

**THE DEVELOPMENT OF METHODS OF STUDY  
COURSES IN STATE COLLEGES AND UNIVERSITIES**

**by**

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# THE DEVELOPMENT OF METHODS OF STUDY COURSES IN STATE COLLEGES AND UNIVERSITIES

## CHAPTER I

### Introduction

The increased enrollments in the colleges and universities of the United States from the few thousands at the time of the Revolutionary War to the 1,500,000 (25) or more at the present time represent not only a tremendous increase in numbers but a great increase in the percentage of people of college age who have been and are actually enrolled. It is reasonable to believe that one result of this increase has been the inclusion, in the larger numbers over the later years, of many students who have been and are deficient in either prior training or in native ability or both. Many of our youth have never had to study because they could pass their elementary and high school courses with little or no regular study. Others, of little native ability, studied hard and well and were able to pass their pre-college courses but lack the ability to pass college and university courses, at least at the usual rate of progress, yet they have enrolled in many colleges and universities.

To a very considerable extent, in the opinion of this writer, the Progressive Education Movement, as it has been



variously interpreted, has brought about a decrease in both training in and willingness to study. While extensive claims have been made for increased interest and effort on the parts of the pupils by use of this movement in our schools, it is believed that enthusiasm strongly colored many of these claims. In addition, many teachers talked long and loudly about the merits of this movement when it is doubtful if they, themselves, were familiar with more than its superficial aspects. This movement has been a splendid and popular cloak behind which lazy and incompetent teachers could hide with smugness or even aggressive boastfulness. Whether these people were "progressive educators" or not, they were able to use a movement which had not provided for their exclusion.

An apparent candidate for the place in the educational sun which has been held by the so-called Progressive Education Movement is the so-called "inspirational education movement." Under this so-called plan, neither pupils nor teachers make advance preparation for classes. The material taken up in any class is arrived at by "inspiration" and the more-or-less common agreement of the members of the class. Such a procedure is labeled as "democratic," whether it accomplishes anything in the development of learning or even of democracy or not.

Another development which the writer has viewed with

some concern was the National Association for the Prevention of Study Away from School (22). It had its office in Chicago and its purpose was apparent from its name. The writer tried to contact this association by letter and found that, according to the Post Office, they no longer maintained an office. In the opinion of this writer, the number of newspaper references which indicate that parents are becoming impatient with the public schools in their communities and are beginning to force programs of study and of discipline on their public schools is a hopeful sign. That this should be necessary indicates a regrettable condition in the schools of those communities at least. Of course, there still appear occasional newspaper and magazine articles favorable to the abolition of all study outside of school.

The ruling made by numerous public school administrators that yearly promotions of pupils will be automatic unless the cases are most exceptional has militated against the acquisition of habits of study by pupils because they did not have to study nor was there any way in which the pupils who were lazy or uninterested could be made to study. Since many parents have no interest in the amount of studying which their children do, there has been no pressure from any source on many pupils to study, either out of the classroom or inside of it.

The excitement caused by World War II, both before and during its existence, was inimical to the formation of habits of study or to any sustained studying. The ability of secondary school pupils to obtain large sums of money as wages, during and since the War, has made study, or even attendance at school, to be held as dull, unprofitable, or representing an economic loss of money and a social loss of "rights" by individual pupils if effort is made to return them to school under compulsory school attendance laws.

All of these factors, singly and in combinations, have brought about -- or at least have not overcome -- a not unnatural lack of interest in school attendance and an unwillingness to study. Too many college and university students want the benefits of a college degree without being willing to earn them. This is not, of course, an entirely new situation.

The so-called "G.I. Bill of Rights," managed by the United States Veterans Administration, has introduced into the colleges and universities of the nation many students who completed their high school courses during the exciting months immediately preceding or following the declaration of the war emergency. Expecting to enlist or to be drafted, their interest in school work was usually most perfunctory and unsatisfactory as a foundation for college

work. As college students, some of these young people have made the extra effort required to overcome this handicap. Others have not been able to make the adjustments needed for overcoming their handicaps. The "G.I. Bill of Rights" has also brought into colleges and universities many high school graduates who would not have registered in any college or university without it. Many of these have become excellent college material. Others have dropped out quickly through lack of ability, unwillingness to work, or "the low pay." Still others have been saved to the institutions by a course in methods of study or similar courses, and have become completely acceptable students and "shown a profit" to themselves and to the institutions attended. Still others might easily have been saved to the institutions if courses in methods of study had been available to them or if they had taken such courses early enough in their college enrollments (12).

Some college and universities have held and are holding strongly opposite views on the importance of methods of study, or similar courses. Others, of course, have taken intermediate positions of all degrees between the two. Each can, to an acceptable extent to numerous persons, justify the position taken. One extreme position is that of rendering all reasonably possible aid to a

student to enable him, or her, to meet the scholastic requirements of the institution. In addition, such programs may, and sometimes do give initial guidance to students who drop out of college in discovering the kinds of jobs in which they have interests and sufficient abilities for success instead of just cutting them adrift on their own resources. The other extreme position is that of cutting off the registration of any student who cannot or will not meet the scholastic requirements which have been established. Such students may, of course, register elsewhere in institutions in which the scholastic standards are less severe; or, even though they discontinue their formal educations and enter employment, they do not necessarily become failures in their lives or even cases of "lost leadership." "With all sorts of educational opportunities (25), aside from college, open to them, young people can pursue education, if they have the initiative, as far as they can go and as fast as they can without going to college at all." Many of the most successful men and women of the present day have never been enrolled in any college.

At the present time, enrollment in methods of study courses, partially compulsory for selected students and voluntary for others, is probably larger than it has ever been, just as enrollment in colleges and universities is.

Whether such courses are highly valuable in their purposes or are unjustified at the college level is debated among college administrators. Whether they are valuable to the students saved to the colleges, at least for a time, who otherwise would be dropped from the rolls, is also debated. The present study may add a little to the fund of information available on this subject.

## CHAPTER II

### Historical Development of Plans for Improvement of Study at Various School Levels

Human nature, having been ever-resistant to effort, especially long-continued effort whose results are not immediately apparent and whose consequences are not rewarded by applause, has -- in all eras -- been opposed to studying and the learning which follows effective study. Certainly there have been in all eras, individuals who studied and who liked to study, but these have been a small minority. Such studying as was done by the others was forced upon them by various methods, sometimes of leadership, sometimes by coercive measures. The association between study and painfulness is more than coincidental.

Never before has the need for study been greater than it is today, although there have been equally critical political and social periods in the past. The patterns of the future cannot at present be predicted, and society needs more individuals who (22) can give up outworn or incorrect ideas, attitudes, and skills. Important thought-requiring issues are constantly arising, and habitual reactions cannot now furnish adequate bases for civilized living. To participate in civilized living,

one's actions must be the result of reason and not the products of the emotional processes alone or in large part. It is well known that far too many human actions are based on the emotions rather than on the rational make-up of the individual.

It should be the aim of education to provide each individual with an understanding of the emotional self so that, when rationality is needed, one will be able to think things out in logical sequence and not depend upon his emotional patterns or prejudices in place of knowledge of right or wrong on any issue that may confront him, whether it is of a personal or a public nature. This is particularly true in a democratic society. The basic principles of democracy demand that its citizens shall be able to think effectively, since the sovereignty of such a government is vested in its people.

With the ever-present and cleverly disguised propaganda devices which are increasing in number and basic effectiveness, it behooves education to concern itself with propaganda and to turn out students who can think effectively in order that they may evaluate this propaganda for what it is. Only in this way can the powers which have as their chief aim the destruction of the democratic way of life be circumvented. The school years are the years in which good foundations for later thoughtfulness



should be laid by establishing in each child good thinking and good study habits commensurate with his age. It is upon this foundation that our democracy will get its effective and thoughtful future citizens who are to uphold the sovereignty of the government --- through their ability to think clearly and act effectively on the problems of the day. The problem-solving ability of each person is important. Good problem-solving cannot come from anything but good thinking and good study habits.

The schools cannot be expected to turn out finished and fully mature products, but they should be expected to turn out products that have solid foundations which can be built upon by industry, business, or higher education. They should at least turn out products that are prepared to continue learning and studying after they leave school. The pupil should be taught how to study and to think so that he will be able to gather the facts he may need when he needs them and be able to use them in his problem-solving.

The idea (22) of directed learning as an aid to teaching grew out of the need for educational reorganization that followed the great increase in the school population during the latter half of the last century and the first half of the present one. With the great increases in numbers of pupils came a further need of a better

understanding of individual differences among the large groups of pupils who were not motivated by family tradition or personal ambition.

About 1908, Thorndike and Search (22) published their program of directed study for the individualization of instruction under the then relatively new school conditions. The idea of individualized instruction was not new even at that time, except for the numbers of pupils involved. The national change from an agricultural economy to an industrial economy had begun to break the family control, reduce the size of the family, produce less family unity, replace the home with tenements and, in far too many cases, to produce a condition of the home being more like a hotel than a family sanctuary. In addition, penny-wise school administrations had made school classes larger and larger, and the teachers could not know even their pupils' names.

Since Thorndike and Search's (22) publication, numerous additional plans for the improvement of education have been advanced under the name of supervised study. All of these plans have within their frameworks the idea of individual differences and the need for allowing the pupil to work at the rate of progress which is most effective for him. Some of these plans have been effective for their founders alone. Some were effective for many different schools until they became formalized or until their

proponents lost interest in them. Some were very little, if any, better than the programs that they sought to replace. Some may have been plans for attracting personal attention to their instigators.

In any school in which supervised study is to play an important part, the plan should not be left by each teacher for the teacher of the next grade to put into effect. Far too many pupils have found that the schools have not prepared them for anything. The job of teaching them to think and to study had been left for the next class or grade to do, and the job was never done. A supervised study program should be begun in the first years of the school. This is the time to lay the foundation of intellectual curiosity. Each succeeding class can then build on this foundation.

In any good supervised study program, the assignment and the study of the assignment by the pupil are advanced to a position of primary importance. The teachers must realize, if the plan is to be effective, that this is a great opportunity to stimulate interest, suggest methods of study, and give clear explanations of what is to be expected from the lesson. If such a program is followed, it is possible for most misdirection of effort by the pupils to be avoided. The teacher would be working with the pupils and actually supervising their study rather

than working for them or at them.

"Supervised study (23) is that plan of school procedure whereby each pupil is so adequately instructed and directed in methods of studying that his daily preparation will progress under conditions most favorable to the hygienic, economical, and self-reliant career of intellectual endeavor."

One of the first programs offered as a plan of supervised study was the study hall. This was in many cases just a large classroom set aside for the pupils not in classes during that period, and called a study hall. It would usually hold fifty to one hundred pupils. The pupils would be gathered in this room for all of their free class periods for a supposed study period. The teacher's duties in this study hall were those of taking the roll and of maintaining as much order as possible. The attitudes of many of the pupils were often those of mischief or defiance. Under all except the most favorable conditions, these so-called study halls could not be classed as being supervised study periods. No teacher could teach such a large group, with their mixed abilities and varied subjects. It was not possible for one teacher or even two to give help to more than a small percentage of the pupils in a study hall in an hour or less of time with the group. About the only thing that could be said in

favor of the study hall was that it was better than the study conditions found in many of the homes when practically all study was done at home and was the responsibility of the pupil. A study hall, under proper and reasonable provisions, can be valuable when the number of pupils in each study hall is small enough that discipline is not a problem and the number of pupils per teacher is such that the teacher may give to each pupil the amount of help that is desirable.

The Batavia Plan of Supervised Study (23) was one of the first organized moves to individualize pupil instruction. In this system one needed a plant that had over-size classrooms. These rooms would usually hold from fifty to seventy pupils who were to be taught by two teachers. The pupils were divided into groups of about equal ability. While one group was having recitation with one teacher, the other group was being supervised in its study by the second teacher. When all were studying, both teachers assisted the individual pupils. This plan proved to be very successful for a considerable number of schools and was quite unsatisfactory in others. It was used, with or without modifications, in a large number of school systems throughout the eastern part of the country over several decades.

The Study Coach Plan (23) is a form of the Batavia

Plan. Under this plan, one teacher in each school devoted all of his or her time to the slow pupils or those who needed assistance for any reason. The classes for this type of teaching might be called a kind of opportunity or make-up class. All pupils who were having scholastic trouble were referred to the study coach during the day. Individually, they might call upon him whenever they needed help or they might be required to work under his supervision for a certain number of hours a week beyond the regular school day because of unsatisfactory work habits or classroom production.

The Dalton Plan (36) is a contract plan in which the student contracts to do a certain assignment. It is a plan for individual instruction under which the pupil is allowed to work at his or her own speed in fulfillment of this contract. Each contract has a minimum and a maximum amount of work to be done and the child knows that he is to do the amount for which he has signed. The pupil (15) knows that he cannot move on to a new contract in any of his subjects until all of the work in his present contract has been completed. This plan (36) is an attempt to make school as nearly true to life as possible. In this way, the pupils have real experiences in learning-while-doing. "It is no longer school--it is life." "The children move from subject to subject as they see fit, or

remain with any one subject as long as their interest holds for that subject. They keep a record of their own progress on the unit. The plan-makers do not like testing just to be testing, but check-ups are used and can be given individually and, if the results meet with the teacher's approval, the pupil is allowed to sign for a new contract - providing that all of his other subject contracts have been completed.

The Conference Plan (23) was, generally, of two kinds (a) slated conference periods or (b) conferences by appointment. Under these plans, all children were given the chance to correct any weakness which they may have had in their school work.

In the slated conference period plan, the teachers were asked by the administration to remain after the regular daily schedule was over for a half-hour or hour to confer with those pupils who were having trouble in their subjects. These conferences were held to be of value not only to the pupils but to the teachers. They aided the teachers in finding out more about their pupils and their difficulties so that they might teach better in their classes. They gave the pupils a chance to know their teachers and to receive aid from the teachers teaching the subjects that were giving them trouble. These conferences were often friendly, informal, and personal. From the

more able and interested teachers, the pupils obtained counseling in many fields and lessons in mental and social hygiene.

