A STUDY OF THE MICHIGAN STATE COLLEGE SUMMER COUNSELING CLINICS

Thesis for the Degree of Ph. D.

MICHIGAN STATE COLLEGE

Thomas Albert Goodrich

1952

This is to certify that the

thesis entitled

A STUDY OF THE MICHIGAN STATE COLLEGE
SUMMER COUNSELING CLINICS

presented by

Thomas A. Goodrich

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Education

Walter F. Johnson
Major professor

Date May 5, 1952

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A STUDY OF THE MICHIGAN STATE COLLEGE SUMMER COUNSELING CLINICS

by

Thomas Albert Goodrich

A Thesis

Submitted to the School of Graduate Studies of Michigan
State College of Agriculture and Applied Science
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Division of Education

1952

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ACKNOWLEDGMENTS

The writer wishes to acknowledge his indebtedness to the many people who have helped him in the preparation of this study. His greatest obligation is to his Guidance Committee: Drs. Walter F. Johnson, Chairman, Clifford E. Erickson, Cecil V. Millard, Clyde M. Campbell and Leonard J. Luker for their helpful suggestions and criticisms.

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Doctor of Philosophy

Final examination, May 5, 1952, 8:00 A. M., 116 Morrill Hall

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Major Subject: Counseling and Guidance

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A STUDY OF THE MICHIGAN STATE COLLEGE SUMMER COUNSELING CLINICS

By

Thomas Albert Goodrich

AN ABSTRACT

Submitted to the School of Graduate Studies of Michigan State College of Agriculture and Applied Science in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Department of Education

Year 1952

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A STUDY OF THE MICHIGAN STATE COLLEGE SUMMER COUNSELING CLINICS

by

Thomas Albert Goodrich

The general purpose of this study was to evaluate the program of the summer Counseling Clinics sponsored by the Counseling Center at Michigan State College. The specific problem was to examine, describe and determine changes evidenced by clients who participated in the clinics during the summer of 1951. An attempt was made to measure changes in the following areas:

1. Self-understanding - knowing one's assets and liabilities.
2. Decision on educational-vocational goals.
3. Orientation information concerning college.

An effort was made to secure objective data evaluating the 1951 clinic from the viewpoint of the participating client.

The method employed in the study was known as the normative-survey method. The particular type of normative-survey technique was the questionnaire inquiry.

A pilot study was made in the summer of 1950. In the summer of 1951, a pre-clinic questionnaire was administered to the entire group of 635 clients during the first session of the respective clinic in which they participated. On the third day, following the final interview, they were given the post-clinic questionnaire. From this group of 635 participants, two hundred people were selected as a random sample by the random number technique. All information from the completed survey was compiled, tabulated, analyzed and reported in the study.

The results of the research indicated that many people entering

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college lacked "self-understanding" of their potential capacities to do college work and of their ability to read, as compared to results on the A. C. E. Psychological Examination and the Cooperative English Test C2: Reading Comprehension. Their "self-understanding" increased while they were attending the clinics which enabled them to make more realistic educational and vocational plans. Those with deficiencies that could be overcome were able to enroll in the proper Improvement Services offered by Michigan State College.

There was little evidence that clinic participation led to any radical change in the clients' plans concerning college attendance. Likewise, clients made few changes in ultimate vocational goals while they were at the clinics. The seed for better evaluation of plans may be planted at this time but the actual change appears to be gradual. The most significant change was the trend by a number of clients from special programs toward the No Preference program. This trend must be interpreted in accordance with the Michigan State College Basic College philosophy and organization, and the close relationship of college counselors to the No Preference students.

There was strong evidence that participants gained considerable information about Michigan State College. By engaging in a program of orientation planned for prospective students, they were able to become acquainted with college procedures, which gave them an advantage over the non-clinic participants. This orientation experience was one of the most beneficial results of the entire program, according to the clients.

A preliminary follow-up of clients indicated that they made good academic adjustments to college. They had grade point averages comparable

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to college juniors at the end of the first term and they had a smaller percentage of people on probation, as contrasted with other entering freshmen. Whether this can be attributed to the clinics alone or to other factors may require further investigation, but the fact that they were superior academically was shown in the research.

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CHAPTER I

THE PROBLEM AND ITS IMPLICATIONS

Introduction

This study has been undertaken for the purpose of evaluating the program of Counseling Clinics sponsored by the Counseling Center at Michigan State College during the past several summers. These summer Counseling Clinics provide an opportunity for recent high school graduates to seek the aid of professional counselors in a brief but intensive attack on some of the educational and vocational problems which they face.

Choosing a career has been one of the most vital challenges confronting young men and young women as they approach graduation from high school. Should they find a job in business or industry? Should they seek specialized training in a trade, technical or business school? Should they continue their education by enrolling in college? What type of job or profession would be most suitable in terms of their abilities, likes and dislikes? What are the opportunities in the vocational fields? These questions all demand intelligent and objective answers for which it was felt, much help could be provided through the clinics. The first of these programs was inaugurated by the Michigan State College Counseling Center in 1949. Three experimental Counseling Clinics were conducted that summer. Twenty-one clinics have been held to date with eleven more scheduled in 1952. This venture into a comparatively untried educational

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practice has just started to attract attention. People are asking about it. Already several colleges and universities are initiating similar programs or are anticipating doing the same. They want to know what results have been achieved at Michigan State College. Since the program has been operating for three years, some type of evaluation seemed advisable.

The Problem

Statement of the problem. The purpose of this study is to examine, describe, and determine changes evidenced by clients who participated in the clinics during the summer of 1951. An attempt is made to measure changes which are consistent with the objectives which were listed in the brochure published by Michigan State College.[1] These include the following areas:

1. Self-understanding - knowing ones assets and liabilities.
2. Decision on educational - vocational goals.
3. Orientation information concerning college.

An effort was made to secure objective data evaluating the 1951 clinics from the viewpoint of the participating client.

Importance of the study. It has long been recognized that the transition from high school to military service, homemaking, the world of work, business institutions or colleges is a rather difficult experience for most young people. Each year thousands of high school graduates must make important decisions affecting their entire futures. To

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[1] See Appendix A

obtain help in solving these problems 226 young men and women came to the Michigan State College campus in 1949, 366 in 1950 and 635 in 1951. At least 250 additional people were turned down because more applications were received for the late summer clinics than could be accommodated.

The clinic idea has been favorably received by high school administrators and much of the increased participation may be attributed to their support. As already indicated several colleges and universities are asking for further information. The Michigan State College administration, itself, feels the program has done much good but they have little research data to validate their conclusions.

In order to evaluate this program with the view toward improvement certain kinds of basic information are essential. One factor that should be ascertained is what actually happens while the client is here. Has he been changed by this experience while on the campus? Can he formulate more realistic educational and vocational plans as a result of participating in a clinic?

All of the previously stated evidence indicates the immediate need for some type of research. The results when analyzed will be used to determine the value of clinic programs of this type and to plan and improve the clinics of the future.

Definition of Terms

Counseling Clinics. This refers to the total program which lasted three days. During that time the client received assistance in formulating realistic educational and vocational plans. At these sessions he might:

1. Secure assistance in determining aptitude for college.
2. Decide whether or not to attend college.
3. Consider suitable vocations and the methods of obtaining vocational training.
4. Obtain information about course requirements.
5. Confer with members of the Michigan State College faculty.
6. Select fall term courses, insofar as possible, if he plans to attend Michigan State College.
7. Participate in a plan of orientation designed for prospective students.

Basic College. All students at Michigan State College are required to complete a broad general education before they do much specialization. The Basic College is the name given to that portion of the students' college career which he must complete before he is accepted into one of the Upper Schools.

No Preference. This category was set up by the Basic College to designate Basic College students who had indicated no vocational choice but who will decide on a college major sometime before they enter the Upper School.

Enrollment Officer. An official assigned by the college to help a student make out his schedule of classes so that he can pursue his educational objectives.

Counselor. The role of the "counselor" pertains to, as Erickson defines counseling, "The entire process of helping a person having problems and needs to achieve more desirable goals." (1:49) At Michigan State College counselors also serve as enrollment officers for No Preference students.

Limitations of the Study

The Counseling Clinics are a broad program and offer innumerable possibilities for research, thus the delineation and definition of only one of these possibilities, of necessity, constitutes a limitation. Since this investigation was limited to the study of what actually happened to the client while he was attending one of the ten Counseling Clinics held during the summer of 1951 no attempt was made to carry on a longitudinal study of his later success in college.

A third limitation lies in the various degrees of difference in counselor training of the personnel who worked in the clinics. There were the regular Michigan State College counselors who were very familiar with the college, the people with counselor training who were staff members at Michigan State College, the graduate students at Michigan State College who were familiar with the college but had limited experience in counseling, and the visiting high school counselors who were experienced in counseling but had a limited knowledge of the college. Through a counselor training program an intense effort was made to bring everyone's work in the clinics up to an equal degree of competence.

A fourth limitation was involved in the physical conditions under which the group operated. In some clinics the group was by itself and operated as a unit which intensified group spirit, in other clinics the group was put in dormitories in overcrowded relationships with other people on the campus. Groups varied in size from 41 to 83. This may be a factor which had some influence on clinic outcomes.

The final limitation applies to the questionnaire survey method which was employed for the purpose of collecting data for this study.

The limitations of this type of instrument include the difficulty of validating the questionnaire, the difficulty of tabulating unstructured responses, and the difficulty of procuring the desired cooperation of the sources of information. (3) Limitations imposed by the respondents included their biases, the degree to which they were qualified to give the requested information, their interest in the project and the accuracy of their replies.

Organization

Plan of organization. This thesis is divided into eight chapters: In Chapter I a statement of the problem, the importance of the problem, and other related information necessary to an understanding of the thesis are included. A review of the literature pertinent to Counseling Clinics and other related educational research is contained in Chapter II. In Chapter III an attempt is made to describe the development of the Michigan State College clinic program and to point out some problems involved in their organization. The method of conducting the study, the method of acquiring the data and the means of analyzing the data are essential parts of Chapter IV. Analyses of various aspects of the results of the survey are included in Chapters V and VI. In Chapter VII a brief follow-up is made of the clinic participants during the fall term of 1951. The findings, conclusions, and recommendations are summarized in the final Chapter.

CHAPTER II

REVIEW OF THE LITERATURE

There has been relatively little written about High School Counseling Clinics or Educational Guidance Clinics, mainly because the movement is so new and so little has been done in this field. For the very same reason the research in this type of activity has been practically nil. The problems which confront the high school graduate as he faces a vocational decision are serious enough, however, that they are receiving increasing attention.

There are only three other institutions which have developed programs similar in nature to the one now operating at Michigan State College. These programs were developed at Allegheny College, Meadville, Pennsylvania, 1938, DePauw University, Greencastle, Indiana, 1946, and Georgia Institute of Technology, Atlanta, Georgia, 1951. (11, 27, 29) Several colleges and universities are giving serious consideration to starting similar programs. These include the University of Wyoming, University of West Virginia, and the University of Sydney, Australia, to mention only a few.

The present study was conducted to examine changes in individuals while they were completing the three day program at Michigan State College. The research related to this study is reported here in three divisions. The first report summarizes studies dealing with the Educational Guidance Clinics at Allegheny College and DePauw University. The second deals with orientation systems in colleges and universities as they are related to the clinic experiences which are being studied here. The third is concerned with evaluations of personnel programs, especially educational-vocational processes.

The Literature Pertaining to the Programs at Allegheny and DePauw

In 1942, Anderson, in describing the Allegheny program, pointed out the problem of dealing with vocational choice at the college level in the following manner:

> Those administrative officers who have something to do with admissions find it difficult to answer adequately many of the questions which parents and students ask about their chances for success in college, their vocational plans, and their other educational problems. (11:32)

In the same article mentioned above he explains how a committee in 1938 from the same college tried to solve some of the problems. With aid from the Carnegie Foundation for the Advancement of Teaching, Educational Guidance Clinics were constructed. They have been an annual affair at the college ever since. The following questions were among those they attempted to answer: Should I go to college? What type of college should I choose? What predictions can be made about my success in college? Do I seem to have any special talents which ought to be developed? What vocational suggestions may be offered? How far have I explored possible vocational interests or aptitudes? What kind of program will give me the best basis for my future work? What colleges are equipped to provide such courses?

Anderson (11) points out that a number of these participants have been advised not to enter college. This is in keeping with obligations of all colleges and universities to provide as honest and unbiased advice as can be given.

The clinic at Allegheny College is characteristic of all other programs of its kind in that the core of the Clinic Staff is the college

committee on Student Personnel. The staff is supplemented by other staff members, some outside psychologists, a specialist in remedial reading, a psychometrist, and a vocational guidance specialist. Recently high school counselors have been added as well as a representative from the State Department of Public Instruction.

Anderson (11) reveals that clinic activities are divided into three parts. First, the clients are given two and one-half days of testing; second, a review of the testing is done in prolonged staff conference; third, individual conferences with parents and students are arranged to discuss the importance of the data collected. Around this core program are arranged social and recreational events and discussion groups. All these activities take place in a college environment with the full use of college facilities.

In the same article, Anderson also points out that an all out effort is made to see that each student receives individual attention. Counselors are limited to five counselees. At the conclusion of the conference a folder is mailed to the student which contains: first, a Preference to the Educational Guidance Clinical Report which has been written to help parents and students understand test results; second, the report itself which is in convenient profile form; and third, a letter written by the staff member which is a summary of the conference held.

Limited evaluation of their program points to the fact that the clients are highly satisfied with the clinic. This program has been the direct inspiration for the clinic at DePauw University and helped spark the idea at Michigan State College.

Heston has been in charge of a similar program and he, too, pointed

out the lack of Educational Guidance Clinics in this statement:

> This type of educational venture has several very commendable qualities but thus far it has been attempted by only a few scattered schools. Further exploration into this area of concentrated guidance procedures, oriented especially toward college and educational problems and designed to fit individual cases, will well repay considerable investigation on the part of a much larger number of educational institutions. It is a project offering worthwhile returns to all parties concerned, bearing all signs of a sound educational investment. (27:307)

He described in detail the program at DePauw. Many features are very similar to those in the program at Allegheny. His conclusions concerning advantages of the clinic to the individual are very interesting. From the test profile he states the client gains the following results:

1. An analysis of past achievements.
2. An analysis of ability level.
3. An analysis of vocational interest pattern.
4. An analysis of personality traits.

He also stated that from their analysis and their interpretations the student should derive:

5. Help in planning his educational program.
6. A considerable amount of vocational guidance.
7. Beneficial insight into special deficiencies or special aptitudes that might effect his academic or vocational goals.
8. An acquaintance with general college procedures.
9. Suggestions as to the type of school best needed to offer courses suited to his need.
10. A friendly acquaintance with individual faculty members.

Heston also pointed out that while no effort has been made toward objective evaluation of the points just suggested or the ones which follow that they appear to be quite self evident. He summarizes the advantages to the University in the following manner:

1. In making this service available to the public a college is building up the best kind of public relations.
2. The sponsoring college profits because its own staff counselors gain much from the opportunity to make these intensive case studies.

3. The local counselors definitely benefit from the association with visiting counselors imported from responsible positions in personnel offices elsewhere.
4. The local counselors become acquainted with some of their counselees for the ensuing year in a manner far superior to that usually obtained in a typical counselor-counselee relationship.
5. A program of this nature tends to attract particularly earnest students, i.e., those seeking to make the best possible use of their abilities and opportunities. It is reasonable to assume that these students will in turn be attracted to an institution willing to sponsor this counseling service. (The clinic is not designed as a recruiting service, as would be perfectly obvious to anyone in these days of overcrowded colleges)
6. In certain cases of debatable admission qualification, a mutually satisfactory answer may be provided by the clinic as to the advisability of certain candidates.
7. The testing program of the clinic, in so far as it includes the usual entrance examinations, will to some extent relieve the testing load during orientation week.

Brief opinion surveys of the clinic, Heston stated, showed that the program was well received by clients, staff, parents and administrators. He concluded that the clinics needed many improvements, but that it did seem definitely worthwhile to have been able to present a service generating so much desirable "consumer" good-will.

Matteson (38) in a follow up investigation sent a one page evaluation questionnaire to 202 third-term freshmen who had been in the 1949 clinics at Michigan State College. While the percentage of returns was low the feeling toward the help they received was quite uniformly favorable. Suggestions they made for improving future clinics included the lengthening of the program, more and longer intervals between tests, more evening entertainment, and a little more free time. All of these suggestions have been incorporated in the clinics of the past two summers at Michigan State College.

Summary of the literature reviewed which is related to Educational Guidance Clinics at Allegheny College and DePauw University. The analysis of the programs at Allegheny and DePauw indicate many similarities. They differ from the program at Michigan State College in that they allot less time to individual counseling contacts, place more emphasis on parental participation and are of only one week's duration per summer while those at Michigan State College cover the entire summer.

Experience at each of these institutions indicates that programs of this type are favorably received and benefit both the client and the university. There is evidence of need for more clinics of this kind as well as the desirability of a more intensive research study of the entire program.

The Literature Pertaining to Orientation Systems in Colleges and Universities

Most of the published literature about college orientation programs is descriptive in nature. Few carefully controlled research studies have been attempted. Guthrie, in discussing the program at Ohio State University, stated: "We have not done enough in the way of formal research to study the results of our program and it is little consolation to find that little research is carried on elsewhere in the field." (24:716)

Croft (20) in pointing out major reasons for the commencement and continuation of orientation programs gave credit to Dean Warren of Boston University for introducing the first college orientation course in 1888. He also reported that Freshman Week originated at the University of Maine in 1925. He stated that a sound orientation program has two major objectives: (1) To aid the student in becoming acquainted with the

educational facilities offered by the college or university; (2) To give the educational institution an opportunity to evaluate each student. He concluded his article by reporting that orientation programs, based on sound rationale, have gained the respect of all who are acquainted with them, not only the educators, but perhaps more important, the students themselves.

Harvard University (59) in 1925 recognized the need to help new students coming to the campus to adjust themselves to college conditions by the appointment of a special board of freshman advisers. This board consisted of approximately sixty well-selected members of the faculty who had no advisees other than freshmen. Emphasis was placed on knowledge and understanding of the individual rather than on formal interpretation of his academic progress.

Several other examples will be reported briefly in the survey of this literature but one study deserves special attention at this time. Bookman (16), in her study of orientation, reported practices as they existed in 188 institutions ranging in size from one thousand to three thousand students. Her findings showed; (1) a testing program, (2) arrangements for the details of registration, (3) the establishment of student faculty contacts, (4) a series of lectures on aims and purposes of the institution, its history, organization and administration, rules and regulations and curricula offered, and (5) a social and religious program were the prime essentials advocated from a review of the writings of 34 authorities in the field of guidance from 1926 to 1948. Her survey and tabulation of the techniques in use by 143 institutions during orientation week are summarized in the form of 26 distinct conclusions. One

conclusion indicated although 143 schools gave orientation tests only 29 reported the test results used by trained counselors. Her study also revealed that among those schools using the test results for guidance purposes, fewer than ten gave any in-service training on interpretation and use of tests. Another factor shown was that in crowded "freshman days" little time was allotted for social adjustment of students. Her study definitely pointed out the need for colleges to do some thinking about their present inadequate orientation programs.

Jones (31) reported in 1938 that as a result of a series of preregistration meetings of the faculty designed to set up a program of individual help for students at Graceland Junior College, Lamoni, Iowa, much better scholastic achievement was obtained. Results indicated that 77 per cent to 81 per cent of the students achieved or surpassed their level of expectancy throughout the year as measured by the standard adopted for this project. They, too, as the Harvard report (59), focused attention of the faculty and administration upon the student as an individual rather than upon the average tendencies of students as a mass.

The plan of using faculty in a key role during orientation week is quite common in colleges and universities. State Teachers College, Bloomburg, Pennsylvania, (60) reported a plan of faculty advisers typical of many teacher training institutions. Parker (41) gave a description of the plan in use at the University of Michigan. Their program consisted of three parts: (1) Welcoming and information meetings which were sponsored by the University as a whole; (2) The required procedure involved with registration and classification; (3) Social events. They also used a technique applied by many other colleges such as Southern Illinois Normal University (17) and Colgate (30), namely, that of emphasizing the

use of group leaders selected from the student body. Any Michigan parent and student could come to the campus for counseling prior to the opening of the school year. Next year this program will extend to out of state freshmen. Ohio State and Illinois[1] have comparable programs although Illinois placed more emphasis on groups of students. In each instance, approximately 25 per cent of the freshmen entered early. The University of Michigan also holds 13 University of Michigan Parents' Nights throughout the state where college representatives discuss housing arrangments, student activities, scholarship, financial arrangements, social regulations and courses of study.

Southern Illinois Normal University (17) used seniors in their preceptorial counseling who received one hour credit for the work. They were under faculty supervision. Colgate (30) started its program in 1943 and used 18 mature graduate students, each of whom were assigned 20 freshmen. These assignments were made two weeks before the opening of Freshman Orientation Week. Each preceptor contacted his men by mail with a brief welcoming note, greeted him upon his arrival at Colgate so that he might be of all possible assistance, discussed his course program, dined with him and helped him make the final adjustment to college. The article revealed that despite "bugs" in the operation of the program, those who have studied it believe that it meets a series of personal student needs which could not be met effectively in any other manner.

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[1] This information was obtained through personal correspondence with Dr. Frank M. Fletcher, Jr., Director of Occupational Opportunities Service, Ohio State University, January, 1952, and through personal correspondence with Mr. James F. Kamman, Clinical Counselor and Psychometrist, University of Illinois, January, 1952.

Many high schools are adopting a plan described by Mason (37) to help in the orientation of prospective college students. Graduates of previous years who were currently enrolled in some college or university were invited to meet with members of the senior class who planned to continue their education at the college level. The high school seniors prepared questions in advance of the meeting which was held during the Christmas vacation under the direction of the President of the Student Council. Both groups were very enthusiastic about the results.

Lovejoy's report (35) on his program in New York City described an attempt on the part of an organization to counsel students and parents about college selections. He concluded that there is nothing wrong with our college-bound youngsters that sympathetic understanding and well formed advice cannot help. He believed that high school graduates deserve intelligent, professional counseling. General reactions on this program were highly favorable.

Summary of the literature reviewed which is related to Orientation Systems in colleges and universities. The literature pertaining to orientation systems used in colleges and universities indicated the following trends:

1. Orientation programs are quite generally accepted as a definite responsibility of the college personnel program.

2. The use of upper classmen as guides during freshman week is receiving wide attention.

3. During freshman week, counselors should have time to become acquainted with their counselees in individual conferences not entirely devoted to registration procedures.

4. There is a growing trend to try to work with incoming freshmen in small groups.

5. Follow-up studies should be made of the students progress through college; thus, the value of orientation techniques could be studied at first hand.

The Literature Pertaining to Research Concerned With Evaluation of Personnel Programs, Especially Educational-Vocational Processes

In 1932 Kitson and Stover (33) reviewed all investigations directed toward measuring the results of vocational guidance undertaken in the preceding 25 years. They concluded that the movement was still in its infancy but predicted a considerable amount of attention would be devoted to this problem within the next five years. The prediction proved to be correct. Kitson and Crane (32) in 1937 reviewed this five year period. They found at least 15 major studies had been made during that time. They concluded that workers in vocational guidance continued to maintain an interest in evaluating the success of their efforts. The kind of evidence produced was pitifully insignificant when compared with the momentous aim of vocational education. One difficulty reported as a part of the inability to discover how well counselors are performing vocational educational guidance lies in the difficulty of maintaining contacts with cases until they are settled occupationally. Practically none of the investigations reported covered more than a two year period, whereas young people guided vocationally may not be expected to reach their vocational goals within ten years.

Williamson and Bordin made the following statement in 1940: "Evaluation of educational and vocational counseling is in its infancy. The tremendous growth of counseling activities in colleges and universities - part of the expanding student-personnel programs - has far outstripped

the scattered efforts of research workers to measure the outcomes." (55:434).

Even as late as 1949, C. Gilbert Wrenn, in the presidential address to the American College Personnel Association, spoke as follows: "We are a comparatively young profession. We are too young to be a science and not old enough to be a tradition. We are on our way toward accumulating a science of practice, and certainly psychology upon which we depend can be considered a young science, but upon the whole we cannot stand out in an academic gathering with the assurance of the natural sciences, nor yet with the complacency of our older academic relatives, such as literature, history or the languages." (57:361)

Rackham (42) pointed out that few people today question the need for a program of student personnel services on any campus. Yet, he stated, it is somewhat surprising that, despite the need for such criteria, intensive evaluation studies of the total personnel services are extremely rare. He concluded that evaluation must be made to remove skepticism about the program.

Among the few better known studies conducted on either a national or local scale which do concern themselves with the overall aspect of student personnel services one can name the Hopkins study (28) reported in 1926; the point scale developed by Brumbaugh and Smith (18) in the early 1930's; the study conducted by Douglas H. Gardner under the sponsorship of the North Central Association and reported in 1936; the study of the total personnel service at the University of Minnesota in 1940 by Williamson and Sarbin (9); and the evaluation form devised by Wrenn and Kamm (58) and reported in 1948.

Froehlich (2) called evaluation a prerequisite to progress. He

presented a very complete review of evaluation studies which included 177 references. He discussed these articles in terms of a seven-fold categorization. He reported the lack of a suitable criteria to be the greatest single difficulty to date.

Dressel (22) gave as his first and major reason for conducting evaluation studies the fact that it provided the basis for improving the personnel program. He also stated that a second function fulfilled by evaluation is that of providing evidence which will convince administrators and others outside the field of personnel work of the value of the activities subsumed under this term. He gave as a third reason for evaluation that this process constituted a directed or applied research program in education and psychology. He stated a fourth reason for evaluation arises out of the fact that any realistic consideration of the way in which individuals or programs gain recognition, in the modern school or college, must acknowledge the importance of publication. He concluded with nine suggestions which will help to correct some major weaknesses in evaluation studies.

Williamson and Bordin (56) have an excellent article which dealt with criteria and experimental design. Anyone planning an evaluation study could profit by reading it.

Much has been written in regard to vocational-educational counseling but only a brief summary of the work of experiments on problems very closely related to the one at hand will be given in the rest of this section.

In a study by Katz and Allport (5) three thousand students indicated their three most common problems as being problems of their own personality, choice of a vocation, and choosing a productive program of study.

In a study by Reeves (7) two years later, students in ten liberal arts colleges and alumni in five other colleges indicated that they regarded counseling on vocational problems as the least effective of all counseling.

A more recent study by Wrenn and Bell (10) showed that students who were questioned believed that the most important problems in which the college should provide more help were the selection of a major, required subjects and the uncertainty about vocational goals.

McElhannon (39) reported an eight year study carried on at San Houston State Teachers College from the autumn of 1929 to spring semester of 1937 on all first term freshmen who received mid-term grades of C, D or F. The students were given an interview at this time and received special help. He concluded that conferences with the higher quintile ranking groups appeared to be beneficial, yet realized other types of motivation could be the cause for grade progress.

Williamson and Bordin (54) made a study of all clients who came to the Testing Bureau of the University of Minnesota to be counseled in the years of 1933, 1934, 1935 and 1936. This experiment showed that 83 per cent of the students who came showed improvement in their educational and vocational adjustment as a result of counseling. They also made a study (54) to attempt to measure the hypothesis that students counseled, if left to their own devices, would not have shown the same progress toward adjustment. They concluded that: (1) Students who have been counseled in the Testing Bureau were likely to be better adjusted than those who were left to their own resources. Approximately two-thirds of the non-counseled students achieved satisfactory adjustment as defined in the

experiment, in contrast with four-fifths of the counseled group. (2) Counseled students were markedly more likely to make better grades than were the non-counseled group. (3) The effect of counseling upon scholastic achievement was evident at the end of the first quarter of work. No additional or additive effect was evidenced during the remaining two quarters of the freshman year in the experiment.

Troven (51) at New York in 1935 and 1936 used a control and experimental group in an attempt to measure results achieved by a counseled and non-counseled group of students. The factors selected were; (1) graduation from college, (2) persistence in college, (3) scholastic action by the faculty, (4) cumulative college grade averages, (5) college grades A to F, and (6) number of points computed. The students of the two groups were matched person for person on the basis of (1) scores and percentile rank on the American Council of Education Psychological Examination, (2) sex, (3) age, (4) college class, (5) race, (6) religion and (7) curriculum chosen. A statistical treatment revealed that the two groups were approximately identical with respect to socio-economic background, intelligence and geographical distribution. Results showed that 53.7 per cent of the counseled group graduated as compared with 36.2 per cent of the non-counseled group, a significant differential of 33 or 17.5 per cent.

The final study reported deals with Stone's (47) attempt to find out which is better - a well formulated sequence of courses in vocational orientation or a comprehensive program for counseling students individually. He used an experimental and a control group. The results of the evaluation of the vocational orientation sequence in the General

College, University of Minnesota, suggested certain answers to the above question. The trend of the study indicated that the adequacy of either method of guidance when used alone was open to serious question.

Summary of the literature which is related to evaluation of personnel programs, especially educational-vocational processes. The literature pertaining to research concerned with evaluation of personnel programs, especially educational-vocational processes suggested the following conclusions.

1. A major difficulty of evaluating educational-vocational counseling lies in maintaining contacts with cases until they are settled occupationally.

2. Evaluation studies are a prerequisite to progress yet few worth while ones have been made.

3. Evaluation studies formulate the basis for improving personnel programs.

4. They help programs to achieve recognition through the important media of publication.

5. The problem of choice of a vocation is a common problem listed by college students and one they feel is not very effectively handled.

6. Students who receive counseling tend to show improvement in their educational and vocational adjustment as a result of it.

7. A combination of counseling and a formulated sequence of courses in vocational orientation seems to be a highly desirable method of achieving maximum educational-vocational success.

CHAPTER III

DEVELOPMENT AND ORGANIZATION OF THE MICHIGAN STATE COLLEGE CLINIC PROGRAM

As mentioned in Chapter I, the problem of wise educational-vocational planning has confronted high school graduates for a long period of time. It will continue to be a vital challenge to them as long as people live in such a complex society. Attempts to solve this situation have been many and varied. As previously stated, assistance through High School Counseling Clinics or Educational Guidance Clinics, as they are sometimes called, is relatively new. Reference has already been made to the program described by Anderson (11) and Heston (27) at their respective schools. While there was considerable discussion concerning clinics at Michigan State College in the years 1945 and 1946, the real planning for the present program started in the winter term of 1949. Dr. Paul L. Dressel, Director of the Michigan State College Counseling Center, Dr. William Mann, Assistant Director of the Counseling Center, and Dr. Ross Matteson, Chairman of the Counseling Center Research Committee, met and discussed plans for summer clinics. They outlined the general procedure, leaving the details to be worked out later.[1]

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[1] A complete descriptive brochure is found in Appendix A.

Problems Involved in Organizing Counseling Clinics

Since many colleges and universities are requesting information concerning the clinics at Michigan State College, some organizational problems that have confronted the program as it developed in the past four years will be presented. Minor details and incidental problems will be omitted because of their frequency as well as the fact that each must be solved as it arises. The success of a program so comprehensive depends to a great extent on how clearly the objectives are defined and how successfully all details are handled by each responsible person.

Evaluation. The first and, perhaps, the most important consideration is to determine whether the clinics benefit the institution and the individuals involved. Reports by Anderson (11) and Heston (27) gave positive statements concerning the benefits derived from clinic programs for their clients and for their schools. In Chapter I reference is made to the possible values which high school graduates may obtain from such a program at Michigan State College.

Personnel. If it appears that the proposed clinic is worth while to the college and the students, the institution should direct its thoughts to a second problem; namely, personnel. The success of the whole program is determined to a great extent by the efficiency of the personnel who are responsible for its operation and by the interest of the personnel in the project. The counselors must be highly trained, capable individuals. Since few colleges have sufficient trained personnel to operate on a large scale, additional staff must be obtained.

Michigan State College utilizes advanced doctoral candidates in counseling and guidance as supplemental staff for its program. These candidates benefit by obtaining sound practical experience and the Counseling Center also benefits because of the additional counseling assistance. In 1952 six full-time counselors will assist the present staff. Personnel can also be obtained from within the ranks of the instructional staff. For institutions which do not have graduate programs in counseling this may be the best source of help. Another excellent source for needed personnel lies in the high schools themselves. Excellent high school counselors can often be invited to the campus to assist with the clinic activities. Unless sufficient staff is assured the program may disintegrate completely. It is not a wise policy to overload the counseling staff. They should not be required to direct too many clients during any one scheduled clinic program. The average schedule at Michigan State College has been between five and eight clients at each clinic.

Publicity. The third problem in organizing a new program resolves around publicity. While the best publicity is a group of satisfied clients from the previous year, that, in itself, is not sufficient. Michigan State College solved its problem by employing several specific measures. All students who had been accepted by the college registrar (for that year) were contacted by means of a brochure and a form letter.[2] Secondly, a letter was sent to all high school administrators

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[2] A copy of all main items of publicity are included in Appendix B.

and high school counselors in the state explaining the program. Third, the offices of High School Cooperation and the Institute of Counseling, Testing and Guidance were utilized to disseminate publicity throughout the state. Other media of publicity were radio, newspapers, career days and alumni clubs. Some alumni clubs are sponsoring clients and paying their clinic expenses.

Testing. A fourth area that demands careful planning and supervision is testing. Since the entire program is centered around the core of individual testing and counseling, care must be taken in selecting these tests.

In the summer of 1949 the following battery was used:

1. A. C. E. Psychological Examination: 1947 Edition
2. Cooperative English Test C 2: Reading Comprehension
3. Iowa High School Content Examination: Form L
4. Kuder Preference Record: Form CM
5. Ball Adjustment Inventory: Student Form.

These were supplemented by special tests which were devised by individual counselors when they felt additional tests were necessary.

In the summer of 1950 the Bell Adjustment Inventory was replaced by the Mooney Problem Check List, High School Form. There were no changes in 1951,[3] but in 1952 the Iowa High School Content Examination is being eliminated as well as the Kuder Preference Record and the Mooney Problem Check List. These are being replaced by the Michigan

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[3] Copies of psychological tests used in the Summer of 1951 are included in Appendix C.

State College English Placement Test for Freshmen: 1942 edition, an Arithmetic Proficiency Test, the Lee Thorpe Occupational Interest Inventory: Form A, and the Thurstone Temperament Schedule: Form AM.

There are a number of factors involved in test selection that should be discussed at this time. First, a check on scholastic aptitude is highly essential. For Michigan State College, the A. C. E. Psychological Examination is desirable since it is given to all college freshmen and local norms have been established.

Second, reading scores are very necessary. The reasons for the adoption of the Cooperative English Test C2: Reading Comprehension are very similar to those mentioned for the A. C. E. Psychological Examination.

Third, high school achievement tests should be given consideration. Since most achievement tests require several hours of testing time which is at a premium during the clinics, the time factor became an element in the final selection of the test to be used. After careful study the testing committee decided upon the Iowa High School Content Examination: Form L as the test which best met clinic needs. Local norms were established in 1949. It is being eliminated in 1952 because the Michigan State College English Placement Test for Freshmen and the Arithmetic Proficiency Test, both a part of the college orientation test battery, are partially replacing it. The committee concluded that with the addition of these two new tests and with the information received by the counselors from the high school records of the clients, the Iowa High School Content Examination was no longer necessary.

Fourth, an interest test is highly desirable. The Kuder Preference Record: Form CM was used for three years but is being replaced by the

Lee Thorpe Occupational Interest Inventory mainly because the Kuder, widely used in high schools, had been taken by some of the clients for as many as three times.

Fifth, personality tests are also desirable. The testing committee felt that no personality problems should be opened unless the clients could make continuous contacts with the counselors. The committee shifted from the Bell Adjustment Inventory to the Mooney Problem Check List and now to the Thurstone Temperament Schedule. The final change from the Mooney Problem Check List was made primarily because certain guest counselors, despite instructions, were inclined to probe too deeply into personality problems which should not have been discussed at that particular time. The Thurstone Temperament Schedule, a comparatively new test, favorably recommended by counselors at the Counseling Center who had used it, has replaced the Mooney Problem Check List. It will be placed in the clients' personal files to be used for screening serious cases and assisting the students when they enter college.

A college or university organizing a clinic program should give careful consideration to the problem of scoring and recording the test results as well as to the selection of the tests. Such problems are of a clerical nature which must be done accurately and quickly if results are to be available for the immediate use of the counselors. Unless facilities are available for machine scoring the task becomes almost impossible. A special testing committee should be available to continuously examine and evaluate this part of the program.

Counselor training. Counselor training is a fifth problem, especially if graduate students or instructional staff personnel are involved.

The best solution to this problem appears to be the appointment of a qualified counseling staff member aided by an assistant to supervise the counselor training program. The most difficult task of the training centers upon assisting the intern to become familiar with the college so that he may acquire the information needed to answer the numerous questions of the clients concerning the college. This information is gradually accumulated by the counselors over a period of time.

Physical facilities. A sixth problem concerns the physical facilities such as dormitory space and office space which must not only be available, but must be adequate to handle large numbers of participants.

Experience has shown that dormitory living is an essential part of the entire clinic process, inasmuch as group spirit and unity are developed and social activities become a more defined part of the program. The supervisors who reside in the dormitory with the clients are also afforded an opportunity to exert considerable influence over the entire group. For these reasons it is highly desirable for the group to be housed by itself and removed from other large groups.

Experience has also shown that, since testing and counseling are so closely related, they should be conducted in the same building. Offices for regular staff members are satisfactory but visiting counselors can be supervised more successfully in a large room where they have free access to the supervisor. Effective interviews can be satisfactorily arranged when counselors are properly spaced in a large room and, since most clinic counseling is of an educational-vocational nature, the privacy of the counselor is not violated.

It is highly essential that the physical facilities of the clinics be arranged in advance and that they are not subject to change during the summer clinic programs.

