A COMPARATIVE STUDY OF THE REQUIRED PHYSICAL EDUCATION PROGRAM FOR MEN AT NORTH TEXAS STATE TEACHERS COLLEGE AND THE PHYSICAL TRAINING PROGRAM FOR NAVAL AVIATION CADETS WITH A PROPOSED PHYSICAL FITNESS PROGRAM FOR MEN TO BE OFFERED AT NORTH TEXAS STATE TEACHERS COLLEGE

THESIS

Presented to the Graduate Council of the North Texas State Teachers College in Partial Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By

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CHAPTER I

INTRODUCTION

During World War II, in his position as physical training instructor to Naval aviation cadets, the writer noted that cadets from secondary schools and colleges lacked sufficient training in a physical conditioning program which developed their strength and improved their posture. Having had training in the Department of Health and Physical Education and Recreation of North Texas State Teachers College and holding the degree of Bachelor of Science from that institution, the writer was familiar with the required physical education program offered to the men students in that institution and felt that the program could be made stronger by the inclusion of physical conditioning activities which the Navy offered to aviation cadets.

Since 1,400,000 men under twenty-six years of age were rejected by the armed forces as physically unfit for military service in World War II, it was evident that physical training in American homes and schools was insufficient. It was evident also that this condition might have been remedied by required physical education programs for men students, who, in turn, would have passed the knowledge gained to the American school boy and thereby raised the physical standards of the future American men.
Purpose of the Study

This comparative study of the required physical education program for men students offered by the North Texas State Teachers college and the physical training program offered to Naval aviation cadets was made to determine the type of additional training necessary for an adequate program at North Texas State Teachers College which will improve the physical condition of the men students.

Definition of Terms

In the course of this study certain terms which are used in a rather specialized sense are explained below:

Physical fitness, as applied to the course of study at North Texas State Teachers College, means the activities offered men students as required physical education in the Department of Health and Physical Education and Recreation.

Physical training, which relates to the activity program for Naval aviation cadets, means the program employed in the process of developing in the men a high level of physical fitness in the shortest possible time.

Physical fitness, as the writer termed his proposed program, means the combination of the most desirable material offered in the activity courses of the North Texas State Teachers College and in the physical conditioning program for Naval aviation cadets, the latter having
emphasized activities that have conditioning value and that lend themselves readily to mass exercise programs.

Method of Procedure

The bibliographical method, rather than the questionnaire or survey method, was used because it seemed more reliable for this particular study.

Source of Material

Both documentary and human sources were used in this study. Documentary sources were the course of study offered by North Texas State Teachers College, bulletins and manuals from the United States Navy, professional books and periodicals. Human sources were teachers of health and physical education at North Texas State Teachers College and Naval personnel.

Treatment of Data

The data gained were used to compare the required activity programs of health and physical education offered to men students at North Texas State Teachers College and the required physical training program of Naval aviation cadets and to propose a well-rounded body-building program of physical fitness. Evaluation was made on the basis of the promotion of physical growth and development of muscular endurance, agility and flexibility of body movements, improvement of posture, and body-building activities
which tend to produce and maintain a well developed physical manhood.

 Procedures

This study was made of the physical training program of Naval aviation cadets and the required physical education program for men at North Texas State Teachers College. The data gained were tabulated and compared. The proposed program was presented from facts shown in the data. Conclusions were drawn from the data presented, and recommendations were made for the proposed physical fitness program.
CHAPTER II

HISTORY AND PURPOSE OF THE STUDY

No citizen has the right to be an amateur in the matter of physical training. What a disgrace it is for a man to grow old without ever seeing the beauty and strength of which the body is capable!¹

Historic events for 2,000 years have brought the realization of the truth of this statement by Socrates. Often it has been impressed on the minds of the American people, but nothing has startled the nation so much as the knowledge that in World War I "one-third of its young men between 21 and 31 were rejected for active service... on account of physical defects."²

The schools were sharply criticized because they had failed to develop the American youth. The need for a broader and more intelligent national program of health education and leisure-time activity prompted a change in the field of physical education.³ As stated in a thesis by Lida Kate Bryson in a chapter on physical education in the United States as an integral part of the modern education

²Ibid.
program: "...the elementary and secondary schools through various procedures began to set up achievement goals and there was an increasing interest in physical welfare."^{4}

Progressive colleges were quick to respond to the needs for better trained physical education teachers, and in 1928 there were ninety-four secondary schools which offered a full-time four-year college course, consisting of a scientific, cultural, and educational background and a well-rounded program of theory and practice in the many phases of health and physical education.^{5}

The selection of service personnel for World War II revealed much the same alarming results as World War I.

During and after the first World War, draft data were reviewed, analyzed, and interpreted. Over the ensuing years, medical statisticians decried the low level of health among the nation's young men and viewed the situation with alarm. It is regrettable that the papers produced by these statisticians represent the sole use to which the findings of World War I were put.

Now once more, protests are being raised against the health level--this time based on the amount of the defects found among the sons of World War I examinees. It is to be hoped that the implications of these latest wartime health reports will be regarded as an index of the degree of actual need and will be utilized in planning health which must be supplied to bring oncoming generations the benefits of knowledge already on hand.

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^{5} Beulah A. Harriss, op. cit., p. 37.
Reports of defects found among young men examined for military duty in World War II can serve as signposts to health authorities in planning future activities. Much of the past achievement in public health has been due to the application by health departments of epidemiological case finding techniques to the control of disease spread. Selective data make available a new source of information for evaluating the relative extent of particular physical and mental defects.

The President in his recommendation to the Congress for the establishment of National Health Programs has used the reports on medical examinations of selectees to gauge the total health needs of the country. Nation-wide programs for the prevention and cure of tuberculosis, venereal disease, and other communicable diseases are now authorized by the Congress. State and local health authorities can use Selective Service findings and ascertain where existing programs should be strengthened and what additional services are required. In the past, health authorities have turned to mortality rates as a major index for determining problems of public health significance. The limitations of these rates in evaluating health needs has been recognized. Knowledge provided by mortality rates is confined to deaths resulting from specific diseases. A well organized attack on the whole health front requires comprehensive and current information on the prevalence of disease and defects—in short, complete morbidity reporting on every state. In lieu of this, Selective Service data, while not so accurate, offer an immediate and potent source of information on the prevalence of those defects which it is within the province of public health to prevent or remedy.6

There is, as yet, no standardized health and physical education program for the colleges, but each department of health and physical education has set up its own program relative to the needs of the particular student body.