The conference by appointment was frequently looked upon by the pupils as a form of punishment because the appointments were usually made for the pupils to report at a certain place and to a certain person at a certain time -- usually after the other pupils had left the school. These conferences for assistance were often confused, at least beforehand, with appointments for punishment. Frequently, even the best of them were felt to be impositions by the less ambitious and less intelligent pupils.

The Divided-Period Plan (23) had its origin in the overcrowded classrooms of the time, much as the Batavia Plan was conceived. Under this plan, the time in each classroom was divided between recitation and study. The class hour was to be spent, approximately, half in recitation and half in study. Careful or even overelaborate directions for study were often a part of this plan. The better teachers gave much of these periods to the assistance of the less able pupils or to those who needed special counseling.

The Double-Period Plan (23) was similar to the Divided Period Plan except that a longer class period was provided.



Where the high school class period was usually forty-five or fifty minutes, this new plan was set up so that the pupils had forty-five or fifty minutes for study and forty-five or fifty minutes for recitation within each class period. This plan was often operated on a bell system so that the teacher and the pupils would know when to change over from study to recitation and back to study again. Considerable success was obtained by some of the schools that put this plan into effect.

The Flexible Plan of Class Division (17) soon followed because it was felt that the teacher should have the division of the period left to his or her discretion. Under such a plan, on days when it was believed to be more valuable to study most or all of the period, there was no recitation. On other days, when it was believed to be more valuable, the pupils recited most or all of the period.

The Daily Extra-Period Plan (23) involved an added period at the end of a shortened school day. This plan gave the pupils a chance to study under supervision for one whole period on any subject of their choice. The work which was not completed during this period could easily be finished at home since the pupil had worked on the material long enough to know the way to do it and to know what was to be done on the assignment. This plan often

carried a form of reward with it. If a pupil made a grade of ninety or higher in his recitations for the day, he did not need to go to the extra period but was permitted to go home or to go out on the playground to play.

The Giles Scheme (23) had certain hours set aside for study and the pupils did their studying by directions in the form of a set of printed rules which were handed out to the pupils as they entered the study rooms.

The Newark Plan (23) was another attempt to break the class period into equal parts for recitation and study. The class period was fifty minutes in length. Usually, twenty-five minutes were spent on supervised study and twenty-five in recitation but this division was frequently varied. The proponents of this plan had wide success until they either lost interest or the system became formalized. The plan, however, is still used with success in numerous high schools.

The Columbia Plan (23) allowed more time for study than for recitation. Seats were not assigned to the pupils. The pupils were not expected to remain in their seats, but were allowed to pass freely about the room from the reference books to their desks or to the desks of each other. Under this plan, where it was controlled, the classroom was essentially a workshop in which the teacher cooperated with the pupils in constant supervision and

assistance. Only about one-third of the class time was actually spent in recitation.

The Winnetka Plan (49) consisted essentially of definite and carefully planned assignments, with all material organized into units with definite outcomes which were to be achieved by the pupils at their own rates of accomplishment. It contained pretests, in order that each pupil might know which parts of the assignment he already knew and which parts he needed to study. There were also self-corrections to be made from the self-corrective teaching material with which each child was supplied. That material was basically a foretaste of the final test on the assignment. The teacher was in the classroom, helping first one and then another pupil as help or stimulation seemed to be needed. Under this plan, the able teacher could give educational, vocational, or personal guidance to individual pupils or give pointers on methods of study or mental hygiene.

The Gary Plan (1,6,20) was organized as a children's community in which the pupils learned by doing. This system tried to make school as much like life as possible. The school day was eight hours in length, and was divided into sections for work and sections for study and for play. The subject-matter was taught as a practical part of the school community, and learning was largely by doing

and using. The children learned the trades and skills necessary for real life from the teachers of trades and crafts who were skilled artisans. Each teacher exercised supervision of the study and of the work in his special field and, in so doing, was able to offer activity of an educative nature to the pupils who were interested in his type of skill. The Gary Plan and the Winnetka Plan borrowed much from the "job sheet" which the industrial arts (manual training) teachers had introduced into the schools and which they, in turn, had borrowed from the job specification sheets of industry and the building plans of building contractors and construction engineers. The Winnetka and the Gary Plans were further extended and crystallized in the Morrison Plan.

The Morrison Plan (17) is an adaptation of Herbart's five formal steps of preparation, presentation, association, generalization, and practical application in learning. This plan has been very influential in popularizing the use of "units" in the teaching process. A unit was the specification sheet elaborated into a "contract" between the pupil and the teacher for the performance of a certain amount and quality of work on the "unit." Usually there were two or three levels of difficulty for the contracts for each unit. Each level received a certain grade upon its completion, the more

difficult and inclusive level sometimes receiving the highest grades. In other systems, the work on any level might receive any grade but records were kept of the level of each contract. Usually the brighter pupils were expected to do the more difficult contracts, and the duller the less difficult contracts. In some systems, the pupils were allowed to choose the contracts of greater or less difficulty as they pleased except as the more able pupils could be persuaded to choose the more difficult contracts. Each contract had to be completed before the pupil was permitted to begin another. The duller pupils usually had not only simpler units but fewer units to complete in order to meet the minimum essentials of the grade or course. Great emphasis was put upon the completion of the units. Class-time was spent mostly in study, but the teacher was free to call a recitation or instruction period for a long or a short time whenever he or she believed it would be profitable. A pretest was usually given to find out what knowledge about the unit was already possessed by the pupils. This might be oral or written. This step was often called the exploration step, and showed the teacher and each pupil the parts of the unit which were known and the parts which needed further study. In the second phase, which was called the presentation step, the teacher's aim was to stimulate interest in the unit and to give the

necessary directions for the study of the unit.

The third step, or the assimilation step, was really the independent study period and might be extended over two or three weeks, depending on the length of the unit.

The fourth step was that of organization of the material learned. In this period the pupils put their work into some type of organized report, oral or written, or the construction of some "project."

The next step was that of recitation wherein the pupils presented their findings to the class or to the teacher. The last step was the examination over the unit. This was either passed or it was not. If it was not, there had to be further study and repeated examinations until it was passed. This system had wide success in many sections of the country. It is still used in many school systems, with or without modifications.

A step to "popularize" schools or to "make them so interesting that all pupils would want to attend" was the so-called "Progressive Education Movement." This writer believes that, while there was some good in the Progressive Education Movement, it contained the nuclei of its own disintegration. For one thing, there was little if any agreement on any definition of the principles of this movement by its adherents. A statement of principles was published in the journal of the association, but was

withdrawn in the 1930's at what was probably the height of this movement and was not replaced by any other statement (38). Educators (38), even in the "Progressive" ranks, were not prepared to make any adequate statement of agreement. As a social consciousness became increasingly evident within the teaching profession and particularly among the "Progressives," teachers began to stress the social studies, talked boldly about unemployment and national economic planning, and expressed an interest in efforts anywhere that showed signs of solving the ills of periodic depressions. The social responsibilities of education and of educators were topics at conferences of the Progressive Education Association. Leaders spoke of education's role in shaping society and discussed whether the schools could be the instruments for building a new social order. The depression encouraged an interest in human relations as the problems of young people became a major concern of society. Schools that were "child centered" now tried to be "youth centered" and the "community school" grew into definite interest of the "Progressives," but the progressive educators were unable to take a definite stand on many social issues that cut deeply. In the meantime, the pupils who might have been "reaching for the stars" had not learned as much as their predecessors had about addition, subtraction, multiplication, division,

spelling, language usage, handwriting, clear thinking, and habits of study.

While all of the plans for better teaching have served well in some instances, the ultimate success of the work of any classroom is dependent upon the ability of the teacher as a teacher and upon the command that the pupils have gained of the tool-subjects. Among the most important of these tool-subjects at the high school level are reading comprehension and reading rate. It is a truism among high school and college teachers that the reading abilities of the majority of the members of their classes are woefully poor.

Henery (54), a high school principal of extensive experience, stated about his pupils that "one-third are incapable of mastering the stock of learning well enough to make any difference in their literacy." The pupils of whom he wrote could not, in his opinion, "read on a fifth-grade level or write a coherent paragraph reasonably free from errors."

Inability in reading may be due to lack of interest in reading and to its corollaries, lack of desire to gain knowledge from the printed page, lack of training in reading, nonverbalism, or a combination of any or all of these. It is easily demonstrable that many high school pupils and many adults fall into this first group. The



voluntary reading habits of even college students (39) are limited largely to the sports page and the "comics" for the men and the society and fashion pages and the "comics" for the women. The annual sale of some sixty million copies of the so-called comic books, largely to adults, further demonstrates this. There are many excellent places in the work of the world for these people in certain specialized activities as well as in activities which are more largely muscular than mental, such as many jobs in forestry, engineering, construction, and farming, but any job of any importance requires some ability to think and, usually, ability to read with some degree of accurate comprehension.

Lack of training in reading may result from little or no training on the one hand or poor training on the other. The United States Office of Education estimates that there are in the United States six million illiterates or people more than twelve years of age who can read less well than the average fifth-grade pupil, including those who cannot read or write at all. There are other uncounted millions who are or have been in grades beyond the fifth grade who cannot read in correspondence with the grades in which they are or were when they left school.

Of a thousand boys and girls entering (54) the ninth grade in a New York City high school, fifty-nine per cent

were below the norms for the sixth grade in reading ability. In some mitigation of this large per cent was the fact that three-fourths of this group came from homes in which a foreign language was spoken, but these pupils had attended American public schools for eight years. In another large high school (54) in another American city, twenty-five per cent of the entering class were below the reading norm for seventh grade pupils. Some writers (3) estimate that six or seven per cent of college students have reading comprehension scores below those of the average eighth grade pupil. Strang (3) reported that one-third of four hundred and thirty-seven college freshmen were inferior in reading comprehension to the average high school freshman. A large number of studies showing similar results could easily be cited. They all show that the teaching of reading in public schools is and has been exceedingly poor in a great many classes.

According to recent (7) statistics, only about twenty-five per cent of the pupils graduating from high school enter college. It is not always the poorest readers who are in the seventy-five per cent who drop out. In a study (7) of three hundred and thirty-eight entering students at one of our leading universities, it was found that twelve per cent of these students were reading at or below the ninth-grade level, twenty-three per cent were

reading at or below the tenth-grade level, and thirty-seven per cent were reading at or below the eleventh-grade level. Most of those who tested below the forty percentile level in the initial test were retested at the end of a quarter in a special-help course and made slightly more improvement than other students of all levels of initial ability who did not take this course. It is most difficult for anyone so poorly equipped in reading skill to have a technique of study that will meet the requirements of any college. It is a tragic situation for young people to be forced to face life so deprived of essential tool equipment.

With regard to the large number of illiterates in the United States, many come from isolated areas where there are few opportunities and fewer incentives for school attendance. A probably equal number come from the slum and foreign-language areas of the cities and from towns of average and small sizes where schools were available to them.

During the World War II, it became (53) necessary to induct large groups of men who were illiterate. These men were held in the Reception Centers, theoretically for thirteen weeks or until they were able to do the usual work of the fourth grade. The purpose of this training was twofold, first, that the men might be better soldiers,

and, second, that illiteracy in the nation might be reduced. These men in the special training units were exceedingly eager to learn. If they were not, they were not retained in the special training battalions. Experience had shown them some of the disadvantages of being unable to read. More than anything else, they wanted to be able to read letters from home and to write letters home. Actually, many of them were sent to military units after two to six weeks and before they had progressed very far in their training because the need for man-power was so great. Even then, this program demonstrated that the mass of American youth is quickly and thoroughly educable where there is incentive and that illiteracy need not continue as a large social problem in this country among people intelligent enough to grasp the educative material through the fourth grade. The value of compulsory school attendance beyond that level is debatable. In states in which compulsory attendance beyond this level has been made a legal requirement, the results have been only moderately desirable.

It would seem only reasonable for every elementary and high school teacher to make it his or her business to see that each pupil has full control of the tools of learning, since only twenty-five per cent go on to higher learning. After a pupil has left high school, there will

be plenty of problems for him to face and solve without having to worry about the tool subjects.

The term, nonverbalism, is used in at least two ways. In one way, actual physiological defects, such as poor visual fusion (with or without noticeable strabismus), visual inversion, visual confusion in which the letters of a word are seen in reverse or partially reverse order, alexia or loss of ability to read or inability to learn to read in cases in which loss of sight is not involved, and many other forms of disability may be found in individuals but not in any large numbers for any one form. In the other way, the defects are more psychological than physiological, e.g., mental blocks by reason of which certain words or letters cannot be seen although no detectable eye defects are found, and a subconscious fear of either silent or oral reading, or both. The number of actual cases of true nonverbalism is probably much less than the three per cent of the school population (19) which is frequently given and usually includes both kinds of nonverbalism.

The importance of good reading comprehension and rate may be demonstrated by the fact that college students who have low reading ability are found to be low in all of their other classwork which requires the gaining of knowledge from the printed page except in unusually courageous

cases in which long hours of hard work are devoted to study. It was found (26) that those students who made the poorest scores in reading comprehension examinations made the poorest showing in the other phases of a comprehensive examination. The most frequently found weaknesses of students in this study were:

1. Inability to isolate the several elements of an involved statement.
2. Inability to grasp the full meaning of the question as stated.
3. Inability to follow a thread of thought through a maze of detail.
4. Inability to associate related elements.
5. Failure to grasp from given explanations the significance of concepts essential to the understanding of the context presented later.
6. Careless, irrational or impossible answers, due possibly to some peculiar individual experience.
7. Inability to select the best one from among several possible answers.

Comprehension of the printed page is, obviously, a tool subject which is used not only in securing an education but in the good management of all of life's activities.

It would appear that the need for remedial work would, to a large extent, be eliminated if the classes in the lower grades were smaller in order that the teachers might give personal attention to the pupils who are in need of help and if the teachers were sincerely interested

in the future well-being of the individuals and of the nation.

It is also possible at any school level to plan remedial-reading programs (8) to take care of the needs of the two groups usually found to be poor readers. In the first group, one will find the pupils with visual handicaps, emotional blocking, glandular irregularities, speech defects, and other serious problems. In the second group are the less seriously handicapped pupils who have had little interest or poor training in reading.

Where (54) remedial programs have been tried, the less seriously handicapped pupils have usually shown large amounts of improvement and, even among the serious cases, gains have been made. In one study (54), it was found that ninety per cent of the lowest twenty-five per cent of an entering freshman group were able to enter the regular classes and do satisfactory work at the end of a year of remedial work.

