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A CURRICULUM GUIDE AND THEORETICAL PROGRAM
FOR SENIOR HIGH PHYSICAL EDUCATION

Thesis for the Degree of M. A.
MICHIGAN STATE UNIVERSITY
Clayton F. Roth
1965



A CURRICULUM GUIDE AND THEORETICAL PROGRAM
FOR SENIOR HIGH PHYSICAL EDUCATION

By

Clayton F. Roth

AN ABSTRACT OF A THESIS

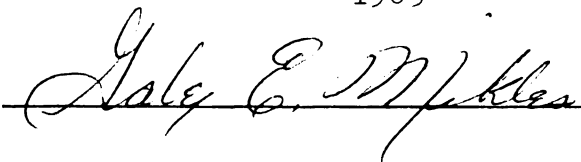
Submitted to
Michigan State University
in partial fulfillment of the requirements
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MASTER OF ARTS

Department of Health, Physical Education, and Recreation

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Approved

A handwritten signature in cursive script, reading "Dale E. Miller", is written over a horizontal line.

ABSTRACT

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by Clayton F. Roth

State of the problem. To develop a theoretical curriculum guide for a senior high school physical education program.

Methodology. The framework of the entire physical education curriculum, the overall philosophy, the statement of objectives specifically for the senior high school level, student developmental characteristics, and the theoretical program have been compiled and developed in this guide. A list of knowledge and abilities the student entering senior high school should have has been presented to serve as a bases for the development of the senior high school program.

Conclusions. By giving concern to the determination of what the student is ready to learn, what he should learn, and how he should best learn it can provide a realistic and scientifically based framework for continuity in program development.

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CHAPTER I

INTRODUCTION

Today a good share of our schools physical education programs are activity centered. These activities are often unrelated and make little reference to any sequential approach to the individuals specific needs, values or skills at periodic intervals in his development. Understanding and applying the basic developmental characteristics into a total physical education curriculum, kindergarten through grade twelve, should aid in the development of program continuity.

I. THE PROBLEM

Statement of the problem. The purpose of this study was to develop a theoretical curriculum guide for a senior high school physical education program. This curriculum guide should serve as the final stages of a total curriculum with continuity, kindergarten through grade twelve.

Importance of the study. To develop a physical education curriculum, it is important that the whole student be considered. There must be an understanding of the students basic needs, goals, skills, and values with relation to his growth and developmental levels. There

should not be any attempt to set-up a program of activities of skills before certain questions have been answered. Consideration must first be given to: (1) what is the student ready to learn; (2) what should the student learn; (3) how can the student best learn it; and (4) what is the pertinent background information? In this study an attempt has been made to answer these basic questions with special reference to the senior high school.

II. ORGANIZATION OF THE PROBLEM

This curriculum guide initially will present the framework of the entire physical education program. The overall philosophy will be presented followed by statements of objectives specifically for the senior high school level, student developmental characteristics, and the theoretical program. A suggested list of knowledge and abilities the student entering senior high school should have will also be presented.

III. THE PHYSICAL EDUCATION CURRICULUM

Before a specific area of a program can be developed in any detail a total curriculum framework must first be defined. This total curriculum framework must portray an educationally meaningful philosophy and it must be structured to permit continuous revision based on valid current research findings. Once the curricular framework is developed and

accepted more intensive work is then possible for the needed development of the physical education curriculum. It must be emphasized that the senior high school curriculum presented here is theoretical. In its present form it can serve only as a tentative guide. Much more development, programming, and pilot experimentation will be required if such a curriculum is to move from theoretical stage to implementation.

It is of particular importance that continuity be planned in the physical education curriculum, kindergarten through twelfth grade, utilizing all associated disciplines. The specific needs and objectives of the students must be developed for each grade level in relation to their growth and development. Games and activities are tools to be used in achieving these specific needs and objectives. At each grade level the primary concern is to determine what the student is ready to learn, what he should learn, and how he should best learn it. When this realistic and scientifically based framework has been established then activities can be incorporated which will provide interrelated sequential development through the grades. It is very clear at this stage of development that one of the most difficult tasks is the development of clearly defined and specifically stated objectives.

IV. THE GENERAL OBJECTIVES OF EDUCATION¹

To place physical education in its proper perspective with relation to the entire school curriculum, total educational objectives as listed by the Educational Policies Commission are presented. These objectives apply to senior high as well as to the lower grades.

1. Self-realization.

- a. An inquiring mind, speech, reading, writing, numbers, health, intellectual interests, aesthetic interests and character, for the individual to speak clearly and effectively.
- b. To solve problems of counting and of calculating.
- c. To understand the basic facts concerning health and disease.
- d. To have mental resources for the use of leisure.
- e. To appreciate beauty.
- f. To give responsible direction to his or her own life.

2. Human relationships.

- a. Respect for humanity, friendships, cooperation, courtesy, appreciation of the home and homemaking, for the educated person puts human relations first.
- b. To enjoy a rich, sincere, and varied social life.
- c. To work and play with others.
- d. To appreciate the family as a social institution, conserve family ideals, and is skilled in homemaking.

3. Economic efficiency.

- a. Work, occupational information, personal economics, consumer judgment and protection, for the educated person knows the satisfaction of good workmanship.

¹Educational Policies Commission, "The Purposes of Education in American Democracy" (Washington, D.C.: National Education Association, 1938), pp. 47-108.

- b. To understand the requirements and opportunities for various jobs.
- c. To appreciate the social value of his or her work.
- d. To plan the economics of his or her own life.
- e. To develop standards for guiding his or her own expenditures.
- f. To be an informed and skillful buyer.
- g. To take appropriate measures to safeguard his or her own interests.

4. Civic responsibility.

- a. Social justice, social activity, critical judgment, tolerance, conservation, social application of science, world citizenship, law observance, and devotion to democracy, for the educated citizen is sensitive to the disparities of human circumstances.
- b. To act toward correction of unsatisfactory conditions.
- c. To seek understanding of social structures and social processes.
- d. To have defenses against propaganda.
- ✓e. To respect honest differences of opinion.
- ✓f. To have regard for the nation's resources.
- g. To measure scientific advance by its contribution to the general welfare of the people.
- h. To be a cooperating member of the world community.✓
- i. To respect the law.
- j. To be economically literate.
- k. To act upon an unswerving loyalty to democratic ideals.

V. PHILOSOPHICAL BASIS²

The advent of today's rapid technological changes have rewarded society with numerous comforts of living. Unfortunately many of these comforts are detrimental to the physical, mental and social requirements necessary for

²W. D. Van Huss, Curriculum Guide (Flint, Michigan: Philosophy Committee, Flint Community Schools, I-C-1, 1964).

healthful maintenance of the body. Normal daily living no longer requires sufficient physical activity for the adequate development of proper body function. Supplementary skills, exercise and/or leisure activities must be utilized for adequate physical maintenance and the release of tension. Physical education can and must provide the knowledge and means, on an individual basis, to meet this challenge.

Through the teaching of the physiological and anatomical characteristics and the effects of physical activity, knowledge and understanding will be gained in the long range effects of stress, physical activity and weight control. Through laboratory experiences the individual will gain insight into his unique needs.

Physical education provides rich opportunities for the individual to develop sound values through participation in controlled sequential laboratory experiences. Emotional and social growth are stimulated when the basic needs of the individual are met. This may be accomplished only through a program with sufficient flexibility and depth which identifies the unique needs of each individual and provides the necessary teaching and experience for fulfillment of the needs. In our culture not only must the immediate needs be met but attitudinal changes must also take place to insure continued maintenance of a healthy individual into later life.

VI. GENERAL OBJECTIVES OF PHYSICAL EDUCATION³

The overall objectives of education as previously stated provide for the general purposes of secondary education. The following presentation of tentative physical education objectives provides for specific development and shows by comparison the relationships of general physical education objectives to the total school objectives.