Program. The final major problem is the construction of the program.[3] This has to be individualized according to the institution and has to be constantly revised. Features that have been outstanding in the Michigan State College program include:

1. A friendly welcome being extended to each client at the time of his arrival on the campus.
2. Meeting with individual counselors.
3. The campus tour.
4. Testing and test interpretations.
5. Dormitory living experiences.
6. Opportunity to meet new friends.
7. The program the first evening which includes a get-acquainted party.
8. Vocationally oriented talks.
9. An opportunity to meet school representatives.
10. Assistance in planning courses.

At Michigan State College a Counseling Clinic committee guides the destiny of the program. Its membership includes a chairman who serves as a general coordinator, a psychometrist who presents the viewpoint of the testing department and is chairman of the testing committee, the assistant director of counseling who represents the administration, and

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[3] A copy of the program is included in Appendix D.

three counselors; one of whom is in charge of publicity, one of counselor training and one of the program for college orientation. All major problems are referred to this committee which meets one hour per week during the regular school year.

The summer program, 1949. Two clinics were arranged on an experimental basis for the summer of 1949. The response was so great that a third clinic was added and a number of applicants had to be refused admittance because of the lack of qualified counseling personnel. The steady growth of the Counseling Clinics is reflected in Table 1.

TABLE 1
GROWTH OF COUNSELING CLINIC PROGRAM

Year	Number Clinics	Number Clients	Estimated Number Refused	Average Attendance per Clinic
1949	3	226	75	75.3
1950	8	366	100	45.8
1951	10	635	75	63.5
1952	11	-	-	-

The total number who attended in 1949 was 226. Of this number, 215 (95 per cent) actually returned to enroll at Michigan State College for the fall term of 1949. The program was intensive and every hour had to be utilized. Luncheon periods and evenings were scheduled with clinic activities and vocationally oriented talks. Recreation was at a minimum because of the crowded schedule. General evidence indicated that the clinics were well received. Based on the experience of 1949, the clinic of 1950 was outlined on a more extensive scale.

The summer program, 1950. Clinic planning at Michigan State College has, of necessity, developed into a yearly activity. During the fall quarter of 1949, organizational planning for the summer of 1950 was begun and many things were accomplished.

First, a general questionnaire was developed which was to be used during the summer of 1950. Second, plans for the transition from a two to a three day program were made. This change was necessary because experience had shown that two days were an inadequate period of time in which to accomplish all of the essential clinic activities. Third, a radio program entitled, "Student Reaction to the Michigan State College Summer Counseling Clinics," was presented on WKAR, college radio station. Fourth, a mimeographed sheet explaining the purposes of the clinics was presented to school adminstrators at the Student-Principal's Conference and the clinics were discussed to a considerable degree with these high school leaders.

Thus, throughout the entire school year, basic plans continued to be formulated. The program began to penetrate more deeply into other departments of the college. A closer relationship was established between the Counseling Institute and the Counseling Center and a plan was established to use the clinics as a training laboratory for advanced doctoral candidates.

During the summer of 1950, 366 high school graduates from eleven states and Canada participated in the three day program. For each of these 366 clients a series of interviews with professional counselors were arranged. These interviews had as their aims: (1) Selection of special tests; (2) Consideration of educational and vocational plans

and experiences; (3) Interpretation and evaluation of test results in terms of tentative goals.

Follow-up questionnaires indicated that the clinics had facilitated adjustment to college as a result of the clinic orientation program, the experience of living in a college dormitory and becoming acquainted with other prospective students in small groups. Clients reported that becoming aware of deficiencies in reading and other basic skills, registering for remedial clinics during their first term in the college, and planning their fall schedule of classes for exploration or for entering upon their proposed majors have been helpful in making a more satisfactory academic adjustment.

The summer program, 1951.[4] Following a plan very similar to the previous year, the program for 1951 was arranged. One notable change was the added emphasis on orientation procedures. It was possible for every client to complete his enrollment before he left the campus if he planned to enter Michigan State College. Each participant was requested to fill out a questionnaire upon his arrival at the clinic. He was also requested to fill out a second questionnaire upon the conclusion of his final interview. This was necessary in order that an analysis of the changes which occurred while the client was on the campus could be made and his evaluation of the clinic could be studied.

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[4] A description of a typical Michigan State College Counseling Clinic Program - Summer, 1951, is found in Appendix D.

One notable feature of the clinics of the first three years is revealed in Table 2. Most of the participants desired to attend the clinics early in the summer or just before registration in the fall. The period from the middle of July to the middle of August, when the counseling staff is most available, has never been popular with the clients. This may be due to a number of factors, but the one most commonly listed is "working."

TABLE 2

SUMMARY OF ATTENDANCE AT THE 1951
SUMMER COUNSELING CLINICS

Date of Clinic	Attendance Totals
June 4 - 6	41
June 11 - 13	83
June 20 - 22	67
July 11 - 13	83
July 23 - 25	52
July 30 - 31, August 1	43
August 6 - 8	47
August 15 - 17	70
August 27 - 29	73
September 5 - 7	76
Total	635

"Working" people may come early or late but rarely in the middle of the vacation period. If enough counseling personnel had been available, the September clinic could have reached a total of approximately 150 clients. The problem of a larger enrollment of clients in July and August must eventually be solved if the program continues to expand. Since a summary of the activities of 1951 will be reported in detail in Chapters V and VI, no attempt will be made to analyze any data at this time.

Off-campus clinics, 1951-1952. In the winter of 1951 a new trend developed in the Counseling Clinic program. Two off-campus clinics were held; one at Saginaw High School and one at Saginaw Arthur Hill. Approximately 225 high school seniors were given a battery of tests. These were interpreted to the group by Michigan State College counselors. Parents were invited to attend the evening session and a conference was held with them. The program was enthusiastically received and has been expanded for 1952. As a result, four off-campus clinics have been scheduled; two at Saginaw and two are scheduled at Marshall and Evart High Schools. Indications point to an expansion of this program in the future, depending upon the availability of staff and an evaluation of those clinics which have already been held.

The summer program, 1952. Plans for the summer of 1952 include eleven clinics on campus which will be the largest number attempted in any one year. Further details of the prophecy for the future of Counseling Clinics are included in the final Chapter.

CHAPTER IV

METHODS AND PROCEDURES

In Chapter I, the problem of this study with its implications were discussed, terms were defined, limitations imposed and the plan of organization presented. A review of the educational and psychological literature pertinent to the study was made in Chapter II. In Chapter III, brief highlights in the development and organization of the Michigan State College Counseling Clinics were presented.

The present chapter is a discussion of methods and procedures used for conducting the study. The chapter is divided into the following sections: (1) Methodology, (2) Preparation of Questionnaire, (3) Selection of the Sample, and (4) Procedures used in Analyzing the Data.

Methodology

The method used in this study is referred to by Good, Barr and Scates (3) as the "Normative-survey method." The word "survey" indicates the gathering of data regarding current conditions. The word "normative" is used because surveys are frequently made for the purpose of determining the normal or typical condition or practice. This type of research is concerned with ascertaining the prevailing conditions and with securing historical perspective at different periods of time for the purpose of comparison. From these findings, the direction of changes can be noted and evaluated and future growth guided. This is very important in a society as complex and rapidly changing as ours.

Although the survey method may at first appear superficial in that it gathers data only for the present and does not immediately give the perspective of a long historical sweep, such perspective is gained ultimately through a series of cross-section pictures of conditions existing at various times. Such studies furnish an increasingly valuable source of information for the historian.

The particular type of normative-survey technique used in the present research is the questionnaire inquiry. Good, Barr and Scates define a questionnaire as, ". . . . . a form which is prepared and distributed for the purpose of securing responses to certain questions. Generally these questions are factual, designed to secure information about conditions or practices of which the recipient is presumed to have knowledge. The questionnaire may, however, ask for opinions, and it may be used to afford an insight into the attitude of a group." (3:324) The questionnaire constructed for this study includes questions of a factual nature as well as those designed to secure the opinions of the groups contacted.

Preparation of the Questionnaire

Preliminary preparation. Four major steps preceded the actual preparation of the final questionnaire. Each of these steps was of utmost importance for the successful completion of this problem.

First, the desirability of and the need for procuring more research data on Counseling Clinics was discussed with various members of the Counseling Center and the Education Department of Michigan State College. Every counselor and educator contacted believed that this research would

be worth while and that the findings would be a valuable addition to the fields of guidance and education.

Second, the literature on Counseling Clinics and related areas was examined. As indicated in Chapter II, the examination of the literature revealed that the proposed study had not been reported and that, with one or two exceptions, no colleges or universities were even attempting to operate a program of this kind. The amount of related research was also very limited. An article by Dressel and Matteson, "The Effect of Client Participation in Test Interpretation," (23) and an article by Matteson, "Counseling Clinics for High School Graduates," (38) were most beneficial in developing certain aspects of the present research.

Third, a number of references devoted to the preparation of questionnaires were studied. Men with experience in the development of survey blanks were also consulted. Their suggestions were combined with the information found in the references in order to determine the best structural form for the final draft of the questionnaire.

Fourth, a pilot study was made on the clients who attended the clinic sessions in the summer of 1950. This first draft of the questionnaire was prepared, criticized, and revised and finally administered to the clients in this pilot group in order that necessary revisions could be made and methodological problems could be identified.[1] From the results of the pilot study the writer anticipated answers to the following questions:

1. How much time would need to be allotted in the program for the administration of the questionnaire?

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[1] A copy of this survey blank is included in Appendix E.

2. Would the items included identify the essential objectives demanded in the study?
3. Would the students cooperate by repeating the questionnaire after the final interview?
4. Would the clients have difficulty in answering the questions?
5. Would they offer suggestions in their evaluation of the program which could be incorporated in the construction of the final questionnaire?

The questionnaire was administered to 366 clients at the beginning of the respective clinic in which they participated. After their interviews all of the clients with the exception of nine, returned for their final questionnaire. The answers to the above questions were then clarified.

1. The question of the amount of time necessary for the administration of the questionnaire was easily solved.
2. The number of items and areas included would have to be increased.
3. Student cooperation was excellent which was evidenced by the fact that all but nine of the 366 clients returned for the final questionnaire. They not only answered all questions but frequently remained after the completion of their survey blanks for a discussion of the entire program.
4. Some of the questions needed modification and certain words had to be changed.
5. Many suggestions made by the clients were of value and were incorporated into the new questionnaire.

Final preparation. The pilot study gave evidence of the importance of this particular research problem and indicated that results would be valuable in the organizing and planning of future Counseling Clinics.

However, two major changes were found to be necessary as a result of the pilot study. First, additional areas dealing with decisions on educational-vocational goals and information concerning college orientation should be included. With these additions the study would more closely approach the objectives on the brochure. Second, the directions needed to be clarified so that the questionnaire could be more efficiently administered by any member of the counseling or secretarial staff.

After analyzing the results of the clinics of 1950, it was necessary to revise the areas used on the questionnaire and to appropriately develop the two newly proposed portions. Since a study can be no stronger than the quality of the instrument employed, considerable attention to detail was necessary in preparing the best kind of a survey blank. The selection of the items, the wording of the questions, and the methods used for securing the responses were very important. The final questionnaire used in the study was developed through the following procedure:

1. A number of guidance specialists and counselors from the Counseling Center were consulted again to secure suggestions for the development of the final survey blank.
2. Counselees who had been in the clinics of the summer of 1950 were consulted freely during the school year for suggestions concerning the items to be included in the final questionnaire.
3. High school seniors were interviewed to learn what benefits they hoped to obtain from the program.

4. The office of High School Cooperation was contacted to discover the types of questions which were most frequently asked by high school seniors.
5. The expanded tentative blank was prepared.
6. Several former clinic participants and high school seniors filled out the questionnaire.
7. The blank was revised to incorporate a few of the suggestions made through procedures indicated in item number 6.
8. Before the construction of the final form, seven Michigan State College staff members, representing the Department of Education, the Counseling Center and the Board of Examiners, suggested improvements in form and content.
9. Members of the writer's graduate committee offered criticisms and suggestions.
10. The final revision of the blank was completed incorporating all of the information secured in the first nine areas.

The Selection of the Sample

Once the instrument had been satisfactorily developed, it was available for clinic use. The questionnaires were administered to the entire group of 635 clients during the first morning of the respective clinics in which they participated. All clients were administered the same questionnaire and had the same amount of time to write it. They received no assistance during the period in which they were recording the required information. On the third day, following the final interview, they were given the final questionnaire. This post-clinic survey blank included an evaluation sheet for clients' reactions to the entire program.

Each participant cooperated to the extent that all necessary data were gathered and all 635 survey blanks could have been used in the study. However, few studies in educational research are set up to utilize the entire population. Consequently, the definition of a Sample, from which inference can be drawn for the entire population, becomes a primary consideration in any research project. A careful study of statistical techniques by Johnson (4) and McNemar (6), and pertinent material by Good, Barr and Scates (3), plus consultation with members of the writer's guidance committee, led to the selection by random sampling of two hundred people who had been involved in vocational and educational counseling in connection with the summer Counseling Clinics of 1951. This number was considered sufficiently large to give a reliable distribution of scores typical of the entire group. When the questionnaires were completed, they were collected and filed until the end of the summer. At that time they were numbered and the random Samples were selected.

Analyses of Data

Two sets of data were obtained in conducting this study; one set was quantitative and the other set was qualitative. The quantitative data consisted of results obtained from students on the pre and post sections of the questionnaire which were concerned with self-understanding, educational and vocational goals and information regarding college orientation. The qualitative data were obtained from the students' responses to the evaluation sheet which was a part of the post questionnaire. These two sets of data do not lend themselves to the same type of analysis and, therefore, will require separate discussion.

Procedures used in analyzing the quantitative data. The first step in analysis was tabulating the raw data. Coding was used whenever possible and all data were recorded in organized form. For the questions one through eight, four columns were necessary for each item. These columns were entitled: (1) True proficiency as indicated by test scores; (2) Pre-clinic feeling of client; (3) Post-clinic feeling of client; and (4) Gain or loss in "self-understanding." For the questions nine through thirty, frequency tables were established showing the number of pre and post clinic replies. From this rough analysis of data, tables were formed for each question on the questionnaire.

The use of Chi-square in testing the "Goodness of Fit" of a theoretical curve to an observed frequency distribution was employed in this study. Chi-square was also used as a means of testing the significance of change from the first to the second set of responses from the same individual. The testing of significance of difference between two percentages and the comparison of data by percentages were other statistical techniques employed in the research. Chi-square is often very useful for testing whether certain experimentally obtained results differ significantly from those to be expected by "chance," or whether observed results agree or disagree with the findings to be expected on some other hypothesis. Thus, Chi-square can provide a measure of the probability that the two sets of data are dependent (definitely associated) or are independent (significantly different). It was used in this study because it was considered the best method to employ with frequency data of the type compiled. Percentages were used because much of the data was of a descriptive nature and per cents are much more meaningful in

expressing results than figures alone. Due to the descriptive nature of the research, tests of significance were not used for much of the data. Because of the nature of the data obtained most of the information is reported in terms of percentages.[1]

The background material for Chi-square test of "Goodness of Fit" was discussed in McNemar (6:211-215). This Chi-square technique provides one with a test by means of which he can judge if the frequencies of a given distribution do not follow the frequencies of a theoretical curve closely enough to be regarded as a departure therefrom. In other words, if P is between .05 and .01, the hypothesis that the universe distribution is of the normal type (or whatever type is fitted) is questionable; if P is .01 or less the hypothesis is rejected; if P is between .95 and .99 one may suspect the fit as being too good; if P is between .05 and .95, the fit is said to be satisfactory. This Chi-square test was used to determine whether the clinic Sample differed from the regular fall term freshmen admission students at Michigan State College in regard to decile grouping on the A. C. E. Psychological Examination, the Cooperative English Test C2: Reading Comprehension and the Iowa High School Content Examination.

The background material for Chi-square as a means of testing the significance of change from the first to the second set of responses for the same individual was discussed in McNemar (6:204-207). It was used primarily in the statistical analysis for the "Test of Self-Understanding."

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[1] These decisions and other decisions relating to statistical procedures, calculations and the like, were made in conference with Dr. John Schmid, Assistant Professor, Board of Examiners, and Dr. Walter F. Johnson, Associate Professor, Institute of Counseling, Testing and Guidance, and other staff members of Michigan State College, East Lansing, Michigan.

The formula used was: $X^2 = \frac{(|A - D| - 1)^2}{A + D}$

This formula allowed correction for continuity. It is preferred when A + D is less than twenty and should always be used when A + D is less than ten. To safeguard the writer, it was used on all parts of the "Test of Self-Understanding" when testing significances of changes.

The background material for testing the significance of the difference between percentages was discussed in Johnson (4:80-81). The formula used was:

$$X = \frac{\frac{t_1}{n_1} - \frac{t_2}{n_2}}{\sqrt{P_o Q_o \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

In analyzing the statistical data the significant differences were reported as significant at the .05 level if CR $>$ 2.58 and significant at the .01 level if the CR $>$ 1.96.

<u>Procedures used in analyzing the qualitative data</u>. The qualitative data were obtained from the last part of the questionnaire in which each client was given an opportunity to openly indicate features of the clinic which he believed most valuable to him, to make his most important suggestion for improving the clinics and to write further comments concerning his attitude toward the clinics.

The clients' comments were classified into positive and negative reactions. Since the positive reactions completely outnumbered the negative reactions they were again subdivided into the following areas:

1. Statements indicating the clinics were worth while.

2. Statements concerning college orientation features of the clinics.

3. Statements concerning the questionnaire.

4. Statements regarding future clinics.

5. Statements concerning the program itself.

6. Statements concerning special features of the clinics.

The negative classification was entitled: Limitations of clinic according to client opinion.

Summary of the Methods and Procedures

1. The method used in this study is known as the "Normative-survey method." The particular type of normative-survey technique used was the questionnaire inquiry.

2. A pilot study was made in the summer of 1950, and a questionnaire was administered to the clients during the clinic sessions as a preliminary measure in order that problems, which might arise in the final research, could be identified.

3. Revisions in the proposed investigation were made as a result of the pilot study.

4. The final preparation of the questionnaire was of a progressive nature. It was formulated, utilized in the pilot study, revised, criticized and finally reconstructed into its present form.

5. The final form of the questionnaire was administered to all clients who participated in the summer Counseling Clinics in 1951 on a pre-clinic and post-clinic basis.

6. From this group of participants a random Sample of two hundred

clients were selected for the present research.

7. Chi-square and comparison of data by percentages were the main statistical techniques employed for the analysis of the quantitative data.

8. The qualitative data were classified into positive and negative reactions. The positive reactions were subdivided into six areas:

I. Statements indicating the clinics were worth while.

II. Statements concerning college orientation features of the clinic.

III. Statements concerning the questionnaire.

IV. Statements regarding future clinics.

V. Statements concerning the program itself.

VI. Statements concerning special features of the clinic.

The negative classification was entitled:

Limitations of clinics according to client opinion.

CHAPTER V

ANALYSIS AND INTERPRETATION OF THE QUANTITATIVE DATA

The analysis and interpretation of the quantitative data as presented in this chapter will be divided into three sections. The first part discusses changes in the clients' "self-understanding," as judged by reference to the clinic psychological tests; the second part presents information concerning the clients' vocational futures and analyzes the clients' changes in college planning, changes in vocational interest patterns and changes in attitudes toward future educational-vocational goals; and, the third part summarizes changes in orientation information regarding college.

Changes in "Self-Understanding"

As previously stated, the first part of the study involved an analysis of the changes in "self-understanding." The primary instrument used to measure these changes was the "Test of Self-Understanding." Table 3 (page 49) summarizes the definitions of the terms used in scoring the test, and a further clarification of the responses is given in the paragraphs immediately following the table. Most of the items are identical with those used by Dressel and Matteson (23) in their test interpretation study.

TABLE 3

KEY FOR SCORING TEST OF SELF-UNDERSTANDING

Response	Considered correct if test profile shows:
"about equal"	Same scores or scores within ten percentile points of one another.
"considerably stronger in"	Twenty or more percentile points difference between scores.
"about average"	Scores which lie between the 35th and 65th percentile inclusive.
"above average"	Scores which lie above the 65th percentile.
"below average"	Scores which lie below the 35th percentile.
"weakest in"	The lowest score or one of the lowest scores.
"about equal in all three"	Scores are the same or within ten percentile points of one another.
"three highest vocational interest areas"	Three highest areas as measured by the Kuder Preference Record.
"three lowest vocational interest areas"	Three lowest areas as measured by the Kuder Preference Record.

An explanation of the responses which were used in Table 3 follow: The response, "about equal," meant that, on both the quantitative and linguistic areas of the A. C. E. Psychological Examination, the client had the same percentile score or within ten percentile points of one another; while "considerably stronger in" meant a difference of twenty or more percentile points on the same examination.

"About average," "above average" and "below average" described the responses according to the position of the scores on the A. C. E. Psychological Examination, the Cooperative English Test C2: Reading Comprehension, and the Iowa High School Content Examination.

The terms, "about equal in all three" and "weakest in," were used to describe the placement of the scores for the vocabulary, speed and

comprehension sections of the Cooperative English Test C2: Reading Comprehension.

The "three highest vocational interest areas" and the "three lowest vocational interest areas" were used in connection with the Kuder Preference Record and are self-explanatory.

Distribution of the clients in various areas according to the "Test of Self-Understanding." As already stated, a random Sample of two hundred clients was selected as a sufficiently large group to give a reliable distribution of scores typical of the entire group who had attended the clinic during the summer of 1951.

In Table 4 the number of clients in each decile grouping, according to the various tests, have been tabulated.

TABLE 4

DISTRIBUTION OF CLIENTS IN EACH DECILE ON A. C. E. PSYCHOLOGICAL EXAMINATION, COOPERATIVE ENGLISH TEST C2: READING COMPREHENSION AND IOWA HIGH SCHOOL CONTENT EXAMINATION

Decile Rank	A. C. E. Psychological	Cooperative Reading	Iowa Content
10	15	18	13
9	19	16	22
8	17	17	30
7	28	20	18
6	20	15	19
5	15	27	23
4	29	20	22
3	20	23	11
2	18	19	18
1	19	25	24
Totals	200	200	200
	$X^2 = 10.5$ 9 df $P = .31$	$X^2 = 6.9$ 9 df $P = .61$	$X^2 = 13.6$ 9 df $P = .14$

The Chi-square test, discussed in Chapter IV, was used to determine any apparent differences between the decile ranking of the clinic Sample students and the regular fall term freshman admission students at Michigan State College in regard to the A. C. E. Psychological Examination, Cooperative English Test C2: Reading Comprehension and the Iowa High School Content Examination. With df 10-1 (number of intervals minus the number of constants used in the fitting) P equaled .31, .61 and .14, respectively. One can conclude from these results that there is no compelling evidence to indicate that the distribution of the group varies from the expectancy for regular fall term freshman admission students at Michigan State College on the basis of these three tests.

Comparative results of the changes in "self-understanding" as judged by the various tests. In order to learn the real merits of the clinic concerning the changes in "self-understanding" before and after counseling, the A. C. E. Psychological Examination was administered to the clients as the first step in evaluation; (1) to compare the client's "self-understanding" of relative quantitative and linguistic ability before and after counseling and (2) to compare his "self-understanding" concerning his capacity to do college work before and after counseling. These comparative results are shown in Tables 5 and 6 (pages 52, 53).

An examination of the data in Tables 5 and 6 reveals that the clinic experience proved very valuable to the clients in these areas. With respect to their relative quantitative and linguistic ability only 36 per cent possessed "self-understanding" before counseling, while 57 per cent possessed "self-understanding" after counseling; a gain of 21 per cent. Using the formula mentioned in Chapter IV, Chi-square equaled 25.5,

TABLE 5

SELF-UNDERSTANDING OF RELATIVE QUANTITATIVE AND LINGUISTIC ABILITY ON THE A.C.E. PSYCHOLOGICAL EXAMINATION BEFORE AND AFTER COUNSELING

Before	- After	Number Clients	Per cent
Discrepancy*	- Agreement*	54	27.0
Agreement	- Agreement	60	30.0
Discrepancy	- Discrepancy	74	37.0
Agreement	- Discrepancy	12	6.0
Totals		200	100.0

Relative quantitative and linguistic ability:

36 per cent possessed "self-understanding" before counseling
57 per cent possessed "self-understanding" after counseling

$X^2 = 25.5$ 1 df $P < .01$

* Discrepancy: Client's evaluation of himself does not agree with test scores.

* Agreement: Client's evaluation of himself does compare favorably with test scores.

TABLE 6

SELF-UNDERSTANDING OF CAPACITY TO DO COLLEGE WORK AS JUDGED BY REFERENCE TO A.C.E. PSYCHOLOGICAL EXAMINATION TEST SCORES BEFORE AND AFTER COUNSELING

Before	-	After	Number Clients	Per cent
Discrepancy	-	Agreement	59	29.5
Agreement	-	Agreement	68	34.0
Discrepancy	-	Discrepancy	56	28.0
Agreement	-	Discrepancy	17	8.5
Totals			200	100.0

Capacity to do college work:

42.5 per cent possessed "self-understanding" before counseling
63.5 per cent possessed "self-understanding" after counseling

$X^2 = 22.1$ 1 df $P < .01$

which furnished substantial evidence that the change was significant at the one per cent level. One must caution, however, that this represented changes over a brief period of time, as is the case of all other changes in "self-understanding" reported herein. This factor was indicated as a limitation of the study in Chapter I. The fact that only 36 per cent of the clients possessed "self-understanding" of their relative rank on the quantitative and linguistic score compared with freshmen at Michigan State College implied that many high school seniors were not aware of their potential ability in these two very important categories.

The data on client "self-understanding" of the capacity to do college work, as judged by reference to the A. C. E. Psychological Examination, (Table 6), indicated that 42.5 per cent of the clients possessed "self-understanding" before counseling and 63.5 per cent possessed "self-understanding" after counseling; a gain of 21 per cent. This change was significant at the one per cent level since Chi-square equaled 22.1. Students who enter institutions of higher learning should have a knowledge of their capacity for competing at the academic level. Although it is quite generally accepted that high school grades are the best predictors of college success, another very important criteria are scores on psychological examinations. Birdie, Dressel and Kelso (13) reported that the A. C. E. Psychological Examination was widely used by colleges and universities as a part of their freshman orientation week.

The second instrument used to determine the degree of change in "self-understanding" due to clinic training was the Cooperative English Test C2: Reading Comprehension. Table 7 gives evidence that the clients had better "self-understanding" of their reading skills, as judged by reference to this test, after counseling than they possessed before counseling; the amount of gain being 25.5 per cent. The value of Chi-square was 24.7, again being significant at the one per cent level.

TABLE 7

SELF-UNDERSTANDING OF READING SKILL AS JUDGED BY REFERENCE TO THE COOPERATIVE ENGLISH TEST C2: READING COMPREHENSION TOTAL SCORE BEFORE AND AFTER COUNSELING

Before	-	After	Number Clients	Per cent
Discrepancy	-	Agreement	76	38.0
Agreement	-	Agreement	66	33.0
Discrepancy	-	Discrepancy	33	16.5
Agreement	-	Discrepancy	25	12.5
Totals			200	100.0

Reading skill:

45.5 per cent possessed "self-understanding" before counseling
71.0 per cent possessed "self-understanding" after counseling

$X^2 = 24.7$ 1 df $P < .01$

While the clients had a fairly good knowledge of their reading ability, as measured by the reading test, they lacked knowledge of their relative rank in vocabulary, speed of reading and reading comprehension (Table 8). In fact, only 23.5 per cent possessed "self-understanding" before counseling but 64.5 per cent possessed "self-understanding" after counseling. The Chi-square test of significance gave a value of 65.6, which again showed a significant gain at the one per cent level. The percentage of increase (41 per cent) in "self-understanding" was the highest for any of the categories measured. The explanation of this may lie in the fact that, in general, high school seniors have a fairly clear knowledge of their general ability to read, but have never attempted to analyze their abilities in the total reading patterns. Many high schools do not offer reading tests or instruction on the secondary level.

TABLE 8

SELF-UNDERSTANDING OF VOCABULARY, RATE AND COMPREHENSION OF READING SKILL AS JUDGED BY REFERENCE TO THE COOPERATIVE ENGLISH TEST C2: READING COMPREHENSION TOTAL SCORE BEFORE AND AFTER COUNSELING

Before	-	After	Number Clients	Per cent
Discrepancy	-	Agreement	91	45.5
Agreement	-	Agreement	38	19.0
Discrepancy	-	Discrepancy	62	31.0
Agreement	-	Discrepancy	9	4.5
Totals			200	100.0

Vocabulary, rate and comprehension of reading skill:

23.5 per cent possessed "self-understanding" before counseling
64.5 per cent possessed "self-understanding" after counseling

$X^2 = 65.6$ 1 df $P < .01$

The Kuder Preference Record Scores were used to compare the changes in "self-understanding" of the clients' three highest and three lowest interest areas. The results are shown in Tables 9 and 10.

A careful study of Table 9 reveals that more than half, or 51 per cent, of the clients showed no pre-clinic, post-clinic change in their three highest interest areas. This lends support to the hypothesis that interest patterns do not change too rapidly over a short period of time. When the above mentioned 51 per cent is combined with the 33 per cent who showed gains in only one area and the 5.5 per cent who showed losses in only one area, the result is a total of 89.5 per cent who registered little change in interest pattern as a result of the clinics. The fact that a high percentage of the clients had been exposed to this test in high school could account for the stability of interest registered.

TABLE 9

CHANGES IN SELF-UNDERSTANDING IN CLIENTS' THREE HIGHEST INTEREST AREAS AS COMPARED WITH THE KUDER PREFERENCE RECORD SCORES

Nature of Change		Number Clients	Per cent
Gain:	3 areas	2	1.0
	2 areas	15	7.5
	1 area	66	33.0
No Gain		102	51.0
Loss:	1 area	11	5.5
	2 areas	0	0.0
	3 areas	0	0.0
Invalid Kuders		4	2.0
Totals		200	100.0

Since it has often been stated that many counselors have a tendency to interpret only the high scores on the Kuder Preference Record, an attempt has been made to determine the changes in the clients' "self-understanding" of their three lowest interest areas (Table 10). The percentage who showed no gain, or a gain or loss in only one area, was 88 per cent as compared to 89.5 per cent in the high interest group. The fact that the counselors had been instructed to interpret both the high and low interest areas may have influenced the results.

TABLE 10

CHANGES IN SELF-UNDERSTANDING IN CLIENTS' THREE LOWEST INTEREST AREAS AS COMPARED WITH THE KUDER PREFERENCE RECORD SCORES

Nature of Change		Number Clients	Per cent
Gain:	3 areas	4	2.0
	2 areas	15	7.5
	1 area	56	28.0
No Gain		108	54.0
Loss:	1 area	12	6.0
	2 areas	1	0.5
	3 areas	0	0.0
Invalid Kuders		4	2.0
Totals		200	100.0

To further study the changes in "self-understanding" of the clients, the Iowa High School Content Examination was used as an instrument for measuring the extent of the student's knowledge concerning his total achievement in English, mathematics, science and social studies, and to record the nature of the changes in "self-understanding" before and after his clinic experience. These results are shown in Tables 11 and 12.

As indicated by Table 11, the clients made a 14 per cent gain in "self-understanding" in high school achievement. This represented a significant gain at the one per cent level as Chi-square had a value of 11.1. The percentage of gain in "self-understanding" was the smallest for any of the areas tested. This may be due to the fact that the clients often associated interest with achievement in a subject or, possibly, to the fact that the evidence from a single achievement test did not create an impression on him.

TABLE 11

SELF-UNDERSTANDING OF TOTAL ACHIEVEMENT IN ENGLISH, MATHEMATICS, SCIENCE AND SOCIAL STUDIES ON THE IOWA HIGH SCHOOL CONTENT EXAMINATION BEFORE AND AFTER COUNSELING

Before	-	After	Number Clients	Per cent
Discrepancy	-	Agreement	53	26.5
Agreement	-	Agreement	57	28.5
Discrepancy	-	Discrepancy	67	33.5
Agreement	-	Discrepancy	23	11.5
Totals			200	100.0

Total Achievement:

40 per cent possessed "self-understanding" before counseling
54 per cent possessed "self-understanding" after counseling

$X^2 = 11.1$ 1 df $P < .01$

Changes in clients' "self-understanding" of their relative rank in English, athematics, science and social studies, as compared with their Iowa High School Content Examination, are shown in Table 12. As in the case of Table 11, the amount of gain was slight. Forty-six per cent of the group showed "no gain" during the clinic; the next largest group, 25.5 per cent, showed "some gain", and 14 per cent showed "considerable gain" as contrasted with 2.5 per cent who showed "considerable loss." In general, the trend was slightly stronger in terms of gain as contrasted with loss.

TABLE 12

CHANGES IN SELF-UNDERSTANDING OF CLIENTS' RELATIVE RANK IN ENGLISH, MATHEMATICS, SCIENCE AND SOCIAL STUDIES AS COMPARED WITH THE IOWA HIGH SCHOOL CONTENT EXAMINATION SCORES

Nature of Change	Number Clients	Per cent
Considerable gain	28	14.0
Some gain	51	25.5
No gain	92	46.0
Some loss	18	9.0
Considerable loss	5	2.5
Insufficient data	6	3.0
Totals	200	100.0

Tables 13, 14, 15 and 16 on the following pages, attempt to compare changes in "self-understanding" of high and low ability groups on the basis of their agreement with three psychological tests, namely; the A. C. E. Psychological Examination, the Cooperative English Test C2: Reading Comprehension and the Iowa High School Content Examination. Any client whose total score was in the eighth, ninth or tenth decile on the A. C. E. Psychological Examination was considered in the high ability group (51 clients), while those whose total score was on the first, second or third decile on the same test was considered in the low ability group (57 clients). It must be recognized, however, that other criteria, including high school grades and scores on reading and achievement tests, could also have been used to determine high and low ability groups.

Neither group showed any significant gain in "self-understanding" with regard to their relative quantitative and linguistic ability, but the low ability group did make a much higher percentage of gain as is shown in Table 13 (page 62). It should be pointed out, however, that in this case, as well as in all other cases measured, the high ability group showed much stronger initial "self-understanding" than did the other group, consequently, its chances for additional gain would be much smaller.

As indicated in Table 14 (page 63) both groups showed significant gains in "self-understanding" in regard to their capacity to do college work, as determined by agreement with the A. C. E. Psychological Examination. It was interesting to note that clients, having good ability or poor ability, had a tendency to rate themselves as average. Clients

TABLE 13

COMPARISON OF TWO ABILITY GROUPS IN REGARD TO SELF-UNDERSTANDING OF QUANTITATIVE AND LINGUISTIC PROFICIENCY AS DETERMINED BY AGREEMENT WITH A.C.E. PSYCHOLOGICAL EXAMINATION SCORES

Before - After Counseling	High Ability Group Number	High Ability Group Per cent	Low Ability Group Number	Low Ability Group Per cent
Discrepancy - Agreement	5	9.8	14	24.5
Agreement - Agreement	21	41.2	11	19.3
Discrepancy - Discrepancy	21	41.2	27	47.4
Agreement - Discrepancy	4	7.8	5	8.8
Totals	51	100.0	57	100.0

Relative quantitative and linguistic ability:

High ability group:

49 per cent possessed "self-understanding" before counseling
51 per cent possessed "self-understanding" after counseling

Low ability group:

28.1 per cent possessed "self-understanding" before counseling
43.9 per cent possessed "self-understanding" after counseling

High ability group:	$X^2 = 0$	1 df	$P > .99$
Low ability group:	$X^2 = 3.37$	1 df	$P = .07$

TABLE 14

COMPARISON OF TWO ABILITY GROUPS IN REGARD TO CAPACITY TO DO COLLEGE WORK AS DETERMINED BY AGREEMENT WITH A. C. E. PSYCHOLOGICAL EXAMINATION TOTAL SCORES

Before - After Counseling	High Ability Group Number	High Ability Group Per cent	Low Ability Group Number	Low Ability Group Per cent
Discrepancy - Agreement	22	43.2	21	36.8
Agreement - Agreement	13	25.6	1	1.8
Discrepancy - Discrepancy	15	29.4	34	59.6
Agreement - Discrepancy	1	1.8	1	1.8
Totals	51	100.0	57	100.0

Capacity to do college work:

High ability group:

27.5 per cent possessed "self-understanding" before counseling
68.6 per cent possessed "self-understanding" after counseling

Low ability group:

3.5 per cent possessed "self-understanding" before counseling
38.8 per cent possessed "self-understanding" after counseling

High ability group:	$X^2 = 17.9$	1 df < P .01
Low ability group:	$X^2 = 18.2$	1 df < P .01

with low ability lacked "self-understanding" concerning their abilities. Only 3.5 per cent of the low ability group possessed "self-understanding" of their capacity to do college work when entering the clinic, while 27.5 per cent of the high ability group already had a knowledge of their capabilities.

Reference to Table 15 (page 65) shows that both groups had a much more realistic picture of their reading ability, as determined by agreement with the Cooperative English Reading Comprehension Test, than they did of their ability to do college work. Both groups gained in "self-understanding," but only the low ability group made a significant gain. The fact that 86 per cent of the low ability group possessed "self-understanding" of their reading ability after counseling is reflected in the fact that 106 of the 206 fall term, 1951, Reading Improvement Enrollees were people who had been in a Counseling Clinic during the summer of 1951. It is also worth noting that clients with low ability are much more apt to admit reading weaknesses than they are deficiencies in ability to do college work.

As shown in Table 16 (page 66), neither group made significant gains in "self-understanding" in respect to their total achievement in English, mathematics, science and social studies, as determined by agreement with their Iowa High School Content Examination. This was the only area where the two groups showed similar initial "self-understanding" and the only instance where the high ability group made the largest percentage of gain; 19.6 per cent as compared to 15.8 per cent for the other group.