In another study (34) on the building of vocabularies, it was found that the gain by directed teaching of one group in comparison with a control group that had no vocabulary training was great enough to show that the direct teaching of vocabulary can produce profitable results.

There is no easy road, however, to the acquisition

(10) of vocabulary. Anyone who has studied a foreign language knows that few words are learned casually. The only sure way of learning a word is to isolate it, analyze it, study it, use it, and review it occasionally. Such drill can sometimes be made interesting, sometimes not. If it can be, so much the better, but the sugar-coating is not essential.

In the lower school grades, a drill method is sometimes used because the teachers know that the children must know the words thoroughly, but, in grade after grade, many teachers seem to try to avoid word drill and all other drill merely because it appears to be monotonous or the pupils are able to avoid it because it requires effort on their part.

A study was conducted (45) on a group of beginning freshmen at one of the large universities to find out whether or not one could predict the possible college success from a vocabulary test. This vocabulary test was a part of the placement test in English. The study included more than two thousand members of a freshman class. It was found from a study of the grades of each student that the students who had the best vocabularies at the beginning of the freshman year did better work academically. The weaker the vocabulary, the lower the grades received in almost all cases. The suggestion was made



that the attention of high school teachers should be directed to the need for better vocabularies if they wanted their products to be successful in higher education.

It was found (2) that, for one hundred sixty-eight students taking a course in elementary Mental Hygiene, the vocabulary test scores gave better predictions of college success than any other single measure. It was found that, by paying specific attention to vocabulary, the groups gained an average of fourteen-and-one-tenth words a term, whereas a control group gained only one-and-seventenths words in the same period of time.

Teachers (2) would do well to consider the advisability of giving more specific attention to vocabulary building instead of trusting that development will be achieved through concomitant or incidental learning. Better vocabularies will enable students to understand better what other people say. They will increase their comprehensions of what they read. Good vocabularies make possible more refined and accurate expressions of the students' own ideas and knowledge. In all of these ways, students and others may broaden their concepts in such a way as to improve the quality of their thinking, since thinking must be done in words.

As long ago as 1925, Terman (46) wrote that there was a close parallel between intelligence and work knowledge.

The more intelligent children need more words to express their larger number of ideas and to express them more accurately. The simplest people, such as the Hottentots, Pygmies, and Bushmen, have approximately six hundred words in their entire languages because they have no use for more words to express their simple ideas.

Another most outstanding fact (11) established from a study conducted in a high school on "how to study" was that the attitude of this class as a whole greatly excelled that of a control group in adopting the idea that learning requires ambition, initiative, energy, and effort. The entire group learned that studying is a serious business and that an interest in school subjects can be built up. The classwork done by the group which had had methods of study was more akin to research study than to the usual type of class "effort." The pupils were able to express their thoughts more clearly, sincerely, and pleasingly than the control group could.

In another study of a "how to study" course in a high school (16), all individuals but one in the trained group were much superior to all individuals in the control group on grades in all of the subjects being taken. The other teachers reported improvement in class attitude and in greater interest among the members of the first group as well as improvement in the quality of the classwork.

A study (51) conducted by means of an opinion poll on the values of cramming at one of the universities showed that the average time spent in cramming amounted to six-and-a-half hours for each final examination. The reasons given for the use of cramming were that that it gives one a feeling of security, eases one's conscience, and that one learns as much as possible in a short time. It was learned that eighty-seven per cent of the students crammed for all examinations, but held it to be an unsatisfactory manner of learning.

There are many different types of programs in use in these methods-of-study courses or corrective or technique classes in the different high schools and colleges. These programs all have the correction of the most frequently found weaknesses in the individuals as the basic parts of their courses. These courses may stress corrective English, corrective reading, corrective speech, corrective mathematics, corrective study habits, or similar activities or many of these may be combined into a single course which may carry the name of the most emphasized activity or may be called "Techniques of Study" or some similar name. Some of these courses carry college credit and others do not. The successfulness of their results seems to be greater in those cases in which some credit is given, by reason of the attitudes of the members

of the classes. At the college level, these corrective or technique classes have proved to be highly satisfactory -- if they are well taught.

The selection of students for these classes is usually through or by means of a series of entrance examinations. If a student fails to make certain scores on these examinations, he may be assigned to the course in study techniques or is advised to take it. A course of this kind is usually open to others, but budget limitations will -- at times -- exclude all volunteers from classes of this kind.

The sections or classes in this subject are usually limited to from fifteen to twenty-five students. The smaller the group, the more individualized instruction each student will receive. The standard parts of these courses are, usually, the budgeting of time, problems of personal adjustment, planning individual activities, the technique of reading, how to study, note-making, how to prepare and take examinations, the preparation of reports of various kinds, use of the library, the probabilities for individual college success, social and emotional adjustment, and -- if there is sufficient time -- corrective speech, corrective mathematics, and similar subjects.

A major function (27) of another kind of "Methods of Study" course should be the preparation of teachers who

are skilled in training others in the techniques or methods of study. This may be done by preservice and inservice training courses, also. These skills, similarly, do not just grow automatically. They must be taught specifically.

The most common problems (41) encountered among college freshmen may be classified as physical, social, recreational, cultural, educational, and vocational. Each of these will have many different variations, and the variations must be dealt with as separate problems -- preferably within the framework of a methods of study class or by reference of individual students to the specialists usually or allegedly available on a college or university staff. The most common problems (41), presented in tabular form, are:

1. Physical problems
  - a. Organic maladies
  - b. Functional maladies
  - c. Neurotic maladies
2. Social problems
  - a. Family dominance and misunderstanding
  - b. Financial incapacity
3. Cultural problems
  - a. Conventional misusages
  - b. Moral indiscretions
4. Recreational problems
  - a. Asocial tendencies
    1. Mixed-group functions
    2. Student activities
  - b. Lack of aesthetic appreciation

5. Educational problems
  - a. Course choice and conflict
    1. Vocational indecision
    2. Lack of interest
  - b. Low scholarship
    1. Lack of ability
    2. Overextracurricular activity
    3. Poor training
6. Vocational problems
  - a. Indecision of interest
  - b. Indecision due to conflict of interest and remuneration
7. Psychological and psychiatric problems
  - a. Attitudes resulting in or arising from major problems listed above

For the past thirty or more years there have been extensive claims about the amount of counseling in use in the public schools and in colleges and universities, but surprisingly little has been actually done. The teaching profession has for a good many years advocated counseling programs. Through the many excellent teachers that have from time to time taught in the many systems of our nation, some counseling has actually been done. It was generally understood that counseling was part of a capable teacher's work, but all too frequently insufficient time was available for it on the part of those teachers able and willing to do it. It would seem that all teachers should do a certain amount of counseling and at least understand some of the many problems that confront the average teacher. They should know some of the counseling techniques that have proved themselves valuable. How much

of a "Methods of Study" course is actual counseling would be most difficult to determine. On hundreds of occasions, the writer has asked college students whether or not they had had certain tests in high school. The usual answer has been that they have had tests but that no suggestions were offered to point out the areas of strength or of weaknesses of the pupils, no suggestions given about where to go for certain kinds of training, nor any advice about the choice of colleges or universities. It would appear that far more schools have programs in name only or weak counseling programs than have really functioning programs of counseling.

The roles of good teachers as advisers in schools will depend on the skill with which they handle the many problems which are presented to them in their capacities as counselors. The problems of their pupils must be their problems, and they must be able to use the principles of psychology and mental hygiene and have interest and feelings of sympathy and understanding. To what extent these are actual parts of the various courses in methods of study is impossible to determine.

## CHAPTER III

### Original Studies

The original studies made in connection with this thesis were: (a) an analysis of the contents of all of the books on "methods of study" which could be located without exhaustive search; (b) a questionnaire, containing ten questions, which was sent to all the colleges and universities as listed in the catalogue of the Office of Education (Educational Directory); (c) a study of one hundred and fifty Oregon State College students who had been suspended for scholarship deficiency; and (d) a study of one hundred and fifty Oregon State College students who had taken the course, Education 101, Methods of Study, and their scholastic fates up to the time of this study.

#### Analysis of the Contents of Texts on Methods of Study

The purpose of the analysis of these textbooks on "Methods of Study" was the determination of the subtopics which were included most frequently and which were discussed in these books at sufficient length to show that the writers had considered them of importance. These books were published in the years 1909-1946, inclusive.

The dozens of pamphlets and brochures in this field



have not been included here because they were held to be too fragmentary and unorganized. Several books which were on the borderline between methods of study and elementary educational psychology have not been included even though their titles contained the terms, "improvement of learning," "improvement of study," or similar phraseology because they were classified by the writer as belonging in the field of educational psychology more than in methods of study. Two (4,5), however, were included because they were widely used in methods of study courses for several years immediately after their publication. Twenty-seven books, altogether, have been included in this list. Without doubt, others might have been included to advantage, but they were not readily available.

The subtopics have been arbitrarily arranged in fourteen groups. It is well realized that other groupings, doubtless just as satisfactory or unsatisfactory as the one adopted, could have been made. It is also realized that many of the subtopics which were placed in one grouping in this thesis could have been just as well or nearly as well placed in any of three, four, five, or six other groupings. In fact, in any worth-while textbook, they would be discussed from slightly different approaches in each of several chapters. This writer believed it more advisable to list each subtopic once only

because the list is quite long as it is. To the best of his ability, he placed them in the groupings under which they received the most space. Obviously, this varied widely among the different books. At best, it was, by reason of the difficulties of classification and of the immense amount of work involved, only an estimate.

It was believed that such a classification would be useful to teachers of courses in methods of study in selection of subtopics which should be included in such a course. Incidentally, the classification should be of use to anyone writing or revising a textbook or even pamphlet on this subject. It was hoped that this analysis might show any markedly noticeable trends in the development of this subject. Regrettably, this writer believes that many of the older books contained more subtopics, more specific material, and better discussions of this material than many of the newer books which are, in his opinion, unfortunately general and even vague.

The names of the groupings are listed immediately below:

Attention  
Course selection  
Examinations  
Health  
Interest  
Library  
Motives

Note-making  
Personal, problems  
Study, Methods and Rules of  
Study, Physical Conditions  
Conducive to  
Reading  
Textbooks  
Time, Use of

The names of the subtopics listed are those used most commonly in these books although, obviously, wide varieties of names were used in the different books -- tradition in textbook writing being what it is.

The frequency with which each subtopic was included in these different books is shown by the number of check-marks in TABLE I. These do not show the various amounts of space given to the subtopics.

TABLE I is a list of the subtopics in twenty-seven widely known textbooks on "Methods of Study," showing which subtopics were discussed in each of these books.

TABLE I

## AN ANALYSIS OF THE SUBTOPICS INCLUDED IN METHODS OF STUDY TEXTS

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kernhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (4)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
ATTENTION																											
Adapt thoroughness of attention to material		X	X		X			X	X		X	X	X		X		X		X							X	
Analyze attention difficulties	X	X	X		X	X					X	X	X		X		X		X	X	X					X	X
Analyze causes of mind wandering	X	X	X	X		X								X			X		X	X							X
Assume responsibility	X					X		X										X		X				X			
Be an active contributor		X	X		X			X			X		X	X	X									X			
Build around pivotal points	X	X	X		X	X			X		X		X	X										X			
Concrete illustrations in own words	X			X	X	X			X				X				X		X	X					X		X
Control outside activities	X			X			X										X		X	X							
Distinguish between fact and feelings		X	X		X			X							X		X									X	
Elastic provisions for individual differences					X								X				X				X		X				

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwich (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinsmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Express what is being learned	X	X	X			X	X		X		X		X	X			X		X		X		X	X	X		
Fluctuation of attention		X	X			X														X			X				
Have attitude of attention, physical and mental		X	X					X									X			X					X		
Holding attention steadily	X				X	X	X								X				X	X			X		X		
Imagination, control of	X	X	X		X		X	X								X	X			X						X	
Learn to concentrate	X	X	X	X					X					X		X	X	X		X							
Learning to frame questions for learning					X	X							X										X	X	X		
Note your progress	X	X	X		X																		X	X			
Outline all writing of im- portance	X				X				X				X				X			X				X			
Outside sources of information	X	X	X		X	X							X				X			X							
Participate in activity of speaker					X				X			X	X							X							
Psychology of attention		X	X		X		X						X							X			X				
Read between lines					X								X								X					X	
Real challenge	X				X	X			X				X		X						X						
Real thinking	X	X	X		X		X	X					X		X		X									X	X
Research technique	X	X	X		X		X	X							X											X	X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Fressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Review daily				X					X	X								X									X
Set up own problems	X	X	X		X	X			X		X		X	X	X	X	X						X				X
Suggest solutions	X	X	X		X	X			X		X		X	X	X		X						X				
Study habits--rapid-- aggressive	X	X	X		X	X							X				X		X	X			X				
Think of test suggestions	X	X	X			X			X		X		X	X	X								X	X			
Watch speaker	X					X	X		X				X	X	X								X	X			
Work systematically	X	X	X			X			X		X		X	X	X	X				X			X	X			X
COURSE SELECTION																											
Advantage of specialization	X																				X						
Choose courses taught by best teachers	X					X							X														
Choose courses that contrib- ute to home membership						X							X														
Choose courses to promote health						X							X														
Choose subjects of which you know the least						X							X														

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Korabauer (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Compare values of courses						X																					
Discount prejudices (poor advice)						X	X							X													
Expect many adjustments	X																X										
Eliminate subject-matter that does not have bearing on life														X			X										
Plan your whole career for continued growth	X					X	X						X				X				X			X			
Recognize your relative maturity						X			X														X				
Respect your own individuality						X							X														
Responsibility young people should have						X											X										
Sample many fields of knowledge	X					X							X														
Select courses according to capacity	X					X							X														

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (35)	Ruse (36)	Fressey (37)	Robinson (40)	Sandwich (43)	Smith-Littlefield (45)	Thomas (47)	vonKleinsmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Select courses for specific objectives						X	X							X													
Take courses for leisure time activity						X								X													
Take courses contributing to citizenship						X								X													
Take courses that promote character						X	X							X	X												
Take some vocational studies						X	X							X	X												
Take survey courses before specialization	X					X								X													
Working way through college	X																	X			X						
<b>EXAMINATIONS</b>																											
Achievement tests																											
Apportion time	X				X	X			X		X		X	X	X							X				X	
Avoid flattering appeals to instructors, but know the instructors					X	X			X					X		X											



