

AN EVALUATION OF THE "HOW TO STUDY"
INSTRUCTION GIVEN TO FRESHMEN
AFROTC CADETS AT VIRGINIA
POLYTECHNIC INSTITUTE
BLACKSBURG, VIRGINIA

by

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CHAPTER I

THE PROBLEM, THE NEED FOR RESEARCH ON THE PROBLEM,
ITS PURPOSE, SCOPE AND LIMITATIONS

The Problem: Each year, about five hundred freshmen enter the Air Force ROTC program from many walks of life. Many fail. Others succeed very well. To aid all cadets in getting a proper academic start at VPI, the Air Force ROTC instructors give them formal training in the techniques of effective studying. The problem as set forth was to evaluate the observable results of this training, and also to attempt to determine the degree to which Corps life aided or hindered the cadets in their study efforts, in both their freshman and sophomore years.

The Need for Research on the Problem: The writer is now in his fourth year at VPI, having been an assistant professor of Air Science, Detachment 875, Air Force ROTC, during this period. The writer has had the opportunity of teaching both Freshman and Sophomore classes. Of particular interest has been the block of instruction given to Air Force ROTC freshman cadets called "How to study". This block of instruction had been included in the ROTC curriculum three years ago, and in noting the variation in student's grades and the drop out rate, particularly during the freshman year, the writer became vitally interested

in the entire question of student study habits. Two questions arose: first, was the block of instruction on "How to Study" really effective, and second, did Corps life aid or hinder the individual cadets in their academic pursuits? The writer decided to attempt to find answers to these questions by utilizing personal observation and other appropriate techniques for the collection of empirical data.

The block of instruction on "How to Study" was patterned in great measure after a system used in Air Force Schools at the college level called the "three R" system, which stands for "Reconnaissance, Read and Recall". Each cadet was provided with an official, yet easy to read manual¹ in which a definite, positive, workable plan for studying was outlined for him. Each Air Force ROTC freshman instructor spent two or more classroom contact hours explaining the need for a "plan" of study, illustrating how to make out a daily time schedule, and lecturing on the overall need for a balanced pattern of activities during one's college career.

1. Studying to Learn, Air Command and Staff College, Air University, Maxwell AFB, Alabama, 1955.

Such specific items as the need for adequate dieting, sleep, and athletics were expounded upon². Principles of learning³ were explained in considerable detail, and stress was placed upon the psychological and educational factors that learning does not take place in some mysterious and inexplicable fashion; neither is it a passive process of absorption that operates automatically when you are exposed to material to be learned.

Each cadet was provided with a mimeographed chart which outlined, on a seven day a week basis, the hours from 0600 in the morning, through 2300 hours in the evening. He was asked to fill out this chart based upon his particular curriculum, and to seek individual counsel with his AFROTC instructor, should he desire to do so. Many did this. Many did not. Some cadets reacted favorably, while others did not.

The Purpose: It was in recognition of the above stated observation (made over a three year period) that the writer undertook this analysis of the block of instruction heretofore referenced, in order to attempt to determine its relative effectiveness.

2. See Appendix "A".

3. Ibid.

The scope of this analysis, or study, was as follows:

1. Determining how many entering freshmen in AFROTC had received formal training in study techniques.

2. Determining the extent to which the suggestions and methods presented were followed by freshmen and sophomore AFROTC cadets.

3. Evaluating the extent to which the "How to Study" instruction was of value to the cadets who actually followed the program during their freshman and sophomore years.

4. Attempting to determine the degree to which Corps life aided or hindered the plan on "How to Study", in the cadet's freshman and sophomore years. Note: The writer elected to pursue this item, as it has appeared to be a controversial point on campus since his arrival at VPI in 1958. There have been many "unofficial" statements of opinion made supporting one or the other position, i.e., that the Corps routine aided or hindered individual cadets at this institution. The writer felt it appropriate to include this item in the interests of eliciting from the cadets themselves a representative, and objective response. Your attention is invited to the questionnaire percentage analysis, Chapter Three, this thesis.

5. Determining whether or not the two or more hours allotted to "How to Study" should be continued, revised, or eliminated, based upon available evidence.

The limitation of this study was that it was restricted to Air Force ROTC Cadets in their freshman and sophomore years in what is called the Basic Course. No Junior or Senior cadets were involved, nor were any members of the civilian student body included.

Vocabulary: The "Three R" system of study is one which is advocated by the Air University at Maxwell Air Force Base, Alabama. The terms, in sequence, are:

1. Reconnaissance: A preliminary **survey** of the material to be learned to determine its general plan and nature, but not to get details.

2. Read: Air University research indicates that effective reading involves activity. Although our eyes are active - they read every word on the page - all too frequently our minds are relaxed. The result is that we read a paragraph word for word and then find that we have no idea of what we have read. The keystone of effective reading is action. The extent to which your mind grapples with each point covered in your reading is the extent to which you learn what you are reading. Read for ideas, not words. Know the objective, then actively seek said objective.

3. Recall: The third step in our method of study is recall. By this we mean rephrasing in your own words what you have read. When you finish reading a paragraph, a topic, or a chapter, look away from the book, and say in

your own words what the author has been saying. When you outline verbally or in writing the material you have read, and put the substance of it in your own words, you have achieved one of the essentials of learning: organization. Practice of the "recall" step will give you a ready, reliable, and helpful device for evaluating the effectiveness of your study to the present, for determining whether further study on a given topic is necessary, and for indicating areas in which additional study would be most profitable.

The importance of the "recall" step can hardly be overemphasized. Actual laboratory experiments⁴ have shown that students who study a specified amount of time, whether fifteen minutes or five hours, generally make better test scores if they spend at least half their total study time in reflective thinking. That means if you have an hour to study a topic, you will do well to spend about thirty minutes in the reconnaissance and reading steps, and at least thirty minutes in the recall step.

Basic Course. The first two years of the Air Force ROTC curriculum, comprising three quarters in the freshman year and three quarters in the sophomore year. Successful

4. Studying to Learn, Air Command and Staff College, Air University, Maxwell Air Force Base, Alabama, 1955, p. 7.

completion of six quarters enables each cadet to compete for the Advanced Course, which comprise the Junior and Senior years.

Air University: The largest school in existence for the professional training of Air Force officers. Established at the College and also Graduate level at Maxwell AF Base, Alabama. All fields of academics are pursued there, ranging from the geo-political to special weapons and nuclear warfare. It is primarily for Senior officers of the Air Force.

Effectiveness Reports: An efficiency report submitted once per quarter on each ROTC cadet, by his immediate superior within the Corps.

CHAPTER II
METHODS OF APPROACH TO THE PROBLEM
AND ANTICIPATED OUTCOME

Methods of Approach: The study was conducted in the following manner: a representative survey of fifty Air Force Basic Course cadets was undertaken. Educators as well as personnel planners point out that the Questionnaire⁵ is an excellent technique for obtaining specific as well as generalized information. Therefore, the fifty cadets were asked to fill out an appropriate questionnaire⁶ which had been carefully designed to cover such areas as personnel data, Corps data, extra-curricular activities, and study habits.

Twenty-five of these cadets were freshmen, known as Group A. Twenty-five were Sophomores, known as Group B. They will remain anonymous. All were voluntary participants.