At the North Texas State Teachers College the Department of Health and Physical Education and Recreation makes

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specific requirements for graduation. All undergraduate students in the college are required to complete for graduation four semester hours in activity courses in physical education, these hours to be earned during the freshman and sophomore years. In addition, the Department of Health and Physical Education and Recreation has for its primary aim, "under competent supervision to prescribe training necessary for the physical, mental and moral development of the student."  

In contrast to the lack of a standardized health and physical education program for the colleges of the nation, the Navy has a well developed and well standardized program for the training of aviation cadets. This program emphasizes the relationship between sports and war. Brownell expresses it in this manner:

It has become clear that training in sports prepares young persons to be much more effective than they would be otherwise. It gives them strength, endurance, agility, and speed and the ability to work with others in the attainment of a common goal. This is the reason why the United States Navy established pre-flight schools for the training of Naval aviation cadets. Sports are a major part of the training in both branches of the military service.  

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8 Ibid., p. 51.
At the established pre-flight training schools for aviation cadets, the Naval aviation training program had for its purpose "to train our pilots not only so they are more skillful in flying technique and knowledge, but in one year to turn them into the air stronger and tougher, both physically and mentally."\(^{10}\) Captain King states that the minimum training requirements designed for all midshipmen bear in mind that part of the Academy mission which states "that healthy minds in healthy bodies are necessities for the fulfillment of the individual mission of the graduate."\(^{11}\)

In presenting the broad objectives of the physical training of Naval aviation cadets, the Navy emphasizes these objectives of varsity, physical drills, and sport programs:

1. To develop in the cadets a will to win against any odds, the love of combat and the willingness to sacrifice for an ideal.

2. To challenge and develop daring and courage in the cadet.

3. To determine the initial status of the cadet by means of posture photographs and achievement tests.

4. To measure by retesting at periodic intervals the improvements of the physical status of each cadet.

5. To give the cadets confidence and the ability to swim, tread water, or stay afloat under varying conditions for an indefinite period of time.

\(^{10}\) Physical Fitness Program for Naval Aviation Schools, p. 2.

\(^{11}\) Physical Training Manual, p. ix.
6. To give training to the sense of balance.

7. To accustom the cadet to being upside down for extended periods.

8. To instruct the cadets in skills that have a definite carry-over into military tactics.

9. To teach the most effective methods of self-defense against an assailant armed with a gun, knife, blackjack, or riot stick.

10. To teach the skills of ordinary combat against an unarmed opponent.

11. To develop through team play--speed, quick thinking, anticipation and timing.

12. Through bodily contact and competition, to develop ruggedness, endurance, agility, and strength in the cadet.

13. To give the cadet the self-assurance that he is capable of using his two fists to defend himself.

14. To develop the co-ordination of eye, mind, and body.

15. To learn skills that could be used in an emergency.

16. To develop and toughen the body.

17. To help the cadet in every way--physically, mentally, and spiritually to become the best possible fighting pilot.²

The proposed physical fitness program offered by the writer is intended neither as a criticism nor as a condemnation of the present program at North Texas State Teachers College but is offered only as a supplement to enrich the present program offered to the men students, with some

²Physical Fitness Program, op. cit., p. 2.
emphasis on the activities of swimming, strength, and posture which have proved of value in the training of Naval aviation cadets. The physical fitness program has for its aim the promotion of physical development and maintenance of physical fitness.
CHAPTER III

PRESENTATION OF TWO PROGRAMS

Required Physical Education Activities at
North Texas State Teachers College

At North Texas State Teachers College the Department of Health and Physical Education and Recreation has planned three types of courses to meet the demands of the student body.

1. One course is set up to provide both activity and theory courses for men students majoring or minoring in health and physical education.

2. Students desiring to elect those courses which may be of benefit to them either as teachers in their communities or for personal improvement, for leisure-time activity, or for recreational needs-- such students may elect a second type of course.

3. It is necessary for all students who desire to graduate to complete a minimum of four semester hours in health and physical education activity courses during their freshman and sophomore years.¹

For twelve years North Texas State Teachers College

has offered a program which has a wide selection of activity courses from which men students majoring or minoring in other fields may elect courses which meet the physical education requirements for graduation.

A student is permitted to select from these activity courses the ones which appeal to him and which will at the same time meet the requirements for the Degree of Bachelor of Science, or Arts, or Music. "A student is guided in planning his physical education program on the basis of his past experiences, interests, and aptitudes." It is, therefore, quite possible for a student to meet the requirements for graduation and yet never have learned to swim, develop his strength, or improve his posture.

The required courses are defined as "activity" courses. Students participating in activity courses are given one semester hour credit each semester for each activity in which they receive instruction and participate. The semester hour is described as "the unit of credit...allowed for one lecture a week, or its equivalent, with two hours of preparation, for eighteen weeks."