1. A knowledge of one's physical make-up, its function, its operations, and its safeguards.
 - a. Body type and associated weight gain patterns.
 - b. Relative size, height, and weight.
 - c. Growth increment and changes.
 - d. Relative skill levels.
 - e. Relative emotional stability.
 - f. Knowledge of functions of the cardiovascular system in exercise.
 - g. Knowledge of bodily responses to stress.
 - h. Longitudinal physiological responses to exercise.
2. Knowledge of the values of physical activity, one's vital capacity and health.

³Patrick Cavanaugh, Main headings: Six Contributions of Physical Education, Curriculum Bulletin, Flint Public Schools, October, 1963, and W. D. Van Huss, Sub-headings: Curriculum Guide, Objectives of Physical Education, I-D-1, 1964.

- a. Role of activity in the prevention of vascular disorders.
 - b. Relation of physical fitness to work ability.
 - (1) Basic physiological reasons why work performance is improved.
 - (2) Signs which reflect improved work ability.
 - (3) Experience in improving work ability.
 - ~c. Ability to bring about physical changes through physical activity. (Knowledge of the techniques of effecting such changes.)
 - d. Role of recreation and play in the prevention of psychosomatic disorders--their bases and possible releases.
 - e. Knowledge and experience in the technique of relaxation.
3. A knowledge of sports, games, and recreational activities, their conduct, value, and role in human activity.
- a. Knowledge of sports and games, introduced appropriate to the developmental level.
 - b. The use of a well formulated progression of skills to assure mastery of the basic body movements not later than grade six. Later skill teachings will be included for greater mastery and for the learning of skills most appropriate to individual needs.

- c. Recognition of the most needed values to be taught and implementation of an appropriate program for teaching of these values.
- “4. A knowledge of one's own needs present and future and an understanding of how these needs may be met.
- a. Body type--projection of weight gain patterns into the future.
 - b. Specific future guidance to age sixty-five based on body type:
 - (1) Living habits to control weight.
 - (2) Exercise habits to maintain body function.
 - (3) Social-emotional needs.
 - (4) Types of physical activity and sports in which the individual could be most successful.
 - c. Posture, physical fitness, body mechanics needs.
 - (1) Posture, screening (not later than nine years). Screening thereafter about every three years.
 - (2) Careful assessment of current abilities (in relation to potential)--recognition of high and low points.
 - (3) Guidance and instruction in the techniques of changing physical status. Highly personalized.
 - (4) Recognition of the amount of regular activity and the nature of the activities that are necessary to one's own body.

(5) Instruction in body mechanics needs--techniques of sitting, standing for long periods, lifting heavy objects, moving heavy objects safely. For girls the technique of walking, sitting, maintaining the body during pregnancy, knowledge of the weight shift and need for exercise at this time, techniques of lifting and handling children.

5. An attitude--a conviction--that a self directed, self selected program of physical activity throughout life will increase one's total efficiency as an individual and as a member of society.
6. Physical skills--recreational and sport--that will be a means through which one may continue to be physically and recreationally active.
 - a. Acquisition of broad skill base through sequential development.
 - b. Students present and future needs outlined in grade nine.
 - c. Student developed guidance (reviewed by counselor) into activities for secondary school participation. This would be reviewed to insure specific (the strength lies in self-administered) guidance appropriate to the individuals unique needs. For this program the school would not be the sole facility. Large classes and inadequate facilities, operate to

defeat the purposes of the program. The school and community facilities should be mobilized to teach the activities for the individuals unique needs and to teach the activities that are appropriate to one's environment.

VII. KNOWLEDGE AND ABILITIES THE STUDENT ENTERING SENIOR HIGH SCHOOL SHOULD HAVE

By the end of junior high, specific objectives should be completed which will prepare the student to successfully participate in the senior high program. The knowledge and abilities, expressed as objectives, that the student should have before entering the senior high program are listed below:

1. Relativistic assessment of physical abilities.
2. Understanding of techniques for effecting physical changes.
3. Understanding of techniques for maintaining physical abilities.
4. Mastery of basic body movements.
5. Understanding of body mechanics.
 - a. In sport skills.
 - b. In work skills.
6. Realistic assessment of sports skills.
7. Knowledge of activities that he or she could continue to participate in.

8. Understanding of neuromuscular tension and how to relieve it.
9. Understanding of personal emotional needs that may be met by sport.
10. Understanding present growth and development status.
11. Understanding of physical changes associated with age. The role of exercise in delaying this process.
12. Assessment of present interests. Knowledge concerning the interest shift with age.
13. Knowledge of the nutritional needs of the individual.
14. Understanding of the physical capacities and abilities of others.
15. Know his or her body type and its characteristics.
 - a. Physical abilities relative to body type.
 - b. Weight gain pattern to age 65--his or her weight gain or underweight problem.
 - c. Social needs inherent with one's body type.
 - d. Knowledge concerning activities in which he or she could be more successful.
16. Knowledge of the role exercise and nutrition plays in the degenerative disorders.
17. Ability to swim and water safety skills.
18. Knowledge of boating and hunter safety.
19. Program plan worked out for senior high. Self derived and approved, based upon his or her individual needs.

CHAPTER II

SPECIFIC OBJECTIVES OF SENIOR HIGH SCHOOL PHYSICAL EDUCATION

Up to this point, general aspects of philosophy, school objectives, and physical education objectives have been considered. In this chapter the specific high school physical education needs, objectives, and individual developmental characteristics will be presented. The specific treatment given here will relate itself to the recommended program to be described later.

I. SPECIFIC OBJECTIVES OF SENIOR HIGH SCHOOL PHYSICAL EDUCATION

Based on the knowledge and abilities the student entering senior high school should have (p. 11) the following are the tentative objectives for the theoretical high school program to be presented later.

1. Body Mechanics.
 - a. Increase mastery of basic body movements.
 - b. Maintain individual's proper cardiovascular level.
 - c. Provide opportunity for students with special physical needs to satisfy these needs in a special program specifically adapted to the individual student.

2. Physical Ability.

- a. Maintain and develop physical abilities.
- b. Utilize techniques effecting physical change.
- c. Utilize techniques for maintaining and developing physical abilities.
- d. Provide opportunity for students to improve physical capacities.

3. Values.

- a. Utilize sports and work skills effectively for everyday living.
- b. To provide opportunity for student to learn and use basic living skills.
- c. Provide opportunity for students to learn and use leadership.
- d. Provide opportunity for participation in sports skills and activities.

4. Social--Emotional.

- a. To provide opportunity to develop and maintain emotional stability through activity.
- b. To aid in the development of social skills that should be functional throughout life.
- c. Achieve a new and more mature relations with age-mates of both sexes.
- d. Achieve a masculine or feminine social role.
- e. Accepts one's physique.
- f. Achieve some emotional independence of parents and other adults.

- g. Achieve some assurance of economic independence.
- h. Consideration of selection and preparation for an occupation.
- i. Prepare for marriage and family life.
- j. Develop intellectual skills and concepts necessary for civic competence.
- ✓ k. Desire and achieve socially responsible behavior.
- ✓ l. Acquire a set of values and an ethical system as a guide to behavior.

5. Knowledge.

- a. Application of the assessment of sport skills.
- b. Utilize principles for neuromuscular tension release.
- c. Maintain and improve health status.
- d. Maintain and develop the habits of exercise and activity which delay the processes of physical degeneration.
- e. Project guidance for physical and emotional maintenance into the future.
- f. Establish and practice desirable nutritional habits.
- g. To be able to apply knowledge of the individual's own body type and its characteristics in social and physical activities.