Their personnel records were screened by the writer to assure an awareness of the history of each participant, but

5. J. Jeffrey Auer and Henry Lee Ewbank, Handbook for Discussion Leaders (New York: Harper and Brothers, 1954), pp. 28-29.

6. See Appendix "B".

not with a view towards correlating their questionnaire answers with known performance, either in the classroom or in the Corps of Cadets.

Since they were aware of this procedure, it was expected that they would respond in a completely objective and informative manner.

All questionnaires were carefully analyzed and responses entered and discussed in essay form in Chapter IV, summary and evaluation of research.

The responses to the questionnaires of both Group A and Group B were shown statistically, utilizing a percentage format, tabulated and written in essay form for precise reader reference to any specific question of interest.

Anticipated Outcome: It was anticipated that the above stated treatment of the data obtained would indicate whether or not the block of instruction entitled "How to Study" was beneficial, and to what degree, and also whether such block should be continued, revised, or eliminated, based on this current data.

It was further anticipated that the narrative answers and resultant percentages derived from said questionnaires would indicate to a great extent whether or not membership in the Corps of Cadets at the Virginia Polytechnic Institute actually aids or hinders individual cadets in their academic pursuits, and further, would indicate an answer as to why, in either instance.

CHAPTER III
EVIDENCE DIRECTED TOWARD A SOLUTION
OF THE PROBLEM

Collection of Data: The first step directed towards a solution of the problem was to distribute fifty questionnaires to Group A, 25 freshmen, and Group B, 25 sophomores. The writer explained the purpose of his research, then assured that all fifty cadets involved were volunteers.

No time limit was established for submission of the questionnaire. All were back to the writer, completely filled out, within three academic weeks, which testifies as to the splendid cooperation the writer received, throughout this **research**.

Personnel records, grading trends and effectiveness reports of all participants were screened by the writer.

Collation and presentation of Data: The responses of the questionnaires of Group A were analyzed first. Then those of Group B. Finally, both Group A and Group B were grouped together for a total percentage analysis.

The writer presents at this point a reprint of the questionnaire, showing three columns of responses to each item on the questionnaire. Each question is stated, and response by Group, by number, and resultant percentages,

positive or negative, are shown. Column 1 is Group A. Column 2 is Group B, and Column 3 is Group A and B combined.

SURVEY QUESTIONNAIRE - THESIS DATA

Personal History:

1. Name: To remain anonymous except to the writer.

2. Home Address: (By geographic area)

| <u>Group A (25)</u> | | <u>Group B (25)</u> | |
|----------------------|-------|----------------------|-------|
| 20 from Virginia | 80% | 15 from Virginia | 60% |
| 1 from West Virginia | 4% | 2 from West Virginia | 8% |
| 2 from Tennessee | 8% | 3 from New Jersey | 12% |
| 1 from Florida | 4% | 1 from Connecticut | 4% |
| 1 from New York | 4% | 4 from New York | 16% |
| | <hr/> | | <hr/> |
| | 100% | | 100% |

Totals
Groups A and B (50)

| | |
|----------------------|-------|
| 35 from Virginia | 70% |
| 3 from West Virginia | 6% |
| 2 from Tennessee | 4% |
| 3 from New Jersey | 6% |
| 1 from Connecticut | 2% |
| 5 from New York | 10% |
| | <hr/> |
| | 100% |

Seven out of fifty states of the Union were represented in these Groups. Eighteen percent were from Northern States,

while eighty-two percent were from Southern states, and the majority, seventy percent, were from Virginia. No Western States were represented.

3. High School: To remain anonymous in keeping with question one, above.

4. Rank standing in graduating class at High School:

| <u>Group A</u> | <u>Group B</u> |
|----------------------|----------------------|
| 20 in upper 1/3: 80% | 19 in upper 1/3: 76% |
| 1 in middle 1/3: 4% | 3 in middle 1/3: 12% |
| 4 in lower 1/3: 16% | 3 in lower 1/3: 12% |
| <hr/> | <hr/> |
| 100% | 100% |

Group A and B

| |
|----------------------|
| 39 in upper 1/3: 78% |
| 4 in middle 1/3: 8% |
| 7 in lower 1/3: 14% |
| <hr/> |
| 100% |

5. When entered V.P.I. By examination? Yes _____ NO _____

| <u>Group A</u> | <u>Group B</u> |
|------------------|------------------|
| 25 in 1960: 100% | 25 in 1959: 100% |
| 19 by exam: 76% | 22 by exam: 88% |
| 6 no exam: 24% | 3 no exam: 12% |

All entering freshmen at V.P.I. are admitted by examination since Academic Year 1960.

Group A and B

25/1959 - 25/1960: 100%

41 by exam: 82%

9 no exam: 18%

6. Major Studies. Minor Studies.

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|------------------|--------------------|-----------------------------|
| <u>Major:</u> | <u>Major:</u> | |
| 18 in Engr: 72% | 20 in Engr.: 80% | 11 major areas of study. |
| 3 in Bus.: 12% | 1 in Pub. Ad.: 4% | |
| 1 in Agr.: 4% | 1 in Sociology: 4% | |
| 2 in Math: 8% | 1 in Zoology: 4% | |
| 1 in Biol: 4% | 1 in Physics: 4% | |
| ----- 100% | 1 in Agr.: 4% | |
| | ----- 100% | |
| <u>Minor:</u> | <u>Minor:</u> | |
| 19 unknown: 76% | 8 unknown: 32% | 6 minor areas of study |
| 3 in Math: 12% | 3 in Hist.: 12% | |
| 2 in Physics: 8% | 2 in Psych: 8% | |
| 1 in Hist.: 4% | 5 in Math: 20% | |
| ----- 100% | 3 in Engl.: 12% | |
| | 3 in Physics: 12% | |
| | 1 in Lib.Arts: 4% | |
| | ----- 100% | |

7. Number of quarter hours carried per quarter:

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|--------------------|--------------------|----------------------|
| 6 at 17 hrs.: 24% | 1 at 16 hrs.: 4% | |
| 14 at 18 hrs.: 56% | 6 at 17 hrs.: 24% | Range 16 to 19 |
| 5 at 19 hrs.: 20% | 13 at 18 hrs.: 52% | hours per quar- |
| 100% | 5 at 19 hrs.: 20% | ter. |
| | 100% | |

8. QCA 1st year _____ 2nd year _____

| <u>Group A</u> | <u>Group B</u> |
|---------------------------------|---------------------------------|
| 1st year range .60 thru 2.89 | 1st year range .61 thru 2.26 |
| 11 over 1.00: 44% | 14 above 1.00: 56% |
| 10 under 1.00: 40% | 9 under 1.00: 36% |
| 4 over 2.00: 16% | 2 over 2.00: 8% |
| 100% | 100% |

Group A and B

| |
|---------------------------------|
| 1st year range .60 thru 2.89 |
| 25 above 1.00: 50% |
| 19 under 1.00: 38% |
| 6 over 2.00: 12% |
| 100% |

Group A
2nd year: None

Group B
2nd year
range .68 thru 2.26
15 above 1.00: 60%
6 under 1.00: 24%
4 over 2.00: 16%

100%

Group A and B
2nd year
range .68 thru 2.26

Note the upward trend of the grade pattern. There is reflected here a gain of one student over a 1.00, a loss of 3 which had been below a 1.00, and a gain of 2 students above a 2.00 QCA.