TABLE 15

COMPARISON OF TWO ABILITY GROUPS IN REGARD TO SELF-UNDERSTANDING OF READING SKILL AS DETERMINED BY AGREEMENT WITH COOPERATIVE ENGLISH TEST C2: READING COMPREHENSION

Before - After Counseling	High Ability Group Number	High Ability Group Per cent	Low Ability Group Number	Low Ability Group Per cent
Discrepancy - Agreement	11	21.6	29	50.9
Agreement - Agreement	19	37.3	20	35.1
Discrepancy - Discrepancy	12	23.5	4	7.0
Agreement - Discrepancy	9	17.6	4	7.0
Totals	51	100.0	57	100.0

Total Reading Skill:

High ability group:

54.9 per cent possessed "self-understanding" before counseling
58.8 per cent possessed "self-understanding" after counseling

Low ability group:

42.1 per cent possessed "self-understanding" before counseling
86.0 per cent possessed "self-understanding" after counseling

High ability group:	$X^2 = .05$	1 df	$P = .83$
Low ability group:	$X^2 = 17.5$	1 df	$P < .01$

TABLE 16

COMPARISON OF TWO ABILITY GROUPS IN REGARD TO SELF-UNDERSTANDING OF TOTAL ACHIEVEMENT IN ENGLISH, MATHEMATICS, SCIENCE AND SOCIAL STUDIES AS DETERMINED BY AGREEMENT WITH IOWA HIGH SCHOOL ACHIEVEMENT EXAMINATION

Before - After Counseling	High Ability Group Number	High Ability Group Per cent	Low Ability Group Number	Low Ability Group Per cent
Discrepancy - Agreement	17	33.3	15	26.3
Agreement - Agreement	13	25.6	13	22.8
Discrepancy - Discrepancy	14	27.4	23	40.4
Agreement - Discrepancy	7	13.7	6	10.5
Totals	51	100.0	57	100.0

Total Achievement:

High ability group:

39.2 per cent possessed "self-understanding" before counseling
58.8 per cent possessed "self-understanding" after counseling

Low ability group:

33.3 per cent possessed "self-understanding" before counseling
49.1 per cent possessed "self-understanding" after counseling

High ability group:	$X^2 = 3.37$	1 df	$P = .07$
Low ability group:	$X^2 = 3.05$	1 df	$P = .07$

Summary of Changes in "Self-Understanding"

1. There was no compelling evidence to indicate that the clients in the random Sample differed from regular fall term freshmen at Michigan State College in regard to range of scores on the A. C. E. Psychological Examination, the Cooperative English Test C2: Reading Comprehension or the Iowa High School Content Examination.

2. There was a significant gain in "self-understanding" with respect to the clients' relative quantitative and linguistic ability and capacity to do college work, as measured by reference to the A. C. E. Psychological Examination.

3. There was a significant gain in "self-understanding" with respect to reading skill, and with respect to the clients' knowledge of his relative rank on scores in vocabulary, rate and comprehension, as judged by reference to the Cooperative English Test of Reading Comprehension.

4. There was no evidence of significant gain in "self-understanding" on the three highest or lowest areas of interest, as compared with the clients' Kuder Preference Record.

5. There was a significant gain in "self-understanding" with respect to the clients' total achievement, as judged by reference to the Iowa High School Content Examination total score.

6. In general, high ability clients had better "self-understanding" before counseling, but the low ability clients showed the most significant gains after counseling.

7. Reading was one area in which low ability clients admitted their weaknesses and readily sought assistance by enrolling in the Reading Improvement Service.

Changes in Educational and Vocational Goals

The second part of the study involved an analysis of the information concerning the client changes in educational and vocational goals. Since educational and vocational diagnosis and planning are one of the primary functions of the Counseling Clinics, it is important that these changes, or lack of changes, be reported.

Previous experience indicated that, in general, Counseling Clinic clients enrolled in college. Table 17 presents an analysis of change in attitude of clients toward attending college.

TABLE 17

CLIENT ATTITUDE TOWARD ATTENDING COLLEGE

Attitude	Pre-clinic Number	Pre-clinic Per cent	Post-clinic Number	Post-clinic Per cent
College is not for me	1	0.5	1	0.5
Confused	12	6.0	4	2.0
Fairly certain I should attend	55	27.5	37	18.5
Positive I should attend	132	66.0	158	79.0
Totals	200	100.0	200	100.0

It is significant to note that only 0.5 per cent believed that college was "not for them" on both the pre- and post-clinic questionnaires. Only six per cent said they felt "confused" in regard to attending college when they enrolled in the clinic, while only two per cent said they were "confused" when they left. The largest gain was registered by those people who were "positive" they should go to an institution of higher learning. Sixty-six per cent had this attitude

before clinic counseling, while 77 per cent had this attitude after counseling. The implication seems to be that many people who are fairly certain they should attend college leave the clinic with a much more positive feeling that they should attend.

Each client was asked to state his plans for the school year of 1951-1952. On their pre-clinic statement, 94 per cent indicated they planned to go to college and on their post-clinic statement, 95.5 per cent said that was their plans (Table 18). A check on fall term admissions, 1951, revealed that 95.5 per cent did go to an institution of higher learning. Ninety-two and a half per cent enrolled at Michigan State College and three per cent went to other colleges and universities.

TABLE 18

CLIENT PLANS FOR THE SCHOOL YEAR 1951-1952

Plan	Pre-clinic Number	Pre-clinic Per cent	Post-clinic Number	Post-clinic Per cent
To go to college	188	94.0	191	95.5
To go to a trade school	1	0.5	1	0.5
To go to a business school	0	0.0	0	0.0
To go to work	1	0.5	1	0.5
To go into military service	0	0.0	0	0.0
To go into my own business or partnership	0	0.0	0	0.0
No definite plans	6	3.0	4	2.0
Other plans	4	2.0	3	1.5
Totals	200	100.0	200	100.0

Actual enrollment in the fall of 1951:
185 - 92.5 per cent enrolled at Michigan State College
6 - 3.0 per cent enrolled at other colleges
6 - 3.0 per cent did not go to college
3 - 1.5 per cent attended high school as seniors

This evidence (Table 18, page 69) would lend support to the fact that, in general, the clinics have very little effect in changing the clients' ultimate decision in regard to going to college. It also would lend support to the fact that most of the clinic personnel are prospective college students and that the vast majority do attend Michigan State College. It is interesting to note that 1.5 per cent of the clients are still in high school.

An attempt was made to discover the vital reasons why clients were coming to college. An examination of the pre-clinic and post-clinic results in Table 19 (page 71) showed that their first reason, as indicated on both questionnaires, was a practical one; namely,"to prepare for a vocation." In general, their reasons indicated little pre-clinic, post-clinic fluctuation. The highest percentage of gain as a result of clinic experience was on the item, "to make friends and helpful connections." The gain was only five per cent. A 13 per cent post-clinic loss was registered on the item, "without a college degree or training there is less chance of getting a job." The four items listed least by the clients as reasons for going to college were; "to be with old friends," "it was the thing to do," "foregone conclusion - never questioned why," and "to please parents or friends, or because of family tradition." This would indicate that, for the most part, clients had practical reasons for desiring academic training. There is little evidence to indicate serious changes in pre-clinic and post-clinic reasons for coming to college.

TABLE 19

CLIENTS' REASONS FOR COMING TO COLLEGE

Reasons	Pre-Clinic Number	Pre-Clinic Per cent	Post-Clinic Number	Post-Clinic Per cent
To prepare for a vocation	175	87.5	176	88.0
To learn more of certain subjects	117	58.5	101	50.5
To get a liberal education	108	54.0	103	51.5
Without a college degree (or training) there is less chance of getting a job	99	49.5	73	36.5
To get a general education	97	48.5	94	47.0
To make friends and helpful connections	76	38.0	86	43.0
For social enjoyment (college life)	74	37.0	81	40.5
To enable me to make more money	63	31.5	62	31.0
For the prestige of a college degree	38	19.0	34	17.0
To please friends or parents, or because of family tradition	28	14.0	24	12.0
Foregone conclusion - never questioned why	21	10.5	19	9.5
It was the thing to do	18	9.0	12	6.0
To be with old friends	17	8.5	15	7.5

Table 20 indicates the clients' plans for attending Michigan State College. The changes on the pre- and post-clinic questionnaires are very slight; less than one per cent in all instances. The percentage on the post-clinic questionnaire of those who stated that they were coming to Michigan State College in the fall term of 1951 was 93.5 per cent. A check with the registrar's office, fall term, 1951, revealed that 92.5 per cent actually did enroll at the college. These changes are so slight that one may, again, conclude that the clients have their basic plans for going to college fairly well established, and that the clinics serve purposes other than making decisions about attending college.

TABLE 20

CLIENTS' PLANS FOR COMING TO MICHIGAN STATE COLLEGE IN THE IMMEDIATE FUTURE

Plans	Pre-Clinic		Post-Clinic	
	Number	Per cent	Number	Per cent
Coming	186	93.0	187	93.5
Not coming	3	1.5	3	1.5
Undecided	11	5.5	10	5.0
Totals	200	100.0	200	100.0

Table 21 (page 73) reveals pre- and post-clinic changes in school choices of Counseling Clinic personnel who came to Michigan State College. It also compares these choices with the total freshman fall term enrollment in each of the Schools. The highest percentage of students in all three cases were in No Preference. The per cents were 25.4, 30.3 and 30.1, respectively. Science and Arts ranks second with percentages of 23.8, 24.3 and 22.7, respectively. Business and Public Service is third

with percentages of 20.5, 19.5 and 20.3, respectively. While there were some changes in rank for the other Schools, the percentage change was very slight. In the pre-clinic questionnaire the remaining Schools were ranked in the following order: Home Economics and Agriculture tied for fourth, then Engineering, Veterinary Medicine and the Unclassified students. The Unclassified group was last in all three instances. Since the changes were few in the last five Schools and the number of clients involved were small, further study would be necessary before drawing too many valid conclusions about the changes.

TABLE 21

A COMPARISON OF SCHOOL CHOICES OF COUNSELING CLINIC ENROLLEES AND FALL TERM FRESHMEN

School	Pre-Clinic		Post-Clinic		Fall Enrollment	
	Number	Per cent	Number	Per cent	Number	Per cent
Agriculture	17	9.2	12	6.5	169	7.1
Business and Public Service	38	20.5	35	19.5	484	20.3
Engineering	15	8.1	16	8.6	220	9.1
Home Economics	17	9.2	13	7.0	142	6.0
No Preference	47	25.4	57	30.3	720	30.1
Science and Arts	39	21.1	40	21.6	543	22.7
Veterinary Medicine	11	5.9	11	5.9	95	4.0
Unclassified	1	0.6	1	0.6	19	0.7
Totals	185	100.0	185	100.0	2,392	100.0

In order to summarize all changes of vocational preference written during the clinic, Table 22 was constructed. In total, 38 changes were made. This represented 19 per cent of the clients used on the Sample, indicating that approximately one out of every five clients who came to the clinic changed his major during his counseling period. Further investigation revealed that 18 participants changed to No Preference which represented 47.3 per cent of all changes; however, the majority of these clients continued at least one exploratory subject in the field of his original choice. Since No Preference students are constantly associated with the counselors at the Counseling Center, this high percentage of change would markedly indicate that counseling service, during the period of their investigation of choice of school preference, had proved most beneficial. It is also recorded in Table 22 that eight clients transferred from No Preference to a definite vocational choice. Test results, high school grades, miscellaneous factors, and the student's personal desire to major in the new field prompted the change in each instance.

TABLE 22

SUMMARY OF THIRTY-EIGHT CHANGES OF PREFERENCE

	Changes		
School	Within	Out	Into
Agriculture	1	5	0
Business and Public Service	5	5	2
Engineering	0	1	2
Home Economics	0	4	0
No Preference	0	8	18
Science and Arts	3	6	7
Veterinary Medicine	0	0	0
Unclassified	0	0	0
Totals	9	29	29

Table 23 is a survey report of changes in curriculum choices of the Counseling Clinic enrollees. Due to the similarity of areas represented in the Schools of Agriculture, Engineering, and Home Economics, no attempt has been made to analyze the curriculum choices separately in these Schools. In this respect the Table followed the pattern set by the registrar's office in their report on "Distribution of Student Enrollment." The enrollees were found in 22 of the 26 curricula classified by Michigan State College.

TABLE 23

CHANGES IN CURRICULUM CHOICES OF COUNSELING CLINIC ENROLLEES

Curriculum	Pre-Clinic Number	Pre-Clinic Per cent	Post-Clinic Number	Post-Clinic Per cent
No Preference	47	25.4	57	30.7
Business Administration	17	9.2	17	9.2
Home Economics	17	9.2	13	7.0
Engineering	15	8.1	16	8.5
Agriculture	11	5.9	7	3.8
Language and Literature	10	5.4	11	5.9
Education	10	5.4	7	3.8
Pre-Veterinary Medicine	8	4.4	8	4.4
Hotel Administration	7	3.8	5	2.7
Nursing Education	6	3.1	7	3.8
Journalism	6	3.1	5	2.7
Conservation	6	3.1	5	2.7
Social Science	5	2.7	5	2.7
Physical Education	5	2.7	5	2.7
Fine Arts	4	2.3	5	2.7
Medical Technology	3	1.6	3	1.6
Pre-Dentistry	2	1.1	2	1.1
Police Administration	2	1.1	1	0.6
Physical Science	1	0.6	2	1.1
Social Service	1	0.6	2	1.1
Pre-Medical	1	0.6	1	0.6
Unclassified	1	0.6	1	0.6
Totals	185	100.0	185	100.0

Each client was given an opportunity to indicate his first and second choice of the kind of work which he had considered for his life career. In Table 24 an analysis is made of changes recorded during the clinic. Fifty-seven per cent indicated identical first and second choices of their life's work on both questionnaires. The percentage of those who changed their choices after counseling were very small; 26.5 per cent changed only the second choice, 4 per cent gave only one choice and made no change, and 3.5 per cent made no change in choice except in rank. Thus, 91 per cent of the clients had practically the same life vocational goals after counseling as compared with their preferences when they came to the clinic. Of the remaining 9 per cent, 3 per cent indicated no choice before or after the clinic, 5 per cent changed their choices rather completely, and one per cent had a choice on the post-clinic questionnaire but not on the pre-clinic questionnaire. The implication seems to be that radical vocational changes are not made in a three day clinic. The seeds for stimulating changes or better evaluation of plans may be planted at this time but the actual change appears to be gradual.

TABLE 24

CHANGES IN CLIENTS' FEELINGS TOWARD FIRST AND SECOND CHOICES FOR THEIR LIFE WORK

Clients' Feelings	Number	Per cent
No change - first and second choice in same order	114	57.0
Change in second choice - first retained	53	26.5
Only one choice given - no change	8	4.0
No change except in order	7	3.5
No idea of choice before or after clinic	6	3.0
Both choices changed	5	2.5
Both choices changed, only one listed the second time	5	2.5
No comments first time, definite choice second time	2	1.0
Totals	200	100.0

The next question presented to the enrollees which concerned their vocational future was: "If you could do just what you wish, what would you be doing ten or twelve years from now?" The opinions have been tabulated in Table 25. On the pre-clinic questionnaire, 87.5 per cent indicated a vocational choice and 11.5 per cent indicated no choice. On the post-clinic questionnaire, 89 per cent had a definite choice and 11 per cent still indicated no choice so the change was slight. It is interesting to note that 75.5 per cent indicated the same vocational choice each time, while only 8.5 per cent changed from one vocational choice to another and 7.5 per cent responded with no choice either time. Again, there was little change in the pre- and post-clinic questionnaire results which gives more evidence to the fact that vocational ideas are relatively stable over a short period of time.

TABLE 25

CLIENTS' RESPONSES TO QUESTION: "IF YOU COULD DO JUST WHAT YOU WISH, WHAT WOULD YOU BE DOING TEN OR TWELVE YEARS FROM NOW?"

Clients' Responses	Vocational Choice				No Choice			
	Pre-Clinic		Post-Clinic		Pre-Clinic		Post-Clinic	
	No.	%	No.	%	No.	%	No.	%
Definite vocational choice	151	75.5	151	75.5				
Change from one vocational choice to another	17	8.5	17	8.5				
Change from Vocational Choice to No Choice	7	3.5					7	3.5
No Choice					15	7.5	15	7.5
Change from No Choice to Vocational Choice			10	5.0	10	5.0		
Totals	175	87.5	178	89.0	25	12.5	22	11.0

Table 26 (page 79) shows pre- and post-clinic opinions of the three occupational groups into which clients thought they best fit in terms of general interests and abilities. Their total choices found by adding their first, second and third selections are practically identical. A post-clinic increase of 6.4 per cent - from 11.1 per cent pre-clinic to 17.5 per cent post-clinic - is registered in occupations such as selling and promoting work, while a post-clinic decrease of 5 per cent - from 9 per cent pre-clinic to 4 per cent post-clinic - is noted in occupations involving executive responsibility. The three most popular areas in both surveys seemed to be occupations involving social service activities, occupations involving business contacts with people and occupations involving technical or scientific work. The three areas checked the least in both surveys were occupations involving executive ability, occupations involving verbal or linguistic work and occupations requiring special artistic ability.

There is considerable evidence that the clients felt they were quite responsible for making their own vocational choices. This fact is clearly shown in Table 27 (page 80). They, likewise, felt the influence of the home, as shown by the fact that 25.5 per cent felt the family gave them their most help. The role of the high school counselor is a comparatively minor one in their opinions, as only 8 per cent reported that the most help in decisions on vocational choice had been received from such counseling. Thirteen and one half per cent rated teachers as most influential which placed them above that of the high school counselor, perhaps indicating a definite weakness in our high school counseling program.

TABLE 26

PRE- AND POST-CLINIC OPINION OF THE THREE OCCUPATIONAL GROUPS INTO WHICH CLIENTS THINK THEY BEST FIT IN TERMS OF GENERAL INTERESTS AND ABILITIES

Classification of Occupational Groups	Clinic	First Choice No.	First Choice %	Second Choice No.	Second Choice %	Third Choice No.	Third Choice %	Total Choices No.	Total Choices %
Business contacts with people such as the various fields of selling, promoting work, politics, etc.	Pre	22	11.1	36	18.3	38	19.1	96	16.2
	Post	35	17.5	32	16.4	29	15.4	96	16.4
Business detail work, such as accountant, business statistician, cashier, banker, stenographer, and office worker	Pre	25	12.6	27	13.7	29	14.6	81	13.6
	Post	18	9.0	31	15.9	28	14.8	77	13.2
Social Service activities, such as Y.M.C.A. worker, Boy Scout executive, personnel worker, social case worker, teacher, welfare worker.	Pre	36	18.1	37	18.8	29	14.6	102	17.2
	Post	41	20.5	34	17.4	26	13.7	101	17.3
Requiring special artistic abilities, such as musician, actor, artist, interior decorator, designer, etc.	Pre	27	13.6	25	12.7	23	11.6	75	12.6
	Post	21	10.5	35	18.0	21	11.1	77	13.2
Technical or scientific work, such as engineer, chemist, surgeon, architect, research worker, inventor, physicist, toolmaker, etc.	Pre	61	30.6	10	5.1	15	7.5	86	14.5
	Post	60	30.0	16	8.2	14	7.4	90	15.4
Verbal or linguistic work, such as lawyer, newspaperman, author, advertising man, professor, librarian, etc.	Pre	18	9.0	26	13.2	25	12.6	69	11.6
	Post	17	8.5	23	11.8	36	19.1	76	13.0
Executive responsibilities, such as director, office manager, foreman, etc.	Pre	10	5.0	36	18.2	39	20.0	85	14.3
	Post	8	4.0	24	12.3	35	18.5	67	11.5
Totals	Pre-Clinic	199	100.0	197	100.0	198	100.0	594	100.0
	Post-Clinic	200	100.0	195	100.0	189	100.0	584	100.0

After the clinic, 18.5 per cent felt college counselors had given them more vocational help than anyone with whom they had previously worked. This placed college counselors third on the list of people who had been most helpful on the post-clinic survey. These facts are presented in Table 27.

TABLE 27

CLIENT RESPONSE TO THE QUESTION: "WHO HAS HELPED YOU MOST IN MAKING YOUR VOCATIONAL PLANS?"

Responses	Pre-Clinic		Post-Clinic	
	Number	Per cent	Number	Per cent
Own responsibility	94	47.0	85	42.5
Family	51	25.5	43	21.5
Teachers	27	13.5	14	7.0
High school counselors	16	8.0	10	5.0
Friends	8	4.0	5	2.5
High school superintendent or principal	2	1.0	2	1.0
Others	2	1.0	4	2.0
College counselors	0	0.0	37	18.5
Totals	200	100.0	200	100.0

Table 28 indicates how much the clients felt counselors and guidance workers helped them to understand their strong points, their weak points, interests and other things about themselves. The trend from pre-clinic to post-clinic feeling indicated that they had received "considerable counseling help" while on the campus. For instance, 25.6 per cent reported that they had received "very little counseling help" before they came to the clinic; however, only 4.5 per cent reported that they had received "very little counseling help" on the post-questionnaire. There was an increase from 32.7 per cent to 37 per cent in client feeling that they had received "quite a lot of help" and an increase from 15.7 per cent to 57.5 per cent on the part of those who thought they had received "a great deal of help." Over one quarter (26.1 per cent) reported that they had never discussed "these points with a counselor" before enrolling in the clinic. Combining this group with those who received little help, one finds over half the group felt that they had inadequate pre-clinic counseling. It is interesting to note that one per cent stated they had never discussed these matters with anyone even after having attended the clinic.

TABLE 28

CLIENT RESPONSE TO THE QUESTION: "HOW MUCH HAVE COUNSELORS AND GUIDANCE WORKERS HELPED YOU TO UNDERSTAND YOUR STRONG POINTS, WEAK POINTS, INTERESTS AND OTHER THINGS ABOUT YOURSELF?"

Responses	Pre-Clinic Number	Pre-Clinic Per cent	Post-Clinic Number	Post-Clinic Per cent
Very little	51	25.6	9	4.5
Quite a lot	65	32.7	74	37.0
A great deal	31	15.6	115	57.5
I have never discussed these points with a counselor	52	26.1	2	1.0
Totals	199	100.0	200	100.0

Table 29 shows the clients' attitudes toward their vocational future. Almost 50 per cent (49 per cent to be exact) were "confused" or "a bit uncertain" when they came to the clinic. Less than 25 per cent (20.5 to be exact) felt that way when they left. In other words, at least three out of every four clients left the clinic either "feeling certain of a vocational choice and how to proceed," or "certain and secure" in their choices. This feeling of security may have been due, in part, to the fact that the clients knew they could receive additional help at the Counseling Center in the event of future doubt.

TABLE 29

CLIENT FEELING IN REGARD TO VOCATIONAL FUTURE

Client Feeling	Pre-Clinic Number	Pre-Clinic Per cent	Post-Clinic Number	Post-Clinic Per cent
Confused	23	11.5	2	1.0
A bit uncertain	75	37.5	39	19.5
Fairly certain of my choice and how to proceed	86	43.0	116	58.0
Certain and secure	16	8.0	43	21.5
Totals	200	100.0	200	100.0

Summary of Changes in Educational-Vocational Goals

1. The clinics did not play too large a role in helping clients form decisions to attend college. Most of them made this decision before they enrolled in the clinic. It did, however, strengthen their decision that college was desirable for them.

2. The clinics were highly favorable to Michigan State College, since the vast majority of the clients did enroll at Michigan State College for advanced training.

3. Most of the clients came to college for very practical reasons. "Preparing for a vocation," was the most commonly mentioned item given.

4. The percentage of clients attending Michigan State College compared very favorably with the percentage of fall term freshmen who enrolled in each of the Schools of the College.

5. About one-fifth of the clinic enrollees changed college preference while attending the Counseling Clinic. About half of these changes were into No Preference.

6. There was little evidence of much change toward the clients' ultimate vocational goals during the counseling period. The seed for better evaluation of plans might be planted at this time but the actual change appeared to be gradual.

7. There was little change in client opinion of the three occupational groups into which he thought he would best fit in terms of general interests and abilities.

8. The role of the high school counselor was a comparatively minor one in pre-clinic vocational counseling. The family influence was still one of the most influential factors in helping to formulate vocational decisions.

9. The trend in pre-clinic to post-clinic feeling indicated the clients felt they received considerable counseling help while they were here.

10. One out of every ten clients felt reasonably secure in regard to his vocational future before counseling, while three out of every four felt secure after counseling.

Changes in Orientation Information Concerning College

The third part of the present chapter is concerned with the clients' changes in orientation information regarding college. The clients were given an opportunity to sample college activities in the hope that it would enable them to make optimum adjustment to college. They had an excellent opportunity to meet new friends at the clinic. Organized tours of the campus and buildings, question periods, living in the dormitories, learning college songs, and the use of college recreational facilities enabled the prospective student to become acquainted with Michigan State College.

The purpose of the Counseling Center is to aid students in making the best possible adjustment to college. Table 30 (page 85) indicates client opinion concerning who may use the services of the Counseling Center. Eighty-four per cent of the clinic enrollees had the correct opinion when they enrolled in the clinic and 97.5 per cent had this information after counseling. A small percentage thought the services were available only to Basic College students. Only one out of every ten clients did not know who could use the services of the Center in the pre-clinic questionnaire. For this particular group of people the services of the Center are quite well known.

TABLE 30

CLIENT OPINION OF WHO MAY USE THE SERVICES OF THE COUNSELING CENTER

Client Opinion	Pre-Clinic Number	Pre-Clinic Per cent	Post-Clinic Number	Post-Clinic Per cent
Any college student	168	84.0	195	97.5
Only Basic College students	13	6.5	5	2.5
Only No Preference students	0	0	0	0
Only students who are referred there by college officials	0	0	0	0
Unknown to client	19	9.5	0	0
Totals	200	100.0	200	100.0

Clients coming to a college for the first time are apt to have varied opinions about the officials with whom they will become acquainted. In Table 31 the pre- and post-clinic attitudes of students toward college officials is given. The trend indicated that at the end of the three day period there was a very favorable attitude expressed toward college officials.

TABLE 31

CLIENT OPINION OF COLLEGE OFFICIALS

Client Opinion	Pre-Clinic Number	Pre-Clinic Per cent	Post-Clinic Number	Post-Clinic Per cent
Always very friendly	81	40.5	147	73.5
Usually friendly	76	38.0	51	25.5
Sometimes friendly and sometimes not	9	4.5	0	0
Usually unfriendly	2	1.0	0	0
Almost always unfriendly	0	0	2	1.0
Unknown to client	32	16.0	0	0
Totals	200	100.0	200	100.0

In Table 31 (page 85), all but one per cent reported that the officials were either "usually friendly" or "always very friendly." Two people said they were "almost always unfriendly." When the clients arrived on the campus, 40.5 per cent had a pre-clinic attitude that they were "always friendly," 38 per cent thought they were "usually friendly" and 4.5 per cent indicated that they were "sometimes friendly and sometimes not." Only one per cent felt they were "usually unfriendly" and 16 per cent had formed no opinion whatsoever. This implies that Counseling Clinic enrollees leave the campus with a friendly attitude toward Michigan State College officials.

A special attempt was made in each clinic to explain the difference between an enrollment officer and a counselor. Clients were also given information concerning the methods to employ in obtaining a change of school preference. Notwithstanding this careful explanation, the participants were poorly informed at the close of the clinic as to whom they should consult for a change of college major (Table 32, page 87). When they enrolled 58.5 per cent were entirely lacking in knowledge concerning the proper procedure. The concensus of opinion among those who did answer was fairly evenly divided among; deans of the various schools, counselors, enrollment officers and the college registrar. At the close of the three day session, 42.1 per cent thought they should consult an enrollment officer, while only 25.7 per cent thought they should see a counselor for this change. The explanation may lie in the fact that the counselors at the clinic performed all of the enrollment duties for fall term courses for all schools. As a result, the clients

did not distinguish too sharply between enrollment officers and the counselors. There is considerable doubt if verbalization alone establishes a strong enough pattern to enable a person new to the campus to make the necessary distinction between the enrollment officer and the counselor. This may also account for the reason many new students say they are unaware of the services of the Counseling Center even though its purposes are stressed many times in college orientation week.

TABLE 32

CLIENT OPINION OF WHERE A BASIC COLLEGE STUDENT MUST GO TO CHANGE HIS MAJOR

Client Opinion	Pre-Clinic		Post-Clinic	
	Number	Per cent	Number	Per cent
College registrar	14	7.0	18	8.9
Counselor at Counseling Center	22	11.0	52	25.7
Deans of various schools	29	14.5	22	10.9
Enrollment officers	18	9.0	85	42.1
Unknown to client	117	58.5	25	12.4
Totals	200	100.0	202	100.0

No special attempt was made to emphasize the grade point average necessary for admission to an upper school but in the process of discussing the college catalogue and making tentative fall term enrollments, the client was exposed to this information. He was much better informed when he left the campus than when he came, as shown in Table 33. On the pre-clinic questionnaire only 27.5 per cent knew that a "C" average was required for admission to the upper schools, but 76.5 per cent knew this information on the post-clinic questionnaire. Responses on both of the questionnaires indicated that the clients already possessed the knowledge that students could not gain admission into an upper school with less than a "C" average. This information is important and should help prospective students realize the necessity of concentrating on studies from the beginning of the first term.

TABLE 33

CLIENT OPINION OF GRADE POINT AVERAGE NECESSARY FOR ADMISSION TO UPPER SCHOOL

Client Opinion	Pre-Clinic Number	Pre-Clinic Per cent	Post-Clinic Number	Post-Clinic Per cent
A "C+" average	29	14.5	23	11.5
A passing grade in all subjects	31	15.5	16	8.0
A "C" average	55	27.5	153	76.5
A "C-" average	0	0	1	0.5
Unknown to client	85	42.5	7	3.5
Totals	200	100.0	200	100.0

Every college and university has qualities for which they are widely known. Many times they rank high on several. Each client who attended a clinic was asked to indicate the quality he considered the most outstanding at Michigan State College. In a few instances students indicated two choices; both opinions were accepted and included in the total figures. Table 34 tabulates clients' opinions concerning the individual quality of Michigan State College which was most impressive to them. In the pre-clinic survey 35.2 per cent thought its "reputation as an institution of learning" was the most outstanding quality, while 33.4 per cent thought its "friendly and helpful atmosphere" was its most impressive characteristic. These two items were mentioned much more frequently than any others. On the post-clinic survey the item, "friendly and helpful atmosphere," gained 13.6 per cent. The reason for this gain was due to the very fine cooperative spirit that existed throughout each clinic. It is very likely the clients felt just as high a regard for the other qualities as they did before, but the friendliness of all college officials had really made an impression.

TABLE 34

CLIENT OPINION OF INDIVIDUAL QUALITY OF MICHIGAN STATE COLLEGE WHICH IMPRESSED THEM MOST

Client Opinion	Pre-Clinic Number	Pre-Clinic Per cent	Post-Clinic Number	Post-Clinic Per cent
Beautiful campus	33	16.2	28	13.0
Reputation as an institution of learning	72	35.2	48	22.3
Wide extension service	23	11.3	30	14.0
Friendly and helpful atmosphere	68	33.4	101	47.0
Other qualities	8	3.9	8	3.7
Totals	204	100.0	215	100.0

Practically every client made a temporary enrollment card for fall term classes before he left the clinic. By participating in this activity, he gained excellent insight into the number of credits the average student should carry during his first term, if he is doing no outside work. This gain in insight is shown in Table 35. Fifty-nine per cent had no knowledge concerning the number of credits they should carry the first term in college, 35 per cent thought $15\frac{1}{2}$ to $17\frac{1}{2}$ would be satisfactory and one per cent thought 7 to $10\frac{1}{2}$ would be sufficient. In the post-clinic survey 91.5 per cent said $15\frac{1}{2}$ to $17\frac{1}{2}$ would be satisfactory. This represented a gain of 61.5 per cent. Only two per cent of the clients still did not know how many credits should be carried. This is further evidence that students gain a clearer perception concerning activities in which they participate than in those where verbalization is the main method of instruction.

TABLE 35

CLIENT OPINION OF NUMBER OF CREDITS THE AVERAGE STUDENT SHOULD CARRY DURING HIS FIRST TERM IF HE IS DOING NO OUTSIDE WORK

Client Opinion	Pre-Clinic Number	Pre-Clinic Per cent	Post-Clinic Number	Post-Clinic Per cent
7 - $10\frac{1}{2}$	8	4.0	0	0.0
$11\frac{1}{2}$- $14\frac{1}{2}$	12	6.0	8	4.0
$15\frac{1}{2}$- $17\frac{1}{2}$	60	30.0	183	91.5
$18\frac{1}{2}$- $20\frac{1}{2}$	2	1.0	5	2.5
Unknown to client	118	59.0	4	2.0
Totals	200	100.0	200	100.0

Every fall term at Michigan State College many freshmen come to the Counseling Center to drop a course after the official deadline for such a procedure is past. They often remark, "I didn't know a course could be "officially dropped" without penalty." Table 36 compares the pre- and post-clinic results concerning client opinion of the consequences of dropping a course before the close of the first four weeks of the term. Forty-six per cent thought the student would receive a "No Grade" on the pre-clinic survey and 80 per cent thought he would receive a "No Grade" on the post-clinic survey. Forty-three per cent did not know what would happen prior to clinic attendance, and 23 per cent did not know at the end of the three day attendance. In general, clients had better insight concerning this issue when the clinic was over than when it started.

TABLE 36

CLIENT OPINION CONCERNING CONSEQUENCES OF DROPPING A COURSE OFFICIALLY BEFORE THE CLOSE OF THE FIRST FOUR WEEKS OF TERM

Client Opinion	Pre-Clinic		Post-Clinic	
	Number	Per cent	Number	Per cent
Receives a "No Grade"	96	48.0	160	80.0
Receives a grade of "C"	0	0.0	0	0.0
Receives a grade of "I" (Incomplete)	12	6.0	5	2.5
Receives a grade of "F"	6	3.0	12	6.0
Unknown to client	86	43.0	23	11.5
Totals	200	100.0	200	100.0

Many high school seniors request information concerning housing. Their most urgent question is in regard to the correct time of applying for housing. The Counseling Clinic participants were quite well informed on this issue, as indicated in Table 37. According to the pre-clinic survey, 74.1 per cent knew exactly when they should apply, and 76.5 per cent knew exactly when they should apply according to the post-clinic survey. A few people, 15.7 per cent on the original survey blank and 20.5 per cent on the final survey blank, thought they should apply for housing when they sent their application to Michigan State College. While applications can be made at this time, no housing can be assigned until the client receives a student number. The reason clinic enrollees are better informed on the time to apply for student housing than high school seniors is due to the excellent information all college applicants receive from the registrar's office.

TABLE 37

CLIENT OPINION OF WHEN A STUDENT SHOULD APPLY FOR HOUSING

Client Opinion	Pre-Clinic Number	Pre-Clinic Per cent	Post-Clinic Number	Post-Clinic Per cent
When he sends his application to Michigan State College	31	15.7	41	20.5
When he receives a student number or temporary admission slip	146	74.1	153	76.5
When he graduates from high school	2	1.0	0	0.0
When he enrolls in the fall	2	1.0	0	0.0
Unknown to client	16	8.2	6	3.0
Totals	197	100.0	200	100.0

All clients who came to the clinics felt from the very beginning that Michigan State College was making a serious attempt to give them a great deal of help and was showing unusual interest in them (Table 38). Twenty-one and nine-tenths per cent of the people indicated that Michigan State College showed "considerable interest in new students" and 64.8 per cent "felt the college made an all-out attempt to help new students." Only 7.7 per cent of the incoming people were not certain how the college regarded new clients. Every student, on the final questionnaire, indicated that Michigan State College either showed "considerable interest in new students" or "was making an all-out attempt to help them." It is highly significant that no client at the close of the three day session felt the college had shown any lack of interest in the enrollees.

TABLE 38

HOW CLIENTS FEEL ABOUT MICHIGAN STATE COLLEGE

Client Opinion	Pre-Clinic Number	Pre-Clinic Per cent	Post-Clinic Number	Post-Clinic Per cent
M.S.C. shows no interest in new students	1	0.5	0	0.0
M.S.C. shows some interest in new students	10	5.1	0	0.0
M.S.C. shows considerable interest in new students	43	21.9	44	22.0
M.S.C. makes an all-out attempt to help new students	127	64.8	156	78.0
Client not sure how M.S.C. feels about new students	15	7.7	0	0.0
Totals	196	100.0	200	100.0

Summary of Changes in Orientation Information
Concerning College

1. The people who came to the Counseling Clinics had an accurate knowledge of who might use the services of the Counseling Center.

2. Clients felt that college officials were very friendly with students and they liked Michigan State College because of its helpful and friendly atmosphere. They felt it was extremely interested in new people.

3. Clients were uncertain about whom to see for a change of college major. This was the only area concerning college orientation wherein the results seemed to be negative.

4. Clients were well informed on the correct time to apply for housing.

5. Those people who enrolled in the clinics gained knowledge concerning three important areas; grade point average necessary for admission to an upper school, number of credits average student should carry first term of school, and the consequences of dropping a course officially before the close of the first four weeks of the term.

CHAPTER VI

BACKGROUND AND QUALITATIVE INFORMATION CONCERNING CLIENTS

The first part of the present chapter presents information on the clients' background, summarizes his previous experience with counseling and presents his general evaluation of the clinics. The second part is primarily concerned with analysis and interpretation of the qualitative data obtained from student (subjective) reactions to experience in the clinics.

Background Information and Clients' Previous Counseling Experience

One section of the post-questionnaire was concerned with the clients' experience with counseling, how he learned about the clinics and whether people from his high school had previously attended a clinic.

In Table 39 (page 96), an attempt is made to show which subjects the clients preferred in high school. The Table reveals that English, mathematics, history and the sciences are preferred. Agriculture, home economics, industrial arts and physical education were listed only a few times. This may reflect the fact that most of the clinic participants were enrolled in college preparatory courses.