The required activity courses for men students, in which they participate and receive instruction, have for

\[\text{Ibid.}, \ p. \ 134.\]
\[\text{Ibid.}, \ p. \ 59.\]
\[\text{Ibid.}, \ p. \ 138.\]
their aim "the development of physical fitness, skills, knowledge, and appreciations," and may be elected from the following group:

<table>
<thead>
<tr>
<th>Archery</th>
<th>Hand Ball</th>
<th>Softball</th>
</tr>
</thead>
<tbody>
<tr>
<td>Badminton</td>
<td>Hiking</td>
<td>Swimming</td>
</tr>
<tr>
<td>Basketball</td>
<td>Horseshoes</td>
<td>Tag Football</td>
</tr>
<tr>
<td>Boxing</td>
<td>Life Saving</td>
<td>Tennis</td>
</tr>
<tr>
<td>Calisthenics</td>
<td>Miniature Golf</td>
<td>Track and Field</td>
</tr>
<tr>
<td>Croquet</td>
<td>Ping Pong</td>
<td>Tumbling</td>
</tr>
<tr>
<td>Football</td>
<td>Roller Skating</td>
<td>Volley Ball</td>
</tr>
<tr>
<td>Golf</td>
<td>Social Dancing</td>
<td>Wrestling</td>
</tr>
</tbody>
</table>

Men teachers of health and physical education are limited in the use of material equipment, use of football field, baseball diamond, and tennis courts, which must be shared with women teachers and their classes. The temporary gymnasium is an obsolete building, not fire-proof, which must be shared with the college as a social activities building. The swimming pool is in a seasonal outdoor setting, and cannot be used successfully during the long session.

Teachers and coaches in the Department of Health and Physical Education and Recreation must share the teaching load of activity courses, academic classes, and coaching, and frequently they are not able to teach the subjects for which they fitted themselves, stated Fred Slack. The teaching staff is heavily overloaded, and the classes are

5Ibid.
6Statement by Fred Slack, personal interview.
crowded, with freshman and sophomore students participating in the same activities in one class. According to Fred Cobb, "The size of classes varies from twenty to one hundred students, depending on the time allowed to students after academic requirements have been met."  

In the long session classes are conducted on a one hour schedule, three days a week. Ten minutes at the beginning and ten minutes at the end of the class period are allotted for students to change clothing.

In the summer session classes are held for one and one half hour periods with the same amount of time allotted to dressing.

Intramurals may be participated in on an entirely voluntary basis, and the activity possibilities at North Texas State Teachers College are many and varied.

Required Physical Training Program for Naval Aviation Cadets

Preliminary tests are given the beginning classes of cadets, and these tests are used to show both the qualifications and deficiencies of the individual.  

The standard physical fitness score card of the Navy is shown on the following page. There are spaces for name, rank or rating, station and company, or ship and division.

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7 Statement by Fred Cobb, personal interview.  
8 Physical Training Manual, p. 3.
NAVY STANDARD PHYSICAL FITNESS TEST SCORE CARD

Name..................................Rank or Rating............................
Station and Co. or.............Ship and Division......................

<table>
<thead>
<tr>
<th>Date given</th>
<th>Height</th>
<th>Weight</th>
<th>Age</th>
<th>Posture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Record of Events</th>
<th>No. Pts</th>
<th>No. Pts</th>
<th>No. Pts</th>
<th>No. Pts</th>
<th>No. Pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Squat-thrusts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Sit-ups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Push-ups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Squat-jumps</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Pull-ups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total points

Total points divided by 5 gives P. F. S.

Gain in P. F. Score

Instructor's initials

Judge's initials

Recorder's initials

(Note: The form above is the card used for recording the individual's score as he is being tested. The form shown is approximately the desirable size.)

Fig. 1--Navy test score card
In the proper squares on the card there are places to record in a series the date, height, weight, age, and posture. The records are listed with appropriate space to show the gain in number of points of the activities, or tests, of squat-thrusts, sit-ups, squat-jumps, and pull-ups.

In the physical training program all the tests which are required for Naval aviation cadets are the same ones that are required for midshipmen of the United States Navy. Established standards have been set, and the Naval aviation cadet must measure up to these standards, which have been established in each of the four basic fundamentals that are a part of the routine of each flight training school.

The routine was established to achieve, within a training period of three months, basic training in the following four fundamentals:

1. Proper physical conditioning and strength.
2. Knowledge of general Naval lore.
3. Knowledge of military drill and seamanship.
4. Elementary training in communication and specialties.

A short outline of the above-mentioned fundamentals is included in a mimeographed leaflet, No. 61874, originating in the office of T. J. Hamilton, Lt. Comdr., USN, Division of Aviation Training. In this leaflet a brief basic training program, both feasible and easy to operate, was offered to the Director of Aviation Training.

In the first fundamental, "Proper Physical Conditioning
and Strength," the established standards which must be met are to be found in the following activities:

1. Practical gymnasium (which includes tumbling and intramural sports).
2. Swimming.
4. Posture.

The following page is reproduced from the Physical Training Manual, published at Annapolis, Maryland, in 1942, and shows requirements for second, third, and fourth class midshipmen. The outline needs no further explanation.

Body-building activities which are employed in the physical training given to Naval aviation cadets are listed as the following:

- Alertness Exercises
- Apparatus Exercises
- Athletic Sports
- Bag Punching
- Boxing
- Calisthenics
- Combatives
- Group Games
- Jog Marching
- Life Saving
- Medicine Ball Exercises
- Obstacle Course
- Physical Fitness Tests
- Posture Training
- Relay Exercises
- Relays
- Rope Climbing
- Rope Skipping
- Running
- Swimming
- Tumbling
- Weight Lifting
- Wrestling

The above-listed activities are used to develop a high degree of physical fitness in the cadets.

Those cadets who fail to measure up to the standards of any activity which have been set by the Navy must have additional instruction until they are able to pass the tests.