II. GROWTH AND DEVELOPMENT CHARACTERISTICS⁴

To gain better understanding of the senior high student's growth and developmental levels the following characteristics have been considered. These indicate general increases in physical size, skill, and complexity of function by the individual. The materials presented here apply to the middle class social and economic group values. The average levels of physical growth and development presented are applicable for the chronological ages of from fifteen to eighteen years.

⁴Growth and Developmental Characteristics have been compiled from the following sources:

- a. Adolescent Girls (Ann Arbor: Survey Research Center, Institute for Social Research, University of Michigan, 1960).
- b. P. O. Astrand, Experimental Studies of Physical Working Capacity in Relation to Sex and Age (Copenhagen: Munksgaard, 1952).
- c. A Study of Adolescent Boys (Ann Arbor: Survey Research Center, Institute for Social Research, University of Michigan, 1960).
- ✓d. Walter F. Dearborn and John W. M. Rothney, Predicting the Child's Development (Cambridge, Mass.: Sci-Art Publishers, 1941).
- e. A. Espenschade, Motor Performance in Adolescence (Washington: Society for Research in Child Development, 1940).
- f. B. G. Ferris and C. W. Smith, "Maximum Breathing Capacity and Vital Capacity in Female Children and Adolescents," Pediatrics, 12, 1953.
- g. B. G. Ferris and Others, "Maximum Breathing Capacity and Vital Capacity of Male Children and Adolescents," Pediatrics, 9, 1952.
- ✓h. Karl C. Garrison, Growth and Development (New York: Longmans, Green, and Co., 1962).
- i. A. Gessell and Others, Youth the Years from Ten to Sixteen (New York: Harper and Brothers, 1956).

A. Physical Growth (boys)

1. Health is excellent.
2. Resistance to disease is high.
3. Recuperative powers are strong.
4. Body growth is slowing.
5. Strength is increasing rapidly.

- j. Robert J. Havighurst, Developmental Tasks and Education (Chicago: University of Chicago Press, 1948).
- k. A. Iliff and V. A. Lee, "Pulse Rate, Respiratory Rate and Body Temperature of Children Between Two Months and Eighteen Years of Age," Child Development, 23, 1952.
- l. H. E. Jones, Development in Adolescence (New York: D. Appleton-Century Co., 1943).
- m. H. E. Jones, Human Biology, 19, 1952.
- n. H. E. Jones, Motor Performance and Growth: A Developmental Study of Static Dynamometric Strength (Berkeley: University of California Press, 1949).
- o. H. E. Jones, "Skeletal Measuring as Related to Strength," Child Development, 17, 1946.
- p. H. E. Jones, "The Development of Fine Motor and Mechanical Abilities," Yearbook National Social Studies Education, Part I, Adolescence, 43, 1944.
- q. R. E. Scammon, The Measurement of Man (Minneapolis: University of Minnesota Press, 1930).
- r. F. K. Shuttleworth, The Adolescent Period: A Graphic Atlas (Evanston, Illinois: Child Development Publications, 1951).
- s. F. K. Shuttleworth, "The Physical and Mental Growth of Girls and Boys Age Six to Nineteen in Relation to Age at Maximum Growth," Society for Research in Child Development, Vol. IV, No. 3, 1939.
- t. Society of Actuaries, Build and Body Pressure Study, Vol. I, 1959.
- ✓u. Herbert R. Stolz and Lois M. Stolz, Somatic Development of Adolescent Boys (New York: MacMillan Co., 1951).
- v. J. M. Tanner, Education and Physical Growth (London: University of London Press, 1961).
- w. J. M. Tanner, Growth at Adolescence (Oxford: Blackwell Scientific Publications, 1955).

6. Muscle development continues to round out the body.
7. Usually eight and a half to nine hours of sleep is required.
8. Appetite is tremendous with daily food needs reaching maximum height.
9. Adult sexual characteristics attained--shoulders broader, chest deeper, showing a requirement for sex.
10. Many boys are dissatisfied with their physical build.
11. Wide deviation in time of growth spurts.
12. After growth levels off, gain in endurance.
13. Lateral and linear type boys continue to grow.
14. Tables materials. (Appendix A, D, and E.)

B. Physical Growth (girls)

1. Body growth is usually completed during this period--15 to 18 years.
2. There is an increase in fatty deposits and changes in body proportions.
3. There are shifts in body metabolism and energy output.
4. Physical activity is reduced and generally disliked unless it serves some social purpose which adds to her physical appearance.
5. Sex characteristics continue to develop such as pigmentation and curl of pubic hair and an abundant growth of hair under arms.

6. Girls may experience headaches, nausea, faintings or cramps, especially at the beginning of the menstrual period. (Some doctors feel that much of this is psychological if health otherwise is good.)
7. Girls often seem to have less energy during adolescence than formerly.
8. Need to live within their physical limits.
9. Eight and one-half to nine hours of sleep is needed.
10. Lateral-type girls usually reach adult height.
11. Linear-type girls continue to grow.
12. Tabled materials. (Appendix A, D, and E.)

C. Motor Characteristics (boys)

1. Eager to perfect skills.
2. Particularly enjoys team sports, outdoor activities. Also enjoys hobbies, individual sports, social events but to lesser degree.
3. Experienced in a good variety of leisure activities.
4. Higher socio-economic status boys participate in more activities.
5. Outgrowing awkward stage.
6. Eager to perfect skills.
7. The finer body proportions make for body balance, grace, and poise.
8. Physical skills reach a new high.
9. There is a tendency to over-do in sports and other uses of energy.

10. Increase motor co-ordination in tasks of agility, balance, and general body movements.
11. Reaction time decreases from age 14 to age 20 years.
12. Motor performance in such tasks as running, jumping, throwing, and lifting weights increases with age.
13. Tabled materials. (Appendix B and C.)

D. Motor Characteristics (girls)

1. Enjoy skill sports.
2. Enjoy skill sports with boys, but it becomes both less feasible and less appropriate for girls to play the very active and competitive sports with boys as they become young ladies.
3. Less than one-third participate in athletic sports.
4. 28% to 30% play individual sports with boys.
5. About 38% play active team sports with boys.
6. Leisure activities other than dating are distinctly age-graded.
7. Gradually substitute social activities for sports and hobbies.
8. Girls in lower middle class least often play in outdoor activities, hobbies, and homemaking activities.
9. Worry about social skills.
10. Tables materials. (Appendix B and C.)

E. Emotional Characteristics (boys)

1. Would like to change personal characteristics, physical characteristics and improve social skills.

2. Boys worry most about scholastic achievement and acceptance by others. (Peer group, girls, reality pressures and money for dates.)
3. Concerned about development of a personal identity and of internal controls.
4. Some concern over acceptance by girls.
5. Accept parent guidance in curfew, personal problems and how to act.
6. Punishment usually includes physical (20%), deprivation of privileges (83%), or psychological (31%).
7. Desire for peer acceptance is not as much a concern.
8. Only one boy in five does many things with his parents.
9. Early adolescence peer group relations are extremely important--later not so important.
10. Relies on authority more for flexible limits.
11. Individual more independent.
12. Influenced by group opinion.
13. Broadening horizon and movement from family security and affection toward gaining esteem of own age group.
14. Desire to be regarded as an adult.
 - a. Dim view of parental restraints.
 - b. At other times, need advice and counsel.
 - c. Likes to do own thinking.
15. Growing consciousness to becoming an individual personality.

- a. Awareness of "self" is greater.
- b. Personal traits are more readily recognizable.
- 16. There may be emotional instability while striving to understand social relationships.
- 17. Feels adequate and self-assured, or wants to feel that way.
- 18. Critical of self and conscious of his shortcomings.
- 19. Wide difference from others in physical appearance.
- 20. Concerned about his place in the world.
- 21. Has a fine sense of justice and loves to argue.
- 22. He looks to some one for confirmation or denial of his ideas--almost anyone, beyond his home.
- 23. Breakdowns in society puzzle him.