It is interesting to note that the majority of the clients came from large high schools. The classification of high schools used in Table 40 is similar to that used by the Michigan High School Athletic

TABLE 39

SUBJECT PREFERENCE IN HIGH SCHOOL

Subject	Preference Totals			
	First Choice	Second Choice	Third Choice	Totals
English	39	30	36	105
Mathematics	41	29	26	96
History	14	25	35	74
Chemistry	12	19	12	43
Science	15	16	11	42
Foreign Language	10	13	11	34
Physics	10	10	10	30
Biology	11	4	5	20
Commercial	6	6	7	19
Music	3	8	7	18
Speech	8	8	1	17
Physical Education	5	4	5	14
Art	2	5	6	13
Social Studies	5	3	5	13
Industrial Arts	3	6	4	13
Government	4	3	5	12
Home Economics	6	3	2	11
Economics	1	8	1	10
Sociology	1	4	3	8
Agriculture	2	1	0	3
Geography	0	2	0	2

Association for purposes of greater equality among schools in athletic competition. Thirty-four per cent of the clients came from Class A schools, 35.5 per cent came from Class B schools, 23.5 per cent came from Class C schools and 9.0 per cent came from Class D schools.

TABLE 40

CLASSIFICATION OF HIGH SCHOOL

Classification	Number Students in High School	Number Clients	Per cent
Class A	800 and over	68	34.0
Class B	325 to 799	67	33.5
Class C	150 to 324	47	23.5
Class D	less than 150	18	9.0
Totals		200	100.0

Three-fourths of the clients indicated that they had attended schools which had a moderate or great amount of guidance service available, as shown in Table 41. Only 5.1 per cent reported that practically no attempt was made to provide these services. Of the 18 class D high schools reporting, one-third stated practically no attempts were made in their system to provide guidance services. In general, the amount of guidance services available seemed to vary with the size of the school.

TABLE 41

EXTENT OF COUNSELING AND GUIDANCE SERVICES AVAILABLE IN THE HIGH SCHOOL LAST ATTENDED BY THE CLIENT

Extent of Service	Number Clients	Per cent
Great	60	30.3
Moderate	90	45.4
Limited	38	19.2
None	10	5.1
Totals	198	100.0

Table 42 shows the amount of guidance services available in the high school last attended by the client. Informational material on colleges, business and technical schools was provided by 79 per cent of the schools. Over 60 per cent of the schools had individual conferences with students concerning future vocational plans and individual help in planning high school courses and over 50 per cent of them had information describing various kinds of work. The three services listed least often were; testing programs with individual conferences concerning test results, part and full time placement, and individual conferences on personal problems. However, these were all checked over 30 per cent of the time. The implication seems to be that the chief emphasis in high school counseling centers on vocational plans oriented toward higher academic aptitudes.

TABLE 42

GUIDANCE SERVICES AVAILABLE IN HIGH SCHOOL LAST ATTENDED

Guidance Services	Number Schools	Per cent
Informational materials on colleges, business and technical schools	158	79.0
Individual conferences on future vocational plans	127	63.5
Individual help in planning high school courses	126	63.0
Information describing various kinds of work	104	52.0
Testing programs with individual conferences concerning test results	77	38.5
Part and full time placement	71	35.5
Individual conferences on personal problems	70	35.0
Other counseling services not classified	18	9.0

Table 43 records the number of individual conferences which clients had with their high school counselors during their senior year in high school. The largest number, 42.2 per cent, had one or two conferences, while 26.6 per cent had three to five. Only 9.6 per cent reported six or more conferences and 19.6 per cent of the clients stated that they did not have a single one. These statements lend support to the fact that most high school graduates do not have many opportunities for vocational counseling at the secondary level.

TABLE 43

CLIENT ESTIMATE OF THE NUMBER OF COUNSELING CONFERENCES DURING HIGH SCHOOL SENIOR YEAR

Number of Conferences	Number Clients	Per cent
None	39	19.6
One or two	88	44.2
Three to five	53	26.6
Six or more	19	9.6
Totals	199	100.0

An attempt was made to discover the means by which the clients had learned about the clinics. Table 44 shows that 72.1 per cent were notified directly by the college. People who have previously attended, accounted for 12.8 per cent. A few received notification from high school counselors, high school career day or high school superintendents or principals. The fact that the best response came as a result of direct college contact with the students indicated that this method is by far the most workable form of publicity.

TABLE 44

HOW CLIENTS LEARNED ABOUT COUNSELING CLINICS

Source of Information	Clients Reporting	Per cent
Letter from the college	158	72.1
Former client	28	12.8
High school counselor	12	5.5
High school career day	9	4.1
High school superintendent or principal	8	3.7
Other sources	4	1.8
Totals	219	100.0

Table 45 indicates that the majority of the clients have slight knowledge of the clinic attendance in their high schools. Almost half, 41.5 per cent, had no knowledge whatsoever concerning such attendance. This probably reflected the fact that students from large high schools know only the members of their own graduating class. The responses also show that 39.5 per cent indicated that someone from their high school had attended a previous clinic and 19 per cent indicated that no one from their high school had attended.

TABLE 45

CLIENTS' KNOWLEDGE OF THEIR HIGH SCHOOL CLINIC ATTENDANCE RECORD

Question:	Response	Clients Reporting	Per cent
Has anyone from your high	Yes	79	39.5
school previously attended	No	38	19.0
the Counseling Clinics?	Not sure	83	41.5

The results of the inquiry concerning how many persons had previously attended the clinics from their respective high schools are tabulated in Table 46. Twenty-three per cent of the clients reported that one or more individuals from their high schools had attended a previous clinic, 27.5 per cent indicated they had no information, while 49.5 per cent made no reply. The lack of information reflected in this table indicates a need for continuous publicity concerning counseling programs of this kind.

TABLE 46

CLIENTS' KNOWLEDGE OF THE NUMBER OF STUDENTS FROM THEIR HIGH SCHOOLS INCLUDED IN THE CLINIC ATTENDANCE RECORD

Question:	Number Attended	Clients Reporting	Per cent
How many persons from your high	1 - 2	23	11.5
school attended Michigan State	3 - 5	15	7.5
College Counseling Clinics?	6 - 8	1	0.5
	9 - more	7	3.5
	Not sure	55	27.5
	No reply	99	49.5

Clients' Evaluation of the Clinic

In the pilot study clients indicated seven definite ways in which the clinics had been beneficial to them. The reactions to these same items by people who attended during the summer of 1951 are shown in Table 47 (page 103). Ninety-three per cent of the clients thought they received a "great deal of help" in learning more about college and in getting better acquainted with counselors and the ways in which they assist students. Permission was secured during the summer of 1951 for the counselors to make temporary enrollment cards for all persons planning to enter Michigan State College in the fall term of 1951. In the previous summer only No Preference students had been pre-enrolled. This new feature was listed by 83 per cent of the clients as being of "considerable help." Making new friends was checked 76.5 per cent of the time as "helping a great deal." Fifty-eight per cent felt the clinic "helped them a great deal" to understand themselves better. The two items which seemed least helpful were; deciding what career to prepare for, and deciding whether to attend college. On the former item, 43.5 per cent indicated the clinic "helped them a great deal," 39 per cent thought it "helped some" and 11.5 per cent felt it "helped very little." In like manner, 35.5 per cent felt the latter item "helped a great deal," 27.5 per cent thought it "helped some" and 26.5 per cent felt it "helped very little." Since most of the clients had apparently already decided to enroll prior to participating in the Counseling Clinic this result was not too surprising. Likewise, many of the people had decided on a college major before attending the clinic so the results on that item were not too surprising.

TABLE 47

CLIENT FEELING TOWARD HELP RECEIVED AT COUNSELING CLINICS

Type of help	Degree of Contribution (per cent)			
	Great deal	Some	Very little	No reply
Deciding whether to attend college	35.5	27.5	26.5	10.5
Deciding what career to prepare for	43.5	39.0	10.5	7.0
Deciding what subjects to take	83.0	11.0	3.5	2.5
Learning more about college	93.0	6.5	-	0.5
Making new friends	76.5	19.0	2.5	2.0
Understanding myself better	58.0	37.0	3.5	1.5
Getting better acquainted with counselors and the ways in which they may assist students	93.0	4.5	-	2.5

Table 48 summarizes the clients' reactions to the clinics. From the standpoint of emotional satisfaction it is very apparent that the counselees were very highly pleased with their clinic experience. Seventy-one per cent felt the three day program was "extremely helpful," 26.5 per cent felt "it helped a great deal" and 2.5 per cent felt "it was satisfactory." It might be significant that no client indicated "it helped very little" or that "it was of no value." One can conclude that the clients left Michigan State College Counseling Clinics with a feeling of extreme satisfaction.

TABLE 48

CLIENT REACTION TO THE COUNSELING CLINICS

Degree of satisfaction	Frequency	Per cent
It was extremely helpful	142	71.0
It helped a great deal	53	26.5
It was satisfactory	5	2.5
It helped very little	0	0.0
It was of no value	0	0.0
Totals	200	100.0

Summary of Background Information
Concerning Clients

1. The subjects preferred in high school were mainly those found in college preparatory courses.

2. The majority of clients came from large high schools.

3. The majority of the clients thought that their high schools had a moderate or great amount of guidance services available.

4. The guidance service most commonly available in the high school last attended by the client was individual conferences on future vocational plans; the services least commonly available were part and full time job placement and individual conferences on personal problems.

5. The majority of the clients had one to five individual vocational conferences with a high school counselor or advisor in their senior year of high school.

6. Direct contacts with clients through a letter from the college was the best avenue of publicity.

7. Getting better acquainted with the counselors and learning more about college were the two most valuable features of the clinic.

8. Practically every client expressed extreme satisfaction concerning clinic experience.

The Qualitative Data

All information analyzed up to this point has come from the structured part of the questionnaire. This was a limitation since it afforded the participants little opportunity to express their individual or unique feelings regarding the clinic. The last three items were designed to eliminate this inadequacy. It not only furnished the respondents with an opportunity to express the feeling they gain from their experience but it also gave them an opportunity to react to the questionnaire.

Verbatim comments of clients in different content categories will be reproduced, from time to time, to give the reader an idea of the specific feelings of the student.

Most Valuable Features of the Counseling Clinics

Each participant was asked to list the features of the clinic which were most valuable to him in one, two, three order. The results of these statements are shown in Table 49 (page 107). It was very difficult to decide on final groupings, but the items listed represented the minute breakdown of the most valuable features of the clinic according to the clients' responses. The four things most frequently mentioned were; planning courses, understanding college life, the campus tour and making new friends. The next most frequently mentioned items were; finding out their own abilities, individual conferences with counselors and testing. The friendliness of the counselors and vocational help were often stated. The fact that only one client mentioned help on personal problems as a valuable feature indicated the lack of emphasis on this type of counseling at the clinics. One person listed, "A chance to get away from home," as a valuable feature for him.

TABLE 49

CLIENT OPINION OF THE FEATURES OF THE CLINIC WHICH WERE MOST VALUABLE LISTED IN ONE, TWO, THREE ORDER

Feature	Rank order			Clients
	First	Second	Third	Reporting
Planning courses	51	26	6	83
Understanding college life	26	29	22	77
The campus tour	14	29	31	74
Making new friends	5	20	47	72
Finding out their own abilities	24	15	15	54
Individual talks with counselors	27	15	7	49
Testing	34	8	5	47
Friendliness of counselors	9	11	9	29
Vocational help	8	8	1	17
Learning college traditions	4	4	3	11
Group living	2	2	6	10
Talks on vocations	4	5	0	9
Meeting school representatives	3	1	4	8
Deciding which college to attend	3	3	0	6
A chance to get away from home	1	0	1	2
Deciding whether to attend college	1	0	0	1
Help on personal problems	1	0	0	1
Securing housing	1	0	0	1
Totals	218	176	157	551

Suggestions for Improving Future Clinics

Table 50 (page 110) shows the most important suggestions made by the clients for improving future clinics. The most significant fact was that 67 of the people (33.5 per cent) left this item blank on the questionnaire and 45 of the people (22.5 per cent) made no definite suggestions but offered comments similar to, "they are excellent as they are." The most frequently listed adverse criticism was to have more testing. Four and one-half per cent of the clients thought they would have benefited by more special aptitude tests.

Although only mentioned directly on the questionnaire by four per cent of the clients, there was considerable discussion about making the clinics longer. The most common length of time mentioned was four days. This demand was closely related to the suggestion that it would be advisable to have fewer activities the first two days. While only three per cent of the clients mentioned this as a suggestion, it was quite evident the first day's program was a very full one for everyone. Reports from dormitory supervisors indicated the clients were especially tired the first night.

A few other suggestions need special comments. A few people mentioned that it would be helpful to visit a class in session. They wanted to compare high school and college classes. Some clients thought more emphasis should be placed on personal problems of counseling. Several desired more information on specialized fields and more opportunities to talk with school representatives. Two people thought the dormitory selected for clinic purposes should be in the center of the campus. This is a reflection on the amount of walking required while they were

attending the clinics. Another suggestion offered by two people deserves mention. These clients felt additional help on "little things" needed in the fall would be extremely valuable; the "little things" being more detailed information on fall term registration. They seemed to feel it posed a real problem to them.

Four suggestions made by single clients also deserve special mention:

1. "Clinic attendance be required of all freshmen." If the freshmen visited the campus during the summer it would eliminate much of the confusion in the fall. At the present time new students arrive one day prior to the beginning of enrollment and registration which leaves little time for individual contacts and attention.

2. "Have clinic tests substitute for fall term orientation tests." This would eliminate much of the time required for testing in the fall.

3. "Schedule the clinics so they start on Tuesday instead of Monday." The advantage or disadvantage of this plan is open to question, but it would give the college Monday to prepare for a group and Friday to complete all clinic activites for that particular session.

4. "More information on the R.O.T.C." While every effort was made to have the needed information available, it is possible that more material concerning the R.O.T.C. program can be furnished in the future.

The fact that the majority of the clients (56 per cent) indicated they had no special suggestions regarding future clinics can be interpreted as a good omen; however, the suggestions offered deserve consideration since they may indicate weaknesses in the program and should be carefully evaluated.

TABLE 50

SUMMARY CLIENTS' SUGGESTIONS FOR IMPROVING FUTURE CLINICS

Suggestion Classification	Number Clients Reporting
No comment (blank questionnaire)	67
No suggestions ("Excellent as they are.")	45
More tests	9
Add one day to clinic	8
Fewer activities first two days	6
Visit a class in session	6
More personal counseling	4
More group activity	4
Larger attendance	4
More information on specialized fields of training	4
More individual talks with school representatives	3
Entertainment variety	3
More food (quality satisfactory)	3
Select central dormitory	2
More information concerning details of registration	2
No curfew	2
Eliminate repetition in the program	2
More complete tour of the campus	2
Mixed competition - men and women	1
Eliminate square dancing	1
Square dance the second night	1
More square dancing	1

TABLE 50 (continued)

Suggestion Classification	Number Clients Reporting
Reorganize activities of first two evening sessions	1
More activity the second evening	1
More informal clinics	1
More social activity	1
Fewer activities	1
Balance clinic activities	1
Compulsory attendance for all freshmen	1
Schedule clinics to begin on Tuesday	1
Clinics in a girl's dormitory	1
Continuation of friendly personnel	1
Urge friendliness among students	1
More individual interviews	1
Counselors should be more informed concerning catalogue	1
Longer final interviews	1
Closer unity between orientation and clinic tests	1
Provide maps	1
More information concerning necessary items for fall	1
Advance information concerning program	1
Morning warning bell	1
Secure a trained clinic guide	1

The clients were urged to write any further comments on the clinics and their feelings about the questionnaire. These comments were classified into positive and negative reactions. Since the positive reactions completely outnumbered the negative reactions, they were again subdivided into six areas. The positive classifications were: (1) Client opinion regarding worth of the clinics, (2) Client judgment of orientation values of the clinic, (3) Attitudes expressed by clients concerning the questionnaire, (4) Client suggestions concerning future clinics, (5) Client evaluation of the clinic program and schedule, and (6) Special features of the clinic considered valuable by clients. The negative classification was entitled: Limitations of the clinics according to client opinion.

General Comments by Clients Concerning the Clinics

Client opinion regarding the worth of the clinic. Positive statements regarding the worth of the clinics were expressed by 104 people (52 per cent of the Sample).

Ten of the verbatim comments expressing similar opinions of the participants in different ways were:

1. The clinic has seemed beneficial to everyone.
2. I am very grateful for the service and I feel that it was worth more than I spent in time and money.
3. The clinic was a very profitable three days.
4. I think all persons considering college should take advantage of the clinics. Few high school graduates are sure of their college plans.
5. I thought the clinic very helpful and worthwhile.
6. I think that the clinic has helped me a lot.
7. I enjoyed it and thought it was worthwhile.
8. I was very pleased and feel I have benefited from it.
9. I think the clinics are a very helpful thing. They help a person know a great deal about college in a short time.
10. I have enjoyed the clinics and received quite a lot of help.

Twenty-one and five-tenths per cent of the clients thought their understanding of their own abilities increased. A typical statement was:

> I feel this clinic is extremely helpful to one who is undecided as to his vocation. I have already made my vocational choice; however, the clinics helped me understand my personal abilities better.

Nineteen clients (9.5 per cent of the Sample) felt the clinics should be a requisite for all entering college students. A frequent comment was:

> I feel that the clinic is very outstanding and should be made a part of every college. It gives people a much better view of what is in store for them and they won't feel so green when they come in the fall.

Other people remarked that those who did not attend the clinics were being derived of a valuable experience as shown in the following statement:

> I certainly feel sorry for the freshmen who have not had the opportunity to participate in the clinic! I think it has been invaluable. I would like to suggest the Short Course Dormitory be used for each clinic next year, as I feel that being together in that situation brings about closer harmony and friendship within the group. I think it was a good idea. I would also like to suggest that more material about the clinics be given to high schools.

Several clients (5.5 per cent) expressed enjoyment of the experience. One enthusiastic participant said:

> I think this was a swell clinic and very useful. I had a lot of fun.

An equal percentage (5.5 per cent) commented that their feelings of uncertainty had decreased during the clinics. One person stated:

> The clinic is very helpful to those high school graduates that are as confused as I was. I had received a great deal of help and suggestions as to what the future can and does hold for me.

Three other typical statements indicating the worth of the clinic were:

> I liked the clinic because I was afraid to come to State. It is so much bigger than what I am used to, but yet I find there is a friendly atmosphere here, and I really love State and am looking forward to next fall.

> It was a superb experience that I'll never forget. Even if I do decide to go 'East' I'll always know about it. It has opened my eyes to the wonderful advantages it offers for students.

> This is one of the most helpful conferences I have ever attended. It has helped me very much in deciding what particular field to choose.

Table 51 summarizes the content of statements made by the clients concerning the helpfulness of the clinics.

TABLE 51

CLIENT OPINION REGARDING WORTH OF CLINIC

Statement Classification	Number Clients Reporting
Clinic considered valuable	104
Better self-understanding achieved	43
Clinics believed requisite for all entering college students	19
Confusion decreased	11
Pleasure secured from the experience	11
Enthusiasm for Michigan State College increased	5
Anxiety regarding college decreased	3
Interest in college developed	2

Client judgment of orientation values of the clinic. Table 52 (page 116) attempts to analyze client's statements concerning orientation values of the program. In general, they agreed that the clinics had performed well in preparing them for admission to college in the fall. Forty-eight participants thought it helped in orientation and that it was a wonderful program for new students. A typical statement was:

> I think the clinic has been a tremendous help, I'm sure we won't feel as "lost" this fall. If more people could visit State and see how wonderful, friendly and helpful everyone is, I'm positive they would decide on this college. You're doing a fine job. It's difficult to "cram" everything in three days but you've done it! Thanks for a grand time!!

Forty-five clients expressed surprise concerning the acquisition of such a large amount of information in the short clinic session. Several remarks were:

> My only comment is that I am surprised that I could learn so much about college in such a short time and still have so much more to learn.

> The clinics have been worth every bit of my time and I think I shall be a big jump ahead in the fall.

A "feeling of security" was judged as an orientation value by forty of the clients. A typical remark was:

> I felt the clinics were helpful to me in getting over the fright of college life.

Others felt that the clinics gave them a more realistic picture of college life, an opportunity to meet new friends and helped them to understand both the faculty and the college. Three typical comments follow:

> I feel that the clinic has helped me to the extent that I feel almost like a college student already. It has put the full

picture of college life before me along with my abilities to compete in the college program.

I was very glad that I was able to attend this clinic, as I found out more about myself from the results of the various tests, had a chance to find out more about college life, and I also made many new friends. In general I feel that the clinic was of great help to me and answered many of the things I was wondering about.

I think the Counseling Clinic is one of the best ways possible for a person to become better acquainted with M. S. C. The individual counseling meant a great deal to me.

TABLE 52

CLIENTS' JUDGMENT OF ORIENTATION VALUES OF THE CLINIC

Statement Classification	Number Clients Reporting
General orientation value	58
Acquisition of information	45
Feeling of security	40
Knowledge of college life	18
Acquisition of friends	14
Understanding of faculty and college	4
Helpfulness in course planning	1

Attitudes expressed by clients concerning the questionnaire. A number of clients made statements concerning the questionnaire used in the study. As is shown in Table 53, 49 participants felt it was beneficial in helping them to analyze themselves and in assisting them to organize their thinking. No client expressed any serious objection to the questionnaire. Some typical remarks were:

> The questionnaire puts your thoughts together - you realize just how much you have learned - and by classifying it this way, you're more likely to remember the things.

> I can understand the college's interest in the results of this final questionnaire and I think it also is beneficial to the student in that it enables him to realize how much more about himself he has learned, or how many former convictions have been strengthened.

> The questionnaire helped me to see how the clinic has changed my viewpoints on college life and on knowing myself.

> It is a well designed questionnaire and by taking it the first thing on the first day we know better what topics to ask about during the clinic.

> I have no further comment to make on the clinic, but I feel that the questionnaire not only helps you to understand us but for us to understand ourselves.

A tabulated classification of the attitudes expressed by the clients concerning the questionnaire are presented in the following Table.

TABLE 53

ATTITUDES EXPRESSED BY CLIENTS CONCERNING THE QUESTIONNAIRE

Statement Classification	Number Clients Reporting
Facilitation of greater self-understanding	49
Questions considered pertinent	5
Comparison of pre- and post-clinic information valuable	4
Appreciation of counselor guidance	4
Objection to repetition of questionnaire	1

Clients' suggestions concerning future clinics. Many participants gave strong verbal emphasis to the desirability of continuing the clinics for future clients. In total, 44 people suggested the continuation of such programs. They felt high school administrators should have more material and information concerning the clinics, that greater attendance should be encouraged and that none of the present features of the program should be eliminated.

Typical comments of the clients follow:

> The clinic is very helpful and should be expanded in the coming years.
>
> I feel that the Counseling Clinic was the most wonderful and helpful thing that Michigan State College could do for its new students. I know it has helped me beyond words and I shall recommend it to future students.
>
> Maybe it is just our school, but I think this clinic should be advertised more so more students really know what it is. Maybe more cannot be taken care of but I know that I will sure back it and advise others very highly to attend.
>
> The clinic cleaned up many misconceptions and puzzling ideas which I had about college. It made me feel right at home on the M.S.C. campus. It is my personal opinion, an invaluable part of college procedure. It should be continued.

Table 54 presents a summary of the clients' suggestions concerning the future clinics.

TABLE 54

CLIENT SUGGESTIONS CONCERNING FUTURE CLINICS

Statement Classification	Number Clients Reporting
Recommend increase in number of clinics	27
Need for widespread publicity	13
Retention of all present features	2
Increase length of clinics	2

Evaluation of clinic program and schedule. A few remarks were directed toward the program and schedule themselves. Several of these comments follow:

> I think that the idea of having a clinic of this sort was an extremely fine one. It has helped me a great deal to become better acquainted with college life and the opportunities and advantages connected with a clinic such as this. The clinic has had a well-rounded program of entertainment and work and I really think it has been just about perfect in all respects.

> I am very glad I came and I don't think anything we have done should be eliminated from future clinics. The lack of free time is a very good thing since there are very few of us who would know what to do with free time at M. S. C. so soon. Having every minute filled with required activities is the best way to keep things from becoming dull, provided too many of the required activities are not put in just to fill up time. I don't think any of the things we have done could be interpreted as "time fillers."

Table 55 gives evidence that, in general, the program was considered very effective. The comments concerning the schedule were few in number, but have been classified according to the number of clients reporting.

TABLE 55

EVALUATION OF CLINIC PROGRAM AND SCHEDULE

Statement Classification	Number Clients Reporting
Program was very effective	6
Lack of free time was good - few would know how to use it	1
Nothing done was a "time filler"	1
Some free time is desirable	1
Recreation was well planned	1
Longer evening recreation period requested	1

Special features of the clinic considered valuable by the clients. The feature of the clinic which was considered to be the most valuable by the clients was the excellent relationship between the counselors and the students. There were 55 participants who commented on this relationship, while 23 clients stated that assistance in educational-vocational planning was an important special feature of the clinic. Samples of these comments follow:

> I am very satisfied with the clinic and feel that you couldn't find a better counseling staff. They are always friendly which means a lot when you don't know anyone when first coming. Some of the things I especially liked were: the wearing of name cards, a counselor meeting you at the door on the first day, group singing and the wonderful way the square dance helped everyone to get acquainted.

> I feel this clinic is extremely helpful to one who is undecided as to his major.

The student responses are classified in Table 56.

TABLE 56

SPECIAL FEATURES OF THE CLINIC CONSIDERED VALUABLE BY CLIENTS

Statement Classification	Number Clients Reporting
Counseling relationship	55
Educational - vocational planning	23
Experience in educational setting	2
Informational talks	1
Knowledge of resources	1
Scheduling of activities	1

Limitations of clinics according to client opinion. There were few objections listed to the Counseling Clinics and those which were listed were of a rather scattered nature as shown in Table 57.

Two of the comments are stated below:

> I wish M. S. C. could work out a system by which you could be registered in a Counseling Clinic. Some of my friends, who will attend Western have their schedules all made out, dorms assigned, all tests taken, and physical taken.
>
> I feel that I could have had more help on personal problems.

TABLE 57

LIMITATION OF CLINICS ACCORDING TO CLIENT OPINION

Statement Classification	Number Clients Reporting
Lack of vocational-educational information	2
Inadequate help on personal problems	2
Failure to provide fall term registration	2
Question of value for local participants	1

Summary of Qualitative Information

1. The four features most commonly listed as being of greatest value to the clients were; (1) planning courses, (2) understanding college life, (3) the campus tour, and (4) making new friends.

2. The majority of the clients felt that the organization and execution of the clinic program was satisfactory.

3. The three most frequent suggestions for improving future clinics were; (1) more tests be administered, (2) the length of the clinic be increased, and (3) the activities be more distributed.

However, these items were suggested by only a few people.

4. Fifty-two per cent of the clients stated directly that they benefited from the three day sessions.

5. The majority of the clients indicated that the clinics helped in college orientation.

6. The questionnaire was considered beneficial in aiding the participants to analyze themselves and in assisting them to organize their thinking. No client expressed any objection to it.

7. There was considerable evidence to indicate the clients thought the clinics should continue to function in the future.

8. The program and schedule was considered effective and was well received by all of the participants.

9. Objections were few in number. The desire for fall term registration, the feeling that the clinics were not so helpful for the local students and the lack of emphasis on personal counseling were a few of the objections stated.

10. The general conclusion was that the clinics were extremely helpful. A young lady from the East summed it up quite well in her statement that:

> I feel that the clinics have helped me a great deal (from the standpoint of an out-of-state student) in getting to know the campus and people - also helping me to understand my own attitudes and interests. The counselors have been grand - and I hope the counseling will continue in the same vein all through college.
>
> The questionnaire is excellent. I know now just how lucky I've been in high school. I hope these questionnaires will be expanded so that <u>all</u> freshmen will be able to take them before they leave (in some sort of clinic, at least). Everyone was very friendly - I understand now about "midwestern friendship."

CHAPTER VII

PRELIMINARY FOLLOW-UP OF THE CLIENTS

Although not designed as an original part of the study, a brief follow-up was made of the clinic Sample during the fall term of 1951. An attempt was made to learn how many of the clients entered college, how many enrolled in the various improvement services, to determine their scholastic averages and to ascertain the number who were placed on probation at the end of the fall quarter.

As previously stated, 185 of the 200 Sample students, or 92.5 per cent, enrolled at Michigan State College; six, or 3.0 per cent, entered other colleges; three, or 1.5 per cent, attended high school as seniors and six, or 3.0 per cent, did not continue with their educations. A comparison of mean decile scores on the A. C. E. Psychological Examination, the Cooperative English Test C2: Reading Comprehension and the Iowa High School Content Examination, shown in Table 58, reveals considerable differences between non-college and college enrollees.

TABLE 58

COMPARISON OF MEAN DECILE SCORES ON VARIOUS TESTS OF CLIENTS ACCORDING TO COLLEGE AND NON-COLLEGE ENROLLEES, FALL, 1951

	Enrollees		
Tests	M.S.C.	Other Colleges	Non-College
A. C. E. Psychological Examination	5.4	5.3	4.2
Cooperative English Test C2: Reading Comprehension	5.2	4.5	3.7
Iowa High School Content Examination	5.4	5.6	3.8

Those people who enrolled at Michigan State College and those who pursued their academic training in other colleges compared favorably on the A. C. E. Psychological Examination and the Iowa High School Content Examination, but the Michigan State College enrollees scored better on the Reading Test.

In all cases the non-college enrollees had a lower mean score on the three tests compared with the other two groups. Because of the small number of cases involved one can draw no valid conclusions, however, it may be worth investigating this group in future clinics to discover whether their scores are consistently lower than the other clients.

A comparison of sexual distribution between Counseling Clinic enrollees and fall term freshmen admission students revealed that 51.9 per cent of the former and 54.2 per cent of the latter were men. This represents a difference of 2.3 per cent. Forty-eight and one-tenth per cent of the clinic participants were women and 45.8 per cent of the fall term freshmen were women. This represents another area where both groups are similar. There seems to be little evidence to indicate that the clinic group differs from Michigan State College freshmen with respect to distribution by sex as shown in Table 59.

TABLE 59

COMPARISON OF SEX RATIO OF COUNSELING CLINIC PERSONNEL WITH FALL TERM FRESHMEN, 1951

Group	Men	Per cent	Women	Per cent
Counseling Clinic Enrollees	96	51.9	89	48.1
Fall term freshmen	1,296	54.2	1,097	45.8

Improvement Services at Michigan State College

The Reading, Speech, Arithmetic and Writing Improvement Services are all available to strengthen any fundamental deficiencies which the students may have in these areas. During the clinics the purposes of these organizations were explained and clients who might benefit by enrolling in them during their first term in college were encouraged to do so.

Reading Improvement Service. Table 60 (page 126) gives a descriptive summary of the Reading Improvement Services, fall term, 1951, comparing Counseling Clinic freshmen with other fall term admission freshmen. The schedule of courses for the fall quarter originally included five sections of Written and Spoken English 092 - the Improvement of Reading. In previous school years the enrollment had been limited to twenty students per section. At registration for the fall quarter, 1951, more than two hundred students were enrolled in Written and Spoken English 092, making it necessary to establish an additional section to accomodate this large enrollment. The unanticipated increase in enrollment was due to the fact that the clients of the previous summer had become aware of their need for this service during the clinic session and had voluntarily decided to enroll during the fall term. One hundred and six of the 206 students in the Reading Improvement Service had been in the Counseling Clinics; this represents 54.1 per cent of the enrollment total.

Every clinic person who enrolled, with the exception of one, had a score at the fifth decile or less on the Cooperative English Test C2:

TABLE 60

DESCRIPTIVE SUMMARY OF READING IMPROVEMENT SERVICES, FALL TERM, 1951 COMPARING COUNSELING CLINIC FRESHMEN WITH OTHER FALL TERM ADMISSION FRESHMEN

17.8 per cent	of all freshmen who came to the Counseling Clinics entered the Reading Improvement Service
2.1 per cent	of all other freshmen who came to college entered the Reading Improvement Service
39.4 per cent	of the clinic freshmen who entered the Reading Improvement Service had socres in the first decile on the Cooperative Reading Test
39.3 per cent	of the clinic freshmen who entered the Reading Improvement Service were in the second or third decile on the same test
97.0 per cent	of clinic freshmen who entered the Reading Improvement Service were in the fifth decile or below on the same test. The mean reading decile score of the entire group was 3.3
54.1 per cent	of the enrollment in the Reading Improvement Service, fall term, 1951, were Counseling Clinic freshmen

Reading Comprehension. The mean decile score for the group was 3.3. Of all freshmen who came to the Counseling Clinics, 17.8 per cent were in the Reading Improvement Service as contrasted with 2.1 per cent of all other entering freshmen. It is also highly significant that 78.7 per cent of the clinic freshmen who entered the service had scores in the first, second or third decile on the Reading Comprehension Test and 39.4 per cent of this same group were in the first decile on the same test.

An analysis of the Sample group of 185 students revealed that the 33 people who enrolled in the Reading Improvement Service had mean decile scores on the A. C. E. Psychological Examination of 3.6, yet their grade point average was 2.09 for the fall quarter. The six people who scored ones on each area of the Reading Test and who, with one exception (score of three), scored ones on the total score of the A. C. E. Psychological Examination made a grade point average of 1.77 the fall quarter. One client, whose A. C. E. scores were 10-4-6 and whose Reading scores were 1-1-1-1, made a grade point average of 3.00 for the fall quarter; a second person, whose A. C. E. scores were 10-3-6 and whose Reading scores were 3-2-1-2, made a 3.06 grade point average fall quarter; and a third person, whose A. C. E. scores were 2-1-1 and whose Reading scores were 1-1-1-1, made a 2.25 grade point average the same quarter. These figures indicated that a substantial percentage of people with low reading scores were benefitting from the Reading Improvement Service early in college.

Arithmetic Improvement Service. While the Arithmetic, Speech and Writing Improvement Services were not utilized as extensively as the Reading Improvement Service by the clients, a study was made to learn to what extent the students had taken advantage of these Services. As previously stated, people who appeared to have deficiencies in arithmetic, speech or writing were informed about the assistance they could receive. In Table 61 (page 129) a summary of the Arithmetic Improvement Service, fall term, 1951, is made. All new students (freshmen and transfers) were given an Arithmetic Prognostic Test during the orientation week preceding the beginning of classes in September. There were 3,021 who took the test and 274 of these (9.1 per cent) did not have a satisfactory score. The cutting score was set at 26 right (of a possible 45) or 58 per cent. Only 3.8 per cent of the Counseling Clinic participants failed the test as compared with 9.1 per cent of all fall term enrollees. No particular reason could be discovered for this difference.

One major difficulty experienced by the Arithmetic Improvement Service was the problem of early enrollment. Only 52.5 per cent of all students who failed the test took the remedial course in the fall, while 85.7 per cent of the Counseling Clinic participants who failed it enrolled immediately. This may be due to the encouragement they received while at the clinic to enroll in any Services in which they appeared to be deficient during the fall registration. As in the case of the Reading group, test scores showed these people needed assistance. Of the clinic freshmen who entered the Arithmetic Improvement Service, 42.8 per cent had a Q score of one or two on the

A. C. E. Psychological Examination. A further study revealed that 4.2 per cent of the enrollment in this Service were Counseling Clinic freshmen as compared with 17.8 per cent of the same group in the Reading Improvement Service. Evidence again indicated that the clients who enrolled were those who needed the remedial work to a great extent.

TABLE 61

DESCRIPTIVE SUMMARY OF ARITHMETIC IMPROVEMENT SERVICES, FALL TERM, 1951, COMPARING COUNSELING CLINIC FRESHMEN WITH OTHER FALL TERM ADMISSION STUDENTS

3.8 per cent	of all Counseling Clinic freshmen who took the Arithmetic Prognostic Test did not have a satisfactory score
9.1 per cent	of the new students who took the Arithmetic Prognostic Test did not have a satisfactory score
85.7 per cent	of the Counseling Clinic freshmen who failed the test took the remedial course in the fall
52.5 per cent	of all new students who failed the test took the remedial course in the fall
42.8 per cent	of the Counseling Clinic freshmen who entered the Arithmetic Improvement Service had a Q score of one or two on the A. C. E. Psychological Examination
4.2 per cent	of the enrollment in the Arithmetic Improvement Service, fall term, 1951, were Counseling Clinic freshmen

Speech Improvement Service. During the fall term orientation week, a total of 2,807 students were given the speech test. Of this number, 115 (4.1 per cent) were judged to have speech disorders such as; problems in lisping, sound substitution, hoarse and husky voice quality, stuttering, nasality, pitch, cleft palate, paralyzed velum, speech problems due to severe hearing loss and extreme stage fright.

The total number of cases handled by the Speech Improvement Service during the term was eighty. A total of twenty referrals were made to other student services; nine to the Counseling Center, nine to the Speech Department Speech Clinic, two to the Reading Improvement Service and one to the social psychiatric worker. A total of 36 were discharged during the term, and 23 were retained for further work during the winter term.

A careful study of the Counseling Clinic participants failed to show any major difference between their participation in the program and participation by the other regular fall term admission freshmen. Approximately 2.7 per cent of the former and 2.9 per cent of the latter enrolled for the Service, fall term, 1951. Since all new students are carefully screened for speech disorders and since the clinic group appears to be quite typical of regular Michigan State enrollees, these facts are not too surprising. It should be mentioned that 69.6 per cent of all students judged to have speech disorders entered the Speech Improvement Service, fall term, 1951. The fact that 31.4 per cent with deficiencies did not enroll in the proper service agency indicates the need for further emphasis and encouragement during the clinic session.

Writing Improvement Service. During the fall quarter the Writing Improvement Service had 119 enrollees. They were in six sections with an average of approximately twenty people to a section. A careful study of the Counseling Clinic participants again failed to show any major difference between their participation in the program and the other regular fall term freshmen students. Approximately 6.5 per cent of the former and 5.4 per cent of the latter enrolled for the service. A final check revealed that 21 per cent of the people enrolled in the Writing Improvement Service had been in the clinics in the summer of 1951.