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9Physical Fitness Manual, p. 2.
**Fig. 2—Naval requirements in physical training**

<table>
<thead>
<tr>
<th>Class</th>
<th>Swimming</th>
<th>Physical</th>
<th>Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D. (Summer Requirement)</td>
<td>Rope climb: 15 ft.</td>
<td>Just pass 30</td>
</tr>
<tr>
<td></td>
<td>Ability to stay afloat for 5 minutes</td>
<td>Running: 8 tr. mile-70 sec.</td>
<td>out of total</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Broad jump: 7 ft.</td>
<td>of 40 muscles.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pummeling: Two forward rolls.</td>
<td>Ten defects allowed.</td>
</tr>
<tr>
<td></td>
<td>Swimming or keeping afloat</td>
<td>Dips: Three dips.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for 5 minutes. Ability to use</td>
<td>Shelf: 7 ft., 6 in.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>crawl, right and left</td>
<td>Bar vault: Height of chest.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>side strokes, and back stroke. Each for 20 yards</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E. (Youngster Requirements)</td>
<td>Rope climb: 15 ft.</td>
<td>Just not be</td>
</tr>
<tr>
<td></td>
<td>Swim 120 yards in 3 minutes—</td>
<td>Running: 8 tr. mile-68 sec.</td>
<td>deficient in</td>
</tr>
<tr>
<td></td>
<td>40 yds. crawl, 20 yds. each side, and 40 yds. back stroke. Each for 20</td>
<td>Broad jump: 7 ft., 3 in.</td>
<td>more than 5</td>
</tr>
<tr>
<td></td>
<td>yard</td>
<td>Pummeling: Two cart-wheel or</td>
<td>muscles.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>two backward rolls.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dips: Five dips.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chin: Nine chins.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Take-fast: Rope: floor clearance</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. (Final tests)</td>
<td>Rope climb: 20 ft.</td>
<td>No defects allowed in</td>
</tr>
<tr>
<td></td>
<td>Swim 180 yards in 4 minutes—</td>
<td>Running: 8 tr. mile-56 sec.</td>
<td>total of 40</td>
</tr>
<tr>
<td></td>
<td>80 yds. crawl, 20 yds. each side, and 40 yds. back.</td>
<td>Broad jump: 7 ft., 6 in.</td>
<td>muscles.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High jump: 4 ft., 2 in.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Life Saving: Working knowledge</td>
<td>Horizontal bar: Back circle.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of resuscitation, ability to</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>break front and back stroke.</td>
<td>Note: Special defects in posture are considered</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>as deficiencies for all classes.</td>
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</tbody>
</table>
which are required for that class. This additional instruction is usually given in the gymnastics classes.

Gymnastics.-- The Navy places a high value on gymnastics. As Head Coach Chester W. Phillips stated in his chapter in the Physical Training Manual:

As an all round developer, gymnastics on apparatus cannot be surpassed. The co-ordination skills are invaluable to Navy life. This sport teaches quick perception with immediate, accurate, and efficient reaction. Agility often means safety.

A gymnast develops self-confidence and learns to make his decisions fast and final. He learns to depend upon himself and stands alone in competition without help to make good on his one and only trial. Yet, as a member of the team, he shoulders the wheel with his teammates to score a victory. He develops daring, yet learns the futility of foolhardy chance. However, patience and perseverance are probably the finest virtues a gymnast develops, for they carry deeper into every day living than all other things.10

Equipment exercises which require gymnasium apparatus and equipment are a requisite for Naval aviation cadets. The body-building exercises are listed as:

- Medicine Ball Throwing
- Apparatus Work
- Weight Lifting
- Rowing Machine and Pulley
- Rope Climbing
- Bag Punching
- Rope Skipping
- Weight Exercises.

The Navy rates the value of the above-listed gymnastic exercises as most significant when needed to develop "strength, endurance, suppleness, balance, and agility."11

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Gymnastics and tumbling are rarely listed separately in the physical training program for the Naval aviation pre-flight schools. In a detailed syllabus the following objectives are listed for gymnastics and tumbling:

1. To give training to the native sense of balance.

2. To equip the future pilot with strength and skill to extricate himself from emergency situations requiring climbing, vaulting, tumbling and balance.

3. To develop daring and courage.

4. To accustom the cadet to being upside down for extended periods.

5. To teach landing and falling without injury.

A brief and concise syllabus which pertains only to gymnastics and tumbling lists the three following major objective activities:

- Tumbling (directional sense activity)
- Vaulting (body control, agility)
- Climbing (strength and endurance)

These supplemental activities are considered a definite part of the tumbling program:

- Trampoline (body control)
- Balance Beams (balance)
- Aero-wheels (directional sense)

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12 (Syllabus:) Physical Fitness Program for Naval Aviation Pre-flight Schools, p. 7.

13 Ibid.

14 Ibid.
the physical training activity of the cadet, and the opening statement in the chapter on tumbling in the Physical Fitness Manual emphasizes the great value of the tumbling activity as a method of securing and maintaining physical fitness:

Tumbling is an excellent activity for the development of strength, agility, precision and balance. Teamwork is also developed when two or more men are involved.15

Intramural Sports.-- The development of intramural sports from impromptu games between similar groups to organized competition from outside groups has led to the present system of varsity athletics and has fostered the broader ideal of intramural sports for the entire group of student personnel of the Navy. However, the present situation of intramural sports considers not only group activities but also "the quality of the work and the benefits derived by the individual."16

Supervision of individuals for particularly rugged sports in order to derive the greatest benefit is one of the aims of the intramural program. Sports that add to the value of life are those that have a carry-over value into later life. Tennis, badminton, golf, squash, and similar games have the value of competition while the

15Physical Fitness Manual, op. cit., p. 94.
16Physical Training Manual, op. cit., p. 36.
cadet is in training, and they serve as means of recreation in later life. The purposes and aims of the intramural program are as broad and extensive as the broad and general aims of the physical training program as given in the manual for Naval aviation cadets. Together with the objectives they are listed as follows:

The intramural program, therefore, not only tends to develop and maintain physical efficiency in an enjoyable, wholesome manner, but through the instruction, training, and periodic physical examinations, it can be an important feature in launching constructive health habits upon the individual.

The aim of the intramural sports department at the Naval Academy is to promote as many worthwhile activities as is necessary to meet the needs of the regiment. Present voluntary participation by all is the immediate end, while continued participation is the remoter end. The objectives can be summed up under five general headings.