F. Emotional Characteristics (girls)

- 1. Positively identified with the feminine role.
They choose feminine identification. Value the feminine ideals of understanding and helping others.
- 2. Marriage and motherhood become more important.
- 3. Accept and desire the aid of adult authority in setting limits.
- 4. Deprivation is the typical method of punishment.
- 5. Have some internal standards by which they govern their day-to-day behavior. These controls are by no means solid in most cases.
- 6. Movement toward independence can be seen in girls' sources of self-esteem, like assuming adult roles--

and in their capacity to form gratifying relationships outside the family.

7. Has closer relationship with her girl friends than with the boys she dates.
8. Worry about appearance and social skills.
9. Show positive response to dating.
10. The peer group is an important source of self-esteem.
11. She is gaining rapidly in mature appearance and in good judgment.
12. Responds readily to those who treat her as an equal in the adult world.
13. Feels that parents fail to understand her much of the time.
14. Wants the privacy of her room and her thoughts in relation to the family.

G. Social Skills (boys)

1. About one-fourth would like to improve social skills; be a better mixer, make more friends, have more confidence and better manners.
2. About half have jobs that pay money. Most work outside the home. Most work under 20 hours per week. Three out of four work in the summer.
3. About 60% date. Most date occasionally.
4. About a third belong to no organizations. Those that belong are in a wide variety of organizations.

5. Extremely wide range of attitudes toward groups.
6. Organizations have less appeal in later adolescence.
7. Interests in sports is lessening.
8. More interests in social activities and in coed activities in later adolescence.
9. High socio-economic status boys date more than middle or low.
10. High socio-economic status boys belong to more groups.
11. High socio-economic status boys depend less on adult authority.
12. Very sensitive to dress and appearance.
13. Interested in social development.
14. General theme of adolescence is the shift from physical to social reality.
15. Social success with girls is very important.
16. Love affairs are common, whether puppy love or real thing.
17. Trends to turn toward girls with feminine charm and allure rather than toward girls with physical and intellectual skills.
18. He has less interest in the gang and more interest in a few close friends whose standards he approves. Deeper and more lasting friendships develop.
19. Conflict with adults having authority over him is common.

20. He has continued respect for those he can reject or accept as he wishes.
21. His attitude toward minority groups reflects that of his most intimate associates.

H. Social Skills (girls)

1. Close intimate girls friends are most important to her.
2. She wants to look like her friends.
3. Girls like to go places in a group and want to be noticed.
4. Her real life is with those friends her own age.
5. Talks her problems over with her friends and guides her behavior by the standards they approve.
6. Dating becomes a serious part of her life.
7. She is aware of the prestige that culture assigns to marriage and children.
8. She yearns to be attractive to the opposite sex and struggles not only with her personal appearance but with her personal values, such as how far to go in her love relations.
9. Romance takes a heavy toll of her time and her energy.
10. She is home very little, dashing in to eat or change clothes and out again.
11. Most girls are out two to three evenings a week for some activity or to be with the crowd.

12. She has little time for family life, yet she runs them ragged with her primping and preening, and her love life.

I. Marked Interests (boys)

1. Learning about different kinds of jobs.
2. Swimming, hunting, working on cars, baseball, basketball, horseback riding and billiards is participated in by at least 60% of all students.
3. In summer, in addition to working, most boys spend time in sports and outdoor activities.
4. Many would like to learn a sport if they had a chance.
5. Great desire to succeed.
6. Desire excitement and adventure.
7. Interest in body development.
8. Implications for physical education:
 - a. Strong interest in team games.
 - b. Desire to excell in sports.
 - c. Greater ability to play in games of higher organization.
 - d. Main interest of boys lies in competitive team sports but also like tennis, golf, etc.
9. Making money.
10. Craves excitement, adventure, thrill and is particularly vulnerable to fads.
11. Newspaper reading is becoming a more regular activity. Most don't read the paper thoroughly.

12. School clubs center around special interests (dramatics, debating, etc.).
13. Attend movies with opposite sex quite often. Show interest in more mature movies.
14. Radio, television and phonograph: Watch television according to interest. Phonograph is real fad.
15. Reading: Those who like to read, read exhaustively. Interested in sexy books.
16. Outdoor activities: Going places with friends. Sports participant and spectator.
17. Indoor activities: Parties and dances. Dating. Playing or listening to music, reading, radio, television, and movies. Sports. Making things (radios, motors, etc.).
18. Clubs: Loosely organized organizations for meeting and sharing interests.

J. Marked Interests (girls)

1. She has a deep interest in boys and in being able to attract them. Having dates and being with the boys is great fun.
2. She loves to dash about in cars, laughing and shouting.
3. She wants to be attractive and seeks advice and scans magazines on beauty care, clothes, and how to improve her figure.

4. Wants to be popular and is interested in personality development and party ideas.
5. Social dancing, movies, television, record playing, playing the piano, watching athletic sports, going to parties or picnics and riding in a car are her favorite pastimes.
6. Reading is limited and it tends toward glamor, love, personal appearance, and dating.
7. She looks forward to simple close-at-hand events, like a new formal.
8. The average girl hopes for a job requiring some skill and training which will interest and stimulate her and also permit expression of femininity.
9. High interest in membership of organizations.
10. There is no single set of activities, no one design that all girls want for an organizational interest.

K. Concepts (boys)

1. Attained and solidified an understanding of the outside world.
2. Mental growth about maturity. Need experience.
3. Ready for more complex conceptual development.
4. Intelligent citizenship is expected.
5. Lower class boys do not participate much in civic affairs.
6. Upper class boys feel an obligation to be well informed and a responsibility for civic leadership.

L. Concepts (girls)

1. She is much aware of her womanhood.
2. She feels ready for romance and takes great pains to make herself pretty and attractive.
3. She cultivates glamor and sex appeal.
4. Wants her body and appearance to fit the ideals she has imagined.
5. Is acutely aware of any weakness or worries about little things.
6. As she feels more acceptable to herself, she becomes more confident of her ability to become an adult.
7. Reasoning powers are good.

M. Readiness to Learn Skills (boys)

1. Memory span much greater.
2. Ready for more abstract materials and more complex skills.
3. Acquiring language and meanings.
4. Acquiring concepts.
5. Has a vocabulary of about 40,000 words.
6. He has increased ability to think for himself, to make decisions, to carry out plans of his own making, to do things for a purpose.
7. He loves to argue, particularly in resisting the adult world.
8. Imagination is in concrete terms about his future education or vocation.

9. Reason, judgment, and attention span has developed steadily since childhood.
10. Reading is little different from adult reading, except that interests are more individual and specialized.
11. He enjoys discussions--especially those around the situations of his own group or the world.

N. Readiness to Learn Skills (girls)

1. She can choose purposes, make plans, and carry them out.
2. She has reached a high level of reasoning ability.
3. She has increasing ability to see another point-of-view and to form opinions based on reasoning.
- ✓ 4. She pictures her future in concrete terms especially her home and family.
5. She is bothered by social problems and likes to discuss them, especially those of her own group.
6. She understands principles of right and wrong and can apply them to her own situations as well as to the situations of others.
7. Has a vocabulary of better than 40,000 words.
8. Acquiring concepts.
9. Acquiring language and meaning.
10. Memory span much greater.

O. Values (boys)

1. In their models they hold in greatest esteem work skills, personal qualities, character and social skills.
2. Interested in ideals and sense importance of major decisions.
3. Principally a period of application of trial and error. Should be a fruitful time for solidifying values if subtly done.