9. Age when you entered V.P.I.

Group A
9 were 17 yrs. old: 36%
12 were 18 yrs. old: 48%
4 were 19 yrs. old: 16%

100%

Group B
1 was 16 yrs. old: 4%
12 were 17 yrs. old: 48%
11 were 18 yrs. old: 44%
1 was 19 yrs. old: 4%

100%

Group A and B
Statistical mean age -
17.6 years.

10. Do you live in town or the barracks?

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|---------------------|----------------------|----------------------|
| 24 in barracks: 96% | 25 in barracks: 100% | 49 in barracks: 98% |
| 1 in town: 4% | | 1 in town: 2% |
| ----- | | ----- |
| 100% | | 100% |

Corps Data:

1. When did you first enter Corps ranks?

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|-----------------------|-----------------------|----------------------|
| 25 in Sept.1960: 100% | 25 in Sept.1959: 100% | 25 in 1959 |
| | | 25 in 1960 |
| | | ----- |
| | | 50 Total |

2. What was your initial reaction?

| <u>Group A</u> | <u>Group B</u> |
|-------------------------|-------------------------------|
| <u>Positive:</u> | <u>Positive:</u> |
| Liked it. | Decided to enjoy it. |
| Satisfied. Expected it. | Exactly what was expected. |
| Very challenging. | Wanted it and liked it. |
| Quick adaption. | Pride in belonging. |
| Proud to take part. | Enjoyed military atmosphere. |
| Had planned on it. | Good training. |
| | Liked the planned activities. |

Group A and B

See Chapter IV for summary
statements.

Group A

Negative:

Didn't like the yelling.
Amused surprise.
Startling change in life.
Shocked. Emotionally upset.
Bewildered.
Hated the "Rat" system.
Acute homesickness.
Not enough sleep.
Too many trivial things.

3. What did you like the most about it?

Group A

The planned activities.
The precision.
Being in military system.
The parades and the band.
The uniforms.
The sense of unity.
The Corps spirit.
The organization.

Group B

Negative:

Wished he had gone elsewhere.
Afraid and bewildered.
Confused.
Worse than expected.
Insecurity and homesickness.
Not enough sleep.
Too demanding.
Unsympathetic upperclassmen.

Group B

The enforced study hours.
Efficiency and orderliness.
Positive discipline.
Settled me down.
The Group dynamics.
The drill and precision.
Helped me find myself.
The actual fellowship

Group A and B

See Chapter IV for summary
statements.

4. What did you dislike the most about it?

Group A

Group B

Poor upperclass attitude.

The 0600-0800 formations.

The shouting.

Some gross upperclassmen.

Little time to relax.

Being jumped on.

Emotional upheaval.

Being shouted at for nothing.

Rank usurpation.

Loss of study time.

The favoritism of the few.

The absolute conformity.

The degrading "rat" system.

Group A and B

See Chapter IV for summary

statements.

5. Do you feel that Corps life hindered your study habits?

Group A

Group B

Group A and B

9 said yes: 36%

6 said yes: 24%

15 said yes: 30%

16 said no: 64%

19 said no: 76%

35 said no: 70%

100%

100%

50

100%

Taking the total group, well over two-thirds, or seventy percent, indicated that Corps life had not hindered their study habits. Of interest in the question following, are the reasons given by the remaining thirty percent who stated that Corps life did hinder their study habits. These reasons are valid and real to the young men involved, therefore, cannot

be arbitrarily dismissed as maladjustment cases, but rather should be examined objectively by the reader.

6. If yes, in what manner?

Group A

Group B

Took too much time.

Overtired; could not study.

Could not sleep well.

Too much "spit and polish"

Could not concentrate.

Time consuming trivia.

Useless chores, daily.

Could not relax.

Gave a subordinate outlook.

Enjoyed military so much I let my studies slide.

Cut severely into reading time.

Emotionally upset; uneasy.

Damaging efficiency ratings.

Group A and B

See Chapter IV, summary statements.

The last comment under Group B was the most exceptional answer to this question received from the fifty participants. This particular individual has now raised his QCA to above a 1.00, and was recently accepted for an Advanced Course AFROTC contract by the Professor of Air Science at V.P.I.

7. Do you feel that Corps life helped your study habits?

Yes _____ No _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|------------------|------------------|------------------------------|
| 19 said yes: 76% | 18 said yes: 72% | 37 said yes: 74% |
| 6 said no: 24% | 7 said no: 28% | 13 said no: 26% |
| <hr/> | <hr/> | <hr/> |
| 100% | 100% | 50 100% |

It will be noted that there is a gain of four percent in the total group stating that Corps life helped their study habits. This does not agree with the figures of thirty and seventy percent cited in the previous question. The gain is attributed to the fact that four percent of the total had dual responses, in that they indicated yes to both the question of Corps life helping or hindering, at different times during the first two academic years.

8. If yes, in what manner?

| <u>Group A</u> | <u>Group B</u> |
|----------------------------|--|
| Restricted me to campus | Proper study hours. |
| Regular hours. | <u>Made</u> me work. |
| Call to Quarters. | Taught me to use time. |
| Organized time. | The organized activities. |
| Forced me to work. | Call to Quarters. |
| Passes and leaves limited. | Enforced regulations. |
| | It challenged me to do my utmost, which I might not otherwise have done. |

Group A and B

See Chapter IV, summary statements.

9. Did your participation in Corps activities have any other effect on your study habits, positive or negative, that you would care to indicate?

Group A

Group B

Group A and B

25 answered no: 100%

25 answered no: 100%

50 answered no:100%

10. Do you have any recommendations concerning Corps activities that might aid other incoming Freshmen in their efforts to study?

Group A

Group B

Don't get behind.

Study weak subjects most.

Put studies first, but cooperate with Corps.

Coordinate Corps and studies.

Sleep from taps to reveille.

Don't take the "Rat" system personally.

Do not get depressed.

Concentrate.

Keep sense of humor.

Give it a real try.

Study while sitting tours.

Make grades first; Corps second, but do both.

Learn to use the Library.

Put first things first.

Don't join too many clubs.

Don't fight the system.

Group A and B

The writer was impressed with these recommendations. Here, can be found some hint of the "esprit-de-Corps" which exists at V.P.I. Examined individually, each recommendation is good, and would benefit any new cadet.

Extra-Curricula Activities:

1. Do you engage in any extra-curricula activities?

Yes _____ No _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|------------------|------------------|----------------------|
| 19 said yes: 76% | 20 said yes: 80% | 39 said yes: 78% |
| 6 said no: 24% | 5 said no: 20% | 11 said no: 22% |
| _____ | _____ | _____ |
| 100% | 100% | 100% |

2. How many hours per week do you devote to these activities?

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|-----------------|-----------------|---|
| 2 thru 25 hours | 2 thru 20 hours | Minimum of 2 hours Maximum of 25 hours |

3. Do you have a hobby or hobbies? Yes _____ No _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|------------------|------------------|----------------------|
| 24 said yes: 96% | 23 said yes: 92% | 47 said yes: 94% |
| 1 said no: 4% | 2 said no: 8% | 3 said no: 6% |
| _____ | _____ | _____ |
| 100% | 100% | 50 100% |

The combined group statistic is amply borne out by researchers in the field of middle and late adolescent psychology. According to Cruze⁷ interest in hobbies during late

7. Wendell W. Cruze, Adolescent Psychology and Development, pp. 183-186.

adolescence is greatly intensified and is definitely valuable in personality formation and the development of occupational and other long range interests.