Objectives

1. To provide wholesome recreation for the entire regiment in such a way as to develop a high degree of physical efficiency, emotional stability, and morale.
2. To develop a lasting interest in physical forms of exercise that will serve to maintain those qualities throughout the fleet.
3. To promote a group spirit and the feeling of unity that is a natural result of co-operation in intramural sports. These socializing influences are extremely important due to the fact that midshipmen are drawn from all sections of the United States and from all walks of life. Their attitudes must be blended into one of loyalty, co-operation and service to a cause that is larger than oneself.
4. To develop strength, endurance, and the neuro-muscular co-ordination that increases ability and the confident control of the body. This is also important to the training of a naval officer because unhesitating, unerring judgement under fire is absolutely essential.
5. To encourage worthwhile leisure hour pursuits that will serve the recreational needs of midshipmen in later life.
The intramural program, working in accord with other educational programs, all realizing that the individual must be treated as the whole, can contribute directly as well as indirectly to the health, character, emotional stability, physical aspects and development of citizenship. It should be directed entirely toward the enrichment of the individual's social co-ordination during adult life. Physical training cannot regard physical health and well being as an end in itself, but must visualize it as one of the co-operating means to realize the eventual goal in life.17

**Rope Climbing**.-- Rope climbing is considered part of the tumbling program in practical gymnasium work. Tumbling forms the basis for almost all the work on the apparatus. The twisting and somersaulting body movements that are developed in tumbling and advanced gymnastics become the most valuable assets for acquiring agility. The co-ordination of body movements to an alert mind must be augmented by a keen directional sense. This keen sense is necessary for the rope climbing exercises that are required of the cadets.

Rope climbing develops the muscles of the arm since climbing is done by using the arms and leaving the legs free. The Navy has been successful in winning intercollegiate championships every year except one in rope climbing, and now this sport is a sort of tradition among midshipmen and cadets.18 Rope climbing is a necessary and

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17 Ibid., pp. 36-38.
practical exercise used in teaching the cadet to abandon ship safely and quickly.

Swimming.-- In 1886 the Naval Academy made swimming a required part, and a compulsory one, of its physical training program. Diving and lifesaving are also a required part of the swimming standard. The required swimming strokes are listed as the crawl, back stroke, breast stroke, and the butterfly breast stroke. 19

The advanced dives listed and described in the manual are the jack knife, swan, back, flying dutchman, forward somersault, forward one-and-a-half somersault, full twist (cork screw or dolphin), and the spring board.

Life saving courses, with the various approaches and methods of bringing person to shore, preface the training program for resuscitation, which is also a requirement of the swimming course. 20

It is obvious that swimming would be both required and compulsory for Naval aviation cadets and that the primary aim would be a means of preserving one's life. "After realizing that objective, the various phases of swimming can be used as excellent conditioning activities." 21

The peace-time program of training for swimming was

19 Ibid., p. 220.
20 Brownell and Williams, op. cit., p. 65.
changed during the war, and now the syllabus makes this addition to the aims of swimming instruction and lists the following objectives:

Naval aviation training requires that the aims of swimming instruction be changed from specialization and speed to that of teaching men to stay up for unusually long periods of time, swimming with clothes on, under water, and while exposed to the hazards of cold, oil, and fire. Being thrown overboard by an explosion or crash requires mastery of swimming under all these and other emergencies.

The normal strokes and types to be taught are Breast Stroke (different leg action), Back Stroke, Sculling and Treading Water. The use of rafts, life-jackets and debris, docking a person and lifesaving breaks and carries are to be covered. Jumps from heights, swimming under water, and holding another person afloat, or towing him to safety are to be taught.

The normal speed strokes are included to round out a complete program.

Objectives

1. To give the cadets confidence in their ability to swim, tread water, or stay afloat for an indefinite period of time, under varying conditions, and also to keep a shipmate afloat until rescue party comes.

2. To develop in the cadet endurance, stamina, co-ordination, and all round physical development.  

Strength.-- Naval aviation cadets must be toughened physically and mentally in the pre-flight schools, and this state of physical fitness must be maintained in each of the three flight centers to which they are sent from their first phase of training. The Navy emphasized the need for superiority in strength by placing this introduction in the syllabus:

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22 Syllabus, op. cit., p. 155.
The need for a physical program for pilots is very evident. Our flight cadets come into the Naval service from a soft, luxurious, loose-thinking, lazy, peace-time life in our homes and schools. It will be our task in one year to prepare physically and mentally to meet and defeat the personnel of our enemies who have been thoroughly trained in a purposeful wartime physical and mental for years; in fact, from childhood.

Our high school and college athletic programs have developed mental alertness, agility, initiative, and a sporting competitive spirit possibly superior to that of our enemies, but there is little question that their youth is stronger, tougher, better trained physically and steeped in a nationalistic and fanatical frame of mind which drives them to carry out their ruthless methods of total war.

No matter how mentally alert, agile, and clever an athlete may be in handball or other sports, he will be defeated invariably by an opponent only slightly less skillful and less imaginative, who has a great superiority in strength and endurance, and a cold-blooded will, which pushes aside all rules to win. So is war.23

To meet and defeat an enemy on these grounds the Navy established the "most intensive, and comprehensive program of physical and mental training,"24 and to accomplish this objective the methods used are revolutionary when compared to those of peace-time living.25

Strength is an essential attribute to all competitive games. Strength comes after repeated exercise of the muscles and gives added zest to life.26

Posture.—So much significance was attached to the

23Ibid., p. 2. 24Ibid.
25Ibid.
26Brownell and Williams, op. cit., p. 65.
posture of the cadets that the Navy published a pamphlet entitled *Suggestions for the Improvement of Posture for Navy Personnel*. A military bearing is suggested by good posture, and the Navy takes pride in having that reflection of good posture cast upon its officers and enlisted personnel.

Chronic poor posture reduces the efficiency of the vital organs of the abdomen and chest; therefore the efficiency of an otherwise valuable cadet is lowered. The procedures suggested for the improvement of the posture of Naval aviation cadets are these:

1. Appropriate use should be made of visual posture material, such as charts, pictures, posters, and motion pictures.

2. Short and frequent lecture-demonstrations should be provided for men during training. These lectures should emphasize the possible ill effects of poor posture both on the vital organs and on the man's appearance.

3. Men with poor posture must be reminded of this short-coming frequently and given individualized instruction in posture improvement by chief specialists, drill instructors, and other qualified personnel. Complimenting men for good posture encourages them, while occasionally reminding those with poor posture may bring about improvement.