P. Values (girls)

1. Concerned with social skills.
2. Absorbed with marriage and family plans.
3. Has internal standards by which she can govern her day-to-day behavior.
4. Career plans.
5. Has developed high ideals for her own home and family.
6. Personal achievement.
7. Self development.

Q. Student Goals (boys)

1. Establishing satisfactory relations with peers.
2. Achievement of some independent from mfamily.
3. Reasonable economic independence.
4. To achieve self esteem through achievement, helping others or at home or through some activity.

5. Seven out of ten have a model they would like to be like. In one out of four it is the father.
6. Looking forward to educational, occupational, and service decisions. Six out of ten project their thinking beyond high school. Most concerned with non-interpersonal decisions.
7. At this stage about 40% like to enter the professions.
8. Reasonable occupational choice.
- ✓ 9. Reasonable adult acceptance.
10. Feeling equal to becoming an adult.
- ~ 11. Being able to attract the one he admires and to give and receive love.
12. Achieving a working relationship with the family, permitting considerable freedom, yet retaining understanding and affection.
- ✓ 13. Achieving a close friendship with some others like himself.
- ✓ 14. Understanding sex as a creative force and achieving outlets consistent with his ideals.
15. Accepting his body with its strengths and weaknesses and feeling able to contribute to life with it.
16. Accepting and meeting society's demand for competence.
- ✓ 17. Having some identification of his place in the world's work and a positive attitude toward work.

18. Being able to use leisure time creatively.
19. Being able and willing to apply religious values to his own life and situations.

R. Student Goals (girls)

1. Feeling confident of her ability to become adult.
2. Being able to attract the one she admires and to give and to receive love.
3. Developing a working partnership with the family and a growing responsibility for her own decisions.
- ✓ 4. Achieving a close friendship with others like herself.
5. Understanding her sex feelings and working out standards by which to direct her life.
- ✓ 6. Accepting her body and developing skills in making it as attractive and useful as possible.
- ✓ 7. Developing some identification of the place where she can contribute to life.
- ✓ 8. Developing a positive attitude toward work.
9. Being able to use leisure time creatively.
10. Becoming acquainted with mankind's greatest values and determining which ones have the greatest worth for her.

S. Student Needs (boys)

1. Attainment of maturity in personal controls and relations to others.
- ✓ 2. To learn a new pattern of social behavior.

3. To become less dependent upon his parents.
4. To establish his own framework for decisions.
5. To attain reasonable self-confidence.
6. A growing confidence in his ability to handle himself as an adult.
7. A growing acceptance of himself as a person with a distinct uniqueness, through which he will be able to contribute to life.
8. A growing acceptance of himself as an emerging man.
9. A growing eagerness to develop relationships with girls that he will enjoy.
10. A growing confidence in his ability to win the friendship and the respect of girls.
11. An increasing joy in doing things that will make the one he loves happy.
12. A growing appreciation of the foundations on which a happy home is built.
13. A growing appreciation of a loving home as part of God's plan of life.
14. A growing spirit of partnership with the family.
A willingness to participate in the kind of family planning which recognizes the world of each, yet provides strength for any member in need.
15. A continuing willingness to carry family responsibilities.
16. A growing willingness to abide by the working relationships developed with the family.

17. A growing desire to develop close friendship with one or more persons who hold values similar to his.
18. A willingness to think and plan with others for the common good as well as group gains.
19. A growing eagerness to use his group as a doorway to planning and cooperation with other groups.
20. A growing willingness to do something helpful or thoughtful in return for unkindness or unawareness.
21. A growing pride in his body and the powers that have come to him as a growing adult.
22. A desire to manage his sex life in harmony with his ideals.
23. An acceptance of his body with pride or tolerance, and an eagerness to go forward and contribute to life with it.
24. A growing acceptance of his ability to contribute to life.
25. A growing interest in the issues that make life a struggle for his associates and the community.
26. A growing willingness to widen his acquaintances.
27. A growing ability to join with others in new ideas, new causes, or new relationships.
28. A willingness to set high yet achievable goals for himself, such as more education.
29. A willingness to be realistic about his vocational ability and to accept hard work as the price of success.

30. A willingness to be a part of the world but not content with what can be improved.
31. A growing eagerness to contribute to the world's work through his efforts.
32. An increasing satisfaction in a variety of creative, athletic, and social activities.
33. A growing sense of ease in the company of others engaged in useful activity.
34. A growing appreciation of thinking of others and a sense of membership in the whole human family.

T. Student Needs (girls)

1. To develop a picture of herself as becoming adult.
2. To help her become aware of her special abilities and her limitations.
3. To discover her uniqueness.
4. To accept her limitations.
5. To build upon her strengths.
6. Development of a growing skill in her relationships with boys.
7. To be able to handle emotional relationships with boys.
8. To understand her own nature.
9. To have increasing confidence in her ability to be an adequate love partner.
10. To develop a growing spirit of partnership in the family and a growing willingness to abide by the working relationships they have developed.

11. To have the understanding that others cannot always have their way either.
12. To handle more freedom.
13. To retain a warm affection and pride in her family.
14. To develop vital close friendships with those whose values are most like her own.
15. To continue significant group relationships.
16. To move beyond these intimate circles into an understanding appreciation of others.
17. An understanding of her sex feelings. To accept them as normal.
18. To work out ways of having happy times with boys that reduce the need for direct physical expression.
19. To arrive at her own answers and standards by which to direct her life.
20. To accept her body with whatever pride or tolerance it will support.
21. To develop skills in making her body attractive and to help her find ways of using it joyfully.
22. To be realistic in selecting an occupational field of work.
23. To contribute significantly to the life of her home.
24. To develop a positive attitude toward work.
25. To adjust to a wide variety of leisure time activities with boys or girls.

26. To make her own contribution to fun.
27. To realistically appraise the choices and the consequences open to her in each situation as a means of creating a value system by which to guide her life.

U. Comments (boys)

1. Boys strongly favor adult leadership, who help plan, keep boys in line, help boys when needed and indicate basic direction which should be set by boys.
- ✓ 2. Boys like having some type of special clothing or insignia.
- ✓ 3. The leader is principally an organizer and initiator.
4. Very interested in opposite sex.
5. Planning for the future.
6. Interested in adventure, excitement.
7. Greater interest in social affairs, a lessening of sports interests in later years.
8. Interested in body development.

V. Comments (girls)

1. There are very few girls who do not participate in some kind of informal co-ed activity.
2. Baby sitting and helping with chores and errands are the most common employments of girls.
3. Dating--10% to 25% go steady.
4. Leisure activities:

- a. Social activities
 - b. Team sports
 - c. Formal social activities; dancing, parties.
- 5. Interested in older boys.
 - 6. Less interested in sports.
 - 7. Primary focus on the material world to dominant concern with social reality.