4. Do these hobbies coincide with your occupational interests? Yes _____ No _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|------------------|------------------|----------------------|
| 18 said yes: 72% | 15 said yes: 60% | 33 said yes: 66% |
| 7 said no: 28% | 10 said no: 40% | 17 said no: 34% |
| _____ | _____ | _____ |
| 100% | 100% | 100% |

5. Do these hobbies lend themselves to your study interests?

Yes _____ No _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|------------------|------------------|----------------------|
| 13 said yes: 52% | 12 said yes: 48% | 25 said yes: 50% |
| 12 said no: 48% | 13 said no: 52% | 25 said no: 50% |
| _____ | _____ | _____ |
| 100% | 100% | 50 100% |

Study Habits:

1. Prior to coming to V.P.I., had you ever received any formal training in study techniques? Yes _____ No _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|-----------------|-----------------|----------------------|
| 4 said yes: 16% | 1 said yes: 4% | 5 said yes: 10% |
| 21 said no: 84% | 24 said no: 96% | 45 said no: 90% |
| _____ | _____ | _____ |
| 100% | 100% | 50 100% |

2. If yes, please indicate the scope of your instruction.

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|---|--|--|
| High School home-room teacher. Two hours. | High School reading classes, use of library. | It is significant that only 5 out of 50 students ever received any guidance in "how to study" in all the High Schools represented. |
| English classes, Junior High School. Two hours. | Military prep school, part of orientation; approximately three hours, plus individual counselling. | |

3. Did you receive the "How to Study" lectures in your Freshman year in Air Force ROTC? Yes _____ No _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|-------------------|-------------------|----------------------|
| 25 said yes: 100% | 25 said yes: 100% | 50 said yes: 100% |

4. How would you describe your reaction as to whether this type of instruction assisted you in your efforts to study effectively? a. Not at **all** _____, b. Some _____, c. Very much _____, d. Made the difference between passing and failing _____, e. Other: (Explain) _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|----------------|----------------|----------------------|
| a. 1: 4% | a. 4: 16% | a. 5: 10% |
| b. 18: 72% | b. 17: 68% | b. 35: 70% |
| c. 5: 20% | c. 4: 16% | c. 9: 18% |
| d. 1: 4% | d. 0: 0% | d. 1: 2% |
| e. 0: 0% | e. 0: 0% | e. 0: 0% |
| 50 100% | 50 100% | 50 100% |

5. Were you provided with printed handouts in the form of daily activity charts by your Air Force instructor?

Yes _____ No _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|-------------------|-------------------|----------------------|
| 25 said yes: 100% | 25 said yes: 100% | 50 said yes: 100% |

6. Did you fill out this daily activity chart and follow it? a. Yes _____, b. No _____, c. Tried but did not keep it up _____, d. Had no time to think about it _____, e. Used my own method _____, f. Other: (explain) _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|----------------|----------------|----------------------|
| a. 11: 44% | a. 9: 36% | a. 20: 40% |
| b. 3: 12% | b. 4: 16% | b. 7: 14% |
| c. 5: 20% | c. 6: 24% | c. 11: 22% |
| d. 1: 4% | d. 0: 0% | d. 1: 2% |
| e. 5: 20% | e. 6: 24% | e. 11: 22% |
| f. 0: 0% | f. 0: 0% | f. 0: 0% |
| _____ | _____ | _____ |
| 25 100% | 25 100% | 50 100% |

7. Did you find that budgeting each hour of each day assisted you in your efforts to study? a. Yes _____, b. No _____, c. Some _____, d. Very much _____, Other: (explain)

| <u>Group A</u> | | <u>Group B</u> | | <u>Group A and B</u> | |
|----------------|---------|----------------|---------|----------------------|---------|
| a. | 12: 48% | a. | 9: 36% | a. | 21: 42% |
| b. | 2: 8% | b. | 3: 12% | b. | 5: 10% |
| c. | 8: 32% | c. | 12: 48% | c. | 20: 40% |
| d. | 3: 12% | d. | 1: 4% | d. | 4: 8% |
| e. | 0: 0% | e. | 0: 0% | e. | 0: 0% |
| <hr/> | | <hr/> | | <hr/> | |
| | 25 100% | | 25 100% | | 50 100% |

8. Did you follow our recommendations as to the "Three R" system of study, i.e., Reconnaissance, Read, and Recall?

a. Yes _____, b. No _____, c. Tried but did not maintain _____, d. Found it very helpful _____, e. Found it of no help at all _____, f. Other _____

| <u>Group A</u> | | <u>Group B</u> | | <u>Group A and B</u> | |
|----------------|---------|----------------|---------|----------------------|---------|
| a. | 15: 60% | a. | 18: 72% | a. | 33: 66% |
| b. | 4: 16% | b. | 3: 12% | b. | 7: 14% |
| c. | 6: 24% | c. | 4: 16% | c. | 10: 20% |
| d. | 12: 45% | d. | 17: 68% | d. | 29: 58% |
| e. | 0: 0% | e. | 1: 4% | e. | 1: 2% |
| f. | 0: 0% | f. | 0: 0% | f. | 0: 0% |
| <hr/> | | <hr/> | | <hr/> | |
| | 25 100% | | 25 100% | | 50 100% |

Group A. Item d is a continuation of item a. Twelve of the fifteen answering yes found the "Three R" system very helpful. Three did not specify.

Group B. Seventeen out of eighteen found the "Three R" system very helpful.

9. Do you now follow a plan of study? Yes _____ No _____

| <u>Group A</u> | <u>Group B</u> | |
|------------------|------------------|------------------|
| 21 said yes: 84% | 21 said yes: 84% | 42 said yes: 84% |
| 4 said no: 16% | 4 said no: 16% | 8 said no: 16% |
| _____ | _____ | _____ |
| 100% | 100% | 100% |

10. Do you have any recommendations for us to include any additional material in our "How to Study" block which might aid future entering Freshmen?

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|--|--|----------------------|
| Take what your Air Force ROTC instructor says seriously. | Take speed reading courses. | |
| Fill out the schedule and follow it. | Recommend speech courses. | |
| Do <u>not</u> join too many clubs. | Stress use of time. | |
| Study during the day as much as possible. | Encourage them to actually follow the 3R system. | |
| More instruction on the use of the Library. | Squadrons should take more interest in the study program. | |
| Use spare time wisely. | Delay it until the freshmen realize the need for it. | |
| Stress more on note-taking. | Stress importance of knowing poorest subjects, early in the school year. | |

Group B (cont'd)

Stress the art of "listening".

As in question number ten under Corps Data, it will be noted that the responses to this question were made with sincerity and objectivity, as these individual cadets see the problem. Also, their efforts to aid future cadets is again manifest.