### TABLE I (Continued)

[illegible]

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (15)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Mase (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Find out type of examination to expect	X					X			X				X	X	X	X											X
Follow directions	X				X	X			X	X	X	X	X	X	X	X			X	X					X	X	X
Get a good start on test	X			X	X	X			X		X		X	X	X	X			X	X					X	X	X
Good penmanship				X	X	X			X				X	X	X	X			X	X					X	X	X
How to prepare for examinations	X				X	X			X	X	X	X	X	X	X	X			X	X					X		X
Insist on class discussions after tests						X			X				X	X	X	X			X						X		
Keep active	X				X	X			X		X		X	X	X				X								X
Keep eyes on own paper	X																										X
Know how test will be scored	X																										X
Leave uncertain questions to last	X					X																					X
Make cross references						X					X		X											X			
Make use of scratch paper	X			X	X	X			X		X		X		X				X								
More examinations are recall tests					X	X			X				X		X			X					X				
Number points (organize)				X	X	X			X				X	X	X				X						X		X
Objective examinations				X																							

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (25)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Ruse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Open book examinations																											
Outline long questions					X	X			X				X		X	X						X					
Preliminary tests																											
Purpose of examinations	X				X	X			X		X		X	X	X	X		X				X	X				
Read all questions before starting	X			X	X	X			X		X		X	X	X			X									X
Read each question carefully before answering	X				X	X			X		X		X		X	X			X					X			
Rest occasionally during examination	X				X	X			X		X		X		X												
Reword questions for understanding	X								X			X			X												X
Save test questions for study	X					X			X			X	X		X					X							X
Select options	X				X	X			X		X		X		X							X					X
Spend time on weighted questions	X																										X
Spirit of competition									X						X						X						X
Start with easy questions	X				X	X			X				X		X												X
Take all allotted time	X				X	X			X				X		X												X
Test yourself before test	X				X				X	X			X		X							X			X		X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Try for high score	X																										
Try to be above average	X																										
Use concise form of presentation	X				X	X			X		X		X		X			X									
Use drawings and diagrams				X	X	X			X			X	X	X				X		X					X		X
Use good English	X			X	X	X			X				X	X	X				X						X		X
Watch for key words	X																								X		X
Write on all questions	X				X	X			X			X	X		X	X									X		
Writing an examination, general	X				X	X			X		X		X	X	X												
You are working for yourself	X					X			X				X		X	X											
<b>HEALTH</b>																											
Air	X	X	X					X			X		X	X	X	X				X	X	X	X	X	X	X	X
Baths	X	X	X					X			X		X	X	X					X	X	X				X	X
Diversify interests	X								X		X				X						X		X				X
Drinking liquors (alcoholic)	X	X	X					X			X		X							X	X	X				X	X
Excess of anything	X	X	X	X									X							X	X					X	
Exercise	X	X	X	X				X			X		X	X	X					X	X	X		X	X	X	X
Fatigue (mental -- physical)	X	X	X	X				X					X		X					X	X	X	X		X	X	X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Food	X	X	X		X			X			X		X		X					X	X	X	X	X	X	X	X
General health measures and how to keep fit physically	X	X	X					X			X		X	X	X					X	X	X			X		X
Infections and auto intoxication	X	X	X		X			X		X			X	X						X	X	X	X		X		X
Narcotic (mild poisoning)	X	X	X		X			X					X							X	X		X		X		X
"Nervous breakdowns" and nervously inclined	X	X	X										X		X						X						
Play and recreation	X				X	X		X	X		X		X	X	X	X				X	X						X
Rest and sleep	X	X	X		X	X		X			X		X	X	X	X			X	X	X	X	X	X	X	X	X
Sensory defects	X	X	X				X							X	X	X				X	X	X	X		X		X
Sex attitude (proper)	X													X											X		
Speech defects	X	X	X	X	X							X	X	X	X	X				X	X	X	X		X		X
Water (drinking)	X	X	X		X			X					X	X	X	X					X	X	X		X		X
INTEREST																											
Associate with others that have an interest	X	X	X			X							X							X							

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Walpole (50)	Wilson (52)	Wrenn (55)
Associate what you hear with what you know	X								X											X							
Develop own means of stimulating interest		X	X			X							X		X					X					X		
Effect of uninteresting assignment													X										X				
Have a positive interest rather than a negative and work hard	X	X	X		X	X			X		X	X	X		X	X	X			X	X	X	X				X
How uninteresting assignments work out in practice																											
Harnessing interest in work	X	X	X		X	X		X	X		X		X		X		X		X	X	X		X		X		X
Interpret figures of speech									X																		
Learn more about subject	X	X	X			X	X						X		X						X				X		
Listen for change of thought									X					X													
Listen for units of thought	X								X											X							
Listen with all your ability	X								X						X												
Prepare for what you expect to hear	X					X			X						X	X							X				

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlerfield (43)	Thomas (47)	vonKleinsmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Pretend interest to develop it in each subject	X	X	X	X		X	X						X		X					X							
Question interpretations and meanings of material	X	X	X						X																		
Read more about lectures after class	X								X																		
Special attention to speaker's introductory statements							X		X				X														
Sources of interest	X	X	X		X	X			X	X			X	X		X		X				X					
Use guide questions	X	X	X			X			X				X	X		X		X			X		X				
Use habits to aid interests		X	X			X							X	X		X				X	X						
Use questions to stimulate interest		X	X			X									X	X		X			X						
Use questions to stimulate thinking		X	X			X									X	X				X	X						
Visualize	X	X	X			X	X	X	X				X		X	X	X	X	X	X	X				X		X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	Winkelman (48)	Whipple (50)	Wilson (52)	Wrenn (55)
<b>LIBRARY</b>																											
Accurate and definite references						X			X																		
Annual index	X				X	X			X			X	X							X				X	X	X	
Art of using library properly	X					X			X					X						X							
Ask librarian for assistance	X					X			X				X												X		
Authoritativeness of references					X				X			X	X														
Be selective in choice of words in writing																											X
Book review digest	X				X	X			X			X	X							X		X			X	X	
Card catalogue	X				X	X			X	X	X	X	X							X		X		X	X	X	
Choosing and limiting the subject	X				X	X			X	X		X	X							X							
Cite sources of borrowed material					X	X			X	X		X	X							X							
Detailed outline (question form)	X				X	X			X				X			X			X	X	X	X					
Dictionaries										X																	



TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Perguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinsmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Do not copy words of authors																											
Encyclopedias	X				X	X			X	X		X	X			X				X		X		X	X	X	
Feasibility of attempting certain topics					X	X			X				X							X							
Filing system an aid to writing	X				X	X			X				X			X				X							
General plan of books	X								X				X							X							
General reference books	X				X	X			X	X	X	X	X							X		X		X	X		X
Good physical care of books	X					X			X	X			X							X		X		X	X		X
Have something to say when writing	X					X			X			X	X			X			X								
How to prepare talks									X					X					X								
Importance of use of library					X	X			X				X							X							
Include bibliography in all your work	X					X			X	X			X							X							
Interest in books					X	X			X			X	X							X							
International index	X				X	X			X			X	X							X		X			X	X	
Judge value of material before reading						X			X				X														

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrean (55)
Know book call letters																											
Know library regulations																											
Library not a museum but a laboratory	X				X	X			X				X														
Locate references by book bibliographies	X					X			X	X			X								X						
Magazine indexes	X				X	X			X	X	X	X	X								X	X		X	X	X	X
Make use of stack privileges						X			X				X														
Many departments in library	X				X	X			X			X	X								X						X
Major outline for own writing	X				X	X			X	X			X			X				X	X	X	X				X
New York Times Index									X																		
Originality and plagiarism	X				X	X			X	X		X	X			X					X					X	X
Poole's Index of Literature	X				X	X			X			X	X								X				X	X	X
Predetermined objectives for own writing					X	X			X	X			X							X	X						
Prepared book lists -- use them						X			X																		
Previous preparation for writing					X	X			X	X		X	X							X	X						
Public documents						X					X	X															

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (13)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlerfield (43)	Thomas (47)	VonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Readers' Guide	X				X	X			X		X	X	X					X		X		X		X	X	X	
Read prefaces	X			X					X						X			X									
Recreational and serious study					X	X			X				X							X						X	
Reference books (special fields)					X	X			X	X	X	X	X							X		X		X	X	X	
Reference books and their use	X				X								X					X					X		X		
Return books to library when through with them						X			X	X			X										X		X		
Selection during reading					X	X			X				X			X				X				X		X	
Special bibliographies					X	X			X			X	X								X	X	X	X	X	X	
Spend leisure time in library						X						X	X							X							
Study quarters for all	X				X	X			X				X							X						X	
Submit all written work in good form			X														X			X							
Typographical guides							X		X																		
Use good English					X				X				X														
Use professional writer's methods					X				X																		
Use U. S. Catalogue for special subjects					X				X				X														

**TABLE I (Continued)**

[illegible]

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (18)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McNary (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Diagrams-sketches-to appear in notes					X				X				X		X												
Get speaker's or book's outline					X	X			X				X		X												
Good language-clear-brief	X				X				X	X		X	X		X					X	X	X					X
Have cooperative attitude	X				X				X				X		X					X							
Headings and sources on each page	X				X				X				X		X												
How to get the substance	X				X	X	X		X		X	X	X	X	X	X				X			X				
How to make the record	X				X	X	X	X	X		X	X	X	X	X	X				X			X				X
How to report on books									X																		
How to use notes	X				X	X	X		X		X	X	X		X					X		X	X	X			X
How to work on a committee									X																		
Interpret lecture by speaker's inflections						X	X		X				X														
Interrupt speakers with vital questions	X				X								X		X												
Keep active during lecture	X				X	X			X				X		X												
Keep a section in notebook for each subject									X																		
Learn speaker's vocabulary	X				X				X			X		X						X							

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (35)	Muse (36)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlerfield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Listen with purpose of lecture in mind to anticipate what will come next	X					X	X		X	X		X	X	X	X					X							
Loose-leaf notebook (large)	X					X			X	X		X	X		X						X						
Make notes in own words	X			X					X	X		X	X		X						X						
Marginal notes	X				X	X	X		X	X		X	X		X	X					X						X
Master outline	X																			X							X
Mechanics of note-making	X				X	X	X		X		X	X	X		X	X		X		X			X		X		X
Methods and short-cuts in outlining	X				X	X	X		X	X			X		X			X				X	X		X	X	
Note sources of data	X					X	X		X			X	X		X						X		X		X		
Notes taken on books	X									X		X			X												
Outline form for all notes	X			X		X			X	X		X	X	X	X	X		X	X	X							
Quotations only for special purposes, borrowed material						X	X		X				X		X												
React to all outside work as a test									X				X		X												
Reasons for making notes	X				X	X	X	X	X	X	X	X	X	X	X	X				X		X	X	X			
Revise notes if necessary						X			X	X			X		X			X		X							X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (35)	Muse (36)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Study lecture after class period	X					X	X		X	X			X														
Think more -- write less	X					X	X		X	X		X	X	X	X												
Underlining system for books, good and bad features	X				X	X	X		X	X		X	X		X	X				X		X					X
Use summary method	X					X	X		X	X		X	X		X	X						X					X
What constitutes good notes	X				X	X	X		X	X	X	X	X		X	X				X		X					X
Work for speed	X					X			X			X			X												X
<b>PROBLEMS, PERSONAL</b>																											
College environment	X															X											
Cramming	X			X	X	X		X	X		X		X	X	X	X	X		X	X					X	X	
Failures	X															X											
Family troubles	X											X															
Financial troubles	X	X	X		X								X					X		X		X			X		X
Irregular study	X						X								X					X							
Lack of interest in college	X						X								X					X							
Love of approval	X	X	X		X	X	X	X					X	X	X	X					X		X				
Misinterpretation of directions	X				X	X							X							X			X				

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (35)	Muse (35)	Fressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (45)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Opportunities missed	X				X	X															X		X				
Poor methods of study	X														X												
Poor preparation and poor reading as causes of worry in preparation	X														X				X								
Responsibility for assignments					X										X								X	X			
Too many activities	X	X	X				X						X		X					X	X	X				X	X
Unavoidable handicaps	X														X					X	X				X	X	
Working way through school	X						X								X												
Wrong attitude or lack of adaptation	X													X	X												
<b>STUDY, METHODS AND RULES OF</b>																											
Active vs passive learning	X							X	X			X	X		X		X			X	X				X		
Adjust work load to capacity						X							X														
Adapt method to type of task	X	X	X		X	X	X						X								X		X				
Allow time for digestion of ideas	X	X	X		X	X			X		X		X		X					X						X	
Apply conclusions and knowledge	X	X	X		X	X	X	X					X	X	X		X			X					X	X	X



TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Ask questions	X	X	X		X	X			X				X		X	X	X			X	X	X	X	X	X		
Assume responsibility for drill	X					X							X														
Attach satisfaction to study	X	X	X		X	X		X	X		X	X	X		X		X				X		X	X			X
Attitude, proper	X	X	X		X	X		X	X		X	X	X		X		X				X		X	X			X
Average students waste more energy than they use	X	X	X		X	X							X														
Balance home and school study	X				X						X		X														
Banish self-doubts											X										X	X	X				
Be able to defend conclusions	X	X	X		X			X	X						X		X				X		X			X	
Be critical	X				X	X		X			X		X		X		X			X			X				
Be impartial and independent	X	X	X		X	X		X	X		X	X	X		X		X			X				X	X		
Be selective	X			X	X	X		X	X		X	X	X		X		X		X					X	X		
Be ready to suspend decisions	X	X	X		X	X		X	X		X	X	X				X						X			X	
Best time of day to study	X														X		X										
Best way to remember is to use	X	X	X	X					X						X		X			X	X				X		
Blind alleys must be avoided	X				X	X							X														
Budget time	X														X												
Clear idea of wants	X	X	X		X	X			X				X		X					X	X		X				X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	VonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Clear up obscure details	X				X	X					X		X				X							X			
Collection and organization of data	X	X	X		X	X		X	X		X	X	X		X	X	X			X		X	X	X		X	X
College cannot complete education	X				X	X							X														
College work demands higher plane of study	X				X	X							X				X										
Concrete examples, make own illustrations	X	X	X		X			X						X	X		X			X	X		X	X		X	
Conscious analysis	X	X	X		X	X			X				X				X		X	X	X				X		
Cooperate with teachers	X			X		X							X				X								X		
Control antagonism toward course or instructor	X						X																				
Control emotions	X	X	X		X			X	X		X	X			X			X		X	X						
Correlate work daily	X	X	X		X				X	X			X							X	X			X			
Desire mastery	X	X	X		X								X	X						X	X						
Determine bases of comparisons	X	X	X					X	X		X						X						X				
Develop background for courses												X								X							
Develop your own methods for difficult learning	X	X	X	X	X			X	X				X		X		X				X		X				X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Discuss views	X				X	X					X		X														
Distributed practice	X	X	X		X	X							X							X			X	X			
Do not accept everything as fact	X					X							X														
Do not be distracted	X	X	X	X	X	X	X		X		X		X	X	X		X	X	X	X	X	X	X	X	X		X
Do not let unpleasantness discourage								X				X	X														
Do not skip diagrams, charts, tables	X					X			X					X					X						X		X
Do not surrender to power of suggestion						X																					
Do not use artificial memory devices		X	X	X				X												X							
Dramatization	X	X	X					X									X	X									X
Draw your own conclusions from study and discussions	X	X	X		X	X	X		X		X	X	X	X			X	X						X	X	X	
Drill to form study habits	X	X	X					X		X					X		X	X									
Effects of having attended rural school																							X				

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kernhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Effects of large classes in city schools	X									X																	
Evaluate separate ideas	X	X	X		X	X					X		X		X		X		X	X	X		X	X			X
Excursions	X								X			X		X			X									X	
Failures directly traceable to poor study habits	X	X	X		X	X	X	X					X		X						X		X				
Failures reduced by taking methods of study courses	X				X	X							X							X							
Fallow periods between study periods	X					X			X			X	X		X					X	X				X		
Find an interest in each subject	X																										
Formulate problems	X	X	X	X	X				X		X		X		X	X	X	X		X	X		X				
Frequent periods of recall	X	X	X												X		X	X		X					X		
Get constructive criticisms	X				X	X									X						X	X			X		X
Get dictionary habit	X					X							X		X					X	X				X		X
Get overall view of courses						X							X														
Give yourself a chance to succeed	X				X																						
Good and bad uses of generalizations	X							X	X	X																	

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (6)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (25)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressay (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Have active initiative	X	X	X		X	X		X			X		X	X	X	X		X			X	X					
Have a standard of reference	X	X	X						X		X	X						X									
Have an abundance of material	X	X	X			X			X																		
Have an opinion	X				X	X					X		X		X					X							
Have mental activity and curiosity	X	X	X		X	X							X		X		X		X	X	X	X	X			X	
Have physical activity when needed	X	X			X	X		X					X				X				X	X					
Have something worth remembering	X	X	X	X	X	X	X		X		X		X		X	X	X				X				X		
How to appreciate								X		X																X	
How to observe								X		X								X									
How to listen										X								X									
Use ideas, not words	X	X	X						X						X		X			X					X		X
If rote memory is needed, use it	X	X	X	X	X	X			X				X		X	X	X	X	X		X		X		X		
Increase skill by repetition	X				X		X	X	X				X		X	X	X		X		X						
Integrate interests	X	X	X						X		X				X						X		X				
Isolate elements to be judged	X	X	X					X	X	X	X						X									X	
Judgment by affirmative								X	X		X																

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Perguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Hornhauser (30)	May (31)	McKinney (32)	McKury (33)	Muse (35)	Fressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlerfield (45)	Thomas (47)	VonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Judgment by causal relationship								X	X		X																
Judgment by negative relationship								X	X		X																
Judgment by purpose								X	X		X																
Judgment by qualitative relationship								X	X		X																
Judgment by quantitative relationship								X	X		X																
Judgment of data from people	X				X	X		X	X				X	X			X							X		X	
Judging data from tradition	X				X			X	X				X	X			X										X
Judging reference data	X				X	X		X	X				X	X			X										X
Judging textbook data	X				X	X		X	X				X	X			X										X
Keep fragmentary materials vivid	X			X	X	X	X	X	X		X	X	X								X				X		
Keep inferences tentative					X	X		X	X				X										X				
Keep mental stock in appropriate form	X				X	X					X		X		X												
Keep physically alert	X	X	X		X	X		X	X		X		X	X	X		X					X			X		

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (15)	Frederick (21)	Frederick (22)	Headley (24)	Jones (25)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlerfield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Keep mind active while studying	X	X	X			X		X							X					X					X		X
Learn by whole units and see parts together	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X				X		X
Learn technical words	X	X	X		X	X		X	X				X	X	X			X		X	X						X
Learn under pressure	X	X	X		X	X		X	X		X	X	X	X	X			X		X	X	X	X	X	X		X
Learn with intention of remembering	X	X	X		X	X	X	X	X			X	X		X			X		X	X				X		X
Limitations of ability acknowledge	X				X	X	X				X		X		X					X			X				X
List essential ideas	X					X								X	X		X			X				X			X
Locate the objective in the material	X				X	X				X			X				X		X				X		X		
Make use of writing as an aid to mental activity	X					X				X					X				X					X			
Make verification complete	X				X	X		X	X				X		X								X	X			
Misplaced emphasis in preparation						X							X										X				
Motives	X	X	X		X	X		X					X		X		X	X			X	X	X		X		X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Objective centers of interest	X	X	X		X	X		X	X	X	X		X		X	X	X	X			X		X				X
Overlearn	X	X	X		X	X		X	X	X	X		X		X	X	X	X					X				X
Overcome distractions	X	X	X		X	X	X		X		X		X	X	X	X		X		X					X		X
Pay keen attention in class	X	X	X	X		X		X					X	X	X	X	X	X	X						X		X
Place-study habit	X	X	X	X			X		X				X	X	X	X		X	X	X					X		X
Plan the study period and know exactly what you are to do	X	X	X		X	X	X						X		X				X	X	X		X	X	X		
Plateaus of learning	X	X	X		X	X		X	X				X							X							
Problem-solving attitude																											
Promise self reward for work well done	X							X					X		X									X			
Provide motivation for self						X						X															
Pursue subject on own initiative										X															X		
Rational associations and key words	X	X	X	X		X		X	X	X		X	X		X		X						X	X	X	X	X
Reason for course should be known	X					X							X							X							
Recall major points	X	X	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X		X



TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlerfield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Recall requires stimulus and organization	X	X	X		X	X			X			X	X		X		X			X							X
Recall what you already know of problems	X	X	X			X			X				X							X	X						
Recite aloud	X				X	X		X					X							X	X						
Recite in mind only	X				X	X		X					X							X	X				X		
Relate assignment to course objectives	X					X							X				X				X			X			
Relate assignments to larger experiences	X	X	X			X	X				X		X				X	X	X	X				X			X
Remembering demands good learning	X	X	X						X						X		X			X							
Respond actively to subject-matter	X	X	X		X	X			X		X		X	X	X		X			X	X				X		
Review	X	X	X		X	X		X	X		X		X	X	X		X			X	X				X		X
Scholarship a sign of good training	X					X															X						
Seriousness of neglect of study																	X										
Set goals	X	X	X		X	X		X	X	X	X	X	X	X	X		X				X	X	X		X		X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (25)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (35)	Muse (36)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Set safeguards against error					X	X																					
Social standard aided by scholarship	X				X	X							X				X										
Solution of related problems		X	X		X				X		X		X		X								X				
Start work at once	X	X	X	X		X			X	X			X	X	X	X				X	X				X		X
Sustained effort vs stopping too soon	X	X	X		X	X		X				X	X		X		X				X		X		X		X
Teachers and parents complain of lack of ability in study	X					X							X				X										
Teachers are little acquainted with proper methods of study																		X									
Tentative classification of important subtopics						X		X	X								X						X				
Test author's use of words																		X									
Time-study habits	X	X	X		X	X							X	X		X	X		X				X				X
Trust your memory	X	X	X		X	X	X	X	X				X	X	X	X	X			X	X						X
Under learning	X	X	X	X	X	X	X		X	X	X		X	X	X	X	X		X	X	X				X		X
Understand what is learned	X	X	X	X	X	X			X	X	X		X	X	X	X	X		X	X	X		X		X		X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (15)	Frederick (21)	Frederick (22)	Headley (24)	Jones (25)	Jordan (26)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlerfield (43)	Thomas (47)	vonKleinsmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Use own questions to stimulate study	X					X								X													
Use rhythm in memory	X	X	X			X		X	X						X		X								X		
Use short periods in memory work		X	X					X																			X
Vocational success depends on scholarship	X				X	X								X			X										X
Warm up periods	X	X	X		X	X		X	X				X	X	X							X		X	X		X
Watch others' study methods	X							X	X					X		X						X		X			
What skill in study includes	X	X	X		X	X							X	X	X		X			X	X	X	X	X			
Work through given text	X		X	X	X	X					X		X	X	X	X							X				
Work with will to learn	X	X	X			X	X		X			X			X	X	X			X					X		X
Worry will cause failure in recall	X	X	X												X					X							
Wrong and right use of writing in study	X				X	X	X							X	X				X				X				

TABLE I (Continued)

	Bird-Bird (3)	Boon (4)	Book (6)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (25)	Jordan (29)	Kornhauser (3)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (45)	Thomas (47)	vonKleinsmida (48)	Whipple (50)	Wilson (52)	Wrenn (55)
<b>STUDY, PHYSICAL CONDITIONS</b>																											
<b>CONDUCTIVE TO</b>																											
Chair	X	X	X		X			X			X		X	X	X					X	X	X	X	X	X	X	X
General study conditions	X	X	X	X	X	X	X	X	X		X		X	X	X	X			X	X		X	X	X	X	X	X
Heat	X	X	X					X			X		X	X	X	X		X		X	X	X	X	X	X	X	X
Light	X	X	X		X			X			X		X	X	X	X				X	X	X	X	X	X	X	X
Necessary study tools	X	X	X																							X	X
Table	X	X	X		X			X			X		X	X	X					X	X	X		X	X	X	X
<b>READING</b>																											
Diagnosing difficulties	X	X	X	X	X								X	X			X				X		X				
Dictionary habit	X	X	X		X		X					X	X		X	X				X	X		X				
Eliminate vocalization	X								X																		X
Enlarge your vocabulary-- reading-speaking-writing	X	X	X	X		X		X					X		X					X					X		X
Gain mastery of words	X	X	X	X	X	X	X		X		X	X	X		X	X			X	X	X		X	X			X
Glossaries	X					X			X											X		X			X	X	
Grasp main points of author	X	X	X	X	X	X	X		X		X		X	X	X	X	X		X	X	X						X
Hit the high spots	X					X			X				X	X						X							X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	vonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
How to read graphs	M			M					M	M							M										M
How to read maps	M			M					M	M							M										M
How to read newspapers	M								M	M					M		M										M
How to read tables	M			M					M	M							M										M
How to use index	M					M			M											M		M				M	
Illustrative material	X												X										X	X			
Intellectual contacts in many fields						X						X	X		X												
Introduction	X					X											X			X		X			X	X	
Listen to good lectures and addresses						X							X														
Make preliminary survey	X	X	X	X										X	X				X	X							
Master the making of synopses	X					X			X				X								X		X	X			
Mechanics of reading	X						X								X			X		X		X					X
Methods of increasing speed	X	X	X		X	X			X			X	X	X	X				X		X			X			X
Outline by question-and-answer method	X	X	X	X	X				X				X	X	X		X		X	X		X					
Phases of reading frequently neglected	X			X		X													X				X				X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kornhauser (30)	May (31)	McKinney (32)	McMurry (33)	Muse (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (45)	Thomas (47)	vonKleinsmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Read against time for greater speed	x									x		x			x					x							x
Read good literature for pleasure						x				x				x													
Read phrases and paragraphs	x								x				x	x	x					x	x						x
Read rapidly, keeping purpose in mind	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
Read with anticipation of ideas	x			x											x		x										x
Read with question or problem in mind	x	x	x														x			x							
Review-reading	x													x	x				x	x		x		x			
Self-recitation	x			x					x			x		x	x				x	x							
Simplify motor adjustments	x	x	x		x		x				x	x	x		x			x		x							
Skills differ in different materials									x			x								x					x		x
Special lessons for special difficulties	x									x			x								x		x				
Study and reading can be slow processes adjusted to task	x	x	x							x			x	x	x			x		x	x				x		x

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (13)	Crawford (13)	Crawley (14)	Edwards (13)	Frederick (21)	Frederick (22)	Headley (24)	Jones (25)	Jordan (29)	Kernbauer (30)	May (31)	McKinney (32)	McMurry (33)	Mose (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	VonKleinsmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Study words and use them -- keep a list	X					X							X		X										X		
Supplement the thoughts of writer	X														X		X										
Tables						X			X				X							X				X	X	X	
Tables of contents						X			X				X							X				X	X	X	
Topic sentences and paragraphs	X								X				X	X	X						X						X
Types of reading, skimming, rapid, normal, exhaustive									X								X										X
Understand what you read	X	X	X											X	X	X				X					X		
Using own drawings					X								X														
When tired, do not read	X	X	X									X															
Working atmosphere	X	X	X		X								X	X	X	X				X	X		X	X			X
<b>TEXTBOOKS</b>																											
Apply the material	X					X							X														
Find main points						X							X		X		X										
Get acquainted with author						X							X				X								X		X

TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Ferguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Korbanauer (30)	May (31)	McKinney (32)	McMurry (33)	Muse (36)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlerfield (45)	Thomas (47)	VonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
Keep book after course is finished	X					X							X				X										
Make use of writer's signals																									X		X
Make verifications complete	X				X	X		X	X			X			X								X	X			
Organize reviews around textbook						X							X														
Own your own textbooks	X					X							X														
Preparation of text assignments																											X
Read extensively on subject	X					X							X														X
Review																				X							X
Study subject unit rather than page unit	X					X							X														
Supplement textbooks	X					X				X			X		X		X						X				X
Take books to class						X						X					X						X				
Textbook system of instruction	X									X							X						X				
When to stop learning										X																	
Write summaries																											X