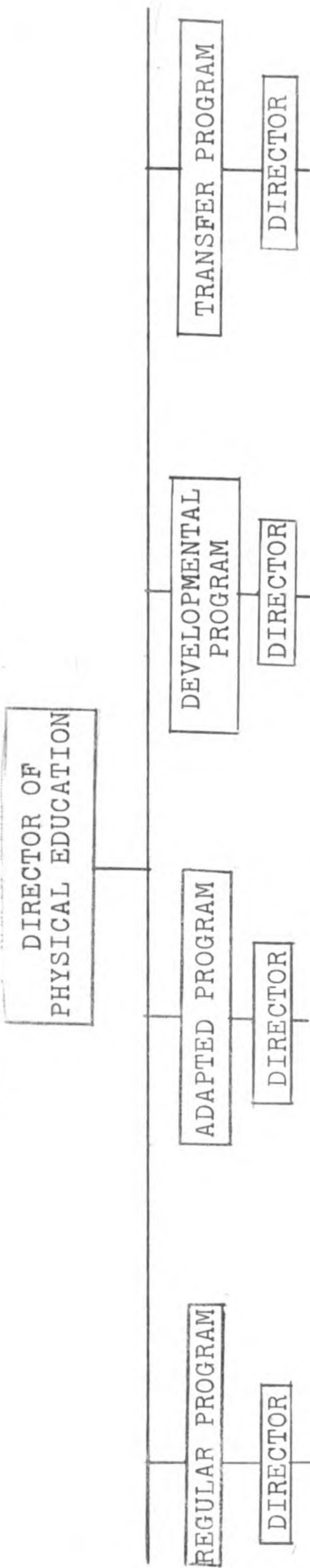
CHAPTER III

RECOMMENDED PROGRAM

The senior high physical education structure is heavily dependent on the junior high school program which must be regarded as the key program within the total curriculum. The junior high program utilizes the learnings of the elementary school program in developing and consolidating the knowledge and abilities preposatory to high school (p. 11). This acquisition of learning, through sequential development, to be effective must be culminated physical education counselor situations. The counselor situations should result in student developed personalized guidance into activities for secondary school participation. In this situation the student plans his own program, taking into consideration his own needs, skill levels, tentative occupational plans, available areas and facilities and personal interests. The counselor serves to aid the student and must be extremely careful not to impose any curriculum.

Prior to enrollment in the tenth grade the student's physical education records and tentative program are transferred to the high school physical education department. Copies of these materials are placed in the student's accumulative record files and are kept current with periodic updating.

HIGH SCHOOL PHYSICAL EDUCATION PROGRAM



Activity Areas	Activity Areas	Activity Areas
1. Instructional 2. Credit given 3. Required 4. Variety of activities a. Sports skills: (1) team games (2) dual and individual games (3) rhythms and dance (4) games of low organization (5) games of high organization (6) aquatics (7) others b. Living skills 5. Use of community facilities as well as school facilities	1. For special students with medical prescription by P.T. direction 2. Restricted and remedial activity 3. Working relationship with medical and nursing personnel	1. Enrollment by choice 2. Work on personal weak points a. Strength b. Flexibility c. Basic skills d. Other
		1. New students to system 2. Orientation to program 3. Development of knowledge and abilities for senior high level 4. Guidance

NOTE: 1. Program selection based upon guidance completed at the end of the 9th grade.
 2. Scheduling could be done by computer programming.
 3. Year round program.
 4. Student centered scheduling.

DIAGRAM I

Based on the students submitted program, selected activities for senior high school participation are then scheduled. The scheduling of activities could easily be determined by computer processes. Periodic schedule changes in the students program can be handled by the same method.

High School Physical Education Program Structure

The physical education structure is divided into four program areas: (1) regular, (2) adapted, (3) developmental, and (4) transfer programs. An organizational diagram is presented.

The Regular Program. Provides physical education for all students and is characterized by instruction in such things as the rules, strategies, and skills of the various activities that comprise the program.

Courses are offered on a year-round basis, which provide for instruction and participation in seasonal activities. Included in this year-round program would be courses conducted during school periods as well as summer, evening, and weekend classes. This type of program arrangement would enable the student to select courses and receive credits in physical education at anytime during the year. The school would not be the sole facility for this program. Community facilities such as: bowling alleys, golf courses, swimming pools, parks and ski areas; as well as the school facilities

would be mobilized to teach these activities. This mobilization would minimize the problems of large classes, schedule conflicts, and inadequate facilities which operate to defeat the purposes of most physical education programs.

It would no longer be necessary that a student attend a given hour during the school day. Credit would be given for a five day canoe trip, or Saturday morning sail boating class as well as other activities that could be offered with adequate professional instruction.

The regular program must provide physical skills and activities through which the student may continue to be physically and recreationally active throughout life.

The Adapted Program. Provides physical education which meets the needs of the individual who because of some physical inadequacy, functional defect capable of being improved through exercise, or other deficiency, is temporarily or permanently unable to take part in the regular physical education program.

When a health examination indicates that a student is not able to participate in the regular physical education program or needs special attention to satisfy certain physical requirements, a medical prescription directed by a physical therapist would be required. This medical prescription would define the limits of the pupil's disability and indicate a corrective type of program which

could be used to meet the physical education needs of the handicapped individual.

Students enrolled in the adapted program with temporary or permanent defects would also be directed into the regular program where they are able to participate within the limits of their own personal capabilities, interests, and needs. This integration would allow for self-development and acceptance by both the handicapped individual and his peers.

Close supervision and highly specialized instruction are necessary in the administration of the adapted program.

The Developmental Program. Provides instruction in the methods of body development. The student is allowed to work on his own personal weak points in such areas as strength, flexibility and cardiovascular endurance types of activity.

The Transfer Program. Provides orientation, instruction and development in the knowledge and abilities necessary for senior high school level physical education participation.

Students placed in the Transfer Program are either new students to the school system or students who have not completed the specific requirements and understandings necessary for taking part in the senior high program.

Programming Procedures. The order of procedures necessary for scheduling of the students submitted program are listed below. Refer to page 47, for a structural diagram of the Programming Procedures.

A. Guidance

1. Student centered guidance for the determining of submitted programs for senior high school.
2. Re-structuring of the submitted program due to necessary program changes.
3. Tentative program for new students and students needing completion of specific requirements to take part in senior high program.

B. Program Scheduling

1. Scheduling of submitted programs.
2. Programming of all selected activities for the entire time the student will be in senior high school.
3. Placement of student into one or more of the program areas.
 - a. Regular
 - b. Adapted
 - c. Developmental
 - d. Transfer

C. Transfer Program

1. New students and students who have not completed the specific requirements necessary for taking part in senior high program.

2. Completion of transfer program
 - a. Referral to guidance for structuring of a submitted program.
 - b. Program scheduling--placement of student into one or more of the program areas.