11. Do you feel that the time allotted to this "How to Study" block by the AFROTC was worthwhile? Yes _____

No _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|------------------|------------------|----------------------|
| 23 said yes: 92% | 22 said yes: 88% | 45 said yes: 90% |
| 2 said no: 8% | 3 said no: 12% | 5 said no: 10% |
| — | — | — |
| 25 | 25 | 50 |
| 100% | 100% | 100% |

12. Do you feel that we should continue to offer this particular block of instruction? Yes _____ No _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|-------------------|------------------|----------------------|
| 25 said yes: 100% | 22 said yes: 88% | 47 said yes: 94% |
| | 3 said no: 12% | 3 said no: 6% |
| | — | — |
| | 100% | 50 |
| | | 100% |

13. What are your favorite academic subjects?

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|----------------|----------------|--|
| Mathematics | Engineering | Combined, fifteen distinct subject areas were selected |
| English | Mathematics | |

| <u>Group A</u> (Cont'd) | <u>Group B</u> (Cont'd) | <u>Group A and B</u> (Cont'd) |
|----------------------------|----------------------------|--|
| Graphics | Shakespeare | by the fifty participants, as "favorite" subjects. |
| The Sciences | AF ROTC | |
| Zoology | Psychology | |
| Agriculture | Agronomy | |
| Chemistry | Sociology | |
| History | English | |
| Western Civ. | | |

14. How much time do you actually spend on studying per subject per week?

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|----------------------|----------------------|----------------------|
| range: | range: | range: |
| 1 hr. per class hr. | 1 hr. per class hr. | 1 through 8 hrs. |
| 6 hrs. per class hr. | 8 hrs. per class hr. | per class hour. |

15. Do you plan to continue in your present curriculum?

Yes _____ No _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|------------------|------------------|----------------------|
| 20 said yes: 80% | 23 said yes: 92% | 43 said yes: 86% |
| 5 said no: 20% | 2 said no: 8% | 7 said no: 14% |
| _____ | _____ | _____ |
| 100% | 100% | 100% |

16. Do you have, at this time, any study problems which we might be able to help you resolve? Yes _____ No _____ Other _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|--------------------|--------------------|----------------------|
| 6 said yes: 24% | 4 said yes: 16% | 10 said yes: 20% |
| 19 said no: 76% | 21 said no: 84% | 40 said no: 80% |
| — | — | — |
| 25 100% | 25 100% | 50 100% |

The writer intends to follow up on these ten cases reporting continued difficulty in how to study. Should he be unable to assist the ten at this time, he will refer them to other trained personnel or campus agencies active in guidance, counselling, and student life. None indicated difficulty of a major nature, therefore, effort towards further guidance should be successful.

17. You are one of fifty Air Force cadets being asked for an evaluation of this program, and your comments will become an anonymous part of a percentage analysis in a thesis. Do you object to this? Yes _____ No _____

| <u>Group A</u> | <u>Group B</u> | <u>Group A and B</u> |
|------------------|------------------|----------------------|
| 25 said no: 100% | 25 said no: 100% | 50 said no: 100% |

Thank you for your cooperation and participation.

* * * * *

This questionnaire, which was divided into four distinct sections containing a total of forty-two questions with multiple alternate answers to each question, revealed some interesting and in some areas, significant responses.

These shall be discussed in Chapter IV, following, with appropriate inferences drawn therefrom.

We in the Air Force are vitally interested in all cadets who come within our jurisdiction. It is incumbent upon every officer serving as an instructor to assure his best performance daily, to maintain college level instructional techniques and to realize his full responsibility to each cadet as an individual, and to the Corps in its entirety.

This thought trend among Air Force ROTC programs is based primarily upon the long range goals of why we have an ROTC program in the first place.

As skillfully pointed out by Lyons and Masland⁸, in recent years, the educational experience of ROTC undergraduates constitutes the pre-professional education of military officers in somewhat the same way that the liberal arts curriculum provides the pre-professional education of lawyers and doctors.

This concept is acceptable only if every effort is expended upon the part of each assigned officer instructor.

8. Gene M. Lyons and John W. Masland, Education and Military Leadership, pp. 218-219, and 232.

Unfortunately, they⁹ further point out the record of the ROTC programs in this respect is uneven. In many units outstanding officers have been assigned and have won the respect of students and faculty alike. However, in others, officers of lesser capabilities have done great harm.

In recognition of this, the personnel of Detachment 875 have attempted to maintain the highest degree of educational standards on campus. They shall continue to strive for this in several ways, among the key methods of which is the pursuit of an "In-service-Education Program"¹⁰, in which certain Faculty members of both V.P.I. and Radford College are invited to give suitable lectures to all instructor personnel in the fields of Education and Psychology, and on a continuing basis. Faculty cooperation in this effort has been most heartening and has been greatly appreciated by all of the Air Force instructors.

9. Ibid.

10. See Appendix "C".

CHAPTER IV

SUMMARY AND EVALUATION OF RESEARCH

Summary: This particular research was based upon observations made by the writer over a three-year period, with the gathering of empirical data utilizing six months of this time. It stemmed from an interest in two particular areas of cadet life of concern to the writer.

These were:

1. Whether or not the "How to Study" block of instruction given by the Air Force ROTC officers¹¹ was effective, and whether it should be continued, revised, or eliminated, based upon available evidence.

2. Attempting to determine the degree to which Corps life aided or hindered the cadets in their efforts to study in both their freshman and sophomores years.

In seeking the answers to the above, the questionnaire which was given to fifty cadets proved to be of great value.

Utilizing the statistical percentages referenced in Chapter III, several interesting results became apparent.

The survey revealed that 78% of the fifty cadets now in V.P.I. had been in the upper third of their High School

11. See Appendix "D".

or Military School graduating class, and that 82% had to take a qualifying entrance examination before being selected and admitted to V.P.I. The probability of their being successful in college was rated as good, based upon these high entrance qualifications, by the Director of Admissions, this Institution.

Also, it was revealed that eleven Major areas of study were being attempted by this particular group, and six minor areas. Of significance here was the relatively low percentage (24%) of Group A who had any firm idea of what to minor in, and yet in Group B, the second year cadets indicated that 68% had selected a positive choice of minor. This would seem to testify to the efforts of the individual cadets' course advisors.

All participants were young men, with an average age of 17.6 years. All but one lived in the barracks. This was considered significant, in that the writer was seeking an opinion as to the effect of Corps life on study habits.

The initial reaction pattern of both Groups to Corps life indicated that although there was some definite dislike and discontent expressed, no mention was made of any questionable practices, malice, or any suggestion that the discipline was harsh, as military training can sometimes be. One can also trace adolescent emotional problems which are not severe, but are nevertheless present. Key example

here is that at least eight cadets complained of acute homesickness and a feeling of genuine insecurity during their first quarter at V.P.I. This is not to their discredit, indeed, they are to be commended for recognizing it and admitting it.

The cadets' comments as to what they liked the most and the least about Corps life were revealing. The majority, or 74%, gave positive answers, while 26% gave negative responses. Typically, the precision, uniforms, the planned activities and the famous V.P.I. Band appealed to most, while others complained emphatically about being shouted at continuously, indicating also, some evidences of poor upperclass attitude and shirking of responsibility, and inability to relax.

Of significance is that in response to the question of Corps life hindering study habits, 70% stated, with clarity, that membership in the Corps with its attendant activities did not hinder them in their study habits, while 30% stated, with equal clarity, that it did.