Scholastic Standing at the End of the Fall Quarter, 1951

A brief explanation of Michigan State College's system of grading precedes the report on scholastic standing. The standards are as follows: Four points are allowed for each credit of "A" grade, three points for each credit of "B" grade, two points for each credit of "C" grade, one point for each credit of "D" grade and no points are given for grades of F or I. A 2.00 grade average is required for graduation.

Grade Point Achievement. An investigation of the grade point averages showed favorable results for the people who had been in the clinics during the past summer. Their total honor point ratio was 2.43 which gave them a record comparable with fall term juniors. The clinic men also equaled the average of junior men (2.34). The clinic women earned 2.53 as compared with the junior women's average of 2.62. In comparing the clinic participants with all Michigan State College freshmen, the clinic men had an honor point ratio of 2.34 as contrasted

with the total freshmen men's average of 2.12. The clinic women earned 2.53 as contrasted with freshmen women who averaged 2.34. The total average 2.43 as compared to 2.20 was favorable to clinic participants. These figures become more important when one considers that clinic averages are included in the all freshmen class average. If those were deducted, the non-clinic freshmen honor point ratio would be lower than the all Michigan State College freshmen average, as shown in Table 62. The clinic freshmen, likewise, had a better scholastic average than Michigan State College sophomores. These results indicated that the people who came to the campus in the summer program made a better scholastic average than the freshmen who did not attend the clinics.

TABLE 62

MICHIGAN STATE COLLEGE GRADE POINT AVERAGE FOR UNDERGRADUATES, FALL TERM, 1951

Classification	Grade Point Average		
	Men	Women	Total
Counseling Clinic Freshmen	2.34	2.53	2.43
All Michigan State College Freshmen	2.12	2.34	2.20
Sophomores	2.22	2.46	2.31
Juniors	2.34	2.62	2.43
Seniors	2.53	2.84	2.61
Special Students	2.04	2.22	2.07
All Michigan State College Undergraduates	2.30	2.53	2.39

These results were based upon careful analysis of 185 clients used in the Sample who enrolled at Michigan State College, fall term, 1951. Of that number, six failed to finish the quarter. While no attempt was made to analyze individual grade point average, one young lady did earn a four point. Several others had better than a three point average.

Probationary status. When a study was made of the 152 fall term freshmen who were placed on probation for the first time, it was highly favorable to clinic personnel. Of the clinic Sample, only five (2.7 per cent of the group) were on probation at the end of the term. Only 18 (3.1 per cent of the group) from the entire clinic were in that category, while 134 (7.8 per cent of regular fall term freshmen) were on probation. Of the nine people listed on strict probation, none had been enrollees in a Counseling Clinic.

These facts just discussed, all highly favorable to the clinic program, indicate that participants had greater understanding concerning the scholastic requirements of the college than did the non-clinic participants.

Summary of Preliminary Follow-up of Client

1. Counseling Clinic participants who attend college have better scores on the A. C. E. Psychological Examination, the Cooperative English Test C2: Reading Comprehension and the Iowa High School Content Examination than the non-college going participants.

2. Seventeen and eight-tenths per cent of clinic freshmen enrolled in the Reading Improvement Service as contrasted with 2.1 per cent of all other entering freshmen. Reading examination results indicated that the people who registered for the Reading Improvement Service were those who had a deficiency.

3. A higher percentage (85.7) of clinic participants who failed the Arithmetic Prognostic Test enrolled in the Arithmetic Improvement Service during the first term in college as compared with other

entering students (52.5 per cent), thus enabling them to improve their deficiencies earlier in their college careers.

4. There was no observable difference between clinic freshmen and other entering freshmen in regard to enrollment in the Writing and Speech Improvement Clinics.

5. Counseling Clinic enrollees made a better scholastic average than other first term freshmen at Michigan State College. Their grade point average compared favorably with college juniors.

6. There was a smaller percentage of clinic freshmen on probation at the end of the fall quarter than first term non-clinic freshmen.

CHAPTER VIII

SUMMARY, CONCLUSIONS AND IMPLICATIONS FOR FURTHER RESEARCH

In this final chapter is presented a summary of the research which was conducted, conclusions which were drawn from the data collected and some implications for further research.

The study was designed to examine, describe and determine changes evidenced by clients who participated in the clinics during the summer of 1951. An attempt was made to measure changes which were consistent with the objectives listed in the brochure published by Michigan State College. These included the following areas:

1. Self-understanding - knowing ones assets and liabilities.
2. Decision on educational-vocational goals.
3. Orientation information concerning college.

An effort was made to secure objective data evaluating the 1951 clinic from the viewpoint of the participating client. Although not designed as an original part of the study, a preliminary follow-up was made of the clinic Sample during the fall term of 1951.

The fact that no comprehensive study of the Counseling Clinics had been attempted previously makes this report especially pertinent. The results presented should prove useful to colleges which are engaged in similar programs and to those schools who are planning programs in the future. It should be beneficial to Michigan State College in planning and improving its present program.

The normative-survey method was employed in the research. Following a pilot study conducted during the summer of 1950, a final questionnaire was developed for use in the summer of 1951. It was administered to the entire group of 635 clients during the first morning of the respective clinics in which they participated. On the third day, following the exit interview, they were given the final questionnaire. The post-clinic survey blank included an evaluation sheet for the clients' reactions to the entire program. From this group, 200 participants were selected by random sampling and used in the research. All information from the completed survey was compiled, tabulated, analyzed and reported in the study.

Summary of the Study

The findings from analysis of these data follow:

1. Statistical analysis of the scores made by clients on the A. C. E. Psychological Examination, the Cooperative English Test C2: Reading Comprehension and the Iowa High School Content Examination showed that there was no compelling evidence to indicate that the distribution of scores varied from those made by other fall term admission freshmen. It could, therefore, be assumed that these two groups were comparable in this respect.

2. The proportion of men and women in the client group compared favorably with that of the regular fall term admission freshmen group.

3. A study of Counseling Clinic enrollees and fall term freshmen indicated little differences in the percentages of the two groups with regard to their enrollment in the various schools of the college.

4. Statistical analysis of changes in "self-understanding" revealed that clinic participants evidenced significant gains in five of the eight areas measured. These areas were:

I. Relative quantitative and linguistic ability as compared with the A. C. E. Psychological Examination.

II. Capacity to do college work as compared with the same test.

III. Reading skill as compared with the Cooperative English Test C2: Reading Comprehension.

IV. Relative rank in vocabulary, speed of reading and rate of reading as compared with the same test.

V. High school achievement as measured by the Iowa High School Content Examination.

5. There was gain, as indicated by the Test of Self-Understanding, in three of the eight areas mentioned. Although these gains could not be said to be statistically significant, the trend in the form of gain was consistent.

I. The three highest interest areas stated as compared with the Kuder Preference Record.

II. The three lowest interest areas stated as compared with the same test.

III. Clients' personal evaluation of their ranking in the fields of English, mathematics, science and social studies as compared with their relative performance in these fields on the Iowa High School Content Examination.

6. The "high ability" group - those people who scored on the eighth, ninth or tenth decile on the A. C. E. Psychological Examination -

possessed better "self-understanding" of their capacity for academic training and their reading skills than the "low ability" group - those people who scored on the first, second or third decile on the A. C. E. Psychological Examination - when they came to the clinic. Both groups made statistically significant gains while attending the clinics. In general, the highest percentage of gain was made by the "low ability" group, but their final percentages did not approach those of the "high ability" group. It must be recognized, however, that the latter showed much stronger initial "self-understanding" than did the former, consequently its chances for additional gain would be much smaller.

7. Clients were willing to admit weaknesses in reading, but were much more reluctant to admit the same in regard to their capacity for college work.

8. Most clients had made a decision concerning college attendance prior to participating in the Counseling Clinics. Over 90 per cent of them enrolled at Michigan State College. The majority of those who came indicated that they had very practical reasons for pursuing their academic training.

9. About one-fifth of the clients changed their college major while participating in the clinics. Almost half of these changes were to No Preference. Those people who went into No Preference usually carried an exploratory subject in their original major preference during their first term in college.

10. Clients made few changes in vocational goals during counseling. The seed for better evaluation of plans may be planted at this time but the actual change appears to be gradual. Seventy-five per cent of the

participants stated that they felt reasonably secure in regard to their vocational future when they left the Counseling Clinic.

11. There was evidence that clients felt they received considerable help while they were on the campus.

12. Clients were well informed when they came to the clinics regarding who could use the services of the Counseling Center and when they should apply for housing. They had little knowledge, at that time, of how to obtain a college change of major (vocational preference); what scholastic average they must obtain to be eligible for admission to an upper school; how many credits they should carry during their first term in college if they were doing no outside work; and the consequences of officially dropping a course before the close of the first four weeks of a term. On the post-clinic questionnaire the results indicated that they had gained considerable information in all of these areas with the exception of one, which concerned the manner in which a student obtained a change in college major.

13. Clients felt that college officials were very friendly with students and they liked Michigan State College because of its helpful and friendly atmosphere. They indicated that the institution either showed considerable interest in new students, or was making an "all-out attempt" to help them.

14. The majority of the clients had attended large high schools. Most of them thought their high schools had a reasonable amount of guidance services available. The number of services varied according to the size of the high school.

15. The most frequently mentioned guidance service available in

the high schools was conferences on future vocational plans; the least mentioned services were part and full time job placement and individual conferences on personal problems. The majority of the clients had from one to five individual vocational conferences during their senior year in high school.

16. The best avenue of publicity for the program was direct contact with clients through a letter from the college. The next best source was information supplied by a former client.

17. The features of the clinic which the clients felt were of most value to them were; help in planning courses (pre-enrolling for college), getting a chance to understand college life, going on the campus tour and having an opportunity to meet new friends.

18. The three most frequently mentioned suggestions for improving future clinics were; to have more special tests available, to make the clinics a day longer and to have fewer activities the first two days.

19. The majority of the clients felt the clinics were worthwhile, helped in college orientation and that the program was efficient. They stated the questionnaire was beneficial in guiding them toward "self-understanding" and in assisting them to organize their thinking. They indicated that they felt the clinics should be continued in the future.

20. There were a few criticisms of the program, namely; the lack of opportunity to register for fall term courses while attending the clinic, the feeling that the clinics were not of sufficient value for local people and the expressed opinion that a large number of tests in early morning were not conducive to clear thinking and, therefore, undesirable.

21. Clinic participants used the Reading Improvement Services in the fall far more than other college freshmen. The clinic students who enrolled for this service had a mean decile score of 3.3 on the Cooperative English Test C2: Reading Comprehension.

22. Eighty-five and seven-tenths per cent of the clinic participants who failed the Arithmetic Prognostic Test enrolled in the Arithmetic Improvement Service their first term in college. In comparison, only 52.5 per cent of the entering students enrolled. These figures indicate that a larger percentage of the clinic participants were aware of their deficiencies and were obtaining help earlier in their college career than non-clinic participants.

23. There was no observable difference between clinic freshmen and other fall term freshmen in regard to enrollment in the Writing and Speech Improvement Services.

24. Counseling Clinic enrollees made a better scholastic average than other first term freshmen at Michigan State College. Their grade point average compared favorably with college juniors.

25. There was a smaller percentage of clinic freshmen on probation at the end of the fall quarter than first term non-clinic freshmen.

26. A survey of the clinic participants showed that 92.5 per cent attended Michigan State College, 6.0 per cent enrolled in other colleges, 3.0 per cent did not continue their educations and 1.5 per cent were still in high school. College enrollees had better mean decile scores on the A. C. E. Psychological Examination than non-college enrollees.

Conclusions

The following conclusions may be drawn from the results of the summary of this study:

1. Many people entering college for the first time were not aware of their potential capacities to do college work. They had little idea of their ability to read compared with other college students. These facts have been substantiated in the research. People from small high schools often cannot understand why they were on probation at the end of the first quarter when they ranked high in their graduating classes. By attending a clinic of this type, all students have an opportunity to obtain an analysis of their ability level as compared to other entering college freshmen. This opportunity to secure better "self-understanding" enabled the clients to make wise use of the College Improvement Services. In certain instances, it helped the student who was not college caliber to formulate more realistic educational-vocational plans. The average participant had better "self-understanding" of his reading ability and of his capacity for college work, as compared to results shown on his Cooperative English Test C2: Reading Comprehension and the A. C. E. Psychological Examination when he left the clinic, as compared to his "self-understanding" when he came.

2. There was little evidence that the clinic participation led to any radical changes in the clients' plans concerning college attendance. Likewise, clients made few major changes in ultimate vocational goals while they were here. The most significant change was the trend by a number of clients from special programs toward the No Preference program.

The participants who made this change to the No Preference category had ample opportunity to work in close relationship with a college counselor during the fall term of 1951. While all of them explored new areas, the majority of them continued with a few courses in their original field of preference. Presumably, this was done in order to further test their original choices.

3. There was strong evidence that participants gained considerable information about Michigan State College while they were on the campus. By engaging in a program of orientation planned for prospective students, they were able to become acquainted with Michigan State College's expansive campus. They conferred with members of the college faculty and planned, insofar as possible, their fall term classes. This chance for making new friends, for becoming acquainted with individual faculty members and for acquiring an acquaintance with college procedures gave them an advantage over the non-clinic participant who arrived in the fall. This orientation experience was one of the most beneficial results of the entire program.

4. The clients' general evaluation of the Counseling Clinics was highly favorable to the program. The few objections were of a secondary nature. Practically everyone who attended the three day program felt it was worthwhile and should be repeated.

5. The preliminary follow-ups of the clients indicated they had made good academic adjustments to college. They had grade point averages comparable to college juniors at the end of the first term, and they had a smaller percentage of people on probation as contrasted with other entering freshmen. Whether this can be attributed to the clinics

alone or to other factors may be debatable, but the fact that they were superior academically was shown in the research.

6. While the values of the clinic to the student were undoubtedly obvious from previous discussion, they are briefly summarized in this section. From the clinics the student can:

a. Make an analysis of his ability level.

b. Secure assistance in determining aptitude for college.

c. Receive help in his educational program.

d. Consider suitable vocations and methods of obtaining vocational training.

e. Participate in a program of orientation planned for prospective students.

f. Acquire beneficial insight into special deficiencies or special aptitudes that might affect his academic or vocational goals.

g. Eliminate some of the inevitable confusion and frustration of freshman-week which prevails at most educational institutions.

7. There were certain advantages of the clinic to the college. These may be summarized as follows:

a. The program created good public relations with high schools in the surrounding areas.

b. It enabled the college staff to benefit from associations with visiting counselors from local high schools and nearby colleges.

c. It provided an excellent opportunity for counselor training and gave graduate students much practical experience.

d. Counselors and staff members had an opportunity to become acquainted with prospective students before the rush of orientation activities.

e. The testing program, which included several examinations required of students in the fall, relieved the college of some of the testing load of orientation week.

f. Large institutions were often criticized because students did not receive enough personal attention. The Counseling Clinics, by bringing small groups to the campus each week, gave every individual the attention he required during the three day session.

This type of educational venture has several very commendable qualities, but thus far it has been attempted by only a few scattered schools. It would be recommended by this investigator that further exploration into this area of guidance would repay dividends to any institutions undertaking such a project. It offers a personalized guidance situation in which the student can plan, well in advance of registration, a suitable course of college study. This early introduction to college procedures and problems is, in itself, a valuable experience. It is a project that should challenge many colleges and universities. It promises worthwhile returns to all institutions and participants involved and bears all the signs of a sound educational investment.

As previously indicated, Michigan State College's plans for the summer of 1952 included eleven clinics - the most attempted in any one year. They will again stress the features of previous years with added emphasis on college orientation activities. It is possible, if the present trend continues, that they may enroll approximately fifty per cent of the in-coming freshmen for orientation activities before college begins in the fall.

Implications for Further Research

Because of the broad nature of the clinic program and its potentialities there are many opportunities for further research. A few possiblities follow:

1. The opportunity to come to the clinics is extended to many high school graduates. Some of them accept and some do not. A study might profitably be made of the factors which motivate students to participate in this type of program. Do the people who attend differ from the people who fail to attend? How much does motivation help these people overcome the problems they face? Since comparatively few studies have been made on motivation, this could furnish ample opportunity for a very worthwhile research project.

2. Some observers are inclined to feel that changing one's major shows lack of vocational stability. Many clients change to No Preference while at the clinics. A study might be made of these people to see whether, after some exploration in No Preference, their curricular and vocational choices are more stable than those students who do not change during the clinics.

3. A follow-up study on Counseling Clinic personnel relative to their college progress might throw considerable light on the specific benefits derived from the clinic. The major difficulty would be to determine the amount of influence other agencies would have on the ultimate success or failure of the participants.

4. The clinics offer an excellent opportunity for a study of group dynamics. With sections of sixty to one hundred students meeting for the first time, there is a splendid opportunity to study the emergence of group leadership.

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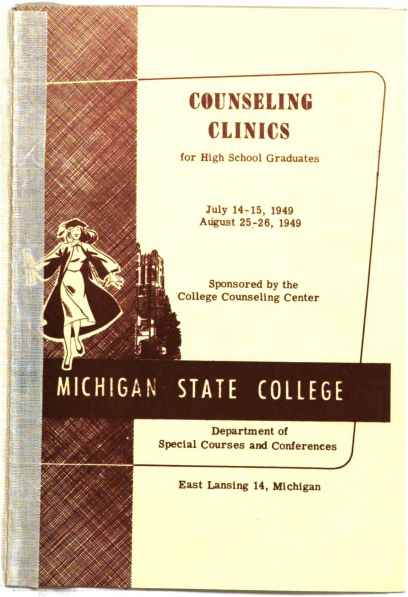
APPENDIX A


COUNSELING
CLINICS
for High School Graduates
July 14-15, 1949
August 25-26, 1949
Sponsored by the
College Counseling Center
MICHIGAN STATE COLLEGE
Department of
Special Courses and Conferences
East Lansing 14, Michigan

CHOOSING A CAREER is one of the most vital challenges confronting a young person about to leave high school. Should he find a job in business or industry? Should he plan to continue his education by enrolling in college? What type of job or profession would be most suitable in terms of his abilities, likes, and dislikes? How about opportunities in the vocational fields? These and many similar questions demand intelligent and objective answers.

VOCATIONAL TESTING AND COUNSELING is a professional service designed to help an individual in making a true analysis of himself—his aptitudes, interests, and personality factors. Through the aid of scientific tests and experienced counselors, the boy or girl is enabled to choose a career instead of just drifting into a field of employment that appears at the moment to be desirable.

THIS COUNSELING CLINIC sponsored by the Michigan State College Counseling Center, under the direction of Dr. Paul L. Dressel, is designed to help the young person:

(1) to choose a suitable vocation
(2) to decide whether or not to attend college
(3) to determine what to take if he does attend college

Participation in the Counseling Clinic may also serve as a basis for:

(1) the awarding of a limited number of scholarships to individuals found to be outstanding
(2) entrance examinations to Michigan State College for individuals who do well on the tests
(3) selection of fall term courses, in-so-far as possible, for those planning to attend Michigan State College
(4) orientation to college for prospective students

HIGH SCHOOL GRADUATES will be helped to formulate future educational plans. The student will be counseled with reference to personal assets and liabilities, probability of succeeding in college, and the choice of a suitable career. A summary of the test results will be made available to each participant in the Counseling Clinic.

program

FIRST DAY

9:00	Registration - Lower Lounge, Phillips Hall
9:30	Meet with Counselors - Phillips Hall
10:00	Interest and Personality Test - Counseling Center
12:00	Lunch - Phillips Hall
1:00	What We Need to Know About Ourselves and About Jobs - Lower Lounge, Phillips Hall
1:30 to 5:30	Academic, Aptitude, Reading and Achievement Tests and Counseling Interviews - Counseling Center
6:00	Dinner - Phillips Hall
7:00	Problems One Faces in Going to College - Lower Lounge, Mason Hall
8:00	Counseling Conferences - Phillips Hall
10:00	Report to Rooms

SECOND DAY

7:00	Breakfast
8:00 to 12:00	Special Aptitude Tests - Counseling Center
12:00	Lunch - Phillips Hall
1:00	Counseling Interviews Display of College and Vocational Materials Campus Tour

Application Blank

Counseling Clinic
for High School Graduates

High School Counseling Clinic
Counseling Center
Michigan State College

Gentlemen:

Please reserve a place for me in the Counseling Clinic for the date checked:

____July 14-15, 1949

____August 25-26, 1949

Attached is a $10 (check, money order) made payable to Michigan State College, in payment of my clinic fee. I shall pay for my dormitory room and meals upon registering at Phillips Residence Hall.

I plan to arrive at Phillips Hall on the date of _____

Name_____ Address_____

School_____ Address_____

Principal_____ Address_____

If for any reason I am unable to attend the clinic, I will notify the Counseling Center immediately. I understand that if notice is given five days prior to the opening of the clinic I am entitled to a refund of $5. I also understand that if 5 days notice is not given no refund is to be made.

general information

Welcome to Michigan State College and the counseling service which these clinics provide for you. This service is offered to aid you in making the educational and vocational choices with which you are faced within the next few months.

The Program is an intensive one. It will occupy all of your time from enrollment to completion. No other activities should be planned for the two day period.

Housing and Meals as well as important parts of the program will be in Phillips Residence Hall on the college campus. Rules and policies of dormitory and college life will be observed by your group.

Testing and Counseling activities, in general, will be conducted in the College Counseling Center, Building A-2, on the south campus. Your counselor will be assigned as soon as your application is accepted. Correspondence and counseling contacts will then be between you and your own counselor.

Parents are encouraged to accompany students if they wish to do so. Dormitory accommodations may be obtained at the rates listed below. Reservations must be made well in advance.

Information and High School Transcript blanks will be forwarded to you when your application is received.

Costs of the Clinic are as follows:

Clinic fee	$10.00
Room (1 night)	2.00
Additional night	1.00
Meals (4)	2.70

Application should be made on the form attached to this leaflet. It should be returned together with your $10 clinic fee. Remittance should be by check or postal money order payable to Michigan State College.

Refunds of clinic fees will be made to students whose applications cannot be accepted. Half of the clinic fee will be refunded to an accepted student who finds it impossible to attend the clinic and who notifies the Counseling Center at least 5 days before the opening date. No refund can be made unless such a 5 day notice is given. A student who participates in one of the clinics and then enrolls at Michigan State College for the fall term, 1949, may apply for full refund of the clinic fee. Application for such refund must be made after registration and before October 15, 1949.

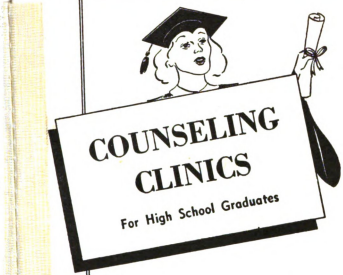
Detach this form and mail with your $10 Clinic fee to:

counseling clinic

Counseling Center

Michigan State College

East Lansing, Michigan



COUNSELING CLINICS

For High School Graduates

SUMMER 1950

May 18-19	July 10-12
June 1-2	July 19-21
June 15-16	August 7-9
June 26-28	August 23-25

September 6-8

Sponsored by the
COLLEGE COUNSELING CENTER

MICHIGAN STATE COLLEGE

Department of
Special Courses and Conferences
East Lansing 14, Michigan

PURPOSE OF THE COUNSELING CLINICS

CHOOSING A CAREER is one of the most vital challenges confronting you as you approach graduation from high school. Should you find a job in business or industry? Should you seek specialized training in a trade, technical, or business school? Should you plan to continue your education by enrolling in college? What type of job or profession would be most suitable in terms of your abilities, likes, and dislikes? What are opportunities in the vocational fields? These and many similar questions demand intelligent and objective answers.

VOCATIONAL TESTING AND COUNSELING is a professional service designed to help you to reach a better understanding of yourself — your aptitudes, interests, and personality characteristics. After a comprehensive battery of tests has been administered, the counselor will explain in a personal interview the relationship of your test results and past experiences to various types of training and occupational goals and may suggest sources of information on vocational opportunities and requirements. Thus he will assist you in formulating realistic educational and vocational plans.

At these clinics you may:

(1) decide whether or not to attend college
(2) consider suitable vocations and the methods of obtaining vocational training
(3) get information about course requirements
(4) confer with members of the Michigan State College faculty
(5) offer the results of the tests administered in lieu of entrance examinations at Michigan State College, if the scores are at the level required for admission by examination
(6) select fall term courses, in-so-far as possible, if you plan to attend Michigan State College
(7) participate in a program of orientation planned for prospective students

COUNSELING CLINIC ACTIVITIES

REGISTRATION — The Clinic gets under way with registration the first day at 8:30 a.m. The program will begin promptly at the scheduled time.

TESTING — The major portion of the morning and afternoon of the first day will be devoted to the testing program. The tests will include interest and personality inventories, academic aptitude, reading, and achievement tests. An explanation of the purpose of each test will precede the testing session. Special aptitude tests may be recommended by the counselor to suit the needs of individuals.

COUNSELING — Each person will be assigned to a counselor who will work with him throughout the Clinic. Each counselor will meet his counselees soon after the Clinic begins to answer questions, explain procedures, and arrange individual conferences. In the individual interviews the counselor will interpret test results and relate them to the student's previous achievement, training, and experiences. Thus, the high school graduate may appraise his interests, his strong points and his limitations and learn how they pertain to vocational goals and to the possibility of doing satisfactory work in college. The counselor will discuss vocations and the type of training necessary and will refer the person to other sources of information, when desired.

INTEREST GROUP MEETINGS — Members of the faculty of various college departments will be available to confer with small groups of students who have similar interests. Individual conferences may also be arranged.

GENERAL MEETINGS — General meetings will be scheduled at various times during the Clinics. College representatives will be present to discuss topics of value to participants.

ORIENTATION — Many of the activities will serve as an introduction to college life. The Clinic period offers an excellent opportunity to make new friends before college begins in the fall. Organized tours of the campus and buildings, question periods, living in the dorms, learning college songs, and the use of college recreation facilities will help the prospective student to become acquainted with campus activities.

RECREATION — Relaxation and fun — opportunities for ice-skating, swimming, bowling, ping-pong, and dancing will be available.

APPLICATION BLANK

To insure best choice of clinic dates and to assist us in serving you, mail this blank as soon as possible. Applications *must* be in at least two weeks prior to the preferred date.

COUNSELING CLINIC FOR HIGH SCHOOL GRADUATES

Please reserve a place for me in the Counseling Clinic for the date checked: (Please indicate first, second, third choices)

____ May 18-19	____ June 26-28
____ June 1-2	____ July 10-12
____ June 15-16	____ July 19-21
	____ August 7-9
	____ August 23-25
	____ September 7-8

Attached is a $5 check (or money order) made payable to Michigan State College, in payment of my clinic fee. I shall pay for my dormitory room and meals upon registering at the Residence Hall.

I plan to arrive at the College Dormitory on the date of _____

Name _____ Address _____

School _____ Address _____

Principal _____ Address _____

If for any reason I am unable to attend the Clinic, I will notify the Counseling Center immediately. I understand that if notice is given two weeks prior to the opening of the Clinic I am entitled to a refund of the Clinic fee.

If you wish to attend one of these High School Counseling Clinics return this application at the earliest possible moment to:

College Counseling Center
A-2, South Campus
Michigan State College
East Lansing, Michigan

GENERAL INFORMATION

WELCOME to Michigan State College and to the Counseling Clinics. The Counseling Center under the direction of Dr. Paul L. Dressel offers this service to assist you in making educational and vocational plans.

THE PROGRAM is an intensive one. Participants should arrange to be present for the entire period of the Clinic.

HOUSING AND MEALS will be provided in a college residence hall. Rules and policies of dormitory and college life will be observed by your group.

TESTING AND COUNSELING activities, in general, will be conducted in the College Counseling Center, Building A-2, on the South Campus.

COSTS of the Clinic are as follows:

Clinic fee	$5.00
Room (1 night)	$2.00
Each additional night	$1.50
Meals (per day)	$2.00

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CHOICE OF DATES — First, second, and third choice of dates should be indicated. The application must be in at least two weeks prior to the preferred date. The applicant will be assigned to the Clinic for which he has stated a perference, whenever possible. Assignments will be made in the order of receipt of applications. The Clinics of May 18-19, June 1-2 and June 15-16 have been arranged primarily for those who have been graduated from high school prior to these dates.

FURTHER INFORMATION regarding the Clinic will be furnished to each applicant in a letter which he will receive approximately two weeks prior to the date of the Clinic to which he has been assigned.

THESE COUNSELING CLINICS are sponsored by the Michigan State College Counseling Center, with the cooperation of the Department of Special Courses and Conferences.

COUNSELING CLINICS

For High School Graduates

SUMMER, 1951

June 4-6	July 30-Aug. 1
June 11-13	August 6-8
June 20-22	August 15-17
July 11-13	August 27-29
July 23-25	September 5-7

Sponsored by the
COLLEGE COUNSELING CENTER

MICHIGAN STATE COLLEGE

MICHIGAN STATE COLLEGE
Continuing Education Service
EAST LANSING 14, MICHIGAN

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Michigan State College
East Lansing, Michigan

GENERAL INFORMATION

WELCOME to Michigan State College and to the Counseling Clinics. The Counseling Center under the direction of Dr. Paul L. Dressel offers this service to assist you in making educational and vocational plans.

THE PROGRAM is an intensive one. Participants should arrange to be present for the entire period of the Clinic.

HOUSING AND MEALS will be provided in a college residence hall. Rules and policies of dormitory and college life will be observed by your group.

TESTING AND COUNSELING activities, in general, will be conducted in the College Counseling Center, Building A-2, on the South Campus.

COSTS of the Clinic are as follows:

Clinic fee	$5.00
Room (1 night)	$2.00
Each additional night	$1.50
Meals (per day)	$2.00

APPLICATION should be made on the form attached to this leaflet. It should be returned together with your $5 clinic fee. Remittance should be made by check or postal money order payable to Michigan State College. The fee will be refunded to an accepted student who finds it impossible to attend provided he notifies the Counseling Center at least two weeks before the opening date of the Clinic.

CHOICE OF DATES — First, second, and third choice of dates should be indicated. The application must be in at least two weeks prior to the preferred date. The applicant will be assigned to the Clinic for which he has stated a perference, whenever possible. Assignments will be made in the order of receipt of applications. The Clinics of May 18-19, June 1-2 and June 15-16 have been arranged primarily for those who have been graduated from high school prior to these dates.

FURTHER INFORMATION regarding the Clinic will be furnished to each applicant in a letter which he will receive approximately two weeks prior to the date of the Clinic to which he has been assigned.

THESE COUNSELING CLINICS are sponsored by the Michigan State College Counseling Center, with the cooperation of the Department of Special Courses and Conferences.

Announcing
the

COUNSELING CLINICS

Summer, 1952

A program of pre-enrollment orientation, testing, and counseling for fall term freshmen.

June 16-18	July 29-31
June 30-July 2	August 5-7
July 8-10	August 12-14
July 15-17	August 19-21
July 22-24	August 26-28

September 9-11

Sponsored by the
COLLEGE COUNSELING CENTER

MICHIGAN STATE COLLEGE

EAST LANSING, MICHIGAN

To The 1952 MSC Freshman:

The College Counseling Center congratulates you on your decision to attend Michigan State College, and on your acceptance as a fall term freshman. College, as you no doubt realize, offers you a new kind of experience — one of opportunity as well as responsibility. You will find at MSC many interesting fields of study and many different avenues of vocational endeavor. To make intelligent choices among so many diverse fields of study and vocations is indeed no small task.

It is to assist new freshmen-to-be at Michigan State that the Counseling Center presents the program of 1952 Summer Counseling Clinics. Experience has shown that attendance at one of these three-day clinics is an investment that can pay real dividends in helping beginning college students solve many of the problems which confront them. Participants during the past three summers have been enthusiastic in reporting the value of the Clinics in contributing to better choice of college subjects, better grades and easier adjustment to college life.

We are happy to invite you to attend one of the Counseling Clinics, and to participate in a program of orientation to college, testing, and counseling activities.

COUNSELING CLINIC ACTIVITIES

ORIENTATION: Many clinic activities are planned to serve as an introduction to college life. The clinic period offers an excellent opportunity to make new friends before college begins in the fall. Organized tours of the campus and buildings, question periods, dorm living, introduction to college songs, and use of college recreation facilities all help acquaint prospective students with MSC. Representatives of college departments and services are available to discuss topics of value to participants and to answer questions. Selection of fall term courses and much of the work of enrollment may be completed at the clinics.

TESTING: To help the recent high school graduate reach a better understanding of himself, a comprehensive testing program is provided. Tests and inventories cover interest and personality, academic aptitude, reading, and achievement. Special aptitude tests may be recommended by the counselor to suit the needs of individuals.

COUNSELING: Each student is assigned a counselor to work closely with him throughout the clinic. At individual interviews test results are interpreted and related to the student's achievement, training and experiences. Thus, the freshman-to-be may appraise his interests, his strong points, and his limitations and decide how they pertain to vocational goals and to satisfactory work in college. The nature and requirements of various vocations are discussed, and referrals to other sources of information are made.

APPLICATION BLANK

To assure best choice of clinic dates, and to assist us in serving you, mail this blank as soon as possible. Applications *must* be in at least two weeks prior to the preferred date.

*Please make my clinic reservation for the date checked:

____June 16-18	____July 15-17	____August 5-7
____June 30-July 2	____July 22-24	____August 12-14
____July 8-10	____July 29-31	____August 19-21
		____August 26-28
		____September 9-11

Attached is a $6.00 check (or money order) made payable to Michigan State College in payment of my clinic fee. I shall pay for dormitory room and meals upon registering at the residence hall.

I plan to arrive at Michigan State on the date of _____.

Name_____ Address_____

School_____ Address_____

Principal_____ Address_____

If for any reason I am unable to attend the clinic, I will notify the Counseling Center immediately. I understand that if notice is given a week prior to the opening of the clinic I am entitled to a refund of the clinic fee.

*Please double check your first choice; then indicate by single checks any other dates that would be satisfactory in case your preferred date is filled.

INSTRUCTIONS FOR APPLICATION

If you wish to attend a clinic return this application blank as soon as possible.

APPLICATION should be accompanied by your $6.00 clinic fee. Remittance should be made by check or postal money order payable to Michigan State College. Do not send cash. Refund of fees will be made to those whose applications cannot be accepted. Applicants finding it impossible to attend on the date for which they have been accepted are urged to notify the Counseling Center at least one week in advance. Failure to do so makes it impossible to fill vacancies in the clinic. Refund of the clinic fee can be made only if one week's notice is given.

CHOICE OF DATES First choice of dates should be indicated. Applications must be in at least two weeks prior to the preferred date. The applicant will be assigned to the clinic for which he has stated a preference whenever possible. Assignments will be made in the order of receipt of applications. Previous experience points to the desirability of selecting an early date. The clinic of June 16-18 has been arranged primarily for those who have already finished high school, and for June graduates who contemplate entering college in the summer term.

ADDRESS your letter to:

College Counseling Center
A-2 South Campus
MICHIGAN STATE COLLEGE
East Lansing, Michigan

GENERAL INFORMATION

REGISTRATION: Each clinic gets under way with registration the first day at 8:00 a.m. The program will begin promptly at the scheduled time.

HOUSING AND MEALS will be provided in a college residence hall. Rules and policies of dormitory and college life will be observed by the clinic groups.

COSTS of the clinic are as follows:

Clinic fee	$6.00
Room (one night)	$3.00
Each additional night	$2.00
Meals (per day)	$3.25

FURTHER INFORMATION regarding the clinics will be furnished in a letter which each applicant will receive approximately two weeks prior to the date of the clinic to which he has been assigned.

Any further questions may be addressed to:
Dr. Paul L. Dressel
Director of Counseling
MICHIGAN STATE COLLEGE
East Lansing, Michigan

APPENDIX B

MICHIGAN STATE COLLEGE
EAST LANSING

COUNSELING CENTER

TO PROSPECTIVE STUDENTS:

I have been pleased to find that you are planning to attend Michigan State College. I should like to call to your attention the Counseling Clinics which are being held here this summer and to point out to you that, if it is at all possible, it would be to your advantage to participate in one of these clinics.

As you know, Michigan State College has become a rather large institution and some of our new freshmen have felt rather lost for the first few days in the fall. After spending some time on this problem we decided two years ago that the best solution was to bring in as many of our new students as possible during the summer, at which time we can visit with them individually, give such tests as may be helpful in advising them on their college program, and endeavor to make them familiar with what college is like and what their responsibilities in college will be. Students who have been through the program have been unanimous in saying that it made them feel much more at home when they arrived in the fall than those people who were arriving on the campus for the first time. Moreover, they were more certain of what they wanted to do.

We realize that attendance at the clinic involves some expense on your part, and we have tried to keep this to an absolute minimum. For reasons indicated earlier, I do feel that the expenditure will repay real dividends to you, and I urge you to come if you possibly can.

In previous years the late summer dates have been so popular that many applications had to be refused. Therefore, I urge you to send in your preferences at once, using the early summer dates if at all possible.

If you find it impossible to come during the summer, we don't, however, want you to feel that we are thereby less interested in you. The Counseling Center will be available to you in the fall and we will do everything we can to make you welcome and to take care of your questions at that busy time.

Sincerely yours,

Paul L. Dressel

Paul L. Dressel
Director of Counseling

PLD:raf

Attention of Superintendents, Principals, and Counselors

Dear Co-Workers

The Michigan State College Counseling Center will offer this summer a third annual series of Counseling Clinics for High School Graduates. The response to the clinics of the past two years was so great that the number of clinics for 1951 has been increased to ten.