PROGRAMMING PROCEDURES

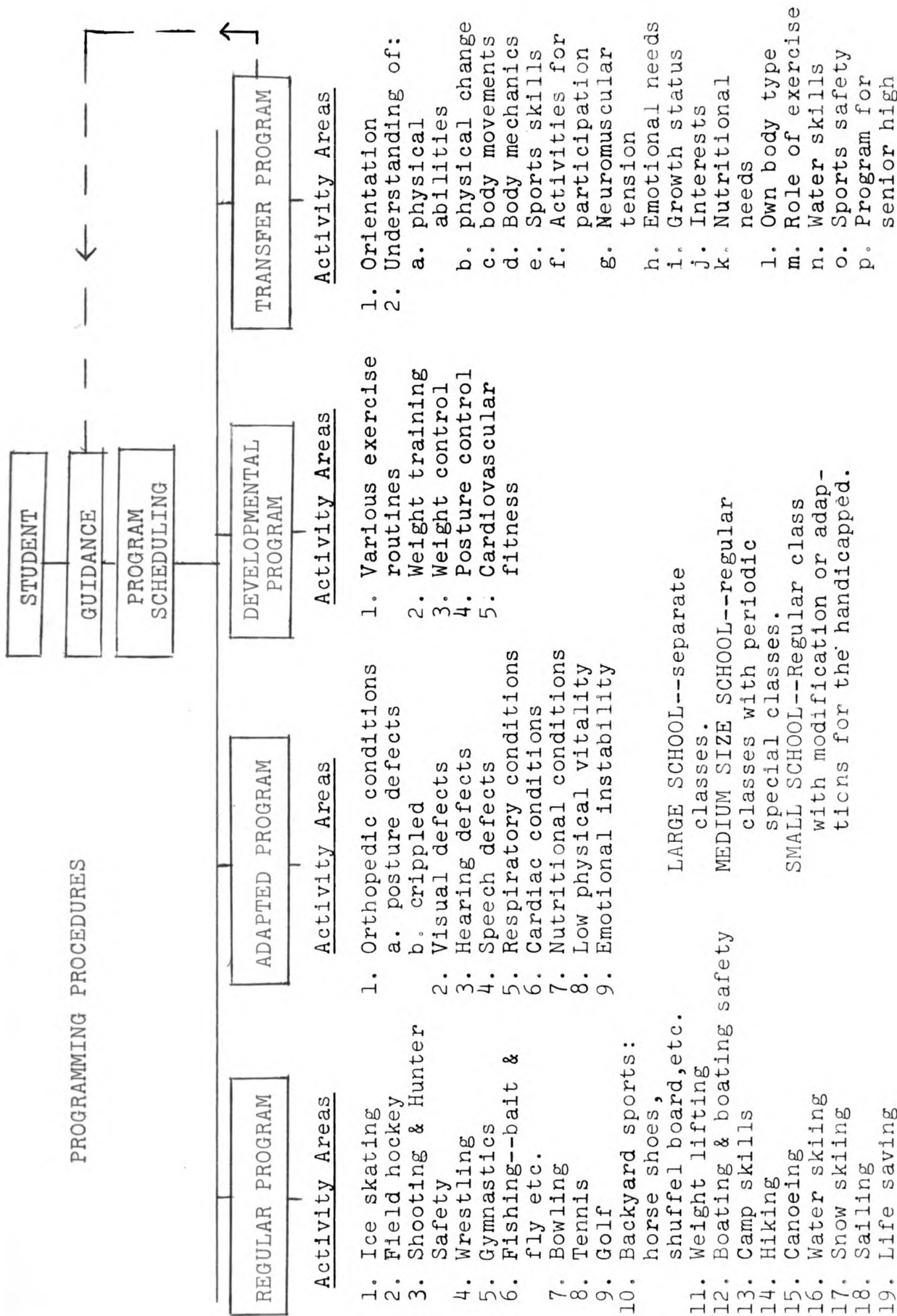


DIAGRAM II

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BIBLIOGRAPHY

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APPENDICES

APPENDIX A

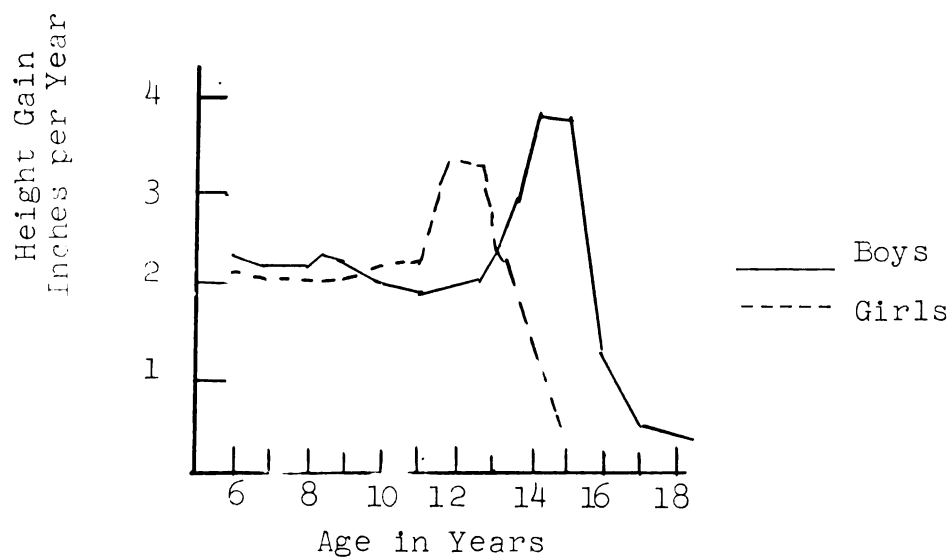


Figure I. Adolescent Spurt in Height Growth
for Boys and Girls.
(Data from Shuttleworth, 1939, Tables 23 & 32)

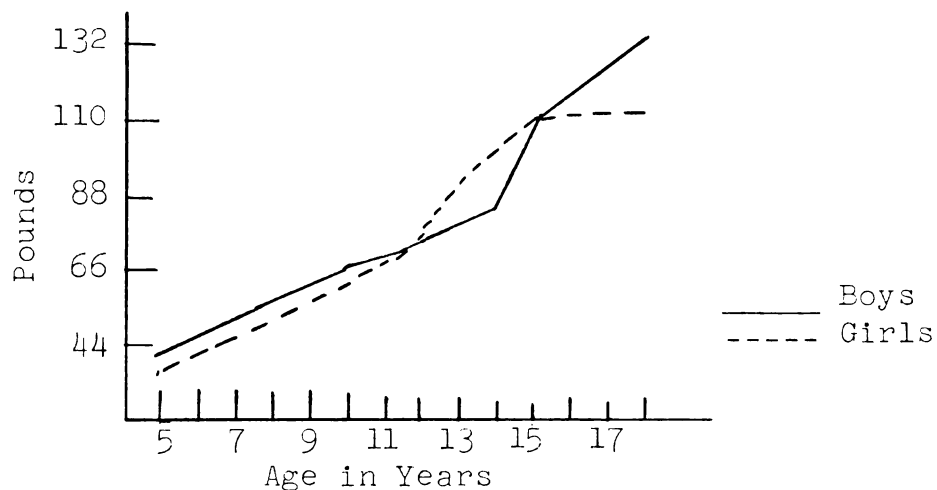


Figure II. Growth Curves in Average Body Weight
of Boys and Girls.
(Data from Shuttleworth, 1951, Figure 14)

APPENDIX B

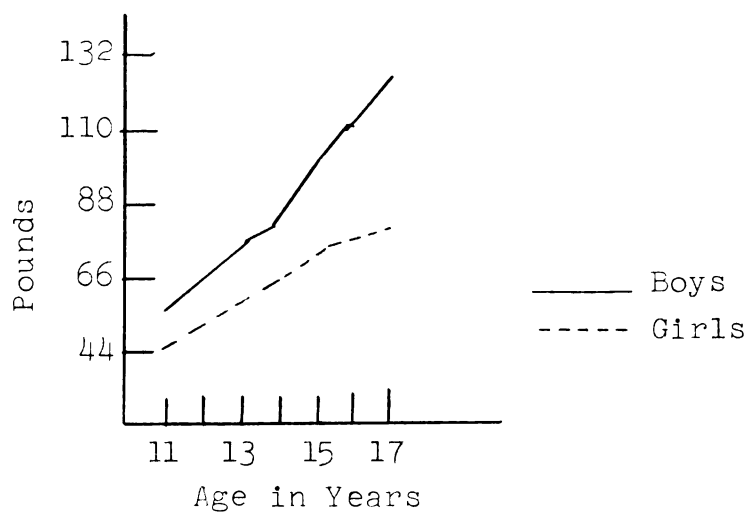


Figure III. Strength of Grip, Right Hand
(from H. E. Jones, 1949)

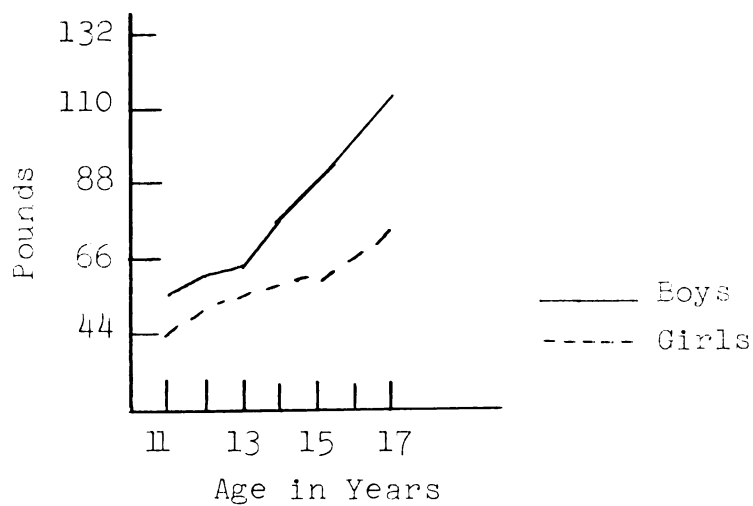


Figure IV. Strength of Grip, Left Hand
(from H. E. Jones, 1949)