Now one must pause to reflect upon this, for although the majority indicated a favorable attitude towards the Corps activities, we cannot summarily dismiss the complaints of the 30%, since their reasons were valid and real to them. The writer feels and recommends that it is incumbent upon all cadets of the V.P.I. Corps of Cadets who are in a position of command and authority to practice the principles

of leadership for which selected, and to actively seek irradiation of any dissident factors adversely affecting any cadet. It is further incumbent upon the Tactical Officers within the ROTC Department to see that this is done. The writer feels that with diligent application, the 70% referenced heretofore could be raised to 90%, or higher. Certainly, it is a worthwhile and profitable goal.

Seventy-four percent stated that they were definitely helped in their academic pursuits by being in the Corps, primarily due to the pattern of organized activities, i.e., having a specific time and place to accomplish daily tasks, including enforced study hours.

In respect to the variation between 70% stating that Corps activities did not hinder them in their academic pursuits, and the 74% stating they were definitely aided, the writer reports that four percent gave dual responses, in that they had been aided or somewhat hindered at different times, during their first two years. This, the writer felt, was possible.

Regarding the course of instruction given by the AFROTC on "How to Study", the survey revealed that the greater majority favored its continuation, and further,

added some worthwhile recommendations as to what else to include, or emphasize, for the benefit of new Freshmen coming in, in September 1961.

For example, we will now undertake to stress the techniques of note-taking perhaps more fully, also, will stress the importance of learning the art of "listening".

The responses received regarding the battery of questions on the possible value of the "How to Study" block were encouraging. Eighty-four percent of the participants who started out using our recommended system are still actively using it in their study programs, while 16% are not.

Ninety percent of all participants found the "How to Study" block of some value, and indicated confidence in the system. Ninety-four percent felt that it should positively be continued, whether or not they themselves were using it.

Lastly, those cadets who indicated that they did in fact have current study problems will be counselled upon their return to V.P.I. in September, 1961. There were ten cadets who so stated.

Evaluation and Conclusion: That most cadets benefited from this program of instruction is borne out in part by an examination of the 1960-61 mid-term winter

grades¹² for Freshman cadets. Significantly, all Air Force freshman cadets had a QCA of 1.00 or better, which means a grade index of 1.00 or better.

This research was rewarding to the writer, in that it enabled an objective analysis of a representative Group of cadets in two specific areas, with the intent of further improving our educational efforts on their behalf. Further, it enabled an inquiry as to the effects of military life on their individual study habits.

The writer returns, once again, to the questions originally proposed, which were: (1) Is the "How to Study" block of instruction worthwhile and should it be continued, revised, or eliminated? and; (2) Does membership in the Corps of Cadets aid or hinder the cadets in their academic pursuits?

From the evidence obtained in this survey we may infer that the particular block of instruction in question was well received, and that it should not be eliminated or revised to any great extent, and that it should be continued by the AFROTC Department in future years.

Secondly, from the evidence obtained in this survey we may also infer that despite a new and perhaps strange

12. See Appendix "E".

military atmosphere in which much is required of each individual cadet, the greater percentage of cadets were aided in their academic pursuits by being members thereof.

In conclusion, it may be stated that the AFROTC instructor personnel were rewarded by the realization that every cadet who had given serious consideration to the study approach known in the Air Force as the "three R" system, showed evidence of having increased his abilities to actually put into usage, the stated techniques of the system, and that he had profited therefrom.

Within their respective curricula, some cadets progressed more rapidly, some more slowly; but it was felt that, without exception, all had attained a greater appreciation of the art of studying and the principles of learning.

Thus, as the study was ended, it seemed that whatever merit it might have lay in its possibility of provoking a more intelligent approach to the entire question of study habits, on the part of each cadet.

ACKNOWLEDGEMENTS

The author wishes to express his gratitude to Howard Homer of the Department of Education, Radford College, for the excellent inspiration and stimulation provided in class, where much of the professional knowledge necessary for the fulfillment of this thesis was acquired.

He wishes to express his appreciation to Marion P. Shelley, Director of Admissions, Radford College, for his valuable assistance as course advisor, during the preceding three year period, and for the professional assistance and guidance received in the writing of this thesis.

The author also wishes to express his appreciation to his Commander, Ray W. Koontz, Jr., whose kind permission and cooperation enabled the pursuance of a Master of Science Degree at Radford College during off-duty hours.

The author wishes especially to thank the fifty members of the Air Force ROTC Basic Course, without whose voluntary cooperation and participation this study could not have been completed.

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APPENDIX "A"

OFFICIAL COPY OF LETTER OF INSTRUCTION
TO FRESHMEN AIR FORCE ROTC CADETS

Detachment 875
Air Force Reserve Officers Training Corps (AU)
United States Air Force
Department of Air Science
Virginia Polytechnic Institute
Blacksburg, Virginia

"Studying in college requires certain working skills which are as essential to your success as knowing how to hold a hammer is essential to the successful carpenter. Just as the athlete must develop coordinated skills, so must the college student practice those skills which lead to academic success." (Quoted from How to Improve Your Study Habits by LeCount and Bamman.)

As entering Air Science I students, you will be given instruction in class on How to Study. Here is a brief resume of some of the important aspects of Correct Study.

Anything worthwhile requires planning. A cake requires a recipe, a house requires a blueprint, the expansion of a city requires a plan. Develop your plan, blueprint, or schedule for study NOW.

No one will encourage you to study when you are away from home. Be alert to the usual pitfalls of many students. Don't put off studying until tomorrow. NOW IS THE TIME FOR WORK. Don't say to yourself, "I'll start to work after college or after I'm 30". Life begins in college. Youth is the period of achievement. Remember the men who became famous before the age of 25. Approximately 45% of college students drop out before graduation NOT because of lack of ability but because of the inability of the student to learn how to study effectively. The very fact that you have come this far is evidence that YOU HAVE ABILITY.

There are several good methods of Effective Study Plans. Your AFROTC instructor has given one which will be of help in your military subjects and academic subjects.

Health Habits - Divide your day up into thirds; 1/3 for sleep, 1/3 for work, 1/3 for miscellaneous activities. To keep alert mentally you must be "alert" physically. Get physical exercise in some form. Balance your program and balance your diet. Be aware of fresh air needs and proper lighting when you study.

Time Scheduling - Make out a daily time schedule and stick to it. Revise it if needed. Don't waste precious daytime study periods and leave all your studying for the evening. Plan your work and work your plan. No man plans to be a failure, but men who do not plan often fail.

Note Taking - There are several systems for taking notes which will work for you. One of the better methods is to make two columns, Facts vs Principles, as explained in class. Review your notes as soon after class as possible and expand if necessary. Allow plenty of space to take notes in your notebook. Think of what is being said and paraphrase as you write. Don't merely copy what you hear. Learn to listen! Reason through what is being said. Associate it with known experiences or facts. Keep tuned in with the speaker. Listen for what is said, not HOW it is said. Learn how to listen so you can listen to learn. Think effectively while taking notes. Get the entire picture. Search and identify the essential parts. Fit the essential parts into their proper place. Henry Ford said, "Thinking is the hardest work there is, which is the probable reason why so few engage in it."

