and community.

6. Unity--The nature of activities selected depends upon administration, community, facilities, need, and desire of students (2:54-57).

III. CLASS SIZE AND MAKE-UP

Physical education classes at Soap Lake Junior-Senior High School are completely segregated as to sex. The boys and girls meet in daily classes at different periods of the day. The maximum number anticipated in class would be 35, with the number more likely to be 25. Due to seasonal work in the area and the employment of parents on government projects, the figure varies considerably during the course of the year. Also, facilities are designed for peak load of 35 students per period.

IV. SUPERVISION AND INSTRUCTION

Szypula states that the most important job is to assist students while they perform the stunts. The instructor should be able to employ the necessary spotting techniques for all stunts expected of the students. He can instill ideas of safety and confidence in his students while teaching them proper techniques for use in spotting each other (30:1).

The value of proper procedure for the instructor is further emphasized by Gary and others, who list the following six points concerning the supervision of gymnastics:

1. All instructors should be neat and uniformly dressed.
2. Instructions and demonstrations should be brief yet understandable and definite.
3. Instructors should be completely prepared.
4. Instructors should possess skills in many of the activities which constitute the program.
5. The instructor should be familiar with the characteristics of the age group with which he is working.
6. The instructor should be aware that the safety of the individual is of the utmost importance (12:24; 31:28).

V. EVALUATION THROUGH MEASUREMENT

The importance and value of measurement in physical education is aptly stressed by Matthews:

The only way a director of physical education knows that the objectives have been accomplished is to measure. Four specific ways in which a good measurement and evaluation program will help the physical educator are: 1. classifying students; 2. determining student status; 3. measuring progress; 4. providing objective means for marking (19:12).

Oberteuffer states that a student is expected to progress within each school course from the elementary to the more advanced. The program must encourage growth in understandings, skills, and attitudes. Proof of such enrichment can be gained only through a process of evaluation (21:272).

Davis and Wallis listed ten purposes for measurement, among which the following were prominent. It provides a basis for motivating the student; for teacher self appraisal; new knowledge for the profession through research; comparisons of ability, achievement, or potentiality between pupils, classes, or schools; pupil guidance; teaching emphases and methods; and diagnoses of weaknesses and gaps in the learning and experiences of pupil, class, or school (8:377).

In further support of evaluation, Hunsiker notes:

Some teachers tend to scoff at the idea of test scores, saying that they ignore individual differences. However, it is helpful for a teacher to know the range and the average performance for a particular age and maturation level. . . . The physical education specialist needs this information just as a doctor needs to know the normal values for pulse, blood pressure and blood constituents. He is well aware that not every person is going to have the same readings, but he is reassured if a patient's test values are within the normal range (15:27).

The evaluation to be used at Soap Lake would be based not only on skill testing but would include other factors as well. Each student will be given a complete knowledge test concerning each

apparatus, the basic skills involved, the contributions of gymnastics to the individual, safety rules, spotting aids, care of equipment, and any other important factor. The attitude of the student will be considered as will his sincerity in attempting to master the required stunts.

CHAPTER IV

THE GYMNASTICS PROGRAM

I. ORGANIZATION

The gymnastics portion of the physical education program is to be organized on the squad and station method. This will mean breaking the class into five equal size squads, each assigned to a particular piece of apparatus or station. They will rotate every ten minutes and thereby practice at four different stations each class period. The following day they will start with the station they did not practice at and again rotate four stations.

Ryser pointed out the following advantages of the squad method:

1. More work can be accomplished.
2. Greater allowance for individual differences can be made.
3. Pupil leadership is promoted.
4. More opportunity for individual instruction.
5. Less formal and therefore more acceptable to the students.
6. Duplicate pieces of equipment are not needed, therefore making the program less expensive (24:13).

Hunter and others point out similar advantages of the squad system: interest is kept alive, it allows more variety, gives more freedom, and is excellent for discipline (16:115).

Under the squad system, evaluation would be accomplished by using progress charts for each student. These would be checked by the squad leader whenever a member of the squad could satisfactorily perform a listed skill. The instructor would use a spot-check method of determining the validity of the student's card. At the request of the instructor, the student would be expected to perform any stunt checked as accomplished on his card. This method of evaluation is similar to that suggested by Bucher in his work on apparatus and tumbling (4:224-230).