APPENDIX C

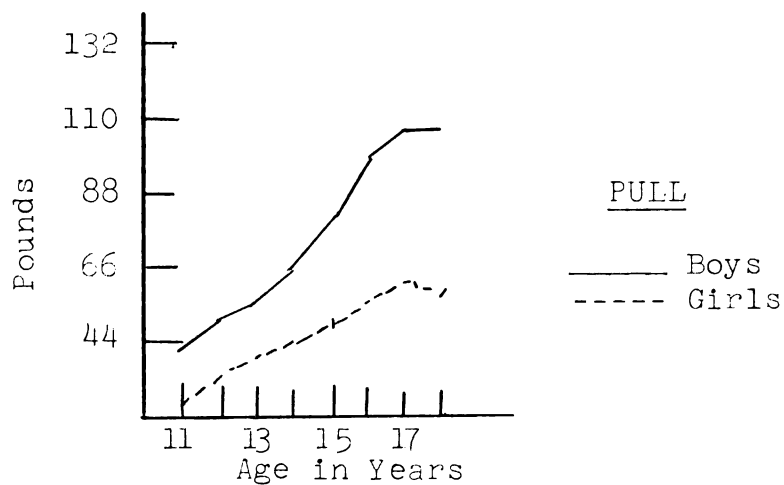


Figure V. Age Changes in Strength of Boys and Girls.
(from H. E. Jones, 1947)

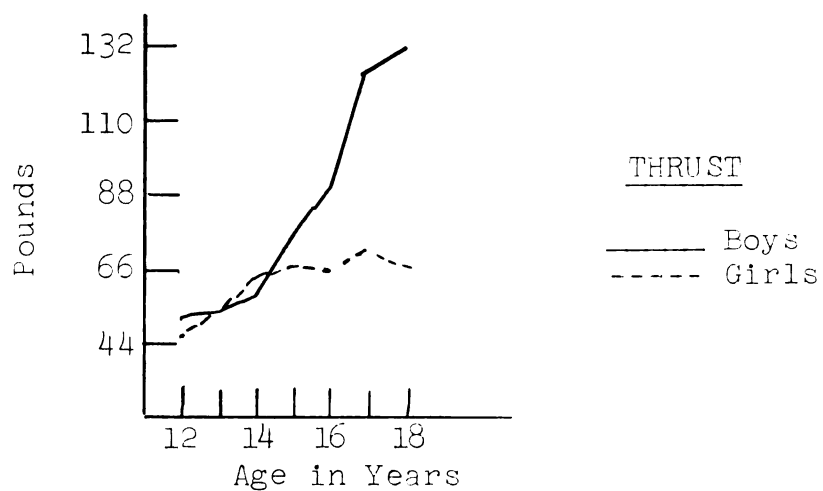


Figure VI. Age Changes in Strength of Boys and Girls.
(from H. E. Jones, 1947)

APPENDIX D

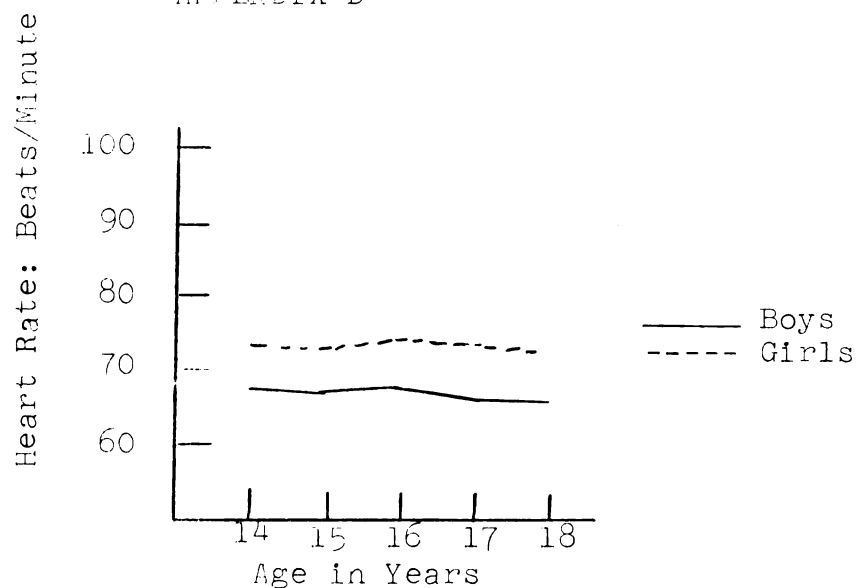


Figure VII. Average Change in Basal Heart Rate Boys and Girls.
(A. Iliff and V. A. Lee, Child Development, Vol. 23, 1952)

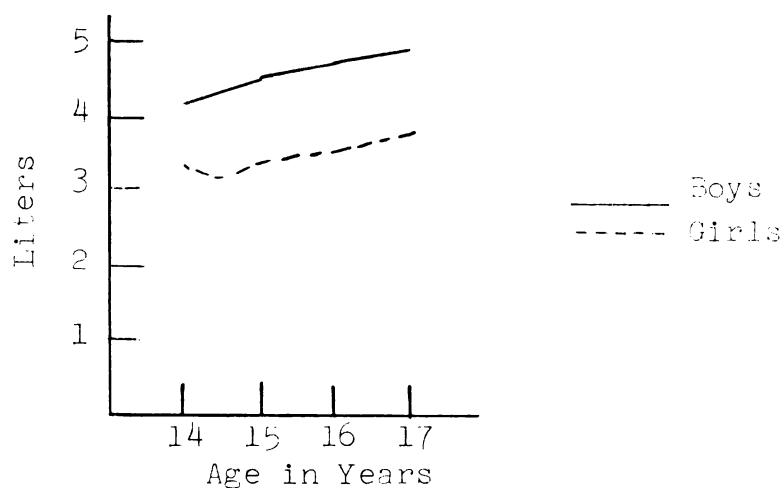


Figure VIII. Changes in Vital Capacity in Boys and Girls
(Combined data from B. G. Ferris and Others, 1952; and B. C. Ferris and C. W. Smith, 1953)

APPENDIX E

TABLE A

BLOOD PRESSURE

The largest increases in average systolic pressures occur from the late teens to the twenties.

GRADUATED AVERAGE BLOOD PRESSURES

MEN		
Ages	Systolic	Diastolic
	M.M.	M.M.
15 - 19	117	71

WOMEN		
Ages	Systolic	Diastolic
	M.M.	M.M.
15 - 19	114	70

Note: Pressures in millimeters (M.M.). Diastolic blood pressures (fifth phase).
 (from Society of Actuaries, Vol. I, 1959)

TABLE B

TEMPERATURE

Mouth temperature was taken under basal conditions after the subject had been lying quietly for forty minutes.

MOUTH TEMPERATURE
 (Temperatures in Farenheit Degrees)

Age	Boy's Temperature	Girl's Temperature
14	97.6°	97.9°
15	97.5°	97.9°
16	97.4°	97.9°
17	97.3°	97.8°
18	97.2°	97.9°

(From A. Iliff and V. A. Lee, Child Development, 23, 1952.)

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