TABLE I (Continued)

	Bird-Bird (3)	Book (4)	Book (5)	Cole-Perguson (9)	Crawford (12)	Crawford (13)	Crawley (14)	Edwards (18)	Frederick (21)	Frederick (22)	Headley (24)	Jones (28)	Jordan (29)	Kernhauser (30)	May (31)	McKinney (32)	McMurry (33)	Nase (35)	Pressey (37)	Robinson (40)	Sandwick (42)	Smith-Littlefield (43)	Thomas (47)	VonKleinSmid (48)	Whipple (50)	Wilson (52)	Wrenn (55)
TIME, USE OF																											
Accuracy rather than speed	X	X	X			X		X							X												
Allot time to needs of day	X	X	X			X					X		X				X		X	X				X			
Check expenditures of time	X	X				X					X		X	X			X			X							
Distribute practice	X	X	X			X	X	X	X			X	X	X	X					X	X	X		X	X	X	
Have a program	X	X	X		X	X					X		X	X	X				X	X			X				
Individual time record	X				X	X							X	X						X			X	X			
Observation		X	X			X				X			X	X		X								X	X		
Optimum work load	X				X								X	X				X									
Personal study rules					X								X										X		X		
Premium on independent work													X							X				X	X		
Review selectively one hour a week	X					X													X	X							
Self-correction	X																					X					
Time for study		X	X		X								X				X						X			X	
Waste time must be used	X	X	X	X	X			X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Some general observations which may be made from the material in and behind TABLE I are: (a) there is an immense amount of material available on methods of study; (b) it is largely "rule-of-thumb" material and, while it has good psychological principles behind it, it is doubtful that discussions of these principles would be useful in a methods of study course; (c) several of the subtopics give the implication that knowledge of the principles of study by the students is not enough but that someone must "pull the trigger" to convert such knowledge into both immediate and methodical action; (d) the older textbooks in this list usually discuss a larger number of subtopics than the newer textbooks; (e) this writer believes, from his reading of these books, that the material in the older books is generally more definite and concrete -- and therefore more usable by the students who will ordinarily take the course in methods of study; (f) the introduction of supporting principles from educational psychology into textbooks in this field was relatively short-lived; and (g) as long ago as 1909, McMarry wrote that parents and adults in general were distressed at the lack of knowledge of the current younger generation, their unwillingness to study, and their lack of training in methods of study. It is doubtful this situation has improved.

### Report on the Questionnaire Study

The second study within this thesis is based on the returns from a ten-question questionnaire which was sent to all of the state colleges and universities listed in the catalogue on this subject published by the Office of Education (Educational Directory). The colleges of education and the normal schools were not included because the writer wanted the situation to be as directly comparable with that at Oregon State College as possible. Independent colleges and universities were not included for the same reason. One hundred and fifty-six questionnaires were sent out. Replies complete enough to be of use were received from 129, or 83 per cent, of these institutions. A sample questionnaire is included as Appendix I.

Question One was: "Is there a course, or courses, in your curriculum for the improvement of the study habits of all of your students or those who are or promise to be below average in scholarship?"

The replies to this question were: "yes" 45, "no" 84. The former or positive replies were 35 per cent of the replies received. The negative replies were 65 per cent of the replies received. Of all the questionnaires sent out, the positive replies made up 29 per cent, the negative replies 55 per cent, and "no answer" 16 per cent.

Question Two was: "If there is a course of this kind, is it elective or compulsory for all freshmen?" While forty-five institutions claimed that they offered a course or courses for the improvement of study habits of their students, only forty-three replied to Question Two. Of these, thirty stated that the course was elective and thirteen stated that it was compulsory; in other words, the course was elective in 70 per cent of the institutions offering the course and was compulsory in 30 per cent.

Question Three was: "Would such a course be open to others if they were in academic trouble? Compulsory?" Forty-six of the returned questionnaires contained replies to this question. Of these, the methods of study classes were: "Open to others than freshmen if in academic trouble," 39 institutions, or 81 per cent of the institutions answering this question. They were "not open to others than freshmen even though they were in academic trouble," in 7 instances or in 15 per cent of the colleges and universities answering this question. Attendance in these classes was "compulsory for others than freshmen if in academic trouble," in 4 instances or in 8 per cent of institutions answering this question. This course was open to others than freshmen if they were in academic trouble in 25 per cent of all the institutions

questioned; was compulsory for this group in 1 per cent of all the institutions to which questionnaires were sent if one grants that the institutions which did not reply had no such course, and "no reply" in 110 or 71 per cent of all the institutions questioned.

Question Four was: "What are the maximum sizes of these classes?" The mean size of these classes in the thirty-eight institutions which replied to this question was  $42.84 \pm 26.94$ . The median size was 30. The range lay between 15 and 175. It is the belief of this writer that a class of this kind which contains more than twenty-five members is impracticable because an important part of the work of such a class is individual counseling and tutoring. Group counseling must be supplemented with individual counseling if it is to be effective (44).

Question Five was: "What is the name of the course?" This question was answered on forty-two of the questionnaires. The names are listed below:

- College Aims
- College Work Techniques
- Communication Skills
- Critical Thinking
- Educational and Social Efficiency
- Effective Methods of Study
- Effective Reading
- Effective Study (3)
- Freshman Orientation
- Group Counseling (2)
- Guidance (2)
- How to Study (4)
- Improvement of Reading and Study Habits

Introduction to College Technics  
 Methods of Study (2)  
 Orientation (3)  
 Personnel and Guidance  
 Psychology 101  
 Reading and Study (6)  
 Reading Clinic  
 Reading Laboratory  
 Remedial Methods in Reading and Study  
 Remedial Reading and Study  
 Study Methods  
 Study and Reading Techniques (2)  
 Techniques of Good Study Habits

It may be seen that these course names may mean anything as to their content and purpose, and may or may not be classified as courses in methods of study. They were listed, however, on the return questionnaires as courses designed for the improvement of study habits and have been treated in this manner in this thesis.

Question Six was: "If it (the course) carries credit, how many quarter or semester hours?" Forty-four replies were received. Of these, eighteen courses carried no academic credit. Two carried nonacademic credit in institutions requiring five nonacademic credits in addition to the academic credits necessary for graduation. Two institutions gave year-courses in this subject carrying six quarter-hours of credit. One college granted five quarter-hours of credit; seven granted three quarter-hours of credit; three granted two quarter-hours of credit; six granted one and a half quarter-hours; four granted one; and one granted three-fourths of a quarter-

hour of credit (actually half a semester credit).

Question or Item Seven was: "If possible, I should like to obtain the syllabus of your course in study techniques." Forty-one institutions reported that they had syllabi, but only two forwarded copies. These were the Iowa State College and the University of Illinois.

Question Eight was: "If you have such a course or courses, in what year was it or they added to the curriculum?" Forty-two institutions answered this question. The data are given in TABLE II.

TABLE II

Years in Which Methods of Study Courses  
Were Established in 41 Institutions

Year	No.	Year	No.
1923	1	1942	2
1934	1	1943	4
1935	3	1944	3
1936	1	1945	3
1938	2	1946	4
1940	2	1947	9
1941	1	1948	6

It may be seen that the trend has been to establish more of these courses, especially since the colleges have been receiving more students from high schools in which

education has been made "so interesting and popular that all young people of high school age will want to attend." Perhaps the return of the veterans from World War II influenced the establishment of these courses in 1946 and 1947, whether the majority of the veterans needed them or not.

Question Nine was: "What has been the trend of growth of the course or courses in sections or enrollments since its or their addition?" Of the thirty-four replies to this question, twenty-two were "expanding" or "increasing demand," five were "varying demand," four were "about the same," two were "uncertain," and one was "not decreasing." While the number of replies is small -- 22 per cent of the number of questionnaires sent out -- the trend within the institutions offering such courses is indicative of an increased demand. Of course, a great deal of this demand will depend upon the quality of the instruction and the appeal of the instructors in these courses. Perhaps some of the demand is based upon the competition in scholarship given by the veterans, who are older and who have higher aspirations than many of the students just out of high school have.

Question Ten was: "Is the need for such a course or courses greater today than it was at the time it or



they were added to the curriculum?" Seventy-two replies were received to this question although only forty-five of the colleges or universities replied that they had established courses in "Methods of Study." The replies will be classified into two groups: those who answered the question directly, and those who answered the question indirectly. There were forty in the first group, and thirty-two in the second.

The first group of replies may be tabulated as:

There is a great need for this course.....	15
The need at present is greater.....	11
The need is about the same.....	10
Need more classes but trained personnel is not available.....	1
The need is no greater.....	1
The need is probably not any greater.....	1
Ten per cent need help but only one per cent try to get it .....	1
Total	40

The second group of replies may be tabulated as:

Counseling service gives aid to those needing it.....	11
Counseling gives special study aid.....	3
Orientation program.....	3
Departmental aid in all schools.....	2
Guidance in the testing service.....	2

Orientation course for no credit.....	2
Attention given to study in required courses in psychology.....	1
Corrective courses in English only.....	1
Corrective courses in English and mathematics.....	1
Done in regular courses and in the counseling service.....	1
Have counseling service, but expect to put in courses soon.....	1
Have departmental classes to aid students...	1
Help in study offered in group counseling...	1
Honor societies aid in fight against low grades.....	1
Lectures offered, attendance not compulsory.....	1
<hr/>	
Total	32

One registrar wrote, "We have no such course. Study habit is acquired in elementary and high schools, not in college. That is entirely too late." The preponderance of opinion received is against him, however. From the second part of the foregoing tabulation one may surmise that the methods listed in the second part are incidental or even accidental to some degree.

While only forty-five colleges and universities, or thirty-five per cent of the institutions replying to the questionnaire had courses in the methods of study,

seventy-two or fifty-six per cent of the institutions replying stated that there was a need for such a course and that some attempt was being made to meet this need in some way.

### A Study of 150 Students Suspended for Scholarship Deficiencies

The third of the studies contained in this thesis involves three qualities or abilities of 150 Oregon State College students, chosen at random, who were suspended for scholarship reasons during 1947-1948. Those chosen were the first 150 for whom decile ratings on the American Council Education Psychological Test were available and, as far as possible, those for whom decile ratings on an English placement test and on high school grade achievement were available; in other words, they are not a selected group.

The American Council on Education Psychological Test is so widely known that it probably needs no discussion. The English Placement Test used is a combination of the Cooperative Reading Test and a locally-made test of grammar and language usage. The content of this test is changed every year or two, but the framework has remained the same over several years. It has proved quite satisfactory in the distribution of freshmen students among the four quarters of beginning English composition.

High school achievement deciles are based on the numbers of the different grades received by each student when he was in high school. These 150 suspended students were located in the following deciles in the three measurements shown below:

TABLE III

Decile Locations of 150 Suspended Students in Three Measurements

Decile	ACE	English Placement*	High School Achievement**
10	7	2	0
9	9	7	5
8	15	10	12
7	11	10	12
6	17	12	9
5	11	12	13
4	22	16	14
3	7	18	22
2	27	22	29
1	24	18	25
	150	127	143

\* 23 ratings not available

\*\* 7 ratings not available

While a third or more of these students were in the lowest two deciles in one or all of these measurements, enough of the remainder were in the higher deciles to show that the majority of these students need not have been suspended as far as ability to do college work was concerned. Poor background in language usage, poor reading ability, lack of interest, competing interests, and especially lack of industry were the actual causes of the suspension of the most of them. Under careful guidance in enrollment and in the presence of determination in the student, even the first decile students can -- in many instances -- complete the college course in fourteen or fifteen quarters. While not all of these students were known to the writer, the majority were. It is his belief that competing interests, unwillingness to study, and unwillingness to face the total competitive situation account for the poor grades which brought about the suspensions of the large majority of these students. It would appear that the need for more sections of a methods of study course, compulsory enrollment in this course of many more students, and a greatly expanded program of guidance are needed if the preventable cases of suspension for scholarship reasons are to be prevented and if one believes that the taking of courses in methods of study is effective in stimulating some or most of their

members into the development of suitable study habits.

A Study of the Scholastic Fates of 150 Students Who  
Had Taken the Course in Methods of Study

The fourth of the studies contained in this chapter involves five measurements of 150 Oregon State College students who have taken the local course in "Methods of Study." These measurements are: American Council on Education Test decile, English Placement Test decile, high school achievement decile, the cumulative-grade-point averages through the spring quarter of 1947-1948, and the number of quarters of enrollment in the College of the members of this group up to and including the autumn quarter of 1948-1949. Following each of the tables showing the distribution of this group by deciles are additional tables showing the same data for (a) the members of this group still enrolled in the autumn quarter 1948-1949, (b) the members of this group who were suspended prior to this quarter, and (c) the group who withdrew from the College prior to this quarter. While it is known that some of the members of this group who withdrew transferred to other colleges and universities, the finding of this material on all of this group would have been so difficult as to be impracticable. For that reason, no distinction is here made between those students who withdrew and did not enter any other college and those

who transferred.

In TABLE IV are shown the deciles on the American Council on Education Psychological Test in which these 150 representative students who had taken the course in methods of study were located.

TABLE IV

Deciles on the ACE Test in Which Members  
of This Group Were Located

Decile	No.
10	1
9	15
8	6
7	10
6	14
5	17
4	16
3	13
2	24
1	34
	<hr/> 150 <hr/>

Assuming that students in Decile Four and above are capable of doing college work satisfactorily, seventy-nine of these students were capable of doing acceptable college work. Experience, however, has shown that some first, second, and third decile students are graduated with quite satisfactory scholastic records by taking lighter scholastic loads over a larger number of quarters, having unusual industry, and having attitudes of

determination and cooperation. This writer believes that all except a few of the Decile One students could have completed the College course if they had really wanted to and if they had been given good advisement. This writer further believes that the individual counseling which can be given to members of methods of study classes can be invaluable to them and that an understanding of the whole college-student situation can make an understanding of each individual's problems much clearer to himself or herself. Students who are persuaded to leave the College voluntarily and are given advisement on things which they can do well and the inspiration to try to do them well are much less likely to become mental hygiene problems and enemies of the College than are those who are left to shape their own courses unaided. In this connection much advantage can be taken of the college testing and counseling service, if it is effective.