II. SELECTION OF ACTIVITIES

All purposes of measurement and evaluation of student and program, ten stunts were selected for each type apparatus. It was not the intention that each student be able to perform the ten but to give some form of organization and progression of stunts. These skills were determined from current writings in the field of gymnastics, largely from Loken and Willoughby, Szypula, McClow, and the State of Washington Physical Education Guide (10:205; 30:157; 20:212; 22:76-88).

III. SAFETY FACTORS

Each piece of apparatus has safety regulations concerning its proper use. These will be covered as use of the apparatus is explained. Some general safety rules that apply to all forms of gymnastics will be mentioned here in order to avoid future duplication. Safety methods should be presented to all students so they will be aware of accident-causing elements.

1. Proper warm-up exercises should be given at the start of each period.
2. Allot sufficient space to prevent collision of performing students.
3. Provide proper spotting in all beginning stunts.
4. Inspect the equipment before using.
5. Require use of gymnastic chalk for all apparatus employing hand stunts.
6. Teach students how to fall safely.
7. Learn all stunts in a progressive manner.
8. Do not allow anyone to continue performing when he is fatigued or ill.
9. Allow no horse-play.
10. Be sure performer has clear picture of stunt he is attempting to perform.

11. Avoid placing mats so that the ends are toward a bright window. Sunlight may cause momentary blindness in a critical moment.
12. Avoid loose, sloppy clothing.
13. Do not allow bracelets, rings, chains, or other pieces of jewelry to be worn during activity period (12:27; 20:198; 24:7-8).

IV. SPOTTING

One of the most important elements of successful tumbling is the work of the spotter. From a list compiled by Ryser, here are some helpful hints to becoming a good spotter. You are protecting the performer; don't hesitate because of chance of personal injury. Be close to the performer but do not hamper his movements. Be aware of all movements made by the performer. Don't overspot; let the performer do most of the work (24:9).

V. CARE OF EQUIPMENT

A very important phase in any physical education program is proper care of equipment. This provides a safer program, one more appealing to students, and prolongs the life of equipment. The following

list will serve as points to be mindful of in care of gymnastic equipment:

1. Inspect regularly all floor plates, turnbuckles, ropes, and beam attachments.
2. Wash and disinfect trampoline covers and mats regularly.
3. Clean leather equipment with saddle soap.
4. Repair torn mats immediately.
5. Properly store equipment when not in use.
6. Performers should be required to wear soft-soled shoes.
7. When moving, mats should be carried, not dragged.
8. No street shoes should be allowed in gymnastic area (23:126; 10:159-174).

VI. TRAMPOLINE

Values. Specific values inherent to the trampoline are that it (1) develops a strong sense of relocation, (2) is one of the most enjoyable activities in gymnastics, and (3) encourages instantaneous decisions and actions (7:3).

Method of Instruction. Six to ten students only should be assigned to each trampoline. The following safety factors concerning the trampoline should be stressed immediately:

1. Those waiting to bounce are spotters, and there should be a minimum of two spotters, one at each end of the trampoline.
2. Students should be instructed to practice one stunt at a time.
3. Bounce period of about thirty seconds to each student.
4. Only one student is allowed on the trampoline at any one time.
5. Safety pads should be in place on the metal frame.
6. Each student in a squad should have time to practice his stunts daily.

Teaching Skills. The students should learn early the fundamental mounts and dismounts of the trampoline. This is best covered by instructor demonstration. The first lesson on the trampoline is the proper time to teach the mounts and dismounts along with the proper bounce.

The student is reminded of the following proper method of bouncing: keep head straight, eyes looking at the end of the trampoline,

feet about eighteen inches apart. Feet should be brought together while in the air. The knees should be bent slightly when contacting the canvass, on the uprise the arms should lift up and out away from the body, descending as the body returns to the bed of the trampoline. To stop the bounce, flex the knees quickly just as the feet contact the trampoline (27:83).