4. Since close and continuous supervision of posture is impossible, the man himself must be responsible in a large measure for his continuous proper military bearing. An appeal can be made to the man's pride in his appearance, indicating to him at the same time that, whether on or off duty, he represents the United State Navy. Moreover, the man should be made to realize that his appearance is an important factor in recommendation for promotion. Good posture indicates good health; it suggests self respect and leadership.
5. Posture training should begin with instruction in the essentials of good military posture. Practical exercises should be prescribed so that skill will be developed in those muscles controlling posture. Each man should practice mastery of the specific posture exercises described later in this chapter.

6. Measurement of posture is important. It reveals progress and at the same time stimulates the man tested by showing him his improvement. Periodically, he should be given a rating or grade by comparing his posture with the various standards of posture shown in figure 4. The letter grade of A, B, C, or D is given him according to the picture he most closely resembles. The plus sign can be added to a lower letter grade when a man’s posture seems to fall between two of the standards.27

The Navy program of physical training was prepared for use during war time and was more drastic than is needed during peace time. The duration of each activity was scheduled for a three-month period, and the day-time class and instruction hours were from 0500 to 2100. Class periods varied from one hour to two and one-half hours, depending upon the activity and the amount of preparation necessary for the individual. The number in class was limited to the platoon of fifty men. Each major sports activity required one head coach and three assistants. Equipment was frequently leased from well-equipped colleges or was requisitioned by the Navy.

Summary of Chapter

The required program in health and physical education which is offered to men students at North Texas State Teachers

College may be elected from twenty-four activity courses, and the student may exclude those physical conditioning activities in which he has no interest.

The duration of the required health and physical education program extends for four periods of eighteen weeks each, and classes are conducted for one hour three days each week.

Men students and teachers are limited in the use of equipment and buildings. The classes are irregular in size, depending on the ability of the student to attend the health and physical education classes after the academic requirements have been met.

Intramurals may be participated in on an entirely voluntary basis, although the activities at North Texas State Teachers College are many and varied in intramural offerings.

In the required physical training program for Naval aviation cadets established standards have been set in four activity groups: practical gymnasium (which also includes tumbling and intramurals), swimming, strength, and posture. Swimming is not only required but also compulsory. Twenty-three body-building activities, or groups of activities, are listed. Each activity group and each major activity within a group has its required aim, objectives, standards, and tests.

The Navy program of physical training was one for use
during war time and was more drastic than is needed during peace time. All activities lasted for a period of three months, and instruction hours were from 0500 to 2100. Class periods varied from one hour to two and one-half hours, depending upon the activity and the amount of preparation necessary for the individual. The number in class was limited to the platoon of fifty men. Each major sports activity required one coach and three assistants. Equipment was frequently leased from well-equipped colleges or was requisitioned by the Navy.
CHAPTER IV

COMPARISONS OF THE TWO PROGRAMS

The Navy has established certain physical training standards for midshipmen, and these same standards must be met by Naval aviation cadets. At North Texas State Teachers College men students are required to elect four semester hours in activity courses specified by the Department of Health and Physical Education and Recreation, but no specific standards are set.

While the Naval aviation cadets are required to participate in the entire activity program, men students at North Texas State Teachers College may elect the activity in which they participate. Certain activities appear in the required group of each program. In Table I a comparison is made which shows that both programs place emphasis on some of the same activities.

The activity offered in both programs has been placed in the first column. The next column is marked with an X if the activity may be elected by Naval aviation cadets, or with an 0 if it may not be elected. The third column is marked in the same manner as either required by the Navy or not required. The fourth column shows that the activity may be elected, or may not be elected, by men students at
TABLE I

The Activities Elected and Required by Navy and the Activities Elected and Required by North Texas State Teachers College

<table>
<thead>
<tr>
<th>Activity Presented</th>
<th>Elected by Navy</th>
<th>Required by Navy</th>
<th>Elected by N.T.S.T.C.</th>
<th>Required by N.T.S.T.C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparatus Exercises</td>
<td>0</td>
<td>X</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Archery</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Athletic Sports</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Badminton</td>
<td>X</td>
<td>X</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bag Punching</td>
<td>0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Basket Ball</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>0</td>
</tr>
<tr>
<td>Boxing</td>
<td>0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Calisthenics</td>
<td>0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Combatives</td>
<td>0</td>
<td>X</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Croquet</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Football</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Golf</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Group Games</td>
<td>0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Handball</td>
<td>0</td>
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<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Hiking</td>
<td>0</td>
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<td>X</td>
</tr>
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<td>Horseshoes</td>
<td>0</td>
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<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Jog Marching</td>
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<td>X</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Life Saving</td>
<td>0</td>
<td>X</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Medicine Ball</td>
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<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Miniature Golf</td>
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<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Obstacle Course</td>
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<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Phys. Fitness Tests</td>
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<td>X</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ping Pong</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Posture Training</td>
<td>0</td>
<td>X</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Relay Exercises</td>
<td>0</td>
<td>X</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Roller Skating</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Rope Climbing</td>
<td>0</td>
<td>X</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rope Skipping</td>
<td>0</td>
<td>X</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Running</td>
<td>0</td>
<td>X</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Social Dancing</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Softball</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Swimming</td>
<td>0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Tag Football</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Tennis</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Track and Field</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Tumbling</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Volley Ball</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Weight Lifting</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Wrestling</td>
<td>0</td>
<td>X</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

33
North Texas State Teachers College. The fifth column shows those activities that are required, or not required, for men students at North Texas State Teachers College.

Those activities that are checked with three X's signify that a high degree of physical fitness results from that activity. Those activities having four X's rate the highest as a means of attaining physical fitness.