TABLE V shows the American Council on Educational Psychological Test deciles for the members of this group of students who have taken the course in "Methods of Study" and who are still enrolled in the autumn quarter of 1948-1949.



TABLE V

Deciles on the ACE Psychological Test in Which These  
Students Who Were in Oregon State College in the  
Autumn Quarter of 1948-1949 Were Located

Decile	No.
10	0
9	13
8	5
7	5
6	10
5	11
4	7
3	10
2	11
1	17
	<hr/> 89

One may see from a comparison of TABLES IV and V that sixty-one of these 150 students were no longer enrolled in the autumn quarter of 1948-49. Of these sixty-one students, thirteen were in the sixth to tenth ACE deciles (inclusive) while forty-eight were in the first to fifth ACE deciles (inclusive). Almost four times as many in the lower half as in the upper half had left the College for some reason. Most of these were fully capable of doing college work, however.

The 59 per cent of these students still registered may be compared numerically with the 45 per cent of entering freshmen who received their degrees at the end of their twelfth quarters although it is probable that

some of these students will drop out in the future.

TABLE VI shows the ACE Psychological Test deciles of the members of this group who had been suspended for scholarship reasons prior to the autumn quarter, 1948-1949.

TABLE VI

Deciles on the ACE Psychological Test in Which  
the Members of This Group Who Were Suspended  
for Scholarship Reasons Were Located

Decile	No.
10	0
9	1
8	0
7	2
6	2
5	0
4	2
3	0
2	3
1	5
	<hr/>
	15

Of these fifteen who were suspended for scholarship deficiency, the eight in the lower half of the ACE decile group may have found college study so difficult that they were incapable or unwilling to do it satisfactorily, but this cannot apply to the seven in the upper. Unwillingness to make the effort required and competing interests are probable causes of their unsatisfactory grades.

TABLE VII shows the ACE Psychological Test deciles of the members of this group who had withdrawn from all college work and those who had withdrawn to transfer elsewhere, without distinction between these two groups.

TABLE VII

Deciles on the ACE Psychological Test in Which  
the Members of This Group That  
Withdrew Were Located

Decile	No.
10	1
9	1
8	1
7	3
6	2
5	6
4	7
3	3
2	10
1	<u>12</u>
	46

Of the forty-six members of this group who withdrew either from all college work or to transfer elsewhere, eight were in the upper half in scholastic aptitude and thirty-eight, or 83 per cent, were in the lower half. For the latter group, the struggle may have been too severe for their available courage, determination, prior training, and native ability.

TABLE VIII shows the deciles in which all of the members of this representative group of students who had

taken the course in "Methods of Study" were distributed on the English Placement Test for whom there were ratings on this test.

TABLE VIII

Deciles on the English Placement Test in  
Which the Members of This Methods  
of Study Group Were Located

Decile	No.
10	2
9	7
8	5
7	10
6	14
5	14
4	15
3	13
2	17
1	24
	<hr/> 121 <hr/>

It may be seen that thirty-eight members of this group, or 31 per cent, were in the upper half of the deciles and that eighty-three, or 69 per cent, were in the lower half in ability to read and write English. While being below college average in skill in English usage is not an insuperable handicap, it is a handicap, largely in accordance with its degree. It can, of course, be overcome by extra effort and interest. Sixty-nine per cent of this group were also in the lower half on the ACE Test, but they were not in all cases the

same individuals.

TABLE IX shows the deciles on the English Placement Test for the members of this group who had taken the course in Methods of Study and who were still enrolled in the College during the autumn quarter 1948-1949.

TABLE IX

Deciles on the English Placement Test in  
Which the Members of this Methods of  
Study Group Still in College Were Located

Decile	No.
10	2
9	3
8	3
7	8
6	7
5	8
4	9
3	9
2	9
1	14
	<hr/>
	72

It may be seen that forty-nine, or 40 per cent, of these students who had taken the course in "Methods of Study" had left the College either through suspension or withdrawal prior to the autumn quarter of 1948-1949. Of those who were still in the College, twenty-three were in the upper five deciles in comparison with thirty-eight in the original group and forty-nine were in the lower five deciles in comparison with eighty-three in the

original group. There is little question that poor ability in English contributes to poor general scholarship just as poor general scholarship contributes to poor ability in English or, perhaps, both are due to a third factor such as poor home background or poor intelligence.

TABLE X shows the deciles on the English Placement Test for the members of this group who had taken the course in "Methods of Study" and who were suspended prior to the autumn quarter, 1948-1949.

TABLE X

Deciles on the English Placement Test in  
Which the Members of This Methods of  
Study Group Who Were Suspended Were Located

Decile	No.
10	0
9	0
8	0
7	1
6	2
5	2
4	1
3	1
2	1
1	5
	<hr/>
	13

Of the forty-nine members who were no longer registered out of this total group of 121 students, thirteen had been suspended for scholarship reasons. Of these thirteen, three were in the upper half of the English

Placement Test deciles and ten were in the lower half. It is known that some of these students would have withdrawn from all college attendance if they had not been suspended, as a result of the counseling which had been given them. These members may be compared with five in the upper half of the ACE deciles who were suspended and the ten in the lower half of the ACE deciles who were suspended.

TABLE XI shows the deciles on the English Placement Test for the members of this group who had taken the course in "Methods of Study" and who had withdrawn voluntarily prior to the autumn quarter, 1948-1949.

TABLE XI

Deciles on the English Placement Test in  
Which the Members of This Methods of Study  
Group Who Withdrew Were Located

Decile	No.
10	0
9	4
8	2
7	1
6	5
5	4
4	5
3	3
2	7
1	5
	<hr/>
	36

Of this group who had taken the course in "Methods of Study" and for whom English Placement Test deciles were available, thirty-six withdrew from the College. Twelve of these were in the upper half of the English Test deciles and twenty-four were in the lower half. This may be compared with eight in the upper half of the ACE deciles who had withdrawn and the thirty-eight in the lower half of the ACE deciles who had withdrawn. It would appear that low scholastic aptitude is a larger factor in withdrawal from college than ability in English is since the percentiles of those withdrawing who are in the lower halves are 83 per cent on the ACE Test and 67 per cent on the English Placement Test.

TABLE XII shows deciles in high school scholastic achievement for these representative students who had taken the course in "Methods of Study" for whom these ratings were available.



TABLE XII

Deciles in High School Scholastic Achievement  
in Which the Members of This Methods of  
Study Group Were Located

Decile	No.
10	3
9	10
8	10
7	20
6	12
5	17
4	19
3	18
2	15
1	16
	140

It may be seen that fifty-five of these students, or 39 per cent, were in the upper five deciles in this measure and eighty-five, or 61 per cent, were in the lower. This measure is widely held to be one of general scholastic ability or ability to learn from the printed page but more especially is it held to be a measure of scholastic industry. However, the scholastic standards of the various high schools are so different that the ratings or deciles are only relatively reliable as indexes for prediction of college scholastic performance. If the high school industry of a student has been great and the scholastic aptitude is low, the college grades will probably be much lower than the high school grades. If the

high school industry has been low and the aptitude is large, the student may increase his industry in college and earn much higher grades in college than he did in high school. In addition, the brighter and more energetic pupils in the smallest high schools are usually so busy with athletics, the school annual, school plays, and other similar activities that they have no time to study even though they may not be overabsorbed in interest in these activities.

TABLE XIII shows the deciles in high school scholastic achievement for the members of this "Methods of Study" group who were still enrolled in the College in the autumn quarter, 1948-1949, and for whom ratings were available.

TABLE XIII

Deciles in Which the Members of This Methods of Study Group Who Were Still in College Were Located in High School Scholastic Achievement

Decile	No.
10	3
9	6
8	9
7	13
6	6
5	10
4	12
3	9
2	8
1	7
	<hr/> 83 <hr/>

It may be seen that thirty-seven members of this group were in the upper five deciles in high school scholastic achievement and forty-six in the lower five. These are 45 per cent and 55 per cent, respectively, of this group. This may be compared with the 39 per cent and the 61 per cent, respectively, of the original total of this group. In spite of the number who were suspended for low scholarship, only a slightly larger proportion of the members of this group who were in the lower half on high school achievement were no longer in College than was the case with the members in the upper half in high school achievement. This may be due to the greater determination and greater latent ability of the group in the lower half, but this was not determined in this thesis. It would require the study of the individuals by name and close personal acquaintance.

TABLE XIV shows the deciles in high school achievement for the members of this "Methods of Study" group who had been suspended for scholastic deficiency prior to the autumn quarter, 1948-1949.

TABLE XIV

Deciles in Which the Members of This Group  
Who Had Been Suspended for Scholastic  
Deficiency Were Located in High School  
Scholastic Achievement

Decile	No.
10	0
9	0
8	0
7	0
6	1
5	1
4	1
3	4
2	3
1	5
	<hr/> 15

Only one member of this group in the upper half on high school scholastic achievement was suspended for low scholarship, while fourteen in the lower half had been suspended at the time of this study. These percentages of 7 per cent and of 93 per cent, respectively, may be compared with those of the original total of this group of 39 per cent and 61 per cent, respectively. It may be reasonably surmised, without a thorough study, that these students who had been suspended had tried at least reasonably hard but did not have quite the necessary ability and more particularly the necessary training in study and in industry in most cases.

TABLE XV shows the deciles in high school scholastic achievement for the members of this group who had had "Methods of Study" and who had withdrawn prior to the autumn quarter, 1948-1949.

TABLE XV

Deciles in Which the Members of This Group  
Who Had Withdrawn Were Located in High  
School Scholastic Achievement

Decile	No.
10	0
9	4
8	1
7	7
6	5
5	6
4	6
3	5
2	4
1	4
	<hr/> 42 <hr/>

Seventeen members of this group, or 40 per cent, were in the upper half of the College group in high school scholastic achievement while twenty-five, or 60 per cent, were in the lower half. This would seem to indicate that lack of determination and of satisfactory goals was about the same in the students in both of these upper and lower halves. It would also seem to indicate that training in good study habits in high school is desirable preparation for college study.

TABLE XVI shows the number of quarters which all members of this group that had taken the course in "Methods of Study" had attended Oregon State College, including the autumn quarter of 1948-1949.

TABLE XVI

Quarters in Attendance of Those Who Had Taken the Methods of Study Course

Quarters in Attendance	No.
10	4
9	1
8	2
7	26
6	15
5	2
4	46
3	29
2	18
1	7
	<hr/> 150 <hr/>

While it would appear that fifty-four had completed the first year or a part of it only, the "Methods of Study" course is primarily for freshmen and some of the students included in this study were still in their freshman year. As may be seen from TABLE XIX, thirty-two members of this group, or 21 per cent, withdrew after the completion of only one college year or a part of one college year and thirteen, or 9 per cent, were suspended during or at the end of one college year. This makes

forty-five students, or 30 per cent, who completed one college year or less, but this was not all loss to either the College or the students.

Better guidance in high school could have prevented some of this to the mutual advantage of the College and the students, however. Sixty-three members of this group, or 42 per cent of the entire group, were in attendance for two full academic years or a part of the second year. Thirteen of these students, or 9 per cent of the entire group, withdrew at the end of or during the second year. Two, or 1 per cent of the whole group, were suspended for scholastic deficiencies at the ends of their fourth and sixth quarters. Twenty-nine members of this group, or 19 per cent, were in attendance for all or part of their third college years at the time of this study. One of this group withdrew during his third year, and none was suspended. Four members of this group, or 1 per cent, were in their fourth year of attendance at the time of this study, and were likely to complete their college courses. As far as the study has continued, none of this group withdrew or was suspended for scholastic deficiencies during their fourth year.

During the time covered by this study, sixty-one of the group who had taken the course in "Methods of Study," or 41 per cent, withdrew or were suspended. When it is

considered that these students were rather carefully selected as needing the help which the course could give them, this percentage of withdrawal and suspension, which is slightly below that of the Oregon State College as a whole, is rather remarkable. Of course, some members of this group will probably drop out or be suspended in the future, but the salvage of so many "poor prospects" is worthy of considerable consideration of college personnel and other administrators.

TABLE XVII shows the numbers of quarters which the members of this group who had had the course in "Methods of Study" and who were registered at Oregon State College during the autumn quarter, 1948-1949, had been in attendance.

TABLE XVII

Quarters in Attendance of the Members of  
This Group Who Had Taken Methods of Study  
and Who Were Still Registered

Quarters Attended	No.
10	4
9	1
8	2
7	25
6	5
5	1
4	42
3	7
2	2
1	0
	<hr/> 89 <hr/>



Of this group, nine were still in their first year; forty-eight were in their second year; twenty-eight were in their third year; and four were in their fourth year; and all were in attendance still. This does not indicate as fast a rate of dropping out as it would seem to be because most of the members of this group had not yet had time enough to be in their third and fourth years.

TABLE XVIII shows the numbers of quarters in attendance for the members of this group who had had the course in "Methods of Study" and who had been suspended for scholarship reasons prior to the autumn quarter, 1948-1949.

TABLE XVIII

Quarters in Attendance of the Members of  
This Group Who Had Taken Methods of  
Study and Who Had Been Suspended for  
Scholastic Deficiencies

Quarters in Attendance	No.
10	0
9	0
8	0
7	0
6	1
5	0
4	1
3	5
2	7
1	1
	<hr/>
	15

It may be seen that, of those who were suspended, thirteen were suspended at the end of or during their first year and two at the end of or during their second year.

TABLE XIX shows the numbers of quarters in attendance for the members of this group who had taken the course in "Methods of Study" and who had withdrawn from the College prior to the autumn quarter, 1948-1949.

TABLE XIX

Quarters in Attendance of the Methods of Study Group Who Had Withdrawn

Quarters in Attendance	No.
10	0
9	0
8	0
7	1
6	9
5	1
4	3
3	17
2	9
1	6
	<hr/>
	46

Of these forty-six students who had withdrawn from the College, thirty-two withdrew at the end of or during the first year; thirteen at the end of or during the second year; and one during the third year. It is probable that there will be additional withdrawals in the

future, especially among the members of this group who are still freshmen or sophomores.