Study Habits - Don't just sit down and start reading! Know the purpose and nature of the assignment. Start work without delay. Use some logical method of attack. Try the suggested Three R method. Reconnaissance; go over the topical breakdown of the chapter, read the summary first, if there is one, to get the picture, scan each page to get the main ideas, formulate thought questions which should be answered in the assignment. Read: Think as you read and register what is being presented, tie in with the reconnaissance step. Recall: Rephrase what you have read in your own words and recall verbally, ask yourself if you really understand what was presented, spend about half of your time on the recall step. Laboratory tests have proved that if the student will spend about half his study

time in reflective thinking, he will be able to make a better score on tests than if he just spends all of his time on the reading steps. Give the recall step a fair chance. The Three R step has been tried and proved. Have a plan, this is a good one.

Classroom - Be alert, think, listen, and participate.

Examinations - Start to prepare for an exam now, the first week of school; on all subjects. Five minutes review every day is far better than one hour review every two weeks. We forget rapidly very soon after we have learned, but we remember quickly if we review before we have time to forget. Review previous quizzes and tests to see where you fell down and strive to correct this on the next exam. Anticipate test questions. Study things not known. In taking an objective exam answer easy questions first and don't change your first choice unless you are very sure (first responses are generally right). Examinations are given to measure progress of your work, induce you to work harder or to keep you your good "A", and force you to organize your knowledge. Don't depend on cramming. As you take an exam, keep moving and don't bog down on any one question. When the momentum is up keep it there. Rest briefly during an exam about every 15 or 20 minutes when there is a logical break in the exam construction, i.e., between true-false, multiple choice, and matching sections. READ each question slowly at least two times. Many mistakes are made by not reading words like NOT, ALWAYS, SELDOM, NEVER, etc. Remember the instructor who writes the exam was once a student!

Reading Habits - Is your reading speed and comprehension better than 8th grade? Probably not for the entering freshman generally reads at an 8th grade level. This can be improved with very little effort. Get a book about reading improvement. Basically you should try to be a phrase reader, not word by word. You should not say the words silently to yourself, but recognize the meaning of the word without saying it. For example, when you see car, you don't say to yourself, "Car". Adjust your speed to the subject matter; read a newspaper or magazine faster than a text book.

Concentration Habits - Avoid distractions and THINK about what you are doing. Have the same "Time, place and station". Settle your social problems or at least dismiss them for the study time. To get worries solved, seek competent help from those who should know, those who are trained to help you NOT the guy on the street.

This is your life. A college education is a big investment of money and time. Instructors, buildings, and books are available. The rest is up to you - the student.

Good Luck!

APPENDIX "B"

FORM OF QUESTIONNAIRE EMPLOYED IN TAKING
A REPRESENTATIVE SAMPLE OF
BASIC COURSE AFROTC CADETS

SURVEY QUESTIONNAIRE - THESIS DATA

Personal History:

1. Name: _____
(first) (mi) (last)
2. Home Address: _____
3. High School: _____
4. Rank standing in graduating class at High School:

5. When entered in VPI _____. By examination: Yes _____
year No _____
6. Major studies: _____. Minor: _____
7. Number of quarter hours carried per quarter: _____
8. QCA _____ 1st year _____ 2nd year _____
9. Age when you entered VPI: _____
10. Do you live in town or in the barracks? _____

Corps Data:

1. When did you first enter Corps ranks? _____
2. What was your initial reaction? _____
3. What did you like the most about it?
4. What did you dislike the most about it?
5. Do you feel that Corps life hindered your study habits?
Yes _____ No _____
6. If you do, in what manner?

7. Do you feel the Corps life helped your study habits?

Yes _____ No _____

8. If yes, in what manner?

9. Did your participation in Corps activities have any other effect on your study habits, positive or negative, that you would care to indicate?

10. Do you have any recommendations concerning Corps activities that might aid other incoming Freshmen in their efforts to study?

Extra-Curricula Activities:

1. Do you engage in any extra-curricula activities?

Yes _____ No _____

2. How many hours per week do you devote to these activities? _____

3. Do you have a hobby or hobbies? Yes _____ No _____

4. Do these hobbies coincide with your occupational interests? Yes _____ No _____

5. Do these hobbies lend themselves to your study interests? Yes _____ No _____

Study Habits:

1. Prior to coming to VPI, had you every any formal training in study techniques? Yes _____ No _____

2. If yes, please indicate the scope of your instruction.

3. Did you receive the "How to Study" lectures in your Freshman year in AFROTC? Yes _____ No _____

4. How would you describe your reaction as to whether this type of instruction assisted you in your efforts to study effectively? Not at all _____, Some _____, Very much _____, Made the difference between passing and failing _____, Other (explain)

5. Were you provided with printed handouts in the form of daily activity charts by your Air Force instructor?
Yes _____ No _____
6. Did you fill out this daily activity chart and follow it? Yes _____, No _____, or tried but did not keep it up _____, Used my own method _____, Other: _____
7. Did you find that budgeting each hour of each day assisted you in your efforts to study? Yes _____, No _____, Some _____, Very much _____, Other: _____
8. Did you follow our recommendations as to the three R system of study, i.e., Reconnaissance, Read, and Recall? Yes _____, No _____, Tried but did not maintain _____, Found it very helpful _____, Found it of no help at all _____, Other: _____
9. Do you now follow a plan of study? Yes _____ No _____
10. Do you have any recommendations for us to include any additional material in our "How to Study" block which might aid future entering Freshmen?
11. Do you feel that the time allotted to this "How to Study" block by the AFROTC was worthwhile? Yes _____ No _____
To this extent: _____
12. Do you feel that we should continue to offer this particular block of instruction? Yes _____ No _____
13. What are your favorite academic subjects: _____
14. How much time do you actually spend on studying per subject per week? _____
15. Do you plan to continue in your present curriculum?
Yes _____ No _____
16. Do you have, at this time, any study problems which we might be able to help you resolve? Yes _____ No _____
17. You are one of fifty Air Force cadets being asked for an evaluation of this program, and your comments will become an anonymous part of a percentage analysis in a thesis. Do you object to this? Yes _____ No _____

Thank you for your cooperation and participation.

EMERY E. KELLSTROM
Major, USAF
AS2 Instructor, VPI

APPENDIX "C"

AIR FORCE ROTC IN-SERVICE EDUCATION PROGRAM

Academic Year 1960-61

AFROTC Detachment 875
Air University
United States Air Force
Virginia Polytechnic Institute
Blacksburg, Virginia

IN-SERVICE EDUCATION PROGRAM
Academic Year 1960-61

- I MISSION: The Mission of the In-Service Education Program is to improve professional competence of the personnel of this detachment by having a planned program.
- II OBJECTIVES: This program is designed to accomplish its Mission by causing each instructor to:
1. Improve his classroom techniques,
 2. Improve his knowledge of related areas of education,
 3. Maintain a current knowledge of educational and Air Force developments, and
 4. Be knowledgeable of the local civilian educational environment.
- III EDUCATIONAL PROGRAM:
- A. Intra-Classroom Visitation
1. Occurrence: At least twice each month by each instructor.
 2. Purpose: To promote mutual improvement of the visiting and visited instructors.
 3. Remarks: A visitation form will be written for each class visited and the form will be discussed with the instructor visited. See DOI 50-2 for procedures and detailed instructions.
- B. Group Meetings
1. Occurrence: As required.
 2. Purpose: To improve instruction techniques, instructor's knowledge of related areas of

education, and to maintain a current knowledge of recent education and Air Force developments.