Activities from the preceding table show that some have greater frequency of occurrence and, therefore, have greater value as exercises for the improvement of physical fitness. Those activities appearing three times are the following:

<table>
<thead>
<tr>
<th>1. Badminton</th>
<th>7. Group Games</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Basket Ball</td>
<td>8. Softball</td>
</tr>
<tr>
<td>4. Calisthenics</td>
<td>10. Tennis</td>
</tr>
<tr>
<td>5. Football</td>
<td>11. Volley Ball</td>
</tr>
<tr>
<td>6. Golf</td>
<td></td>
</tr>
</tbody>
</table>

A further study of the table shows that there are only two activities, excepting athletic sports, that are both elective and required by both programs and that rank first in the requirements of a physical fitness program. These activities are tumbling and wrestling. The activity of athletic sports is a reclassification of most major sports.

The Navy places a high value on gymnastics and requires those who fail to measure up to the standards set to have additional instruction until they are able to pass the tests required for that class. Gymnastics, as such, are not listed on the required activity courses for men students at North
Texas State Teachers College. The intramural program of the Navy has many objectives, but the one pertinent to this study is the "carry-over" value into life. The program gives a satisfaction from playing games that become recreational activities in later life. The men students at North Texas State Teachers College are not required to participate in any training for intramural contests. Participation is entirely voluntary.

Tumbling is regarded by both the Navy and North Texas State Teachers College as of highest value in promoting physical fitness. Bonnie and Donnie Cotteral encourage tumbling and stunt activities even from early childhood as basis for developing agility and general physical fitness in the college student. However, the tumbling course offered to men students at North Texas State Teachers College has a prerequisite of sophomore standing and is included in the class of gymnastics and tumbling for men.

Rope climbing is a part of the practical gymnasium work of the Naval aviation cadet but has no place in the activity courses offered to men at North Texas State Teachers College.

Swimming is a required part, and a compulsory one, of the Naval aviation cadets' program for acquiring physical fitness.

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fitness. Diving and life saving are also a part of the swimming standard. Men students at North Texas State Teachers College may elect swimming, but diving and life saving classes are not a part of the required physical education program.

In order to strengthen and toughen Naval aviation cadets for the arduous tasks of war, the Navy set up strength standards and tests. Exercises to develop strength and endurance were established and made a required part of the physical training of each cadet. The men students at North Texas State Teachers College have not the selection of such courses in their activity classes.

Posture emphasis was a definite part of the required physical training of all Naval aviation cadets. Improving the posture raises the efficiency of the vital organs of the abdomen and chest, and it also reflects the military bearing that is the pride of the Navy. Men students at North Texas State Teachers College do not have the choice of electing such a course.

The routine of each Naval aviation cadet establishment, or base, was planned to include four basic principles; however, the greatest emphasis was placed upon proper physical conditioning and strength.
CHAPTER V

THE PROPOSED PROGRAM AND SUMMARY

To be in prime physical condition and to keep fit is the ambition of every normal youth. By intensive athletic training a man may become a great sprinter or football player. The wiser aim for most young people is to be in condition all the time for any kind of sport, any kind of work, any task a man may be called upon to perform. The reward of keeping fit is vigorous manhood. At least six qualities should be sought if the full vigor of manhood is to be achieved. One of these is strength of muscle. One may have strength in his muscles without having very big muscles. Quality is more important than quantity. Both may be developed by exercise. Endurance is the second important quality. It is the ability to stay in the game when others become tired and discouraged. A third quality is energy; lack of it means laziness. Critical moments in athletics show the importance also of self-control and will power. And courage, though it may not be needed every day, is, of course, essential. 1

Although the above-mentioned qualities of physical fitness are desired by every normal youth, it is the teachers of health and physical education and training that must provide the conditioning program. At North Texas State Teachers College the program of physical education for men students could be improved by the addition of strength and posture activities. The proposed physical fitness program would require more time than the men students now have for activity classes, more frequent meetings, and definite

1U. S. Public Health Service, Keeping Fit, V. D. Bulletin No. 55, p. 2.
requirements of those games and sports which develop vigorous health. Therefore, the writer presents:

Evaluation of Aims

The Department of Health and Physical Education and Recreation has for its primary aim "under competent supervision to prescribe training necessary for the physical, mental, and moral development of the students."\(^2\)

The Naval aviation cadet training program had for its purpose "to train our pilots not only so they are more skillful and flying technique and knowledge, but in one year to turn them into the air, stronger and tougher, both physically and mentally."\(^3\)

The proposed physical fitness program by the writer has for its aim the promotion of physical development and the maintenance of physical fitness through required activity courses offered to men students at North Texas State Teachers College.

Evaluation of Objectives

The Department of Health and Physical Education and Recreation at North Texas State Teachers College has for its primary objective "the development of physical fitness,

\(^2\)Bulletin, No. 149, op. cit., p. 51.

\(^3\)Physical Fitness Program, op. cit., p. 2.
skills, knowledge and appreciation in participation and instruction in the required activity courses."

The Navy lists seventeen specific objectives designed for the purpose of preparing the Naval aviation cadet to help win the war.

The physical fitness program proposed by the writer has for its objectives the following:

1. To raise standards in health and physical education by a required physical activity training program at North Texas State Teachers College.

2. To maintain a high level of physical fitness in men students at North Texas State Teachers College.

3. To add strength and vigor to the life of the men students after they have left college.

Need for the Proposed Program

The general physical unfitness of 1,400,000 draftees in World War II could have been overcome by the "initiation of a physical fitness program in the colleges and in the various community recreational activities," stated Fred Cobb. Mr. Cobb's program encouraged an "all out" emergency preparation for physical fitness for winning the war.\(^6\)


\(^5\)Statement by Fred Cobb, personal interview.

\(^6\)Ibid.
The writer has proposed a program for acquiring and maintaining a high level of physical fitness for peace-time living which would present a formidable front against any enemy in war time.