TABLE XX shows the cumulative grade-point-averages for all of the members of this representative group who had had the course in "Methods of Study" for such length of time as they were registered. In this distribution, "A" equals four points, "B" equals three points, "C" two points, "D" one point, and "F" no points. The all-College grade-point-average for 1947-1948 was 2.53.

TABLE XX

The Cumulative Grade-Point-Average for  
All of the Methods of Study Group Studied

G.P.A.	No.
3.5--3.99	1
3.0--3.49	4
2.5--2.99	15
2.0--2.49	58
1.5--1.99	50
1.0--1.49	17
.5-- .99	4
0-- .49	1
	<hr/> 150

The cumulative-grade-point-averages for all of the members of this group show that seventy-eight had made average or better grades, fifty others had made passing but not satisfactory grades, and only twenty-two or less than 15 per cent have made "D-" or lower averages.

TABLE XXI shows the cumulative grade-point-averages of the members of this group who had had "Methods of Study" and who were registered in the College during the autumn quarter of 1948-1949.

TABLE XXI

The Cumulative Grade-Point-Averages for the  
Methods of Study Group Still Registered  
at Oregon State College

Cumulative G.P.A.	No.
3.5--3.99	1
3.0--3.49	4
2.5--2.99	8
2.0--2.49	45
1.5--1.99	29
1.0--1.49	2
.5-- .99	0
.0-- .49	0
	<hr/> 89

Of these eighty-nine students, fifty-eight were making satisfactory grades, twenty-nine were unsatisfactory but borderline, and only two were clearly unsatisfactory in their total grades up to the time of this study. Several of this group have been earning good grades since they took the course in "Methods of Study," but are still below average in cumulative grades because they are having to raise the poor grades made earlier.

TABLE XXII shows the cumulative grade-point-averages of the members of this group who had the course in

"Methods of Study" and who had been suspended prior to the autumn quarter of 1948-1949.

TABLE XXII

Cumulative Grade-Point-Averages for the  
Methods of Study Group Who Have Been Suspended

Cumulative G.P.A.	No.
3.5--3.99	0
3.0--3.49	0
2.5--2.99	0
1.5--1.99	3
1.0--1.49	8
.5-- .99	3
.0-- .49	1
	<hr/> 15

Up to the time of this study, only 10 per cent of this group had been suspended for scholastic deficiency. This is rather remarkable because the members of the classes in "Methods of Study" are rather carefully selected as needing the assistance which such a course can give them.

TABLE XXIII shows the cumulative grade-point-averages of the members of this group who withdrew prior to the autumn quarter, 1948-1949.

TABLE XXIII

Cumulative Grade-Point-Averages of the Methods  
of Study Group Who Have Withdrawn

Cumulative G.P.A.	No.
3.5--3.99	0
3.0--3.49	0
2.5--2.99	7
2.0--2.49	13
1.5--1.99	18
1.0--1.49	7
.5-- .99	1
.0-- .49	0
	<hr/> 49 <hr/>

Of this group, seven, or 15 per cent, were above College average in their cumulative grades, and twenty, or 43 per cent, were above the required "satisfactory" mark. Twenty-six, or 57 per cent, were below the "satisfactory" mark, but eighteen, or 39 per cent, of these were borderline in their cumulative grade-point-averages. Whether the members of these last two groups could have been stimulated by any reasonable measures to make satisfactory grades and to continue their college careers is a question. Several of these withdrawing students were counseled to withdraw because continued attendance did not promise adequate returns to the students or to the college.

## CHAPTER IV

## Summary

1. The preparation of high school youth for study at the college level is at a very low ebb. There are two very possible causes for this condition. The War has not aided in the preparation of our youth for study at the higher levels. A possibly false philosophy of education for several years has also left its mark on the youth of our present schools. This is not a new condition; hence, one will find courses in "Methods of Study" at the college level.
2. World War II service or high wages during the war years has been most disruptive in the establishment of study skills in our youth.
3. Democracy, by its very nature, needs an educated and thinking (reasoning) public, but not all can be educated to the levels needed to make democracy function to its best for all people.
4. Propaganda is so cleverly dispensed that it behooves education to teach our youth how to detect and resist it.
5. There have been many plans for supervised study. Most of these plans would be effective if they were administered as they were intended to be.

6. Reading comprehension and reading rate are important tools for everyday life. Education should make sure that every pupil is as well equipped as practicable in these tool subjects.
7. A useful vocabulary is a necessary tool and each pupil should be encouraged to develop it so that he will have a tool with which to express his thinking. Thinking should be stimulated in each pupil so that he will be able to figure things out for himself and express his thoughts to others.
8. Methods of study will often change a pupil's attitude toward study, direct his energy into proper channels, aid him in earning better grades, and establish better behavior habits in him.
9. The success of the "Methods of Study" course depends on the quality of the teacher and his or her ability in counseling.
10. The teacher of a "Methods of Study" course should stimulate the pupils to immediate and long-range action. The knowing of rules of what should be done by the pupil is not enough.
11. In general, the older books on "Methods of Study" are the better books.
12. There is an immense amount of material on "Methods of Study" available.



13. Most of the available material in "Methods of Study" is largely rule-of-thumb.
14. The discussion of psychological principles behind "Methods of Study" is of doubtful value. The books of this nature have been comparatively short-lived.
15. As long ago as 1909, parents and adults in general were dissatisfied with the lack of knowledge and the unwillingness to study of the current younger generation.
16. It is pointed out by this study that a large majority of the state colleges and universities in the United States do not offer courses in "Methods of Study."
17. Where such a course is offered, it is elective in the large majority of schools.
18. Where such courses are offered, they are open to others than freshmen who are in academic trouble in the majority of institutions. In a few cases, this course was compulsory for those in academic trouble.
19. The mean size of such classes was  $42.84 \pm 26.94$  students. The median size was 30.
20. In some of the colleges and universities, these courses are limited to certain subject-matter fields; others are wider in their scope. It would be difficult to teach "remedial English," for example, without

teaching quite a little of generally applicable methods of study.

21. In the majority of colleges and universities offering "Methods of Study" courses, some college credit was attached to the course.
22. The majority of these courses have been established since 1942.
23. The number of students enrolling in these courses is increasing at the present time.
24. The replies to this questionnaire, largely by registrars, show that a slight majority believe the need for "Methods of Study" courses is greater today than formerly. A majority of the remainder would attempt the same results by different means.
25. Of the students who had been suspended for scholastic deficiencies and who are studied here, a large majority were well enough equipped in (a) scholastic aptitude, (b) training in reading and in English language usage, and (c) high school scholastic performance to have done at least the minimum of satisfactory scholastic work at the college level. Competing interests, unwillingness to study, unwillingness to face a highly competitive situation, and poor backgrounds of preparation at school and at home probably contributed more to the low grades

which caused suspension for scholarship disability than inability to do the work did. Other students who had less ability in these three measures than the majority of this group have received their degrees after making satisfactory records in class-work, student activities, and social activities although they may have taken more than the usual twelve quarters in which to do it.

26. The majority of the students who had taken the local course in "Methods of Study" could have completed the college course if they had really wanted to and if they had received good advisement, because others with similar equipment in these measures have.
27. Two-thirds, or 69 per cent of the students taking the local "Methods of Study" course, which is elective, were in the lower half of the College American Council on Education Psychological Test deciles.
28. Of the students taking the local "Methods of Study" course, 59 per cent had withdrawn voluntarily or had been suspended at the time of this study. Others undoubtedly will. Of the 41 per cent who were still registered in the autumn quarter of 1948-1949, 63 per cent were in the lower five deciles on the ACE Test and 37 per cent were in the upper five deciles.
29. Of these students taking the local "Methods of

Study" course, fifteen had been suspended for scholarship deficiencies. Of these fifteen, five were in the upper five deciles on the ACE Test and need not have been suspended as far as their scholastic aptitudes were concerned.

30. Of the forty-six students in this group who had taken the local "Methods of Study" course and who had withdrawn voluntarily, thirty-eight were in the lower five deciles on the ACE Test but only twenty-two were in the lower two deciles.
31. Of the 121 students who had taken the local course in "Methods of Study," 69 per cent were in the lower five deciles of the English Placement Test. This may be compared with the 69 per cent of this group who were in the lower five deciles on the ACE Test. They are not in all cases, however, the same individuals.
32. Of the members of this group who had taken the local course in "Methods of Study" and who were still registered in the College in the autumn of 1948-1949, 32 per cent were in the upper five deciles on the English Placement Test and 68 per cent were in the lower five deciles. These are practically the same per cents as those of the whole original group in this study. This may be taken to show that

placement on the English Placement Test does not indicate the probable "mortality rate" of such students as these.

33. Of the thirteen members of this group who had taken the local course of "Methods of Study" and who had been suspended for reasons of scholarship, ten were in the lower half on the English Placement Test. This 77 per cent may be compared with the 68 per cent of this group who were still registered and who were in the lower five deciles on this same test.
34. Of the thirty-six members of this group who had taken the local course in "Methods of Study" and who had withdrawn voluntarily, twenty-four or 67 per cent were in the lower five deciles on the English Placement Test. This may be compared with the 83 per cent in the lower half on the ACE Test who had likewise withdrawn.
35. Sixty-one per cent of this "Methods of Study" group were in the lower half of the ratings on high school scholastic achievement. This measure is widely accepted as an index of willingness to learn from the printed page and of industry in this activity. Since the standards of the various high schools vary widely and since grades are only fairly valid

measures of accomplishment, this criterion is only fairly valid. In practice, it has considerable value, however, in the prediction of college scholastic accomplishment.

36. Of this group who had taken the local course in "Methods of Study" and who were still registered for the autumn quarter of 1948-1949, 45 per cent were in the upper half in high school scholastic achievement. A larger percentage of the students in the upper half in high school accomplishment remained in the College than of those who withdrew.
37. Of the students who had taken the local course in "Methods of Study" and who had been suspended for unsatisfactory scholarship, 93 per cent were in the lower half in high school scholastic achievement. This may be taken to indicate (a) lack of adequate goals and sufficient determination and (b) the penalty for training in poor study habits in high school as preparation for college study.
38. Of the students who had taken the local course in "Methods of Study" and who had withdrawn voluntarily, 40 per cent were in the upper half in high school scholastic achievement. This may be compared with the 45 per cent of the same original group who were still registered in college. This would seem

to indicate that good high school scholastic performance is not enough for college scholastic success.

39. The one hundred fifty members of this group who had taken the local course in "Methods of Study" had, at the time of this study, completed from one to ten quarters, inclusive, in the College. Of these, eighty-nine were still registered at the time of this study -- nine still in their first year, forty-eight in their second year, twenty-eight in their third year, and four in their fourth year. This does not indicate as fast a rate of withdrawal in the upper levels as it would seem to because most of these students had not yet had time enough to become juniors and seniors. All of the members of this group who had been suspended for poor scholarship had been suspended by the ends of their second years. With the exception of one individual, the same is true of those who had withdrawn voluntarily although it is probable that others will still withdraw and, possibly, that others will still be suspended.
40. Of all of the one hundred and fifty members of this group who had had the local course in "Methods of Study," seventy-eight had made satisfactory or

better cumulative grade-point-averages, fifty more had made passing but unsatisfactory cumulative grade-point-averages, and only twenty-two, or 15 per cent, had made clearly unsatisfactory cumulative averages.

41. Of the eighty-nine members of this group who had had the local "Methods of Study" course and who were still registered in the College at the time of this study, fifty-eight had made clearly satisfactory cumulative grade-point-averages, twenty-nine were doing passing but unsatisfactory work, and only two were doing a clearly unsatisfactory quality of work. Of the fifteen members of this group who had been suspended for poor scholastic work, all had unsatisfactory cumulative grade-point-averages. These comprised only 10 per cent of the original group, however.
42. Of the forty-six members of this group who had had the local course in "Methods of Study" and who had withdrawn voluntarily, 43 per cent had had satisfactory or better cumulative grade-point-averages, and 57 per cent were below the satisfactory cumulative average. Of this 57 per cent, however, two-thirds were on the borderline between satisfactory and unsatisfactory cumulative marks, but chose not to make the effort to continue their college careers



and to raise their grades to a point at which they would have been allowed to continue. Whether or not they could have been counseled to a point at which they would have done these things is an open question. Actually, several of these people were advised by their counselor to withdraw because (a) it seemed that they had greater interests and abilities along other lines of activity, (b) the poor accomplishments which resulted from the (for them) unusual efforts to accomplish the usual college achievements seemed to be doing damage to their personalities, and (c) the individuals seemed so unfitted to the college group by personality and background as to promise little of real value from continued attendance.

43. A large part of the value of a "Methods of Study" course should lie in the individual counseling given by the teacher to the members of the classes. This assumes (a) that the teacher has the background knowledge, the personality, the interest, and the time to do this counseling and (b) that some person or agency can give and evaluate the various tests, scales, and questionnaires necessary to give a basis for satisfactory counseling.

44. If the writer of this thesis may be permitted to express a personal opinion, the quality of the teacher or instructor -- important as it is in most kinds of classes at the various scholastic levels -- is almost the whole value of the offering of a course in the methods of study or any other similar remedial course. This writer, however, has no suggestions about the evaluation of the quality of the teaching of such courses except one, that is, the quality of the results obtained.

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## **APPENDIX**



## APPENDIX I

Registrar  
Oregon State College  
Corvallis, Oregon

Dear Sir:

It would be greatly appreciated if you would answer the following questions and return this sheet to the Undersigned.

Is there a course, or courses, in your curriculum for the improvement of the study habits of all of your students or those who are or promise to be below average in scholarship?

If there is a course of this kind, is it elective or compulsory for all freshmen?

Would such a course be open to others, if they were in academic trouble?                      Compulsory?

What are the maximum sizes of the classes?

What is the name of this course or courses?

If it carries credit, how many quarter or semester hours?

If possible, I should like to obtain the syllabus for each of your courses in study techniques.

If you have such a course or courses, in what year was it or they added to the curriculum?

What had been the trend of growth of the course or courses in sections or enrollments since its or their addition?

Is the need for such a course or courses greater today than it was at the time it or they were added to the curriculum?

Approved:

H. R. Laslett,  
Professor of Educational  
Psychology

Yours very truly,  
Gilbert McFadden