Loken and Willoughby suggest some preliminary bounces and leadup stunts before attempting the required stunts. The lead-up stunts are as follows:

1. Half Pirouette. Bounce straight up and execute a turn so body is facing opposite direction when landing. In bouncing, pull one hand across the waist and throw the other behind the head.
2. Full Pirouette. Same as half turn except a complete turn is executed.
3. Tuck Bounce. Bounce straight up, drawing the knees toward the chest and grasping shins with the hands. On the way down release and land in standing position.
4. Pike Bounce. Bounce straight up and while in the air lift legs so they are parallel to the bed. Hands should touch ankles momentarily, then snap legs down; land in standing position.

Preliminary stunts such as these help the student acquire confidence and courage for later advanced stunts (17:64-66).

The following are ten stunts on which students are to be evaluated, listed in order of progression:

1. Knee drop. From the bounce the student is to drop to his knees, landing on knees, shins, and insteps. Return to the feet (7:5).
2. Seat drop. The student is told to drop to his seat from the bounce. Legs should be parallel to the bed and landing should be on legs and seat simultaneously. Extend hands rearward upon landing and push up to aid in regaining the standing position (23:84).
3. Front drop. Instruct the student to drop to his front from a preliminary hands and knee drop. When dropping to the front, arms should be extended, the arms, abdomen, and thighs should strike the bed at the same time. Push with the hands and arms and return to the feet. After several attempts from the hands and knee position, the stunt is done from the regular standing bounce (23:84).
4. Knee-seat-front-feet. This is merely a combination of the previous three stunts. They should perform this in

succession from a standing bounce, to the knees, to the seat, to the front, and return to the feet.

5. Back drop. At the peak of the bounce, lean shoulders backward, raise feet upward to a pike position, placing hands on thighs. Land on the flat of the back with a rigid body and return to feet. A preliminary is leaning back from standing position and lifting one leg to help tip the body into a back drop position (23:84; 17:66).
6. Swivel hips. As a preliminary do a seat drop and execute a half twist, landing on the feet. Then from a seat drop, lift the arms overhead, extending the feet downward. Twist the hips a half turn and swing the legs under the body in a pendulum fashion, flex legs and land on seat facing the opposite direction. Added momentum may be gained by pushing off with the hands from the seat drop position (23:85).
7. Front half turntable. Bounce and land in the front drop position, push hard to the left with the hands on take off, assume tuck position, throwing head and shoulders to the right and keeping stomach parallel to bed. Make a half-turn and end in front drop position facing the opposite direction (23:85).

8. Front flip from knees to seat. First land in a knee-drop position, throw arms up and forward, ducking head so as to land on the small of the back. This will accustom the performer to the somersault position. The performer should drop to his knees, throwing head and shoulders forward on the uprise, assuming a momentary tuck position while turning. Then release grasp on shins, extend the legs, and land on the seat (17:70).
9. Front flip from feet to seat. This stunt is performed in the same manner as the previous stunt with the exception of the initial position, which is from standing.
10. Back drop pull-over. Learning this stunt can begin with several backward rolls from the squat position. Place the hands over the head. Now from regular bounce land on the hips in slight-backdrop position. Using a modified tuck, pull back under the thighs with the hands and continue on over to the feet (17:10).

VII. TUMBLING

Values. Perhaps the greatest value of tumbling lies in the individual nature of the performance. It can be practiced with very little assistance and is therefore quite popular with the beginner.

Tumbling teaches the art of falling, a basic skill of great importance in many sports (17:18).

Method of instruction. Be sure to provide adequate space for all participants. It is recommended that a 5' x 10' mat be made available for every two students in a squad. As the type of stunts get harder, greater mat area is needed for approach and take-off. When using more than one mat in succession, be sure to fasten the mats together (17:19).

Basic stunts. The following stunts are listed in suggested order of progression for the beginner:

1. Forward Roll. Take a squat position with the legs between the arms. Place hands flat on the mat at shoulder width. Lift the hips, shifting the weight from the feet to the arms. Bend arms, placing back of the head on the mat. Push off with the feet. Roll forward, grasping legs just below the knees. Pull on knees and come to a standing position (28:10).
2. Backward roll. A preliminary move consists of rocking back and forth on the back with knees in a tuck position, chin on the chest. Place the hands over the shoulders and rock partially on them. After several rocker motions,

continue on over to the feet. Now from a squatting position, place hands on the mat six inches forward with the knees between the arms. Lean slightly forward to gain momentum and then push backward into a roll. Push with hands and remember to keep the chin in. Roll over the top of the head and onto the hands, keeping the knees tucked into the chest. Finish the stunt in a squat position (28:10).