The Proposed Program

The specific activity courses which the writer found that should be included in the proposed physical fitness program for men students, and should be required of freshman and sophomore students, are those that ranked high in both the physical training program for Naval aviation cadets and in the health and physical activity courses for men students at North Texas State Teachers College. Those activities are the following:

1. Badminton
2. Basket Ball
3. Boxing
4. Calisthenics
5. Football
6. Golf
7. Group Games
8. Soft Ball
9. Swimming
10. Tennis
11. Tumbling
12. Volley Ball
13. Wrestling

The above-listed activity courses should be presented as a required part of the general plan of raising the physical fitness of the men students, and also these activities should be made prerequisites in the intramural and sports programs participated in during the last two years of college, for the purpose of maintaining physical fitness. The proposed required activity courses have value as a carry-over into later life, both to maintain a high level of
physical fitness and to fulfill a recreational need, according to the standards set by the Navy. In the required physical training for Naval aviation cadets the above-listed activity courses also ranked high in the achievement of physical fitness, agility, strength, and posture.

The writer proposes that the program of physical fitness be presented to the men students as an instructional course with student participation in the organization and direction of the required activity courses.

On the following page the writer has proposed a form to be used as a physical fitness record for men students at North Texas State Teachers College.

Peace-time living does not require the strenuous health conditioning that was required of Naval aviation cadets, but an improvement of the physical fitness of the nation's youth requires that health and physical education be given in required activity courses that will strengthen the vital organs of the body and maintain them. A record of the progress of each student would show the development of strength and posture. Exercises, tests, and progress charts show the individual the progress that he has made in acquiring strength. Brownell stated:

There is only one way to gain strength. You cannot buy it, nor can it be given to you. You must work for it. In both peace and war young persons should plan for sports and the fitness that comes from them. They are
Fig. 3—Proposed physical fitness record for men students
a part of the training schedule and they are a part of living.  

One hour periods in activity classes should be held on a five-day-a-week schedule for the duration of the time required to obtain a degree of Bachelor of Arts, or Science, or Music, in order to gain and maintain a high level of physical fitness.

Swimming, tumbling, and wrestling should be continued throughout the full four years of college life. However, these courses should be offered during the last two years as a conditioning activity to maintain physical fitness. Swimming is not as great a requirement for college life of the men students as it is for Naval aviation cadets.

Swimming presents a means for gaining and maintaining physical fitness that may be carried into later life. Williams has said:

Perhaps more than any other sport, swimming represents the ideal activity. From the physiological point of view, swimming allows for maximum functioning of the large-muscle groups without danger of strain. Moreover, the therapeutic value of water has been recognized for ages.

...Two factors that have hindered the growth of swimming as a school activity are: (1) the cost of pool construction and maintenance; (2) the fear of infection.

...If school costs are determined by the number of hours of use and the educational values to be derived by the community, then swimming pools are readily justified and should be added to secondary school facilities. It is desirable to have pools available for community use when they are not needed by the school. Danger of

7Brownell and Williams, op. cit., p. 28.
infection is negligible with improved means of sterilization and adequate supervision.

Posture correction and control should have a definite and required part on the proposed physical fitness program for men students at North Texas State Teachers College. Classes in posture correction should be held frequently—as records and charts show the need. Adequate records would reveal the need for training in a specific activity.

L. A. Woods, Texas State Superintendent of Public Instruction, emphasized the importance of posture training and suggested three tests for good posture: mechanical freedom, adherence to the anatomical fact, and the establishment of better functioning of one or more organs. Woods further states:

Good posture is that position which makes it possible for the body to function best with regard to the work being done, health of the individual, and personal appearance. It is readily seen from this that it is not a question of appearance, or wholly functionary, but a composite. Poise and grace will ordinarily accompany efficient action. It is necessary to realize this in order to derive the values ascribed to good posture; namely, hygienic, economic, social, aesthetic, and spiritual.

The number of students in each class should be limited to fifty, which is the largest group one instructor could manage adequately. The size of class might vary with the

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type of instruction; for instance, larger groups could be instructed in calisthenics than in wrestling.

The teaching staff should be required to handle those activity classes in which they have had special training. Coaches should direct and supervise only the particular sport, or sports, in which they had definite training— for greater efficiency in attaining a physical fitness standard.

Coaches should devote their time to coaching and should not be required to teach academic subjects. Match games and tournaments would require coaches to spend much time away from academic classes. Also the duties of the coach would be divided, a situation which would lessen his efficiency as a coach.

Freshman students should be required to participate and receive instruction in activities that produce physical fitness and that may not be their particular interest.  

Summary of the Proposed Program

1. The proposed physical fitness program aims to promote physical development and maintain physical fitness.

2. The proposed physical fitness program has for its objectives the raising of standards in health and physical education by a required physical activity training program, maintaining a high level of physical fitness, and adding

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10 Statement by Theron J. Fouts, personal interview.
strength and vigor to the life of the men students after they leave college.

3. The activity courses proposed to be required for four years are the following:

- Badminton
- Basket Ball
- Boxing
- Calisthenics
- Football
- Golf
- Group Games
- Soft Ball
- Swimming
- Tennis
- Tumbling
- Volley Ball
- Wrestling

4. The proposed program should include training in attaining and maintaining strength.

5. The proposed program should include posture correction and control classes, tests, and measurements.

6. Swimming, tumbling, and wrestling should be required throughout the full four years of college life.

7. One hour periods in activity classes should be held on a five-day-a-week schedule for the four years of college.

8. Instructors in health and physical education should teach only those classes in which they had special training.

9. Classes should be limited to fifty students.

10. Coaches should not be required to teach academic subjects.

Boxing, for V-5 Instructor's School, U. S. Navy Pre-Flight School, Chapel Hill, N. C. (Mimeographed).

Brownell, Clifford Lee, and Williams, Jesse Fiering, Training for Living, New York, American Book Company, 1943.


Bulletin of North Texas State Teachers College, No. 149, Denton, Texas, July, 1943.


Gymnastics and Tumbling, for V-5 Instructor's School, U. S. Navy Pre-Flight School, Chapel Hill, N. C. (Mimeographed).

Hamilton, T. J., Division of Aviation Training, Leaflet No. 61874. (Mimeographed).


Physical Training Manual, Annapolis, Maryland, United States Institute, 1942.

Syllabus: Physical Fitness Program for Naval Aviation Pre-Flight Schools, No. 81,883. (Mimeographed).


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