These clinics are offered to all high school graduates, whether or not they plan to attend college, to assist them in educational and vocational planning. After a general battery of tests has been administered, the clinic participant may take further tests appropriate to his needs. Primary emphasis is placed on individual interviews with a professionally trained counselor. If the student has already selected a goal, he may appraise his potentialities for such a goal. The prospective college student, for example, may consider his capacity for college work in general and for various college curricula. In addition, possible handicaps, such as poor reading skills, may be discovered and provisions made for remedial work as soon as he begins college. Sources of academic difficulties may thus be anticipated and student mortaility decreased.

In addition to the individually oriented parts of the program, the clinics serve as an introduction to college group experience—dormitory living, social and recreational programs, contacts with other students from many states, and group and individual conferences with college staff members.

The descriptive brochure directed to high school graduates is enclosed. Upon request we shall gladly send you as many of these as you desire for distribution to your graduating seniors. You will note that the early clinics are scheduled before the close of some schools. These are designed for students who have been graduated in previous years or this year prior to the clinic dates or who may be planning to attend summer school in 1951. Requests for brochures and further information may be addressed to the Counseling Center, Building A-2, South Campus.

Sincerely yours,

Paul L. Dressel
Director of Counseling

Enclosure 1

MICHIGAN STATE COLLEGE
EAST LANSING

COUNSELING CENTER

March 15, 1951

To Those Who Have Attended
The Michigan State College Counseling Clinics

Dear Friend:

We have learned from interviews with many of you who attended the Michigan State College Counseling Clinics last summer that you feel that the Counseling Clinic was a worthwhile experience for you. Some of you have said that as a result of the Clinic, you did not feel lost when you came for registration in the fall. Others felt that learning more about your abilities, aptitudes, and interests had helped you to plan your fall schedule of courses more effectively. Others altered vocational plans somewhat as a result of testing and counseling so that your goals were more suitable. Others felt that the special meetings with deans and faculty members were most useful. Thus, each of you found values in the Clinics that were appropriate to your own personal needs.

We are now making plans for the Counseling Clinics of 1951. Details and costs vary somewhat from those of last year, but the program remains essentially the same. We are enclosing two copies of a brochure which describes the Clinics for this year, since we feel that you as a participant in past Clinics will be interested in their growth and development. In addition, we hope that if you feel that the Clinic was time well spent by you, you may wish to tell friends of yours who are being graduated from your local high school this year about the Clinic and to give them the enclosed brochures. We should like to emphasize that these Clinics are not limited to those who plan to attend Michigan State College, but they are designed for ALL high school graduates whether they plan to attend M.S.C. or some other college or do not plan to attend college.

We should appreciate very much your commemts on last year's program and your suggestions of how you think our plans for this year's Clinics may be improved.

Cordially yours,

Thomas A. Goodrich, Chairman
Counseling Clinic Committee

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Enclosures 2

MICHIGAN STATE COLLEGE
EAST LANSING

COUNSELING AND EXAMINATIONS

To Members of Michigan Counselors Association
and Michigan Association of Deans of Women
and Counselors for Girls

Dear Colleague:

As the end of the current school year approaches, many of your students are making plans for the future. The second annual series of Counseling Clinics at Michigan State College is designed specifically for high school graduates--both for those who plan to attend a college, and those who either are in doubt about entering college or do not plan to do so. The enclosed brochure describes in detail the purposes and program of the Clinics.

Since you are aware of the students in your school to whom these Clinics may be of benefit, we are enclosing two copies of the brochure. We shall be glad to furnish upon request additional copies of the brochure and any further information you may desire.

Please address your requests to:

Counseling Clinics
Counseling Center
A-2, South Campus
Michigan State College
East Lansing, Michigan

Cordially yours,

Thomas A. Goodrich
Chairman, Counseling Clinics

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Enclosures 2

MICHIGAN STATE COLLEGE
East Lansing, Michigan

Counseling Center

July 16, 1951

To Newly Accepted Students:

As the time approaches for that important step in your life - your first enrollment in college - it is quite likely that you may be experiencing certain doubts and questions. Most new students do feel this way and each summer increasing numbers of high school graduates find it worthwhile to visit the Michigan State College campus for one of the Counseling Clinics.

If you have not yet attended one of the clinics and have neglected to file an application, you will be interested to know that a limited number of vacancies are still available in the following four sessions:

July 30-Aug. 1
August 6-8
August 15-17
August 27-29

As mentioned in my previous letter, we feel that the Counseling Clinic experience will pay real dividends to you in helping you to feel more at home next fall and in helping you to make plans for the future. If you wish to attend one of the three-day clinics for which space is still available, you may send us your application on the blank at bottom of this page.

In case you may have mislaid the folder describing the Counseling Clinics, which was sent you earlier, we shall be happy to send you another copy.

Sincerely yours,

Paul L. Dressel

Paul L. Dressel
Director of Counseling

COUNSELING CLINIC APPLICATION BLANK (return application to College Counseling Center, A-2, South Campus, Michigan State College, East Lansing, Michigan)

Please reserve a place for me in the Counseling Clinic for the date checked: (indicate 1st and 2nd choices)

____July 30-Aug. 1
____August 6-8
____August 15-17
____August 27-29

Attached is a $5 check (or money order) made payable to Michigan State College, in payment of my clinic fee. I shall pay for dormitory room and meals upon registering at the Residence Hall.

I plan to arrive at the college on the date of ____________________

Name ____________________ Address ____________________

School ____________________ Address ____________________

Principal ____________________ Address ____________________

If for any reason I am unable to attend the Clinic, I will notify the Counseling Center immediately. I understand that if notice is given the week prior to the opening of the Clinic I am entitled to a refund of the Clinic fee.

APPENDIX C

1949 Edition

164

AMERICAN COUNCIL ON EDUCATION

Psychological Examination

For College Freshmen

Prepared by Educational Testing Service
From materials developed by L. L. Thurstone and Thelma Gwinn Thurstone

Cooperative Test Division
Educational Testing Service
Princeton, New Jersey

General Instructions

This examination is different from the ordinary school examinations to which you have been accustomed. The plan for each of these tests is as follows. First, you are given detailed *instructions* about the test, so that you know just what you are expected to do. Then you have some *practice problems*. Then you go to the *test proper*. This is the procedure for each of the six tests in this examination. The total examination requires an hour.

The six tests in this examination represent a variety of tasks. Three of them involve thinking of a quantitative sort, while the other three require more linguistic ability. If you find one test hard, do not be discouraged; you may find the next test easier. Nevertheless you should do your best on all the tests.

People differ markedly in the speed with which they can do these different tests. The tests are long enough to keep everyone busy for the whole time, and you are not expected to complete the tests in the time allowed. By noting how many questions you can answer in a certain length of time, we can determine your speed on each kind of test. You must begin to work on a test promptly when the examiner calls the starting time and stop immediately when he says "Stop." Do not begin a test until the examiner gives the starting signal for that particular test. Do not turn back to a test after the time for it has expired. You are to work on each test during, and only during, the specified time as announced by the examiner in charge.

You are to record your answers on a separate answer sheet rather than on the pages of the test booklet. Instead of writing down your answers, you will record each answer by blackening the space between a pair of lines. *Do not make any marks or record any answers on the pages of this test booklet.*

Your answer sheet will be scored accurately if you observe carefully the following directions:

1. On the answer sheet, find the *section* which corresponds to the practice problems or to the test proper on which you are working.
2. Then find the *row of answer spaces* which is numbered the same as the question you are answering.
3. Then find the *pair of dotted lines* which corresponds to the answer you choose and blacken the space. MISPLACED ANSWERS ARE COUNTED AS WRONG ANSWERS.
4. Indicate each answer with SOLID BLACK PENCIL MARKS drawn vertically between the two dotted lines. Solid black marks are made by going over each mark two or three times and by pressing firmly on the pencil.
5. Make your marks as long as the dotted lines.
6. If you change your answer, erase your first mark completely.
7. Make no unnecessary marks in or around the dotted lines.
8. Keep your answer sheet on a hard surface while marking your answers.
9. Make no folds or creases in the answer sheet.
10. *No scratch paper* is allowed for any of these tests. The answer sheet contains a special section which may be used for scribbling.
11. Fold the pages of your test booklet back so that *only one page is visible*. Place the test booklet to the left. Keep the answer sheet under the test booklet so that the answer spaces being marked are as close as possible to the questions being answered.

(Omit the next paragraph unless the tests are to be machine-scored.)

The examination will be scored by an electric test-scoring machine, which makes use of the fact that a solid black pencil mark will carry a current of electricity in the same way that a copper wire does. LIGHT PENCIL MARKS MADE WITH A HARD PENCIL WILL NOT CARRY A CURRENT OF ELECTRICITY! The machine will not give you a correct score unless you indicate your answers with solid black pencil marks made with the *special* pencil which is provided. Do not use any pencil other than the special one provided. The machine cannot distinguish between intended answers and stray pencil marks. If you are careless in erasing or if you leave unnecessary marks on or near the pairs of lines, such marks may be counted by the machine as wrong answers with the result that your score will be lower than it should be.

Wait until the examiner gives the starting signal for the first set of practice problems.

Arithmetic

PRACTICE PROBLEMS

In this test you will be given some problems in arithmetic. After each problem there are five answers, but only one of them is the correct answer. You are to solve each problem and blacken the space on the answer sheet which corresponds to the answer you think is correct. The following problem is an example:

> **1.** How many pencils can you buy for 50 cents at the rate of 2 for 5 cents?
> (a) 10 (b) 20 (c) 25 (d) 100 (e) 125

Find on the answer sheet the space labeled "ARITHMETIC, Practice Problems, Page 3." The correct answer to the problem is 20, which is answer (b).

In the row numbered 1, space (b) has been blackened.

In the *second* row, blacken the space which corresponds to the answer to the second practice problem.

> **2.** If James had 4 times as much money as George, he would have $16. How much money has George?
> (a) $4 (b) $8 (c) $12 (d) $16 (e) $64

You should have blackened space (a), which corresponds to $4, the correct answer.

Blacken the spaces corresponding to the answers to the following problems:

> **3.** In 5 days Harry has saved a dollar. What has his average daily saving been?
> (a) 20¢ (b) 22½¢ (c) 25¢ (d) 30¢ (e) 40¢
>
> **4.** John sold 4 magazines at 5 cents each. He kept ½ the money and with the other ½ he bought papers at 2 cents each. How many did he buy?
> (a) 3 (b) 4 (c) 5 (d) 6 (e) 10

When the signal is given (not yet), turn the page and work more problems of the same kind. Work rapidly and accurately. Your rating will be the total number of correct answers. You may not be able to finish in the time allowed.

Stop here. Wait for the signal.

Find the correct answer to each problem below. Then blacken the corresponding space on the answer sheet.

ARITHMETIC

1. Twelve girls rented a cottage for 3 months at $40 per month. What was the total rent paid by each girl?
(a) $3.33 (b) $9.00 (c) $10.00 (d) $12.66 (e) $120.00

2. A farmer used 10 bushels of seed wheat on an 8-acre field. At that rate, how many bushels of seed will he need for a field of 40 acres?
(a) 20 (b) 25 (c) 30 (d) 40 (e) 50

3. The capital of a partnership is $18,000. A owns 2 shares, B owns 3 shares, and C owns 5 shares. How much of the capital belongs to A?
(a) $1,800 (b) $3,600 (c) $3,800 (d) $4,000 (e) $4,500

4. If a car goes 8 miles in 15 minutes, how many miles an hour is it going?
(a) 16 (b) 24 (c) 32 (d) 40 (e) 48

5. A tank with a capacity of 150 gallons is half full of water. How many minutes will it take a pipe supplying water at the rate of $7\frac{1}{2}$ gallons per minute to finish filling the tank?
(a) 1 (b) 5 (c) 10 (d) 20 (e) 100

6. John and Will played 50 games. Eighteen games were tied, and John won $\frac{1}{4}$ of the rest. How many games did Will win?
(a) 8 (b) 12 (c) 16 (d) 20 (e) 24

7. On a total bill of $860 a discount of $\frac{1}{2}$% was allowed. How much was the discount?
(a) $2.15 (b) $3.45 (c) $4.20 (d) $4.30 (e) $43.00

8. Sound travels 1,080 feet per second. If the sound which accompanies a flash of lightning is heard 3.5 seconds after the flash is seen, how many feet away is the lightning?
(a) 3,240 (b) 3,680 (c) 3,720 (d) 3,780 (e) 3,790

9. A clock that gained 2 minutes per day was set correctly at noon Tuesday. What time was it by this clock at midnight the following Thursday?
(a) 12:00 (b) 12:01 (c) 12:02 (d) 12:04 (e) 12:05

10. Mr. Lawson pays $65 per month for rent. His salary is $3,120 per year. What per cent of his salary does he spend for rent?
(a) $12\frac{1}{2}$ (b) 15 (c) 20 (d) 25 (e) 30

11. The perimeter of a rectangular field is 48 yards. The length is 15 yards. How many square yards are in the area?
(a) 135 (b) 145 (c) 270 (d) 360 (e) 720

12. How much more is $\frac{1}{8}$ of $\frac{3}{4}$ than $\frac{1}{2}$ of $\frac{3}{4}$?
(a) $\frac{1}{16}$ (b) $\frac{3}{16}$ (c) $\frac{5}{16}$ (d) $\frac{3}{8}$ (e) $\frac{7}{8}$

13. X, Y, and Z gathered 100 chestnuts altogether. X gathered 4 more than Y, and Y gathered 6 more than Z. How many did Z gather?
(a) 28 (b) 32 (c) 34 (d) 36 (e) 38

14. If 10% is lost by selling a bicycle for $9.00, for how much should it have been sold to gain 10%?
(a) $9.90 (b) $10.00 (c) $10.10 (d) $11.00 (e) $12.00

15. The average person attends school 1,080 days. What part of a 12-year course does he complete, if 180 days are counted as a school year?
(a) $\frac{1}{3}$ (b) $\frac{1}{2}$ (c) $\frac{2}{3}$ (d) $\frac{3}{4}$ (e) $\frac{5}{6}$

16. If 42 be added to John's age, the result is 4 times his age. How old is he?
(a) $10\frac{1}{2}$ (b) 14 (c) 16 (d) 21 (e) 30

17. A man buys oranges at 10 cents per dozen and sells them at 18 for 20 cents. How many oranges must he sell to make a profit of $1.00?
(a) 240 (b) 360 (c) 400 (d) 480 (e) 600

18. X can do a piece of work in 8 days, whereas Y would take 20 days. After X has worked alone for 3 days, how many days will it take Y to finish the work by himself?
(a) 8 (b) 9 (c) 10 (d) 12 (e) $12\frac{1}{2}$

19. If $\frac{3}{4}$ of A's money equals $\frac{1}{2}$ of B's money and they have $40 together, how much has A?
(a) $8 (b) $10 (c) $12 (d) $16 (e) $24

20. The head of a fish is 3 inches long; the tail is as long as the head plus $\frac{1}{4}$ of the length of the body; the body is as long as the head and the tail. How many inches long is the fish?
(a) 5 (b) 8 (c) 12 (d) 16 (e) 20

Stop here.

Completion

PRACTICE PROBLEMS

Look at the following definition. You are to think of the word that fits the definition.

1. A contest of speed.
B F M P R

The word is *race*. The letter ***R*** **is the** first letter in the word *race*. In the section of the answer sheet labeled "COMPLETION, Practice Problems, Page 5," the space indicated by *R* in the first row has been blackened.

Blacken the space corresponding to the first letter of the word which fits the following definition:

2. A place or building for athletic exercises.
C D G H T

The word is *gymnasium*. You should have marked the space indicated by *G* because it is the first letter in the word *gymnasium*.

Do the following examples in the same way:

3. The thin cutting part of an instrument, as of a knife or a sword.
A B D H W

4. The wife of a king.
F N P Q V

5. A small or portable bed, as of canvas stretched on a frame.
C G N P T

When the starting signal is given (not yet), turn the page and work more problems of the same kind. Work rapidly because your rating will be the total number of correct answers. You may not be able to finish in the time allowed.

Stop here. Wait for the signal.

Think of the word that fits the definition. Then mark the first letter of that word on the answer sheet.

COMPLETION

21. A cap or cover used in sewing to protect the finger.
R S T W Y

22. A bride's personal outfit, as of clothes, jewelry, etc.
E G K M T

23. A whirling wind accompanied by a funnel-shaped cloud.
P Q T U V

24. A thickly populated street marked by wretched living conditions.
F J S U V

25. A mark to shoot at, as for practice.
F H J R T

26. The internal process which renders food absorbable.
B D F H J

27. The apparent junction of earth and sky.
B D F H I

28. An excavation for obtaining building stone.
B J L O Q

29. The latter part and close of the day and early part of darkness or night.
E F H I K

30. A lure to catch fish or other animals.
B J K O V

31. The workroom of a painter or sculptor.
C J K P S

32. The radius or ray of a wagon wheel.
B F J S T

33. A floating object moored to the bottom to mark a channel, anchor, or rock.
B G I O R

34. A unit of weight for precious stones, especially diamonds and pearls.
A C H N T

35. A list of books relating to a given subject.
B D F H J

36. The theft of literary or artistic ideas.
O P R U W

37. A light spear for hurling.
C F G J K

38. A person given or kept as a pledge, as for fulfillment of a treaty.
G H I J K

39. The resistance to motion between two surfaces in contact.
B C D E F

40. A puppet moved by strings or by hand.
C F H L M

41. A combat on horseback between two knights with lances.
A H I J K

42. A detailed list of goods with their estimated worth.
B D H I K

43. A collection of wild animals in cages for exhibition.
F K M N T

44. Any of the ten symbols expressing number.
D M P U W

45. A fictitious narrative enforcing some useful truth.
C D F G W

46. Any very small painting, especially a portrait.
H M Q S T

47. The art of making articles of baked clay, as pottery, tiles, etc.
C F I L O

48. One of the earliest known inhabitants of a country.
A C F G J

49. A strap or strip of leather.
D F I O T

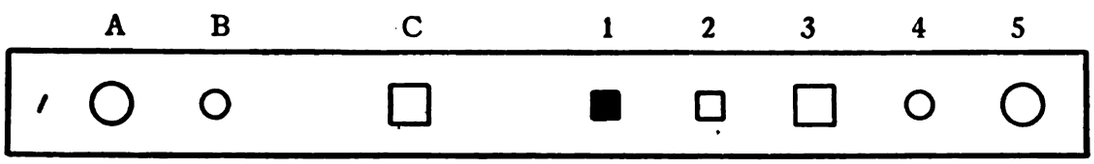
50. The network spread by a spider.
A C E G I

Stop here.

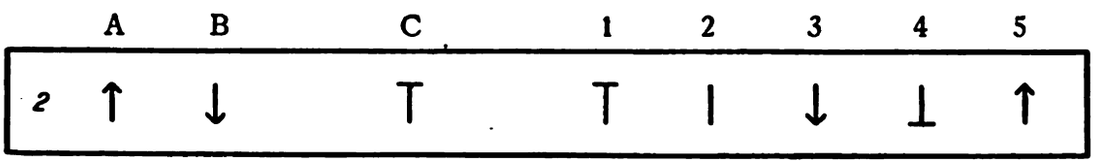
Figure Analogies

PRACTICE PROBLEMS

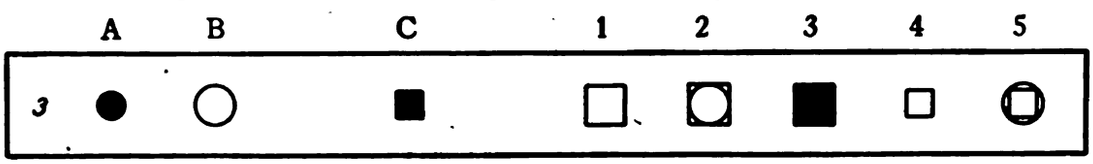
Look at the figures A, B, and C in Sample 1 below. Figure A is a large circle. Figure B is a small circle. By what rule is Figure A changed to make Figure B? The rule is "making it smaller." Now look at Figure C. It is a large square. What will it be if you change it by the same rule? It will be a small square of the same color as the large square. Figure 2 is a small white square. In the section of the answer sheet labeled "FIGURE ANALOGIES, Practice Problems, Page 7," the space numbered 2 in the first row has been blackened to indicate the correct answer.



In Sample 2 below, the rule is: "Turn Figure A upside down to make Figure B." Now look at Figure C and think how it would look when turned upside down. It would look like Figure 4. The space numbered 4 has already been blackened on the answer sheet



In Sample 3 below, the rule has two parts: "Make Figure B of the opposite color and larger than Figure A." Apply the rule to Figure C and blacken the space which corresponds to the correct answer.

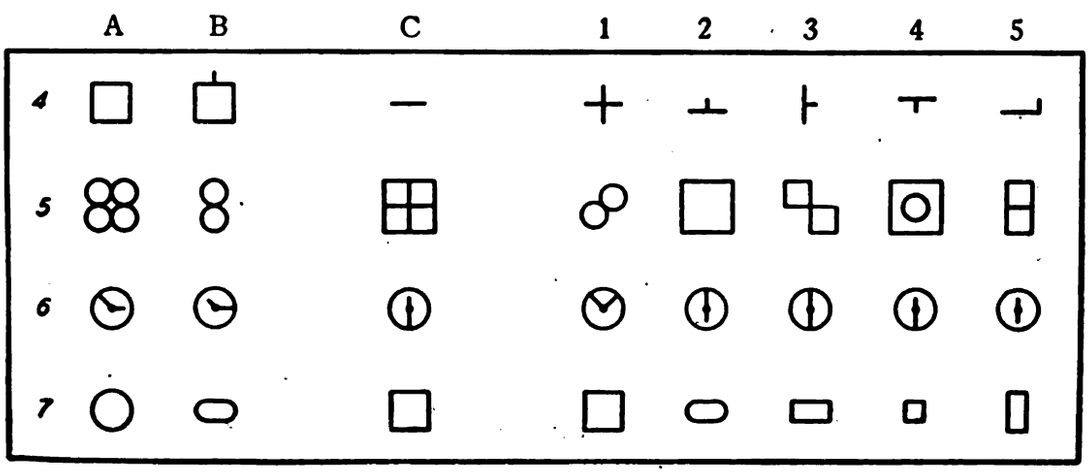


You should have blackened the space numbered 1, which corresponds to the large white square.

Notice that the rule changes from one example to another. You are to do four things to each exercise on this page and the next.

a. Decide what rule is used to change Figure A to Figure B.
b. Apply this rule to Figure C.
c. Select the resulting figure from the five figures at the right.
d. Blacken the space on the answer sheet which is numbered the same as the figure you have selected.

Proceed to the four exercises below, marking your answers on the answer sheet.

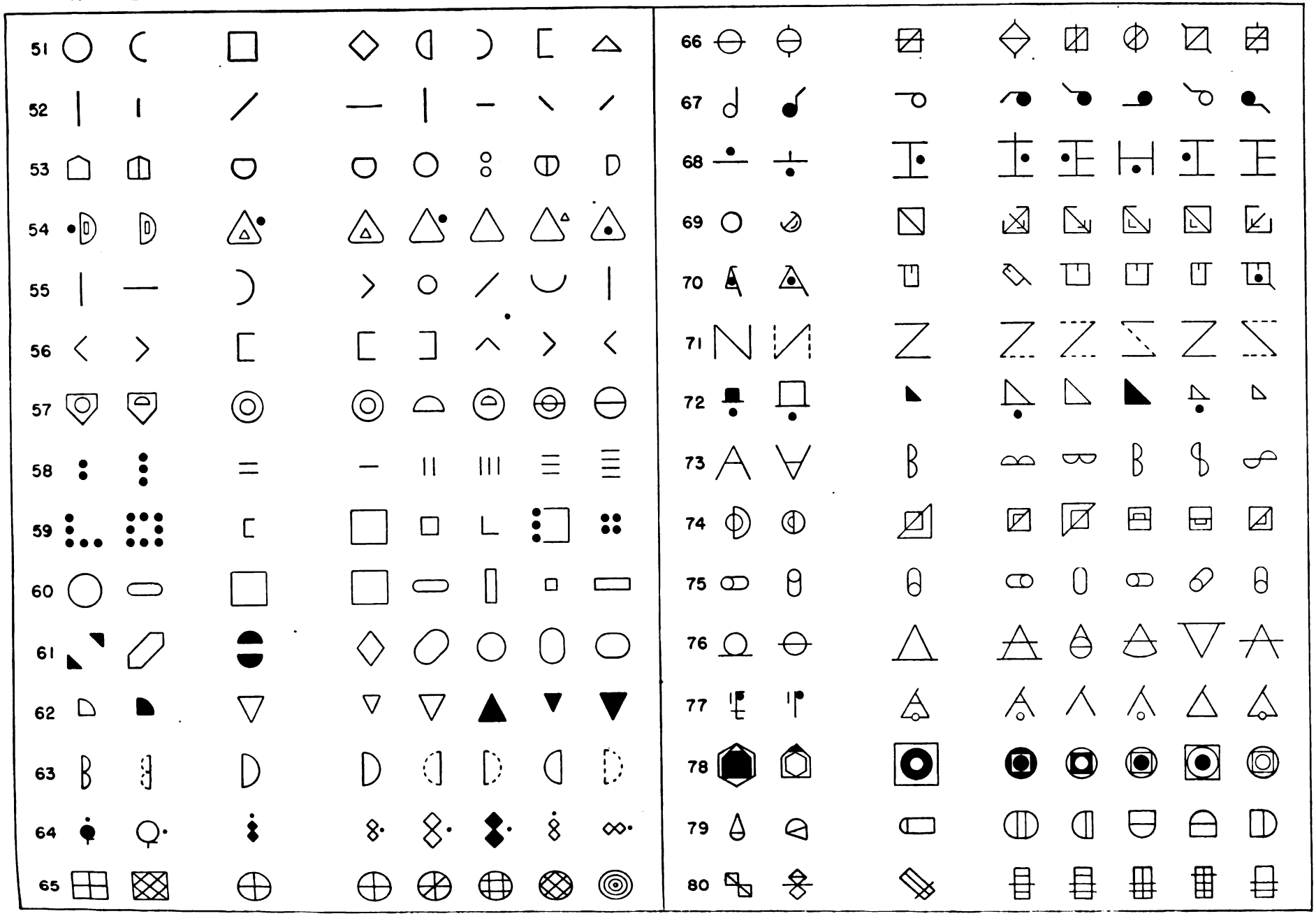


When the starting signal is given (not yet), turn the page and work more problems of the same kind. Work rapidly because your rating will be the total number of correct answers. You may not be able to finish in the time allowed.

Stop here. Wait for the signal.

In each line below, find the rule by which Figure A is changed to make Figure B. Apply the rule to Figure C. Select the resulting figure at the right and blacken the corresponding answer space.

FIGURE ANALOGIES



Stop here.

Same-Opposite

PRACTICE PROBLEMS

The word at the left in the following line is "many."

1. many	(1) ill	(2) few	(3) down	(4) sour

One of the four words at the right means either the *same* as or the *opposite* of "many." The word "few," which is numbered 2, is the opposite of "many." In the section of the answer sheet labeled "SAME-OPPOSITE, Practice Problems, Page 9," space number 2 in the first row has been blackened.

The word at the left in the second example is "ancient." Select the one of the four words at the right that means the *same* as or the *opposite* of "ancient." In the second row on the answer sheet, blacken the space which corresponds to the answer you have selected.

2. ancient	(1) dry	(2) long	(3) happy	(4) old

You should have blackened the space numbered 4 because 4 corresponds to "old," which means the same as "ancient."

In each of the following lines select the word that means the *same* as or the *opposite* of the word at the left. On the answer sheet, blacken the space which corresponds to the answer you have selected.

3. deep	(1) blue	(2) shallow	(3) tense	(4) watery
4. awkward	(1) clumsy	(2) loyal	(3) passive	(4) young
5. hot	(1) dry	(2) cooked	(3) red	(4) cold

When the starting signal is given (not yet), turn the page and work more problems of the same kind. Work rapidly because your rating will be the total number of correct answers. You may not be able to finish in the time allowed.

Stop here. Wait for the signal.

In each row select the word at the right which means the *same* as or the *opposite* of the first word in the row. Blacken the space which corresponds to the word you have selected.

SAME-OPPOSITE

81. severe	(1) cloudy	(2) lax	(3) flat	(4) rustic
82. barbarous	(1) tidal	(2) haughty	(3) cultured	(4) abrupt
83. stingy	(1) tart	(2) generous	(3) distinct	(4) positive
84. imperative	(1) brilliant	(2) mandatory	(3) cheap	(4) honorable
85. rasping	(1) harsh	(2) minute	(3) kinesthetic	(4) marshy
86. uncouth	(1) plausible	(2) refined	(3) restful	(4) sneaking
87. raw	(1) silken	(2) slick	(3) cooked	(4) stale
88. diminutive	(1) distraught	(2) large	(3) inductive	(4) reluctant
89. despotic	(1) open	(2) comparative	(3) tyrannical	(4) brisk
90. oblique	(1) fearful	(2) cruel	(3) ignorant	(4) slanting
91. vague	(1) definite	(2) fashionable	(3) valuable	(4) infinite
92. fastidious	(1) musical	(2) famed	(3) negligent	(4) early
93. obsolete	(1) outworn	(2) rampant	(3) bucolic	(4) genuine
94. single	(1) hearty	(2) knowing	(3) doubtful	(4) unique
95. legible	(1) illegal	(2) ineligible	(3) readable	(4) essential
96. arduous	(1) barren	(2) easy	(3) capable	(4) correct
97. stately	(1) howling	(2) good	(3) furious	(4) august
98. indubitable	(1) questionable	(2) dismal	(3) contented	(4) sick
99. impotent	(1) powerful	(2) prosaic	(3) troubled	(4) tribal
100. heinous	(1) hateful	(2) liable	(3) majestic	(4) foremost
101. dogmatic	(1) stealthy	(2) urgent	(3) opinionated	(4) worthy
102. bellicose	(1) usable	(2) warlike	(3) bald	(4) witty
103. precocious	(1) nodding	(2) hairy	(3) backward	(4) endless
104. inebriated	(1) drunken	(2) defensive	(3) cynical	(4) drab
105. occidental	(1) immodest	(2) calculating	(3) powerless	(4) western
106. innocuous	(1) harmful	(2) nocturnal	(3) null	(4) doleful
107. noble	(1) base	(2) facile	(3) profuse	(4) continual
108. bland	(1) peculiar	(2) undue	(3) athletic	(4) brusque
109. indolent	(1) safe	(2) gradual	(3) emotional	(4) industrious
110. lethal	(1) regal	(2) volatile	(3) arid	(4) deadly
111. perfidious	(1) eastern	(2) entire	(3) faithful	(4) liberal
112. ludicrous	(1) loyal	(2) insane	(3) comic	(4) splendid
113. austere	(1) strange	(2) black	(3) oriental	(4) gentle
114. circuitous	(1) indirect	(2) obligatory	(3) stable	(4) prudent
115. callow	(1) sundry	(2) sophisticated	(3) constant	(4) tall
116. derogatory	(1) dilapidated	(2) distinguishing	(3) disparaging	(4) dilatory
117. refractory	(1) wintry	(2) obedient	(3) plain	(4) lone
118. erratic	(1) consistent	(2) wrong	(3) righteous	(4) courageous
119. puerile	(1) wicked	(2) mature	(3) enraged	(4) gay
120. blatant	(1) tantamount	(2) latent	(3) vicarious	(4) vociferous
121. sardonic	(1) infernal	(2) conjectural	(3) sarcastic	(4) contrary
122. exigent	(1) foaming	(2) pressing	(3) opulent	(4) average
123. anomalous	(1) irregular	(2) accurate	(3) critical	(4) secular
124. tenuous	(1) lateral	(2) periodic	(3) thin	(4) molar
125. torpid	(1) warm	(2) kind	(3) active	(4) bound
126. incorporeal	(1) fierce	(2) joyous	(3) grave	(4) material
127. imminent	(1) eminent	(2) imposing	(3) stupendous	(4) impending
128. redolent	(1) unscrupulous	(2) odorous	(3) unruly	(4) tasteless
129. recondite	(1) obvious	(2) creative	(3) ascribable	(4) valiant
130. egregious	(1) regretful	(2) emerging	(3) destructive	(4) extraordinary

Stop here.

Number Series

PRACTICE PROBLEMS

The numbers in each series below follow some rule. For each series you are to find the *next number*.

In the first series below, each number is 2 larger than the preceding number. The *next number* in the series would be 14. Of the five answers at the right, answer (e) is, therefore, correct. In the section of the answer sheet labeled "NUMBER SERIES, Practice Problems, Page 11," space (e) in the first row has been blackened.

	Series						*Next Number*				
1.	2	4	6	8	10	12	10	11	12	13	14
							(a)	(b)	(c)	(d)	(e)

Find the rule in the series below, and blacken one of the answer spaces in the second row on the answer sheet.

2.	20	19	18	17	16	15	10	12	14	15	16
							(a)	(b)	(c)	(d)	(e)

Each number in this series is 1 less than the preceding number. You should have blackened space (c), which corresponds to 14, the next number in the series.

Find the rule in the series below, and blacken the space on the answer sheet which corresponds to the next number.

3.	10	8	11	9	12	10	9	10	11	12	13
							(a)	(b)	(c)	(d)	(e)

The series above goes by alternate steps of subtracting 2 and adding 3. You should have blackened space (e), which corresponds to 13, the next number.

In each series below, find the rule and blacken the space on the answer sheet which corresponds to the next number. There is a different rule for each series. Go right ahead. Do not wait for any signal.

4.	8	11	14	17	20	23	10	13	23	25	26
							(a)	(b)	(c)	(d)	(e)
5.	27	27	23	23	19	19	15	16	17	18	19
							(a)	(b)	(c)	(d)	(e)
6.	16	17	19	20	22	23	18	20	22	24	25
							(a)	(b)	(c)	(d)	(e)

When the starting signal is given (not yet), turn the page and work more problems of the same kind. Work rapidly because your rating will be the total number of correct answers. You may not be able to finish in the time allowed.

Stop here. Wait for the signal.

Find the rule in each problem below and blacken the space which corresponds to the next number.

NUMBER SERIES

131.	9	12	15	18	21	24	27	30 (a)	31 (b)	32 (c)	33 (d)	36 (e)	*146.*	28	27	25	22	18	13	7	0 (a)	5 (b)	7 (c)	8 (d)	9 (e)
132.	2	3	9	10	30	31	93	89 (a)	91 (b)	92 (c)	93 (d)	94 (e)	*147.*	5	3	4	6	4	5	7	4 (a)	5 (b)	6 (c)	8 (d)	9 (e)
133.	82	73	64	55	46	37	28	14 (a)	18 (b)	19 (c)	20 (d)	27 (e)	*148.*	1	2	4	8	10	20	22	24 (a)	40 (b)	44 (c)	46 (d)	48 (e)
134.	18	21	17	20	16	19	15	11 (a)	13 (b)	16 (c)	18 (d)	19 (e)	*149.*	4	8	9	18	22	23	46	48 (a)	50 (b)	69 (c)	70 (d)	90 (e)
135.	20	18	21	17	22	16	23	9 (a)	12 (b)	15 (c)	21 (d)	24 (e)	*150.*	12	15	19	23	28	33	39	41 (a)	43 (b)	44 (c)	45 (d)	46 (e)
136.	24	48	12	24	6	12	3	6 (a)	12 (b)	18 (c)	24 (d)	48 (e)	*151.*	88	90	45	48	16	20	5	1 (a)	8 (b)	9 (c)	10 (d)	25 (e)
137.	16	18	21	14	16	19	12	5 (a)	8 (b)	9 (c)	13 (d)	14 (e)	*152.*	10	14	16	19	23	25	28	30 (a)	31 (b)	32 (c)	33 (d)	34 (e)
138.	4	4	0	5	5	1	6	2 (a)	4 (b)	6 (c)	8 (d)	11 (e)	*153.*	16	61	15	51	14	41	13	12 (a)	13 (b)	14 (c)	21 (d)	31 (e)
139.	3	8	5	10	7	12	9	6 (a)	12 (b)	14 (c)	17 (d)	18 (e)	*154.*	22	15	21	16	20	17	19	13 (a)	14 (b)	16 (c)	18 (d)	21 (e)
140.	4	5	6	7	5	6	7	3 (a)	6 (b)	7 (c)	8 (d)	9 (e)	*155.*	22	20	10	12	6	4	2	2 (a)	4 (b)	6 (c)	8 (d)	10 (e)
141.	60	64	32	36	18	22	11	0 (a)	5 (b)	7 (c)	10 (d)	15 (e)	*156.*	45	36	28	21	15	10	6	2 (a)	3 (b)	4 (c)	12 (d)	16 (e)
142.	2	6	3	9	6	18	15	12 (a)	20 (b)	30 (c)	45 (d)	50 (e)	*157.*	41	37	38	19	15	16	8	1 (a)	2 (b)	3 (c)	4 (d)	5 (e)
143.	8	9	12	13	15	16	19	17 (a)	20 (b)	21 (c)	23 (d)	24 (e)	*158.*	21	18	9	27	24	12	36	12 (a)	18 (b)	33 (c)	42 (d)	72 (e)
144.	1	2	4	7	11	16	22	24 (a)	25 (b)	26 (c)	27 (d)	29 (e)	*159.*	84	21	63	65	64	16	48	13 (a)	16 (b)	24 (c)	47 (d)	50 (e)
145.	2	5	6	5	8	9	8	4 (a)	7 (b)	9 (c)	11 (d)	12 (e)	*160.*	5	10	13	9	18	21	17	13 (a)	20 (b)	27 (c)	30 (d)	34 (e)

Stop here.

Verbal Analogies

PRACTICE PROBLEMS

Read the following words:

1. foot-shoe hand- (1) thumb (2) head (3) glove (4) finger (5) clasp

The first two words, *foot-shoe,* are related. The next word is *hand.* It can be combined with one of the remaining words in the row so as to make a similar pair, *hand-glove.* In the section of the answer sheet labeled "VERBAL ANALOGIES, Practice Problems, Page 13," space number 3 in the first row has been blackened.