3. Back straddle roll. Assume a straddle position, feet wide, with hands placed between the legs. Lower the body, catching the weight on the hands and in a continuous motion roll over on the back using the hands under the shoulders to assist in rolling over. Complete the stunt in the straddle position (19:6).
4. Shoulder roll. Assume a position on the feet with the weight to the side and forward of center. Place hands on the mat as in a forward roll. Immediately give way with one arm, tucking it close to the body. Pull the shoulder under the body and roll onto the back while kicking the legs over. Complete the roll and return to the feet (10:170).

5. Pull through. Assume a prone position, face down, with the hands beside the shoulders. In one continuous motion, push up with a thrust of the hands and arms, and bring feet through the arms and extend them forward. Finish on the heels supported by the hands.
6. Cartwheel. Place the left foot forward with body weight upon it, lean forward with left hand upon the mat. Throw the right leg up while placing the right hand on the mat. A momentary balance position should be reached before continuing over. Bring right foot to mat; as left hand is raised, drop left foot to mat keeping it widely separated from right. Position of left foot at the finish should be pointed in the direction from which the cartwheel began (19:23).
7. Upstart or Kip. Lie on back, flex thighs, bringing feet back over the head with seat high. Place hands on mat above shoulders, fingers pointing in, simultaneously extend the legs, kicking them up and out while drawing the feet well under the seat. Push away hard with the hands, head, and shoulders, arching the back so as to land on the feet in a standing position. The feet should land in the approximate position that the hips were

previously (19:36).

8. Round-Off. This stunt begins like the cartwheel. When the weight comes to both hands, bring both feet together. Twist the body inward half a turn. Whip both feet to the mat, landing in upright position facing the starting direction (10:170).
9. Headspring. The headspring is best taught from a rolled mat with the use of a spotter. Place the hands on the near side, on top of the rolled mat, with head on the far side. Move the feet close to the mat, keeping the body in a deep pike position until body weight is forward. At this point, whip the feet overhead from the waist and then down to the mat in one motion while pushing off hard with the hands. Land on the feet. After learning this with a rolled mat, it can be done with a running approach on the level mat (17:25).
10. Handspring. The handspring, like the headspring, should first be tried with a rolled mat and from a stationary position. The stunt begins with a skip step during which the arms are raised above the head, plant the raised foot firmly and throw hands downward to a position on the mat

12 to 16 inches in front of the leading foot. The rear leg is whipped over the head, followed by the other leg. The arms are held straight and the head is up, body arched. The two legs should meet about halfway over and continue to the mat together. The body remains arched until position of the feet is gained (10:171).

VIII. BALANCING

Values. "Balancing is fun and enjoyable since it is a natural and self-motivation activity" (17:34). This statement by Loken and Willoughby perhaps best explains the contribution of balancing to gymnastics. The fact that often the smaller individual has an advantage over the larger, more athletic type makes it particularly appealing to many youngsters.

Method of instruction. Balancing, like tumbling, is performed on mats. However, little area is required as there is no extensive movement. For singles balancing, students should be instructed to work in pairs, one performing and the other spotting. This has instructional value in that the spotter can assist in the proper execution of the stunt as well as contribute to safety (17:35).

Basic stunts. The following stunts are listed in the suggested order of progression. Certain students lead-up to more advanced stunts, therefore order of progression should be followed as closely as possible.

1. Frog stand. Squat and place the hands on the mat about shoulder width apart with the arms between the knees. Rest the knees on the upper arms just above the elbows and lean forward, raising the toes from the mat and balance on the hands. Remind students that if balance is lost, tuck head and go into a forward roll (25:66).
2. Head balance. Assume frog stand position with head placed on the mat so it forms a triangle with the hands. Raise the feet up over the head until the body is in an inverted position (25:66).
3. Head and forearm balance. From a kneeling position place the forearms flat on the mat with fingers touching. Place head in hands and kick up to a balance position (17:37).
4. Head balance from prone position. Assume a prone position, face down, with hands under the shoulders, fingers pointed forward. Raise the hips to a pike position,

dragging the feet toward the head. Keep the knees straight. When hips are overhead, raise the legs into a balance position (25:68).