- C. Individual Instructor Meetings with Director of Education
 - 1. Occurrence: Once a month or any time when there is a need for discussion of problems or questions.
 - 2. Purpose: To check, review and discuss lesson plans, course material, or any problems encountered in the course of instruction.
- D. Lectures by Faculty Members and/or Guest Speakers
 - 1. Occurrence: Whenever faculty members and/or guest speakers can be scheduled.
 - 2. Purpose: To broaden detachment personnel's scope in related fields of education, especially at Virginia Polytechnic Institute.
 - 3. Remarks: Note attached proposed schedule.
- E. Rotations of Instructors in Air Science 1, 2, 3, and 4
 - 1. Occurrence: Whenever possible and advantageous, and whenever rotation will serve to improve the quality of a given block of instruction. When regularly scheduled instructors are absent.
 - 2. Purpose: To insure effective utilization of instructors with backgrounds and experiences in specific fields and to provide substitutes for authorized absences.
- F. Orientation of New Personnel
 - 1. Occurrence: As soon as possible after arrival of new personnel.
 - 2. Purpose: To give newly assigned personnel systematic introduction to detachment policies and procedures and important allied college functions and personnel.
 - 3. Remarks: See DOI 35-4 for orientation checklist.

IN-SERVICE EDUCATION PROGRAM
Det. 875
1960 - 1961

Proposed Schedule of Guest Speakers

| <u>DATE</u> | <u>SUBJECT</u> | <u>SPEAKER</u> |
|-------------|-------------------------------------|-----------------|
| Oct | Philosophy of Education | Prof. Kinnear |
| Nov | Educational Psychology | Prof. Smyth |
| Dec | Guidance | Dr. Cato |
| Jan | Human Relations in the Classroom | Prof. Merrill |
| Feb | Educational Measurements | Prof. Bradfield |
| Mar | Educational Sociology | Prof. Bowman |
| Apr | Teaching Responsibilities | Prof. Carpenter |
| May | Vocabulary Building | Prof. Harrison |

APPENDIX "D"

OFFICER PERSONNEL OF DETACHMENT 875

AF ROTC, V.P.I.

The following list identifies the Officer personnel of Det. 875 who are involved either directly or indirectly in the "How to Study" block of instruction. The Professor of Air Science and the instructors of the Junior and Senior Cadets do not give the actual instruction, however, they are extremely active in personnel counselling of many Basic Course cadets, and in that capacity, serve as a vital source in the realization of this educational project.

Professor of Air Science:

COLONEL RAY W. KOONTZ, JR., USAF. Graduate of the Virginia Polytechnic Institute.

Assistant Professors of Air Science:

MAJOR EMERY E. KELLSTROM, USAF. Sophomore instructor. Graduate of University of Maryland.

MAJOR NAAMAN L. MYERS, USAF. Director of Education and Training, also Junior instructor. Graduate of West Virginia Wesleyan College.

MAJOR RANDOLPH C. HEARD, USAF. Junior instructor. Graduate of United States Military Academy, West Point, New York.

CAPTAIN JAMES H. REEVES, USAF. Senior instructor. Graduate of United States Military Academy, West Point, New York

CAPTAIN JAMES R. BAINES, USAF. Sophomore instructor. Graduate of the Virginia Polytechnic Institute.

CAPTAIN PHILLIP E. APPLEBY, USAF. Freshman instructor. Graduate of University of North Carolina.

CAPTAIN ROBERT D. JONES, USAF. Freshman instructor. Graduate of the United States Naval Academy, Annapolis, Maryland.

APPENDIX "E"

CADET FRESHMEN MID-TERM GRADES

FALL QUARTER 1960-61

* From Official College records.

APPENDIX "E"

CADET FRESHMEN MID-TERM GRADES
FALL QUARTER 1960-61

| <u>Unit</u> | <u>Hours Attempted</u> | <u>Hours Passed</u> | <u>Quality Credits</u> | <u>Quality Credit Average</u> |
|------------------------|------------------------|---------------------|------------------------|-------------------------------|
| Squadron A | 750 | 639 | 976 | 1.30 |
| Squadron B | 763 | 608 | 890 | 1.17 |
| Squadron C | 547 | 445 | 645 | 1.18 |
| Squadron D | 626 | 511 | 666 | 1.07 |
| First Group Total | 2686 | 2203 | 3177 | 1.18 |
| ----- | | | | |
| Company E | 814 | 634 | 691 | 0.85 |
| Company F | 725 | 588 | 637 | 0.88 |
| Company G | 728 | 565 | 646 | 0.89 |
| Second Battalion Total | 2267 | 1787 | 1974 | 0.871 |
| ----- | | | | |
| Company I | 762 | 729 | 730 | 0.958 |
| Company K | 736 | 570 | 639 | 0.866 |
| Company L | 842 | 581 | 789 | 0.935 |
| Company M | 703 | 607 | 671 | 0.956 |
| Third Battalion Total | 3043 | 2487 | 2829 | 0.93 |
| ----- | | | | |
| Squadron N | 514 | 426 | 742 | 1.44 |
| Squadron O | 509 | 429 | 602 | 1.18 |
| Squadron S | 560 | 466 | 661 | 1.18 |
| Fourth Group Total | 1583 | 1321 | 2005 | 1.27 |
| ----- | | | | |
| Band Company | 803 | 672 | 911 | 1.14 |
| ----- | | | | |

* Note that all Freshmen in the Air Force Squadrons, which are Squadrons A, B, C, D, N, O, and S, have above a 1.00 QCA.

ABSTRACT

A study was made in an effort to seek an evaluation of the "How to Study" instruction given to Freshmen Air Force ROTC Cadets at VPI, and also to determine the degree to which Corps life aided or hindered these Cadets in their academic pursuits in both their freshman and sophomore years.

Utilizing two techniques, continuous observation and a questionnaire, a representative survey of fifty Air Force Basic Course Cadets was undertaken. They were asked to complete the questionnaire in a completely objective manner. As agreed, they will remain anonymous. Twenty-five were freshmen and were labeled as Group A. Twenty-five were sophomores and labeled Group B. All fifty responded in a voluntary and cooperative manner. Both positive and negative opinions were received.

The writer screened the cadet's personnel records for background information, Grade Indexes and grading trends, to assure an awareness of the history of each participant.

Statistical percentage results to the questionnaire are shown in Chapter III, this thesis, and appropriate comments pertaining to the summary, evaluation and conclusion are contained in Chapter IV. This study indicated, in

general, that the block of instruction on "How to Study" was of positive benefit to at least seventy per cent of the cadets, and that, despite problems of adjustment and being compelled to work, study, and live in a new and difficult military environment, Corps membership and activity actually aided the greater majority in their academic efforts as freshmen and sophomores.

Also, to be completely objective, it was recognized that a certain percentage of cadets were adversely affected in their academic pursuits by Corps activities, and that this study indicated further research in that particular area would be beneficial, and perhaps result in an even finer Cadet Corps.