Read the following words:

2. father-son mother- (1) aunt (2) sister (3) child (4) daughter (5) niece

The first pair is *father-son.* The next word is *mother.* It can be combined with the word *daughter* to make the similar pair, *mother-daughter.* In the second row on the answer sheet, blacken space number 4, which corresponds to the word *daughter.*

In each row of words, the first two words form a pair. The third word can be combined with another word to form a similar pair. Select the word which completes the second pair. On the answer sheet, blacken the space which corresponds to the word you select.

3. sky-blue grass- (1) ground (2) sod (3) path (4) blue (5) green

4. ice-solid water- (1) hard (2) fire (3) iron (4) liquid (5) boat

In the third row on the answer sheet, you should have blackened space number 5, which corresponds to *green.* In the fourth row, you should have blackened space number 4, which corresponds to *liquid.*

Select the answers to the following problems and blacken the corresponding spaces on the answer sheet. Go right ahead. Do not wait for any signal.

5. ear-music nose- (1) face (2) perfume (3) breath (4) tone (5) noise

6. cloth-dye house- (1) shade (2) paint (3) brush (4) door (5) wood

7. green-grass yellow (1) silver (2) color (3) golden (4) china (5) gold

8. cattle-hay man- (1) eat (2) drink (3) water (4) life (5) bread

When the starting signal is given (not yet), turn the page and work more problems of the same kind. Work rapidly because your rating will be the total number of correct answers. You may not be able to finish in the time allowed.

Stop here. Wait for the signal.

In each row, select the word which completes the second pair.
Blacken the space which corresponds to the word you have selected.

VERBAL ANALOGIES

161. clothes-tear	dishes-	(1) eat	(2) silver	(3) fall	(4) wash	(5) break
162. soldier-uniform	knight-	(1) fight	(2) armor	(3) heraldry	(4) sword	(5) gallant
163. tree-forest	flower-	(1) petal	(2) garden	(3) perfume	(4) aroma	(5) rose
164. coffee-bean	tea-	(1) cup	(2) cake	(3) tree	(4) leaf	(5) lunch
165. skate-ice	ski-	(1) skis	(2) sport	(3) winter	(4) snow	(5) danger
166. tiger-hair	trout-	(1) meal	(2) water	(3) fish	(4) scales	(5) swims
167. finger-hand	toe-	(1) nail	(2) heel	(3) foot	(4) arch	(5) leg
168. boat-lifebelt	airplane-	(1) pilot	(2) air	(3) train	(4) mail	(5) parachute
169. nurse-hospital	teacher-	(1) office	(2) pupil	(3) class	(4) school	(5) examination
170. tragedy-comedy	tears-	(1) laughter	(2) weep	(3) handkerchief	(4) movie	(5) amusement
171. body-food	engine-	(1) wheels	(2) fuel	(3) smoke	(4) fire	(5) motion
172. Indian-wigwam	Eskimo-	(1) ice	(2) igloo	(3) home	(4) Arctic	(5) seal
173. table-wood	knife-	(1) cutting	(2) chair	(3) fork	(4) handle	(5) steel
174. sight-color	hearing-	(1) blind	(2) deaf	(3) hue	(4) tone	(5) ear
175. own-rich	know-	(1) kind	(2) conceited	(3) educated	(4) old	(5) money
176. laborer-foreman	private-	(1) officer	(2) army	(3) servant	(4) soldier	(5) duty
177. offend-defend	attack-	(1) fight	(2) protect	(3) duel	(4) besiege	(5) battle
178. past-present	yesterday-	(1) today	(2) tomorrow	(3) Christmas	(4) future	(5) forgotten
179. scepter-king	chains-	(1) bonds	(2) mail	(3) slave	(4) link	(5) carpenter
180. automobile-wagon	motorcycle-	(1) walking	(2) horse	(3) bus	(4) train	(5) bicycle
181. nation-war	clan-	(1) group	(2) peace	(3) feud	(4) guns	(5) family
182. large-object	loud-	(1) soft	(2) small	(3) heavy	(4) weight	(5) sound
183. bow-violin	stick-	(1) violinist	(2) juggler	(3) orchestra	(4) leader	(5) drum
184. metal-gold	grain-	(1) plant	(2) silver	(3) vegetable	(4) food	(5) oats
185. banquet-snack	oration-	(1) chat	(2) drama	(3) voice	(4) manuscript	(5) sermon
186. caution-safety	risk-	(1) security	(2) danger	(3) insurance	(4) life	(5) good
187. abundant-cheap	scarce-	(1) buy	(2) costly	(3) bargain	(4) rare	(5) plentiful
188. odor-fragrant	taste-	(1) sweet	(2) bitter	(3) sugar	(4) tongue	(5) smell
189. eraser-ink	suds-	(1) soak	(2) stock	(3) dirt	(4) clothes	(5) foam
190. hose-nozzle	pitcher-	(1) handle	(2) rim	(3) cover	(4) spout	(5) basin
191. book-author	machine-	(1) inventor	(2) genius	(3) factory	(4) mechanic	(5) driver
192. wolf-sheep	cat-	(1) fur	(2) kitten	(3) dog	(4) mouse	(5) puzzle
193. trifle-disaster	spark-	(1) small	(2) hot	(3) bright	(4) burn	(5) conflagration
194. cloud-storm	fever-	(1) thermometer	(2) temperature	(3) doctor	(4) patient	(5) sickness
195. date-calendar	hour-	(1) time	(2) minute	(3) clock	(4) week	(5) o'clock
196. hinge-door	joint-	(1) bend	(2) open	(3) fasten	(4) arm	(5) tendon
197. cave-house	club-	(1) police	(2) gun	(3) strike	(4) rock	(5) armor
198. plumber-pipe	carpenter-	(1) saw	(2) board	(3) wrench	(4) screw	(5) bench
199. lawless-lynch	legal-	(1) kill	(2) execute	(3) condemn	(4) drown	(5) trial
200. cable-wire	crowd-	(1) audience	(2) trio	(3) individual	(4) mob	(5) message

Stop here.

AMERICAN COUNCIL ON EDUCATION

COOPERATIVE ENGLISH TEST

TEST C2: READING COMPREHENSION

(Higher Level)

FORM Y

by

FREDERICK B. DAVIS, George Peabody College for Teachers; CLARENCE DERRICK, University School (Shaker Heights, Ohio); and JEANNE M. BRADFORD and GERALDINE SPAULDING, Cooperative Test Service

with the editorial assistance of

JOSEPH C. LANDIS, Queens College; JANE M. MALTBY, Hamden High School; LOUISE BINDER SCOTT, San Marino City Schools; and ARTHUR E. TRAXLER, Educational Records Bureau

Please print:

Name.....Date.....
Last First Middle

Grade, Form, or Class.....Age.....Date of Birth.....
Yrs. Mos.

School.....City.....Sex.....
M. or F.

Title of the English course you are now taking.....Instructor.....

General Directions: Do not turn this page until the examiner tells you to do so. This examination consists of two parts, and requires 40 minutes of working time. The directions for each part are printed at the beginning of the part. Read them carefully and proceed at once to answer the questions. DO NOT SPEND TOO MUCH TIME ON ANY ONE ITEM. ANSWER THE EASIER QUESTIONS FIRST; then return to the harder ones if you have time. There is a time limit for each part. If you finish Part I before the time is up, go on to Part II. If you have not finished Part I when the time is up, stop work on that part and proceed at once to Part II. If you finish Part II before the time is up, you may go back and work on either part. No questions may be asked after the examination has begun.

You may answer questions even when you are not perfectly sure that your answers are correct, but you should avoid wild guessing, since wrong answers will result in a subtraction from the number of your correct answers.

Part	Minutes
I. Vocabulary	15
II. Reading	25
Total	40

	Scaled Score	Percentile
Vocabulary		
Speed of Comprehension		
Level of Comprehension		

(Sum of Scaled Scores for Parts:)

Total		

PART I

VOCABULARY

(15 minutes)

Directions: In each group below, select the numbered word or phrase that **most nearly** corresponds in meaning to the word at the head of that group, and put its **number** in the parentheses at the right. It is quite likely that you will finish this part before the time is up. In that case, **go on immediately to Part II.**

Column A

1. **carol**
   1–1 prayer
   1–2 song
   1–3 bird
   1–4 battle cry
   1–5 motto . . . . . 1( )

2. **toxin**
   2–1 poison
   2–2 weed
   2–3 failure
   2–4 belief
   2–5 disease . . . . . 2( )

3. **alteration**
   3–1 pause
   3–2 quarrel
   3–3 change
   3–4 step
   3–5 turning . . . . . 3( )

4. **competition**
   4–1 achievement
   4–2 capacity
   4–3 repayment
   4–4 selection
   4–5 rivalry . . . . . 4( )

5. **fling**
   5–1 run
   5–2 replace
   5–3 chew
   5–4 hurl
   5–5 upset . . . . . 5( )

6. **symptom**
   6–1 harmony
   6–2 outline
   6–3 indication
   6–4 result
   6–5 invention . . . . 6( )

7. **verify**
   7–1 taste
   7–2 weigh
   7–3 question
   7–4 confirm
   7–5 attempt . . . . . 7( )

Column B

8. **partition**
   8–1 spasm
   8–2 passageway
   8–3 division
   8–4 bias
   8–5 treatment . . . . 8( )

9. **tolerate**
   9–1 allow
   9–2 disobey
   9–3 resent
   9–4 suspect
   9–5 confess . . . . . 9( )

10. **annul**
    10–1 approve
    10–2 enforce
    10–3 revise
    10–4 corrupt
    10–5 cancel . . . . . 10( )

11. **preposterous**
    11–1 dignified
    11–2 heavy
    11–3 noisy
    11–4 disguised
    11–5 absurd . . . . 11( )

12. **retard**
    12–1 resume
    12–2 delay
    12–3 substitute
    12–4 announce
    12–5 break . . . . . 12( )

13. **molest**
    13–1 grind
    13–2 disdain
    13–3 combine
    13–4 bother
    13–5 soften . . . . . 13( )

14. **sever**
    14–1 label
    14–2 learn
    14–3 scold
    14–4 mend
    14–5 cut . . . . . 14( )

Column C

15. **garland**
    15–1 glove
    15–2 gesture
    15–3 wreath
    15–4 look
    15–5 hook . . . . . 15( )

16. **chronicle**
    16–1 mural
    16–2 history
    16–3 clock
    16–4 large pimple
    16–5 jar . . . . . 16( )

17. **savory**
    17–1 green
    17–2 preserved
    17–3 appetizing
    17–4 well-blended
    17–5 secret . . . . . 17( )

18. **adept**
    18–1 actual
    18–2 extreme
    18–3 skilled
    18–4 distinct
    18–5 fortunate . . . 18( )

19. **humane**
    19–1 living
    19–2 certain
    19–3 realistic
    19–4 active
    19–5 kind . . . . . 19( )

20. **imaginary**
    20–1 insulting
    20–2 fancied
    20–3 exaggerated
    20–4 foolish
    20–5 temporary . . . 20( )

21. **filch**
    21–1 hide
    21–2 separate
    21–3 steal
    21–4 soil
    21–5 destroy . . . . 21( )

Go on to the next page.

Column D

22. lore
22–1 knowledge
22–2 interval
22–3 sermon
22–4 crack
22–5 cuff . . . . . 22( )

23. maze
23–1 folk dance
23–2 alloy
23–3 pale blue
23–4 labyrinth
23–5 dizzy spell . . . 23( )

24. concord
24–1 victory
24–2 harmony
24–3 structure
24–4 danger
24–5 weight . . . . . 24( )

25. civility
25–1 pacifism
25–2 politeness
25–3 loyalty
25–4 courage
25–5 government . . 25( )

26. supple
26–1 condensed
26–2 shrewd
26–3 flexible
26–4 useful
26–5 cheerful . . . . 26( )

27. lethargy
27–1 apathy
27–2 magnetism
27–3 slyness
27–4 prejudice
27–5 paleness . . . . 27( )

28. valid
28–1 sound
28–2 brave
28–3 moral
28–4 careful
28–5 neutral . . . . 28( )

29. comely
29–1 comfortable
29–2 attractive
29–3 sturdy
29–4 stout
29–5 ordinary . . . . 29( )

Column E

30. refute
30–1 recover
30–2 seek
30–3 enroll
30–4 control
30–5 disprove . . . . 30( )

31. wield
31–1 fasten
31–2 use
31–3 accumulate
31–4 pound
31–5 bend . . . . . 31( )

32. jeopardy
32–1 wickedness
32–2 jealousy
32–3 righteousness
32–4 danger
32–5 stubbornness . . 32( )

33. adorn
33–1 paint
33–2 praise
33–3 fasten
33–4 ornament
33–5 admire . . . . 33( )

34. turbulent
34–1 bulging
34–2 towering
34–3 agitated
34–4 powerful
34–5 concealed . . . 34( )

35. frivolous
35–1 trivial
35–2 chilly
35–3 delightful
35–4 abundant
35–5 rambling . . . . 35( )

36. allege
36–1 assert
36–2 warn
36–3 suspect
36–4 lie
36–5 decide . . . . . 36( )

37. hypocrisy
37–1 ill will
37–2 blasphemy
37–3 slander
37–4 insincerity
37–5 criticism . . . . 37( )

Column F

38. gibe
38–1 injure
38–2 gossip
38–3 scoff
38–4 point
38–5 doubt . . . . . 38( )

39. dearth
39–1 crop
39–2 hymn
39–3 supply
39–4 dryness
39–5 scarcity . . . . 39( )

40. gaudy
40–1 happy
40–2 frozen
40–3 showy
40–4 worthless
40–5 clumsy . . . . 40( )

41. concur
41–1 concentrate
41–2 struggle
41–3 close
41–4 pretend
41–5 agree . . . . . 41( )

42. edifice
42–1 building
42–2 body of laws
42–3 design
42–4 assistance
42–5 entrance . . . . 42( )

43. rational
43–1 reasonable
43–2 limited
43–3 reckless
43–4 persuasive
43–5 rebellious . . . 43( )

44. sinuous
44–1 polished
44–2 dangerous
44–3 dark
44–4 feminine
44–5 winding . . . . 44( )

45. cleavage
45–1 depth
45–2 division
45–3 clearance
45–4 growth
45–5 instrument . . . 45( )

Go on to the next page.

Column G

46. undue
46–1 unready
46–2 exposed
46–3 unexpected
46–4 excessive
46–5 scanty . . . . . 46( )

47. candor
47–1 charm
47–2 personality
47–3 tact
47–4 frankness
47–5 logic . . . . . 47( )

48. cacophony
48–1 adjunct
48–2 link
48–3 officer
48–4 gesture
48–5 discord . . . . 48( )

49. sultry
49–1 sickeningly sweet
49–2 disagreeable
49–3 stormy
49–4 weary
49–5 hot and humid . 49( )

50. pallet
50–1 rug
50–2 fence
50–3 garden
50–4 trough
50–5 bed . . . . . 50( )

Column H

51. wroth
51–1 wrong
51–2 angry
51–3 evil
51–4 twisted
51–5 afraid . . . . . 51( )

52. evince
52–1 report
52–2 display
52–3 evade
52–4 develop
52–5 detect . . . . . 52( )

53. cosmos
53–1 planet
53–2 chemical reaction
53–3 species
53–4 universe
53–5 formula . . . . 53( )

54. censure
54–1 blame
54–2 suppress
54–3 deny
54–4 register
54–5 resolve . . . . 54( )

55. laconic
55–1 terse
55–2 lazy
55–3 slow
55–4 liquid
55–5 cynical . . . . 55( )

Column I

56. incursion
56–1 sudden invasion
56–2 condemnation
56–3 spiral movement
56–4 repulse
56–5 investigation . . 56( )

57. recant
57–1 forgive
57–2 speak with emotion
57–3 place on a slant
57–4 take back
57–5 revise . . . . . 57( )

58. choreography
the art of
58–1 singing
58–2 carving
58–3 painting
58–4 dancing
58–5 weaving . . . . 58( )

59. indigenous
59–1 repulsive
59–2 native
59–3 undeveloped
59–4 unaware
59–5 rare . . . . . 59( )

60. divagation
60–1 undersea exploration
60–2 location of position
60–3 wandering
60–4 observation of stars
60–5 separation . . . 60( )

Go on to the next part.

Number wrong	0–2	3–6	7–10	11–14	15–18	19–22	23–26	27–30	31–34	35–38	39–42	43–46	47+
Amount to be subtracted	0	1	2	3	4	5	6	7	8	9	10	11	12

Number right_____

Subtract_____
(See table above)

Raw Score = Difference_____

Scaled Score_____
(See table on key)

PART II: READING

(25 minutes)

Directions: This part consists of selections taken from stories, articles, textbooks, etc. Following each passage are several multiple-choice items concerning it. In each case, you are to **read the passage carefully first**, and then decide on the basis of the passage which one of the choices following each incomplete statement or question **best** completes the meaning of the statement or answers the question. If you cannot decide, you may go back to the passage. Write the **number** of the choice you think is best in the parentheses at the right of each item. You are not expected to finish this part in the time allowed, but work as rapidly as you can without making careless mistakes.

Most boys at school have at some time learned the dates of the English kings. But as a rule they fail to keep this up and lose all the good of it. I have an old friend, a college classmate, who has carefully kept this knowledge alive. He is now able in his old age to get great enjoyment from saying these dates to himself. His keepers tell me that he shows many other signs of mental activity and often recites for them lists of genitive plurals and verbs that take the dative.

It pleased me, I must say, at my country place last summer when there was some mathematical difficulty about marking the tennis court to have one of my guests, a student in my classes at Yale, offer to work out the measurements with a logarithm. He said it was quite simple. He needed, in short, nothing but a hypotenuse and two acute angles, all of which luckily were found around the place. It was very interesting to watch the boy calculate, at first. I am certain he would have got the solution, only while he was preparing to mark the court by means of his logarithm the chauffeur marked it with whitewash.

1. It can be inferred that the reason why the young man did not get his solution was that
- **1–1** he made a mistake in measuring the acute angles.
- **1–2** he got the wrong hypotenuse.
- **1–3** he did not know enough mathematics.
- **1–4** he tried to hurry.
- **1–5** his method took too long. . . . . 1( )

2. The writer hints that most boys learn the dates of the English kings because
- **2–1** these dates are an essential part of history.
- **2–2** they are required to do so.
- **2–3** these dates may provide enjoyment in later life.
- **2–4** it is a sign of mental activity to know these dates.
- **2–5** most educated people know these dates. . . . . 2( )

3. There is evidence that the writer is a
- **3–1** mathematics teacher.
- **3–2** history teacher.
- **3–3** college professor.
- **3–4** Latin scholar.
- **3–5** young man. . . . . 3( )

4. Apparently the old friend mentioned in the first paragraph
- **4–1** had been a history teacher.
- **4–2** has lost his memory.
- **4–3** was in an insane asylum.
- **4–4** was in jail.
- **4–5** had studied too hard in college. . . . 4( )

5. The writer introduces a little humor in the second paragraph by
- **5–1** making fun of the chauffeur's efforts to mark the court.
- **5–2** exaggerating the difficulty of marking the court.
- **5–3** speaking of mathematical concepts as though they were concrete objects.
- **5–4** stressing the simplicity of marking the court by mathematics.
- **5–5** sympathizing with the boy's efforts to make his calculation come out right. . . . . 5( )

6. The main point of this passage is that
- **6–1** many useless things are learned at school.
- **6–2** memorizing damages the brain.
- **6–3** dates are sometimes useful.
- **6–4** mathematics is helpful in practical situations.
- **6–5** almost all schooling is a waste of time. 6( )

– – – – – – – – – – –

To increase its sale value, a cheap stone is often sold under a name closely resembling that of a valuable gem. For instance, some red stones are given names which suggest to the uninformed purchaser that they are a variety of ruby. Thus, red pyrope garnets are sold under such trade names as American ruby and Arizona ruby; red and orange spinels are called Balas ruby. A mineral as different from the true ruby as rose quartz is frequently offered as Bohemian ruby. Rose and pink topaz may be sold as Brazilian ruby, and red or pink tourmalines as rubellite or Siberian ruby.

7. The best title for this passage is
- **7–1** Rubies.
- **7–2** Varieties of Ruby.
- **7–3** Red Stones.
- **7–4** Untruthful Advertising.
- **7–5** Misleading Names for Gems. . . . . 7( )

Go on to the next page.

8. Which one of the following is really topaz?
   8-1 Arizona ruby
   8-2 Balas ruby
   8-3 Bohemian ruby
   8-4 Siberian ruby
   8-5 Brazilian ruby . . . . . 8( )

9. The passage states that trade names of the type mentioned are used to
   9-1 identify varieties of stones for purchasers.
   9-2 make it possible to sell certain stones at a higher price.
   9-3 describe imitation rubies.
   9-4 identify varieties of valuable gems.
   9-5 increase the sales of cheap stones. . . 9( )

10. The writer would apparently favor
   10-1 giving trade names only to cheap stones.
   10-2 giving trade names only to precious gems.
   10-3 forbidding the sale of stones that look like rubies.
   10-4 doing away with trade names for stones.
   10-5 giving a special trade name to true rubies. . . . . 10( )

– – – – – – – – – – –

Perhaps the gorilla was not wilfully a conservative. It may be that his family wandered into a country that suited them so well—so much like the combination of forest and plain in which they had developed—that they had no cause to change their way of living. Why should they, so long as the forests, the plains, and the weather remained so satisfactory for gorilla welfare? After millions of years of this contented life, the gorilla became fixed in his habits—"a living fossil." If conditions in Africa change, if the forests disappear, and the weather grows colder, the gorillas will probably perish, for they have lost the ability to change.

We don't mean they have become more stupid. We mean merely that now there is a great sameness among gorillas. Little gorillas, if they went to school, would learn equally fast. In the football games in such a school, there would be some, but not much, difference among the players. Almost any eleven young gorilla students would make a good team; this is not true, as well we know, among the white primates. It is this uniformity in the gorilla's ability that would prevent his surviving a great catastrophe like a glacial epoch.

When a race of animals has considerable variation among its members—when some prefer hot weather and others cold, when some are good musicians and others good football players—then when earthquakes come and the weather changes, some will be sure to survive. Those that survive will have children like themselves who can live under the new conditions. Thus that race of animals will change. This change is not always for the better. Some mammals that ran through the forests on four feet became whales and probably grew more stupid; at any rate they failed to stay with the progressive branches of the mammals such as tigers, primates, and dogs.

11. In the event of great changes of climate, it is likely that gorillas would
   11-1 acquire the ability to change.
   11-2 learn to like cold weather.
   11-3 die out.
   11-4 become more stupid.
   11-5 become more variable. . . . . 11( )

12. The writer appears to believe that
   12-1 ancestors of whales once ran about the forests.
   12-2 the glacial epoch was unimportant.
   12-3 gorillas are brighter than tigers.
   12-4 children are likely to be brighter than their parents.
   12-5 many gorillas were killed by earthquakes. . . . . 12( )

13. The writer emphasizes that one of the major differences between men and gorillas is that men
   13-1 are weaker.
   13-2 have been in existence a shorter time.
   13-3 are more variable in ability.
   13-4 are not such good football players.
   13-5 are primates. . . . . 13( )

14. The writer indicates that gorillas may be conservative as a result of
   14-1 stupidity.
   14-2 choice.
   14-3 circumstance.
   14-4 variation.
   14-5 change. . . . . 14( )

15. There is an implication that
   15-1 change is almost always for the better.
   15-2 gorillas once had the power to change.
   15-3 uniformity is a good thing.
   15-4 the average gorilla has changed for the worse.
   15-5 gorillas can learn as fast as men. . 15( )

16. The answer expected to the question in the middle of the first paragraph is
   16-1 "No reason."
   16-2 "In order to keep the power to change."
   16-3 "In order to survive."
   16-4 "Because conditions might change some day."
   16-5 "Because change is growth." . . . 16( )

17. The writer states that survival is dependent upon
   17-1 changes for the better.
   17-2 changes in living conditions.
   17-3 uniformity.
   17-4 variation.
   17-5 intelligence. . . . . 17( )

– – – – – – – – – – –

Go on to the next page.

Mighty fleets and armies, harbors and arsenals, vast cities—they are great; but what do they become? Agamemnon, Pericles, and their Greece; all is gone now to some ruined fragments, dumb wrecks: but the Books of Greece! There Greece can be called up again into life.

18. The word "There" (in the last sentence) could best be replaced by the phrase
- 18–1 "Beside the ruined fragments."
- 18–2 "In the Age of Pericles."
- 18–3 "Wherever there are mighty fleets and armies."
- 18–4 "By reading the books."
- 18–5 "In the vast cities of modern times." 18( )

19. The writer is probably most interested in
- 19–1 sculpture.
- 19–2 architecture.
- 19–3 literature.
- 19–4 painting.
- 19–5 warfare. . . . . 19( )

20. The writer implies that the most important information about the ancient Greeks concerns their
- 20–1 political activity.
- 20–2 ships.
- 20–3 ideas.
- 20–4 military skill.
- 20–5 vast cities. . . . . 20( )

21. The writer makes his point by
- 21–1 describing ancient ruins.
- 21–2 quoting from the books of Greece.
- 21–3 praising harbors and arsenals.
- 21–4 giving examples.
- 21–5 appealing to authority. . . . . 21( )

22. The main topic of this passage is
- 22–1 books.
- 22–2 modern Greece.
- 22–3 mighty fleets and armies.
- 22–4 Agamemnon and Pericles.
- 22–5 ruined fragments. . . . . 22( )

- - - - - - - - - -

(1) Literary criticism in those days had some odd
(2) customs. It was scholarly, or at least tried to
(3) appear scholarly. It was dominated by the
(4) assumption that whatever is worth knowing is al-
(5) ready known and whatever is worth doing has
(6) already been done. Astonishment is unbecoming
(7) to scholars and their attitude toward newcomers
(8) is best expressed by the word "recognition." Any-
(9) body fresh who turned up was treated as a would-

(*Continued in next column*)

(*Continued from preceding column*)

(10) be Dalai Lama and examined carefully for evidence
(11) of his predecessor's soul. So it was that every
(12) one of us who started writing in the nineties was
(13) discovered to be a second somebody or other. In
(14) the course of a few years, I was welcomed as a
(15) second Dickens, a second Bulwer-Lytton, and a
(16) second Jules Verne. But I was also a second
(17) Barrie, though J.M.B. was hardly more than my
(18) contemporary, and when I turned to short stories
(19) I became a second Kipling. I certainly, on occa
(20) sion, studied both these excellent masters. Late
(21) on, I figured as a second Diderot, a second Carlyle
(22) and a second Rousseau.

23. Which one of the writers mentioned does the author of the passage think he most closely resembles?
- 23–1 Dickens
- 23–2 Verne
- 23–3 Barrie
- 23–4 Kipling
- 23–5 It is impossible to say. . . . . 23(

24. Which one of the following qualities must have shown itself in the writings of the author of the passage?
- 24–1 Consistency
- 24–2 Conventionality
- 24–3 Variety
- 24–4 Fine literary style
- 24–5 Originality. . . . . 24(

25. If a writer believed in the assumption mentioned in line 4, that belief would almost certainly lead him to
- 25–1 imitation.
- 25–2 excellence.
- 25–3 originality.
- 25–4 progress.
- 25–5 recognition. . . . . 25( )

26. To gain emphasis, the writer relies chiefly on
- 26–1 exaggeration.
- 26–2 repetition.
- 26–3 deliberate understatement.
- 26–4 shocking statements.
- 26–5 reasoned argument. . . . . 26( )

27. The passage implies that, of the following writers, the one born most recently was
- 27–1 Barrie.
- 27–2 Diderot.
- 27–3 Carlyle.
- 27–4 Rousseau.
- 27–5 Bulwer-Lytton. . . . . 27( )

Go on to the next page.

28. The writer thinks the opinions of the literary critics of the nineties were
- 28–1 discriminating.
- 28–2 superficial.
- 28–3 hostile.
- 28–4 challenging.
- 28–5 astonishing. . . . . 28( )

29. Literary critics in the period mentioned were seldom
- 29–1 scholarly.
- 29–2 sure of themselves.
- 29–3 surprised.
- 29–4 interested in newcomers.
- 29–5 familiar with the past. . . . . 29( )

30. "Fresh" in line 9 most nearly means
- 30–1 up and coming.
- 30–2 talented.
- 30–3 odd.
- 30–4 new.
- 30–5 saucy. . . . . 30( )

* * * * *

Millions of dollars are spent annually in misleading the public regarding health facts, and other millions are spent by a gullible public in return, while Miss Jones has forty-five minutes a week (if she is lucky) with a class of fifty students to teach hygiene. She is more than frequently begrudged this time allotment because it is taken from some other more important subject in the curriculum such as algebra, trigonometry, the Renaissance, or Shakespeare. Her materials are oftentimes limited because of an inadequate budget. Yet a manufacturing concern will pay a radio entertainer $8,000 for a single performance on a program designed to acquaint the public with the health-giving values of a cathartic.

31. The writer uses the expression "if she is lucky" to indicate that
- 31–1 hygiene is easy to teach.
- 31–2 most teachers have less time to teach hygiene.
- 31–3 most teachers have more students in their classes.
- 31–4 advertisements can be used in the classroom.
- 31–5 advertisements on the radio make hygiene courses unnecessary. . . . 31( )

32. The writer would be most likely to support a movement for
- 32–1 founding a Shakespearean theater.
- 32–2 increasing the size of hygiene classes.
- 32–3 decreasing the number of radio programs.
- 32–4 spending more money on the teaching of hygiene.
- 32–5 teaching mathematics on the radio. . 32( )

33. The main subject of this paragraph is
- 33–1 hygiene courses.
- 33–2 health education.
- 33–3 commercial advertising.
- 33–4 the inadequacy of teachers' salaries.
- 33–5 the health-giving values of a cathartic. . . . . 33( )

34. The writer seems to be
- 34–1 satisfied.
- 34–2 philosophical.
- 34–3 gullible.
- 34–4 amused.
- 34–5 indignant. . . . . 34( )

35. The claim made in lines 1 and 2 is partially supported by the statement that
- 35–1 Miss Jones has only forty-five minutes a week in which to teach hygiene.
- 35–2 there are only fifty students in Miss Jones' hygiene class.
- 35–3 Miss Jones' materials are limited.
- 35–4 the time for hygiene is taken from other subjects.
- 35–5 a radio entertainer receives $8,000 for a single performance. . . . . 35( )

36. The writer implies that cathartics
- 36–1 are not truthfully advertised.
- 36–2 are not widely used.
- 36–3 are sold at exorbitant prices.
- 36–4 should not be mentioned in public.
- 36–5 should be advertised in classrooms. 36( )

– – – – – – – – – – –

Go on to the next page.

(1) Last night I was endeavoring to converse with
(2) a young Englishman who had just finished his
(3) second year at Cambridge University. He did not
(4) know any of the distinguished professors there and
(5) had not even heard of their names. "Of course,"
(6) he said, "I took up rowing at once, and if you go in
(7) for it seriously, you live in a very restricted circle."
(8) Whereupon he complained about the latest genera-
(9) tion, saying that they had been spoiled by dancing
(10) and automobiles and shirked working for their
(11) colleges. Coming from his lips, "working" took
(12) me back. I questioned him; he meant football.
(13) I felt reassured.

37. "Working for their colleges" in lines 10 and 11 means
- 37–1 earning money to meet expenses.
- 37–2 raising money for the colleges.
- 37–3 raising academic standards.
- 37–4 going out for varsity sports.
- 37–5 studying hard. . . . . 37( )

38. The Englishman evidently spent most of his time
- 38–1 with distinguished people.
- 38–2 at social affairs.
- 38–3 in mental activity.
- 38–4 in physical activity.
- 38–5 trying to make money. . . . . 38( )

39. The Englishman had not heard of any of the famous Cambridge professors because
- 39–1 he had not yet gone to class.
- 39–2 there weren't any there.
- 39–3 he had been there only two years.
- 39–4 he was too busy studying.
- 39–5 he was not interested in academic matters. . . . . 39( )

40. "Took me back" in lines 11 and 12 most nearly means
- 40–1 surprised me.
- 40–2 escorted me.
- 40–3 amused me.
- 40–4 disgusted me.
- 40–5 recalled to my mind. . . . . 40( )

41. The writer felt reassured (line 13) because he knew that
- 41–1 battles are won on the playing fields of England.
- 41–2 all work and no play makes Jack a dull boy.
- 41–3 his original impression was correct.
- 41–4 the future of England was in good hands.
- 41–5 football is important. . . . . 41( )

42. The writer's attitude toward the Englishman is
- 42–1 mildly scornful.
- 42–2 approving.
- 42–3 sympathetic.
- 42–4 severe.
- 42–5 reassuring. . . . . 42( )

43. The writer is probably
- 43–1 a Cambridge graduate.
- 43–2 a Cambridge professor.
- 43–3 a former athlete.
- 43–4 a young American student.
- 43–5 not an Englishman. . . . . 43( )

44. "The latest generation" in lines 8 and 9 refers to
- 44–1 students many years younger than the Englishman.
- 44–2 fellow students of the Englishman.
- 44–3 students preceding the Englishman by a few years.
- 44–4 American students.
- 44–5 students of the previous generation. 44( )

– – – – – – – – – – –

Pure gold is much too soft to be durable as a mounting. It must, therefore, be mixed, or alloyed, with other metals to increase its hardness. The gold content of these alloys, that is, their fineness or purity, is indicated by the term carat or karat, which means one twenty-fourth part. Thus, 18-karat gold, usually stamped 18K, consists of 18 parts of gold and 6 parts of other metals. In order to reduce the cost, alloys of lesser gold content are also used. Custom and practice permit 10K alloys, when so stamped, to be sold as gold, but an alloy with less than 50 per cent gold is not properly designated as gold. The term *fine gold* is used to indicate pure gold. Fineness may also be expressed in terms of parts of one thousand; thus, 750 fine means that the alloy contains 750 parts of gold out of every 1,000. When gold is alloyed with different metals, changes in color may be secured. These alloys are known as yellow, white, and green gold.

45. Which one of the following alloys cannot properly be labeled "gold"?
- 45–1 10 karat
- 45–2 12 karat
- 45–3 15 karat
- 45–4 18 karat
- 45–5 24 karat . . . . . 45( )

46. A gold alloy that is 250 fine can be described as
- 46–1 6 karat.
- 46–2 8 karat.
- 46–3 12 karat.
- 46–4 18 karat.
- 46–5 21 karat. . . . . 46( )

47. This passage is probably part of
- 47–1 an advertisement for jewelry.
- 47–2 a schoolbook about minerals.
- 47–3 an article in a popular magazine.
- 47–4 a jeweler's catalogue.
- 47–5 a law regulating the sale of gold. . 47( )

Go on to the next page.

48. How many reasons are indicated in the passage for alloying gold?
48–1 One
48–2 Two
48–3 Three
48–4 Four
48–5 Five . . . . . 48( )

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Read your favorite poem again and again and the words lose their meaning. Meet your favorite picture or musical composition frequently and you find yourself growing blind and deaf to it. Saturate yourself with your favorite perfume and it loses its appeal. The fact is that any pleasant sensation tends to disappear upon too frequent repetition. One's first *Filet Mignon Béarnaise* is a ravishment. The second, unless it occurs after an interval of repose, is less effective. A third in rapid succession can hardly be thought of.

Any artistic experience, like any gastronomic one, requires a pause for thought and rumination. In many areas of experience, we automatically take vacations. We put the books back on the shelf, stay away from that room in the museum, go to another theater. In music this is not so easy; we are not able to make up our own programs. When next you see me tiptoeing out of a concert and inquire anxiously, "What! Aren't you staying to hear the *Pathétique*?", you will hear me whisper, "No thanks. I'm on the wagon."

49. From the passage, it is clear that *Filet Mignon Béarnaise* is something to
49–1 eat.
49–2 listen to.
49–3 read.
49–4 smell.
49–5 look at. . . . . 49( )

50. The writer expects that when he leaves the concert his friends will express
50–1 amusement.
50–2 surprise.
50–3 disappointment.
50–4 envy.
50–5 anger. . . . . 50( )

51. Apparently, the writer has been
51–1 drinking too much.
51–2 enjoying too many *filets mignons*.
51–3 reading too much poetry.
51–4 looking at too many pictures.
51–5 hearing the *Pathétique* too often. . 51( )

52. The writer thinks that it is hardest to avoid getting too much of a good thing when one is in a
52–1 library.
52–2 theater.
52–3 museum.
52–4 concert hall.
52–5 restaurant. . . . . 52( )

53. The writer thinks of leaving the concert because he
53–1 does not like the *Pathétique*.
53–2 likes the *Pathétique* very much.
53–3 fears that the *Pathétique* won't be performed to suit him.
53–4 is unfamiliar with the *Pathétique*.
53–5 intends never to listen to the *Pathétique* again. . . . . 53( )

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Still farther down among the lower forms of life, the whole question of mother love becomes silly. Even popular sentimentality seems to regard generosity as a function of the backbone. A self-sacrificing cockroach or jellyfish is inconceivable. There are those, of course, who have tried, nonetheless, to discern mother love even in these depths. They point out that among the beetles, solitary wasps, and spiders the most elaborate precautions are made for the care of the young. It is well known that ants lick their eggs with great care and carry them off when danger threatens. But the eggs give off a pleasant-tasting juice, and the ants bestow equal care upon the grubs of their enemies, which also give off a tasty juice, but grow up to eat the ants' own eggs and grubs.

54. The reason why the ants attempt to save their eggs is probably that they
54–1 want to safeguard their offspring.
54–2 like the taste of the juice given off.
54–3 are driven by parental instincts.
54–4 wish to destroy their enemies.
54–5 intend to eat them. . . . . 54( )

55. The writer believes that mother love among the insects
55–1 is frequently observed.
55–2 can be proved scientifically to exist.
55–3 is a sentimental fairy tale.
55–4 is accurately described by other writers.
55–5 is found in a few isolated cases. . . 55( )

56. Just before the passage quoted, the writer apparently discussed
56–1 mother love among the higher animals.
56–2 mother love *versus* father love.
56–3 the differences between human beings and other animals.
56–4 the harm done by sentimental feelings.
56–5 the importance of a backbone. . . 56( )

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Go on to the next page.