5. Forearm balance. From a head and forearm balance, lift the head off the mat, maintaining the balance with the forearms alone. The position may also be attained by placing forearms only on the mat and kicking into a balance position (17:38).
6. Backward roll to head balance. From a sitting position on the mat, roll backward as in a backward roll. When the back of the head touches the mat, place hands beside the head and kick legs upward. Continue the roll to the top of the head, arch the back, and at the same time slide the hands backward into the triangular position for the head balance (17:39).
7. Chest rolldown from headstand. From head and hand balance, arch back to fullest extent. Roll down on face and chest, controlling the roll by the hands. Keep back arched, rolling on stomach up to the knees, and with final push of hands, jerk to the feet (19:13).
8. Clap hands. Take a head and hand balance position. Clap hands together and replace them on the mat without losing

balance (19:13).

9. Handstand. The best method of learning this stunt is to first practice it against the wall with the aid of a spotter. With hands on the mat, shoulder-width apart, focus the eyes on a spot on the wall and kick legs up to a balance position. After this has been mastered, the same procedure is used without the aid of the wall.(17:39).
10. Walk on hands. This stunt is easier than maintaining the balance in the handstand position. A person should rise to a handstand position and begin to walk on hands when feet fall forward, thus maintaining the balance.

IX. ROPE CLIMB

Values. It is especially good for building up the arm, shoulder, and chest muscles and developing explosive power. It has particular value in training pole vaulters, wrestlers, and gymnasts. It also offers opportunity for student competition in speed climbing (17:179).

Method of instruction. The students should be told to attempt only short climbs the first few times. It is important to teach them the proper descent as well as proper climbing method. As this is a very strenuous activity, the students should be limited in time allowed for

the activity (17:184).

Basic stunts. The following are basic stunts in learning the art of rope climbing. Though the stunts appear in the form of exercise movements, they are designed to build the individual physically, not as exhibition activities.

1. Chinning. From a standing position grasp rope with both hands at maximum reach, keep body as straight as possible, draw body upward until chin is above hands, lower body, and repeat as many times as possible (23:82).
2. Hand climb from back. Lie on back, extend arms and grasp rope. Keep the body straight, using hand over hand method, lift body from the floor to an upright position and lower self to starting position (23:82).
3. L position. From a standing position grasp rope and raise legs to an L position, holding for a count of five seconds. Return to standing position (17:184).
4. Upward climb using leg lock. The rope passes between the legs and around the back of the right leg and across the instep of the right foot. Step on the rope with the left foot, pull with the arms, and allow rope to slide

through and then make fast with foot. From this lock position, reach upward for new grip and again bring legs up to new lock position. Climb and descend rope using this method (17:184).

5. Rest position. Climb rope at least ten feet and allow it to pass between your legs and around the outside of the right leg, over the instep. Press the rope tightly against the right instep with the left foot. Squeeze the rope with the right arm-pit (24:134).
6. Upward climb using stirrup method. Allow the rope to pass along the side of the body down along the leg, under the near foot and over the other foot. Grasp rope and pull knees up, with the rope passing through the legs. Clamp feet together, hold body in position, straighten legs, and secure a new grip with the hands. Climb and descend rope using this method (17:184).
7. Speed climb--hands and feet. Using hands and feet, climb rope for speed (17:185).
8. Speed climb--hands only. Using hands only, climb upward at the fastest possible speed (23:83).
9. Sitting climb. With the legs in the L position, climb rope twenty feet and descend (23:83).

X. HORIZONTAL BAR

Values. The horizontal bar is one of the most popular gymnastic events. Apart from the other values, the horizontal bar develops a strong hand grip. It will strengthen the fingers and hands considerably. A strong sense of relocation is developed from the rapid circling experienced when performing a number of the stunts listed.

Method of instruction. Only one person is allowed to work on the bar at a time. This activity requires a great deal of energy and much wear on the hands; thus longer rest periods may be allowed. Often it is desirable to learn two stunts at a time to conserve strength. An example would be to learn a basic type of mount and then a basic stunt while on the bar. The high bar can be supervised best from underneath the bar along one of the supports (17:97).

Basic stunts. It is highly important that students follow some type of progression in learning basic stunts on the horizontal bar. Stunts using basic strength are introduced first, followed by stunts of agility and rhythm. It is important to teach proper grip. Thumbs should circle the bar in one direction, the fingers in another, either the forward or reverse grip. With a few exceptions you should always

go around the bar in the direction the thumbs point. Two spotters are preferred for preliminary stunts on the bar (17:98).

1. Front mount. Grasp bar with regular grip, palms out, jump upwards, pulling with the arms and finish in a rest position on the bar, supporting the body with the arms and the hips resting against the bar (17:98).
2. Back dismount. From front rest position, swing the legs forward under the bar slightly and then swing them backwards, at the same time push with the hands and release the grip. Keep body vertical, flex the knees when landing (17:99).
3. Underswing dismount. From the front rest position lean backward with the head and shoulders and allow the hips to swing forward. As the hips move, extend the legs upward and forward on the far side of the bar by arching the back. The shoulders and head follow the path of the legs, release hands from bar and drop to your feet (25:120).
4. Skin the cat and return. Grip the bar in the regular grip and palms outward, pull the legs up and between the arms and the bar. Continue the feet through the arms on over as far as they will go. Return to original

position by pulling the legs back through the arms and under the bar (17:99).

5. Single knee hang. Hang from the bar with the regular grip and bring one leg up between the arms and circle the knee over the bar. Remain suspended in this position for five seconds and then return to standing (17:99).
6. Single knee swing up. From the single knee hang, swing the free leg slowly forward and upward to bar--immediately swing the free leg forcefully down and backward, press downward with the hands, throw head forward, end on top of the bar (23:77).
7. Single knee circle backward. From the single knee support position on top of the bar, swing the free leg backwards and push the body slightly away from the bar. Continue the swing of the leg downward and under the bar. Hook the back of the knee to the bar, lean backward with the head and shoulders throughout the circle. Near the finish, pull strongly with the arms and end on top of the bar again (17:100).
8. Single knee circle forward. Same as backward circle only in forward direction. Be sure hands are in a reverse grip position with palms toward the performer.

Push up and away from the bar at the beginning and lead with the head as the circle is tried (17:100).

9. Chin-ups. With palms facing outward, require five chin-ups. Be sure the student fully extends the body before beginning a new chin-up (25:126).
10. Front pull up. Grasp bar in hanging position with a reverse grip. Raise legs upward, at the same time flex the arms so the waist will strike the bar. Continue on over the bar, pivoting the waist, and come to a front support. When arms are about half-flexed, lean backward with the head and shoulders; this will add momentum to getting the legs over the bar (25:127).

CHAPTER V

SUMMARY

The school physical education program should encourage physical fitness. The changing social pattern, advancement of technology, and increased leisure time have created the need for a school physical education program that provides vigorous physical activity. This in turn has created a need for activity that can be offered by the school and supervised by competent instruction.

With the aid of library research the author has attempted to organize an activity that will take care of the above needs. It has been well documented that gymnastics meets the aims of physical education. This paper presented a guide for a physical education unit on gymnastics. This specific unit was designed to fit the needs and facilities of Soap Lake Junior-Senior High School. It was not meant to be an all-inclusive unit on gymnastics; as stated in the limitations, facilities were a determining factor in selecting the proper activities.

This program could be readily adapted to most school situations. Some modification would be necessary due to varying class sizes, time available for unit, and facilities and equipment in the

school. However, the unit as prepared provides a strong framework for the planning of progression stunts in a gymnastics unit.

This paper was organized according to (1) philosophy, (2) aims and objectives, (3) values, (4) trends, (5) requirements, (6) class size and composition, (7) teaching techniques and method, (8) supervision, (9) measurement and evaluation, (10) facilities, (11) safety factors, and (12) basic stunts.

The program as presented is well-balanced in content, educationally sound, a proven source of student enjoyment, and should offer great satisfaction to the instructor.

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