No man is desirous of placing himself in a disagreeable situation. But if he have no choice in the case, if there be no choice presented to him but a neglect of duty or the enmity of those who are called the world, he merits the contempt as well as the indignation of his country who can hesitate which to embrace.

57. In the last line, the word "embrace" most nearly means
- 57–1 desire.
- 57–2 choose.
- 57–3 deserve.
- 57–4 consider.
- 57–5 recommend. . . . . 57( )

58. The writer probably likes to think of himself as
- 58–1 crafty.
- 58–2 skeptical.
- 58–3 flexible.
- 58–4 suggestible.
- 58–5 courageous. . . . . 58( )

59. The writer is probably leading up to a statement that he believes will result in
- 59–1 great popularity for him.
- 59–2 widespread indignation.
- 59–3 hesitation.
- 59–4 neglect of duty.
- 59–5 public reward. . . . . 59( )

60. The writer feels obliged to
- 60–1 avoid a disagreeable situation.
- 60–2 accept the verdict of public opinion.
- 60–3 do his duty.
- 60–4 hesitate over a difficult choice.
- 60–5 criticize his own country. . . . . 60( )

* * * * *

I bought me a dollar watch and set it by the great clock on the Parliament House at 8:05 p.m., then went back to my room and buried myself in my book. Now the Parliamentary clock has a peculiarity that exists in no other clock. On the half hour it strikes the succeeding hour, then strikes the hour again at the proper time. After I had been reading for a while, the great clock began to boom and I counted—ten. I reached for my new watch to see how it was getting along; it was marking 9:30. It seemed rather poor speed even for a dollar watch, but I supposed that the climate was affecting it. I shoved it half an hour ahead, took to my book, and waited to see what would happen. Soon the great clock struck ten. I looked—the watch was marking 10:30. This was too much speed for the money; I pushed the hands back a half hour. By and by the great clock struck eleven. The watch showed 10:30. I pushed it ahead with some show of temper. Soon the Parliamentary clock struck eleven again. The watch showed up 11:30 now, and I beat its brains out against the bedstead. I was sorry the next day when I found out.

61. What was it that the writer found out the next day?
- 61–1 That he had damaged the bedstead with the watch
- 61–2 That the great clock itself had been wrong the previous evening
- 61–3 That his watch was broken beyond repair
- 61–4 That he had broken his watch in his sleep
- 61–5 That the great clock struck each hour twice . . . . . 61(

62. At 9:30 the great clock must have struck
- 62–1 once.
- 62–2 eight times.
- 62–3 nine times.
- 62–4 ten times.
- 62–5 eleven times. . . . . 62(

63. The writer was ready to believe that his watch was wrong because he had
- 63–1 taken a dislike to it.
- 63–2 reset it so many times.
- 63–3 just bought it.
- 63–4 never known the great clock to be wrong.
- 63–5 paid so little for it. . . . . 63(

64. This passage was probably written principally to
- 64–1 warn the public against dollar watches.
- 64–2 make fun of the Parliamentary clock.
- 64–3 make fun of dollar watches.
- 64–4 advise against hasty action.
- 64–5 amuse its readers. . . . . 64(

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If I were to choose between the power of writing a poem and the ecstasy of a poem unwritten, I would choose the ecstasy. It is better poetry.

65. The writer considers a written poem to be
- 65–1 an accident.
- 65–2 a by-product.
- 65–3 a result of hard work.
- 65–4 a method of achieving ecstasy.
- 65–5 a reward for humility. . . . . 65( )

66. The writer values most
- 66–1 the desire to write.
- 66–2 the ability to write.
- 66–3 the recitation of poetry.
- 66–4 a mood.
- 66–5 patience. . . . . 66( )

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Go on to the next page.

To avoid or repair the results of plowing we have the new plowless system. It requires at least as many plows as the old system and should be called moldboardless farming, because moldboard plows, which turn soil upside down and bury the dead and live vegetation, are not used. The new plows have blades or rods that run along under the surface and kill the grass and weeds but leave the vegetable materials on the surface.

A modern farmer, when he raises a crop of wheat, leaves all the straw on the surface after the harvest, because he knows that it is the best soil and crop insurance he can get. One drop of hard rain can splash bare soil eight inches into the air. The effect of billions of drops is to move tons of soil downhill.

67. The passage implies that the effect of leaving the straw on the wheat field is to
- 67–1 make plowing unnecessary.
- 67–2 reduce erosion.
- 67–3 keep the soil from getting too wet.
- 67–4 make fertilizing unnecessary.
- 67–5 discourage insects and other pests. . 67( )

68. The chief difference between the old and new plows is that the old ones
- 68–1 kill the grass and weeds.
- 68–2 leave only the live vegetation on the surface.
- 68–3 leave only the dead vegetation on the surface.
- 68–4 leave all the vegetation on the surface.
- 68–5 bury all the vegetation. . . . . 68( )

69. According to the writer, it is inaccurate to call the new system
- 69–1 plowless.
- 69–2 moldboardless.
- 69–3 successful.
- 69–4 widespread.
- 69–5 modern. . . . . 69( )

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There is a later song that rivals *The Rosary* as America's choice—a musical setting for Joyce Kilmer's *Trees*. Here, too, the words play an important part. Ever since it was written, *Trees* has been the sort of poem that people cut out and carry around in their pocketbooks. This is not the case with *From the Land of the Sky-Blue Water* or *Evening Star*. The music for *Trees* is pretty bad but there is one thing in its favor. It is so like Rimsky's *Song of India* that the two could be played at the same time without discomfort. *Trees*, therefore, like *Moonlight and Roses*, does not have to beat its own path to the brain. It travels a furrow already ploughed by a famous predecessor.

70. From the passage it is apparent that *Song of India* was composed before
- 70–1 *The Rosary.*
- 70–2 *From the Land of the Sky-Blue Water.*
- 70–3 *Trees.*
- 70–4 *Evening Star.*
- 70–5 *Moonlight and Roses.* . . . . . 70( )

71. The writer indicates that the words are a large factor in the popularity of
- 71–1 *Song of India.*
- 71–2 *From the Land of the Sky-Blue Water.*
- 71–3 *Evening Star.*
- 71–4 *The Rosary.*
- 71–5 *Moonlight and Roses.* . . . . . 71( )

72. In the last two sentences, the writer uses two figures of speech. Corresponding words are "path" and
- 72–1 "predecessor."
- 72–2 "brain."
- 72–3 "ploughed."
- 72–4 "travels."
- 72–5 "furrow." . . . . . 72( )

73. The writer's statements about the music for *Trees* can best be described as
- 73–1 flattering.
- 73–2 very faint praise.
- 73–3 noncommittal.
- 73–4 uncomplimentary.
- 73–5 bitter. . . . . 73( )

74. We may infer that the writer thinks the American people's taste in music is
- 74–1 improving rapidly.
- 74–2 good.
- 74–3 neither good nor bad.
- 74–4 poor.
- 74–5 disgusting. . . . . 74( )

75. It is most likely that the writer is sarcastic when he states that
- 75–1 people carry a copy of *Trees* around in their pocketbooks.
- 75–2 *Trees* is very popular.
- 75–3 the words of *Trees* are important.
- 75–4 there is one thing in favor of the music for *Trees*.
- 75–5 *Trees* and *Song of India* could be played together without discomfort. 75( )

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Go on to the next page.

(1) The Arabs in Spain are strangely neglected in
(2) current histories. To write of medieval Europe
(3) without them is to ignore the principal civilization
(4) of the period. The fullest histories, the strongest
(5) literature, the largest life, were all south of the
(6) Pyrenees throughout the Dark Ages. Yet this
(7) civilization occupies five lines out of five hundred
(8) pages in the best-known handbook on that period.
(9) We read, in the Arab historians, of different kings
(10) having elaborate gardens with every variety of
(11) plant; of the literary academy to whom new poems
(12) were recited; of the fund for the endowment of
(13) learned men, and the attraction of scholars from
(14) all parts of the world. The crowning glory was
(15) the library of Al Hakem, who in 970 A.D. entirely
(16) filled a palace at Cordova with books sought from
(17) the whole known world. The classified shelves of
(18) this library held 600,000 volumes, all catalogued
(19) and in order.

76. The writer apparently believes that we should
- 76–1 visit Cordova.
- 76–2 live south of the Pyrenees.
- 76–3 use palaces as libraries.
- 76–4 know more about the Arabs in Spain.
- 76–5 have elaborate gardens with every variety of plant. . . . . 76( )

77. As used in line 14, "crowning" most nearly means
- 77–1 best-known.
- 77–2 historical.
- 77–3 intellectual.
- 77–4 royal.
- 77–5 greatest. . . . . 77( )

78. The writer mentions the orderliness of the library as evidence of
- 78–1 a love of beauty.
- 78–2 a respect for learning.
- 78–3 the medieval character.
- 78–4 the Spanish tradition.
- 78–5 the neglect of current historians. . 78( )

79. In the latter half of this passage, the writer's main purpose is to
- 79–1 show evidence of a high civilization.
- 79–2 give examples of the work of Arab historians.
- 79–3 describe the library of Al Hakem.
- 79–4 prove that Cordova was a center of learning.
- 79–5 explain why scholars were attracted to Cordova. . . . . 79( )

80. For information in support of his ideas the writer relies on
- 80–1 current histories.
- 80–2 the best-known handbook.
- 80–3 Arab historians.
- 80–4 the literary academy.
- 80–5 the library of Al Hakem. . . . . 80(

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The temper of the country was not revolutionar There were hopes of a new heaven and a new earth amon a few intellectuals in Paris; but men of sound sense coul afford to smile at such dreams. There was a network "secret" democratic societies; but as a rule they were we known to the police and without any real strength.

81. The dreams mentioned in the passage were dreams of
- 81–1 America.
- 81–2 democracy.
- 81–3 frontier life.
- 81–4 a return to primitive customs.
- 81–5 a new religion. . . . . 81(

82. In the first sentence, the word "temper" means
- 82–1 mood.
- 82–2 hope.
- 82–3 anger.
- 82–4 intellect.
- 82–5 common sense. . . . . 82(

83. The first sentence in the passage is supported by the statement that
- 83–1 there were hopes of a new heaven.
- 83–2 there were hopes of a new earth.
- 83–3 there were democratic societies.
- 83–4 the societies were known to the police.
- 83–5 the societies were without strength. 83(

84. The word "secret" is in quotation marks to indicate that the societies were
- 84–1 illegal.
- 84–2 revolutionary.
- 84–3 not secret.
- 84–4 not democratic.
- 84–5 not important. . . . . 84(

85. The writer's main point is that
- 85–1 men of sound sense were prosperous.
- 85–2 the police knew what was going on.
- 85–3 the intellectuals were hopeful.
- 85–4 the country was conservative.
- 85–5 there is always a preference for democracy. . . . . 85(

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Go on to the next page

No vulgar belief is more settled than that groups of gregarious animals are usually ruled and protected by wise old leaders. Man himself is a gregarious animal and his leaders, though frequently old, are rarely wise. But the instincts of the lower animals are thought to move them to select without error the wisest among them for leaders and to accept their guidance and help. No such reports, however, come from those who, free from sentimental bias, have watched animals. There is never any action that aims at aiding another individual. It is a fact that monkeys often rush up at the cry of a wounded companion, but as often as not they inflict further injury upon the injured one. Stags, in particular, run away at the first sign of danger and rejoin the does and fawns only when it is past. When a herd of caribou is fleeing from wolves, the old bulls, it is true, bring up the rear and so expose themselves to being the first victims. But they have no choice; they just can't run as well as the cows and calves.

86. Compared with the females, old bull caribou are
- 86–1 braver.
- 86–2 wiser.
- 86–3 slower.
- 86–4 more selfish.
- 86–5 more active. . . . . 86( )

87. The most cowardly behavior mentioned appears to be that of the
- 87–1 wounded monkey.
- 87–2 bull caribou.
- 87–3 cow caribou.
- 87–4 stag.
- 87–5 female deer. . . . . 87( )

88. "Vulgar," as used in the first line of the passage, most nearly means
- 88–1 popular.
- 88–2 coarse.
- 88–3 firm.
- 88–4 dubious.
- 88–5 rude. . . . . 88( )

89. In this passage the writer contends that, with respect to leaders,
- 89–1 man is no better off than other animals.
- 89–2 other animals are no better off than man.
- 89–3 wisdom increases with age.
- 89–4 man is guided by instinct as much as the lower animals are.
- 89–5 animals have well-developed instincts for choosing the right ones. . 89( )

90. The writer believes that among animals
- 90–1 the strong care for the weak.
- 90–2 the males protect the females.
- 90–3 the well care for the wounded.
- 90–4 the old protect the young.
- 90–5 each one must look out for himself. 90( )

* * * * *

Number wrong	0–2	3–6	7–10	11–14	15–18	19–22	23–26	27–30	31–34	35–38	39–42	43–46	47–50	51–54	55–58	59–62	63–66	67–70	71+
Amount to be subtracted	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

Speed of Comprehension Score

Total number right_____

Subtract_____
(See table above)

Raw Score = Difference_____

Scaled Score_____
(See table on key)

Level of Comprehension Score

Number of *completed* scales_____
(1 if last item marked is 30, 31, ··· 59;
2 if last item marked is 60, 61, ··· 89;
3 if last item marked is 90)

Number right_____
(on *completed* scales only)

Subtract_____
(Look up in table at left amount to be subtracted corresponding to the number wrong on *completed* scales)

Raw Score = Difference_____

Scaled Score_____
(See table on key under column corresponding to number of scales *completed*)

Book No. .....

Form L

IOWA HIGH SCHOOL CONTENT EXAMINATION

166

For High School Seniors and College Freshmen

Devised by

G. M. Ruch and others

Revised by

D. B. Stuit, H. A. Greene, and G. M. Ruch

GENERAL DIRECTIONS

This is a test of your knowledge of the four fields of (1) English and Literature, (2) Mathematics, (3) Science, and (4) History and Social Studies. One subtest on each of these fields is included. The time limits for each section are indicated in the form on the separate answer sheets. The type of exercise and the method of recording responses are indicated below.

Samples: Answer Sheet

(1) (2) (3) (4)

1. The capital of the United States is (1) Boston (2) Chicago (3) New York (4) Washington ..... ○ ○ ○ ⊗

2. An example of an insect is the (1) mosquito (2) clam (3) starfish (4) earthworm ..... ⊗ ○ ○ ○

In the first sample the answer is *Washington,* so circle 4, corresponding to the fourth choice, is marked with a cross. The answer for the second sample is *mosquito,* the first choice, so circle 1 is marked with a cross. The answer spaces for the exercises in the test booklet are on the separate answer sheet. *Make no marks on the test booklet. All answers must be placed on the answer sheet rather than on the test booklet.* In each of the subtests, read each question carefully, select the best answer, and mark with a cross the proper answer space on the answer sheet.

When the signal is given begin to work on Part 1 and stop when time is called. If you finish a section before time is up, do not go on to the next test or back to any previous test. Answer the questions in order as you come to them but do not spend too much time on any one item. You should answer all questions on which you have some information, but do not resort to sheer guessing. If you make a mistake, erase your first mark completely. *Items for which more than one answer is checked will be scored wrong.*

Do not turn to Page 2 until the signal is given.

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Section 1

ENGLISH AND LITERATURE

1. To *verify* means to (1) vilify (2) confirm (3) deny (4) duplicate.

2. To *have a strong desire for personal advancement* is to be (1) anxious (2) courageous (3) covetous (4) ambitious.

3. A word which is opposite in meaning to *put in* or *count in* is (1) exclude (2) permit (3) increase (4) decide.

4. In the sentence, *"Aren't the summer flowers beautiful?"* the word *summer* is used as (1) a noun (2) an adverb (3) an adjective (4) a verb.

5. (1) Robin Hood (2) Lancelot (3) MacDonald Dhu (4) King Robert was one of King Arthur's Knights.

6. Bret Harte wrote (1) history (2) essays (3) tragedies (4) stories of western life

7. Life in India was described by (1) Defoe (2) Swift (3) Kipling (4) Stevenson.

8. The headless horseman is a character in (1) *The Klansman* (2) *The Fall of the House of Usher* (3) *The Legend of Sleepy Hollow* (4) *Huckleberry Finn.*

9. Mark Twain's work is noted for its (1) humor (2) scholarship (3) profound logic (4) perfect style.

10. *Silas Marner* is the story of (1) a prince in disguise (2) a poor weaver (3) a soldier (4) a prominent statesman.

11. The correct expression for the blank in *"Everyone must have —— own ticket"* is (1) their (2) his (3) there (4) my.

12. *The Tale of Two Cities* tells of the (1) American Revolution (2) Civil War (3) French Revolution (4) Dark Ages.

13. (1) Hawthorne (2) Cooper (3) Dickens (4) Poe wrote *The Last of the Mohicans.*

14. In the sentences (a) *The building contract was signed* and (b) *Does water contract when it freezes?*, the word *contract* is used both as a (1) verb and adjective (2) verb and adverb (3) noun and verb (4) noun and adjective.

15. Morpheus symbolizes (1) sleep (2) fertility (3) health (4) light.

16. Dickens was much impressed by the (1) need for social reform (2) greatness of the British Empire (3) importance of scientific truth (4) theory of evolution.

17. *One who has no certain place of residence* is (1) a resident (2) a tenant (3) a transient (4) an alien.

18. The property of a verb which shows *when* action occurred is its (1) mood (2) gender (3) number (4) tense.

19. The poem which begins "Once upon a midnight dreary" is (1) *The Skeleton in Armor* (2) *The Haunted Palace* (3) *Childe Harold* (4) *The Raven.*

20. The opposite of *affirm* is (1) refute (2) vary (3) exclude (4) agree.

21. In Dickens' *Christmas Carol,* Scrooge, after meeting Marlowe's ghost became (1) frightened (2) miserly (3) indifferent (4) considerate of others.

22. Which of the following words shows its gender positively? (1) secretary (2) children (3) actor (4) committee.

23. *The Call of the Wild* was written by (1) Cooper (2) Kipling (3) Stevenson (4) London.

24. The central theme in the play *Macbeth* is (1) enmity between England and Scotland (2) border warfare (3) the downfall of an ambitious character (4) the foolishness of women.

Go on to Page 3

25. "Sunset and evening star and one clear call for me" is a quotation from (1) Tennyson's *Crossing the Bar* (2) Wordsworth's *The Solitary Reaper* (3) Shakespeare's *As You Like It* (4) Shelley's *Ode to the West Wind.*

26. The opposite of *monotonous* is (1) tedious (2) transparent (3) diversified (4) pictorial.

27. "The world will little note nor long remember what we say here,—" is an extract from (1) Washington's *Farewell Address* (2) the Declaration of Independence (3) Lincoln's *Gettysburg Address* (4) Lincoln's *Second Inaugural Address.*

28. *One who holds the view that all events are for the best* is called (1) a cynic (2) a pessimist (3) an opportunist (4) an optimist.

29. Poe's poetry is noted for its (1) mystery and beauty (2) lack of rhyme (3) lack of music (4) depth of thought.

30. Emerson preached the (1) importance of social reform (2) need for prohibition (3) greatness of the individual soul (4) need for a closer union.

31. *Precarious* means (1) unshakable (2) unpredictable (3) prevalent (4) uncertain.

32. A poem telling of country or farm life is called (1) an elegy (2) a pastoral (3) a satire (4) a ballad.

33. A character in *Les Miserables* is (1) Charles Darnay (2) Cyrano de Bergerac (3) Louis Picard (4) Jean Valjean.

34. *The Gold Bug* tells about (1) adventures in the Klondike (2) the forty-niners' rush to California (3) experiments with insects (4) hidden treasure.

35. According to Greek mythology, the father of the Gods was (1) Jupiter (2) Apollo (3) Hermes (4) Poseidon.

36. The verb in the sentence *"The boy caught a fish"* is (1) active in voice (2) plural in number (3) subjunctive in mood (4) intransitive.

37. Burns' poetry is characterized by (1) its wide knowledge of life (2) its clear interpretation of the life of the humble people (3) its coldness and lack of feeling (4) its unusual narrative power.

38. Which of the following verbs is irregular? (1) shrink (2) march (3) play (4) move.

39. Addison and Steele are known as the writers of (1) *Gulliver's Travels* (2) *Sir Roger de Coverley Papers* (3) *Dunciad* (4) *Absolom and Achitophel.*

40. "The Slough of Despond" is described in (1) *David Copperfield* (2) *Last of the Mohicans* (3) *Tom Sawyer* (4) *Pilgrim's Progress.*

41. "The Assyrian came down like the wolf on the fold" is an example of (1) hyperbole (2) metaphor (3) personification (4) simile.

42. The opposite of *frugal* is (1) fragile (2) economical (3) hateful (4) extravagant.

43. Hawthorne's stories are noted for their (1) humor (2) hidden meaning (3) clear pictures of great figures in history (4) bitter anti-American tone.

44. To *insist on rendering service when it is not needed* is to be (1) officious (2) arrogant (3) unobtrusive (4) conceited.

45. (1) That (2) what (3) either (4) who is a demonstrative pronoun.

46. (1) Whitman (2) Mark Twain (3) Poe (4) Irving did his greatest writing during the period of the Civil War.

47. *Eccentric* means (1) traditional (2) anomalous (3) distinguished (4) familiar.

48. The opposite of *impartial* is (1) biased (2) favorable (3) unbalanced (4) unhappy.

49. "Of Man's first disobedience and the fruit of that forbidden tree, whose mortal taste brought death into the world" is a quotation from the works of (1) Dryden (2) Milton (3) Cowper (4) Shakespeare.

50. (1) *Enoch Arden* (2) *Marmion* (3) *Pilgrim's Progress* (4) *Paul Revere's Ride* is an example of an allegorical tale.

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51. In the opinion of the people of his time the greatest living poet was (1) Pope (2) Addison (3) Swift (4) Defoe.

52. To *resuscitate* is to (1) reconstruct (2) revive (3) indict (4) vacillate.

53. George Eliot's novels impress us with the (1) advantages of great wealth (2) uselessness of moral integrity (3) certainty of death (4) importance of self-sacrifice.

54. (1) Synge (2) Ibsen (3) Capek (4) Maeterlinck was a great Scandinavian dramatist.

55. The setting for the story of *The Courtship of Miles Standish* was (1) Holland (2) Plymouth (3) Jamestown (4) New Amsterdam.

56. *Paradise Lost* is about (1) the fall of man (2) the Civil War in England (3) the resurrection (4) the end of the world.

57. The number of lines in a sonnet is (1) 8 (2) 14 (3) 16 (4) 24.

58. Such novels as *Ivanhoe, Quentin Durward,* and *Rob Roy* are (1) historical novels (2) quiet domestic novels (3) careful character studies (4) novels written to reform.

59. The prefix *ante* means (1) up (2) against (3) under (4) before.

60. (1) *Childe Harold* (2) *The Rime of the Ancient Mariner* (3) *Ode to a Grecian Urn* (4) *The Eve of St. Agnes* is the best-known work of Coleridge.

61. Guinevere is a character from (1) *Idylls of the King* (2) *Merchant of Venice* (3) *Vision of Sir Launfal* (4) *The Rime of the Ancient Mariner.*

62. The author of *Microbe Hunters* and other scientific narratives of man's fight against disease is (1) Paul de Kruif (2) Louis Pasteur (3) Hendrik Willem Van Loon (4) Lewis K. Browne.

63. Whitman's *O Captain, My Captain* commemorates (1) Dewey (2) Lincoln (3) John Paul Jones (4) Washington.

64. An elegy is a lyric which is (1) expressive of grief (2) commemorating heroism (3) expressive of hope (4) humorous in nature.

65. *The Emperor Jones* is a drama by (1) Bernard Shaw (2) J. M. Barrie (3) Booth Tarkington (4) Eugene O'Neill.

66. To *be disdainfully proud* is to be (1) boastful (2) foolhardy (3) haughty (4) impudent.

67. *Nights with Uncle Remus* was written by (1) Barrie (2) Harris (3) Kipling (4) Lanier.

68. Carlyle wrote (1) *Apologia pro vita Sua* (2) *Modern Painters* (3) *History of the French Revolution* (4) *History of England.*

69. Swift was best known as a (1) great poet (2) famous novelist (3) playwright (4) fierce satirist.

70. "The evil that men do lives after them; The good is oft interred with their bones" is a quotation from (1) *Elegy in a Country Churchyard* (2) *Julius Caesar* (3) *Hyperion* (4) *Dr. Faustus.*

71. (1) Shakespeare (2) Pope (3) Eliot (4) Tennyson developed the idea of the immortality of the soul in his poems.

72. To *create as a result of original study* is the opposite of (1) research (2) invention (3) imitation (4) construction.

73. To *bring contradictory statements into agreement* is to (1) balance (2) reconcile (3) nullify (4) vitiate.

74. The tense of the verb in the sentence *"Will you come in?"* is (1) past (2) present (3) future (4) future perfect.

75. A character from *David Copperfield* is (1) Becky Sharp (2) Oliver Twist (3) Samuel Weller (4) Uriah Heep.

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76. (1) *Kidnapped* (2) *Midsummer Night's Dream* (3) *Prisoner of Chillon* (4) *The Charge of the Light Brigade* is an example of a ballad.

77. (1) Cooper in *Leatherstocking Tales* (2) Holmes in *Old Ironsides* (3) Emerson in *The Concord Hymn* (4) Lowell in *The Bigelow Papers* violently expressed his opposition to the Mexican War.

78. The mood of the last verb in the sentence *"I'd tell him myself if he were here"* is (1) subjunctive (2) potential (3) indicative (4) imperative.

79. Which of these sentences is written correctly? (1) Father may I please go? (2) Is your Father coming? (3) May I use the car, Father? (4) Did your father tell you I called.

80. In *The Story of Mankind* (1) Van Loon (2) Van Dyke (3) Parkman (4) Carl Van Doren demonstrated his ability as a historian.

81. Pan is represented as partly (1) dog (2) fish (3) goat (4) horse.

82. The poem beginning "To him who in the love of nature holds communion with her visible forms" is (1) *The Chambered Nautilus* (2) *The Fringed Gentian* (3) *Thanatopsis* (4) *Tintern Abbey.*

83. (1) Byron (2) Dryden (3) Milton (4) Burns wrote a long poem about his travels.

84. (1) Hawthorne (2) Irving (3) Emerson (4) Howells wrote works of a satirical nature.

85. (1) Eugene Field (2) Edwin Markham (3) Robert Frost (4) Edgar Lee Masters gained his first real recognition from a collection of poems called *North of Boston.*

86. (1) Cooper (2) Poe (3) Whittier (4) Emerson was active in antislavery agitation.

87. Which of these writers wrote extensively about politics of his time? (1) Dickens (2) Dryden (3) Gray (4) Tennyson.

88. In Shakespeare's *Hamlet,* King Claudius was killed by (1) the queen (2) Hamlet (3) Horatio (4) Polonius.

89. *The Wreck of the Hesperus* was written by (1) Holmes (2) Longfellow (3) Riley (4) Whittier.

90. The ferryman of the Styx was (1) Scylla (2) Charybdis (3) Argus (4) Charon.

91. In *The Idylls of the King,* the sword Excalibur symbolizes (1) the divine right of kings (2) superstition (3) divine justice (4) ideals of chivalry.

92. Little Nell is a character in (1) *Old Curiosity Shop* (2) *Henry Esmond* (3) *David Copperfield* (4) *Elsie Venner.*

93. (1) *Vision of Sir Launfal* (2) *Hiawatha* (3) *Paul Revere's Ride* (4) *Thanatopsis* is an example of an epic.

94. After the tragic deportation of the Acadians, how long did *Evangeline* search for her lost lover, Gabriel? (1) one year (2) about ten years (3) twenty years (4) about thirty-five years.

95. *The Chambered Nautilus* was written by (1) Holmes (2) Longfellow (3) Lowell (4) Whittier.

96. Which of the following writers wrote primarily about twentieth century phases of American life? (1) Holmes (2) Howells (3) Emerson (4) Mark Twain.

97. *Mr. Britling Sees It Through* was written by (1) O. Henry (2) Winston Churchill (3) H. G. Wells (4) Willa Cather.

98. In *A Midsummer Night's Dream,* the play within the play is (1) comedy (2) tragedy (3) historical drama (4) burlesque.

99. (1) Tennyson (2) Thackeray (3) Shakespeare (4) Swift was a contemporary of Spenser.

100. The number of Muses was (1) 3 (2) 6 (3) 7 (4) 9.

End of Section 1.

Do not turn to Section 2 until told to do so.

Section 2

MATHEMATICS

1. If $x + 5 = 11$, then x equals (1) 5 (2) 6 (3) 7 (4) 16.

2. In the term 14xyz, the coefficient of xyz is (1) x (2) z (3) 14 (4) y.

3. Two lines perpendicular to the same plane are (1) perpendicular (2) equal (3) intersecting (4) parallel.

4. If the equal angles of an isosceles triangle are each 70°, the vertical angle is (1) 20° (2) 40° (3) 55° (4) 150°.

5. $\frac{m^3n^2}{m^2n^3}$ reduced to lowest terms is (1) 0 (2) n (3) $\frac{m}{n}$ (4) $\frac{m^3}{n^3}$

6. The sum of the angles of a triangle is always (1) 60° (2) 360° (3) 120° (4) 180°.

7. The third term in the expression 17x—32y+7z+21 is (1) + (2) 7z (3) —32y (4) z.

8. An aeroplane covered a distance of *18mx—15x* miles in 3x hours. What was the hourly rate of speed? (1) 6mx—15 (2) 6mx—5x (3) 6m—5 (4) 18mx—5.

9. If one acute angle of a right triangle is 40°, the other is (1) 20° (2) 40° (3) 50° (4) 90°.

10. The perimeters of two similar triangles are 18 inches and 12 inches. If a side of the first is 3 inches, the corresponding side of the second is (1) 2 (2) $4\frac{1}{2}$ (3) 10 (4) 12.

11. Given $x = 4$, $y = 2$, $z = 3$, then $x-5y+3z =$ (1) 13 (2) 1 (3) —3 (4) 3.

12. 22.7 times zero = (1) zero (2) 22.7 (3) .227 (4) 2.27.

13. When $\frac{x}{m} = n$, x equals (1) $\frac{n}{m}$ (2) $\frac{m}{n}$ (3) m—n (4) mn.

14. If a man borrows a sum of money at 5% interest, what is the ratio of the interest due each year to the principal borrowed? (1) one-fifth (2) one-twentieth (3) one-half (4) five to one.

15. $30x^3-10$ divided by 10 equals (1) $30x^2-10x$ (2) $3x^3-1$ (3) $30x^3-1$ (4) $3x^2-1$.

16. If $2^6 = 64$ and $2^8 = 256$, express the quantity 64×256 as a power of 2. (1) 2^{48} (2) 2^{28} (3) 2^{14} (4) 2^7.

17. That part of a circle included between two radii and an arc is called a (1) chord (2) sector (3) locus (4) tangent.

18. Of the angles of a triangle, two are always (1) acute (2) complementary (3) obtuse (4) right.

19. The supplement of an angle of 60° is (1) 30° (2) 90° (3) 120° (4) 300°.

20. A quadratic equation is (1) a surd (2) an equation of the first degree (3) an equation which contains the second power of an unknown, but nothing higher than the second power (4) a linear equation.

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21. A perpendicular distance from the vertex of a triangle to the base is called the (1) median (2) bisector (3) altitude (4) perimeter.

22. If one angle of a parallelogram is 80°, the consecutive angle is (1) 20° (2) 80° (3) 100° (4) 180°.

23. Find the quotient: $\frac{20a^2x^3y^2}{4ax}$ (1) $5ax^2y^2$ (2) $5a^3x^4y^2$ (3) $5ax^2y$ (4) $\frac{5a^2x^3y^2}{ax}$

24. A figure involving two dimensions is called a (1) plane (2) line (3) point (4) solid.

25. $\frac{8a+20a^3}{-2a} =$ (1) $(-4+10a^2)$ (2) $(-4a^2+10a^4)$ (3) $(4a-10a^2)$ (4) $4a^2$.

26. The number of inches in y feet is (1) $12+y$ (2) $12y$ (3) $\frac{y}{12}$ (4) y.

27. In the equation $y = x \cdot z$ (1) y varies jointly as x and z (2) y is a constant (3) y varies inversely as x (4) y varies inversely as z.

28. The series, 1,4,7,10,13,16 is called (1) arithmetic (2) geometric (3) algebraic (4) trigonometric.

29. The base of a triangle is b, the altitude is a. The area is (1) $\frac{a}{b}$ (2) ab (3) $\frac{ab}{2}$ (4) $\frac{2}{ab}$

30. $(-2a)^3 =$ (1) $-8a^3$ (2) $8a^2$ (3) $8a^9$ (4) $-8a^6$.

31. A straight line drawn joining any two points in a circumference is called (1) an arc (2) a chord (3) a diameter (4) a radius.

32. $\sqrt[3]{-27m^3n^3} =$ (1) $-3mn$ (2) $-9m^2n^2$ (3) $-mn$ (4) $3mn$.

33. In the following, remove parentheses and collect the terms: $15+(7-9x)-(-7x-9)+9$ (1) $31-16x$ (2) $40+18x$ (3) $31+16x$ (4) $40-2x$.

34. If a triangle containing 30 sq. ft. has an altitude of 6 ft., the base is (1) 5 (2) 15 (3) 12 (4) 10.

35. $\frac{a^5}{a^3}$ is the same as (1) $\frac{a^3}{a^5}$ (2) $3a$ (3) $\frac{5}{3}$ (4) a^2.

36. Inferring values on a curve between plotted points or known values is called (1) induction (2) interpolation (3) deduction (4) extrapolation.

37. The enrollment in a certain high school increased from 2500 to 3000. The percentage increase was (1) 10 (2) 15 (3) 20 (4) 25.

38. Find the value of: $\sqrt{9} + \sqrt[3]{27} + \sqrt[4]{625}$ (1) 11 (2) 33 (3) $\sqrt[4]{661}$ (4) $\sqrt{9+27^3+625^4}$.

39. The complement of an angle of 37.5° is (1) 142.5° (2) 90° (3) 52.5° (4) 37.5°.

40. When $\frac{b}{y} = c$, y equals (1) $\frac{c}{b}$ (2) $\frac{b}{c}$ (3) bc (4) $b-c$.

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41. Any parallelogram inscribed in a circle must be a (1) rhombus (2) trapezoid (3) hexagon (4) rectangle.

42. The locus of points equidistant from a point is (1) an angle (2) a circle (3) a perpendicular bisector (4) a triangle.

43. If the sides of two triangles are respectively proportional, the triangles are (1) congruent (2) isosceles (3) proportional (4) similar.

44. If $a : x = 1 : 2$, x equals (1) $\frac{1}{2}$ (2) 2 (3) $\frac{a}{2}$ (4) 2a.

45. The sum of the interior angles of a pentagon equals (1) 90° (2) 120° (3) 360° (4) 540°.

46. In a two-axis graph a point represented by the values $x = 2$, $y = 3$ would fall in the (1) first quadrant (2) second quadrant (3) third quadrant (4) fourth quadrant.

47. $\frac{-21a^9b^6}{-7a^3b^2} =$ (1) $3a^3b^2$ (2) $3a^6b^4$ (3) $3a^{12}b^8$ (4) $-3a^6b^4$.

48. The length of a hypotenuse of a right triangle whose sides are 3 and 4 inches long, respectively, is (1) 12 in. (2) 7 in. (3) 25 in. (4) 5 in.

49. The value of the quantity $\sqrt{18} \cdot \sqrt{2}$ can be written (1) 6 (2) 9 (3) $\sqrt{9}$ (4) $\sqrt{20}$.

50. The area of a circle with a radius of 5 inches is (1) 5π (2) 10π (3) $5\pi^2$ (4) 25π.

51. The equation, $\frac{4y}{3} + 3 = 7$, is called (1) linear (2) simultaneous (3) complex (4) quadratic.

52. The square root of $a^2+2ab+b^2$ is (1) ab (2) $(a+b)^2$ (3) $a+b$ (4) $(a-b)^2$.

53. $(2x + 3y)^2 =$ (1) $2x^2+3y^2$ (2) $4x^2+9y^2$ (3) $4x^2+6xy+9y^2$ (4) $4x^2+12xy+9y^2$.

54. The square root of the quantity 2.4964 is (1) 1.2482 (2) .12482 (3) 1.058 (4) 1.58.

55. 1 cm. equals about (1) .1 in. (2) .2 in. (3) .4 in. (4) 1 in.

56. If $x^2 - 9 = 0$, x equals (1) 1 (2) ± 3 (3) 3 (4) -3.

57. A tank can be filled by one pipe in 10 minutes and by another in 15 minutes. How long will it take to fill the tank if both pipes are opened? (1) 4 (2) 5 (3) 6 (4) 7.5.

58. The intersection of two planes forms a (1) point (2) line (3) tangent (4) sector.

59. The factors of a^3-b^3 are (1) $(a-b)(a^2-ab-b^2)$ (2) $(a-b)(a^2+ab+b^2)$ (3) $(a-b)(a^2+2ab+b^2)$ (4) $(a-b)(a+b)(a-b)$.

60. $2.246 \div \sqrt{.01} =$ (1) .2256 (2) 2.246 (3) 22.46 (4) 224.6.

End of Section 2.

Do not turn to Section 3 until told to do so.

Section 3

SCIENCE

1. Combustion is another name for (1) drying (2) boiling (3) burning (4) melting.

2. A prism breaks up white light into a multicolored band called a (1) fulcrum (2) plectrum (3) quantum (4) spectrum.

3. When the temperature as shown by a Centigrade thermometer is 100°, a Fahrenheit thermometer would read (1) 0° (2) 32° (3) 100° (4) 212°.

4. A crop that returns nitrates to the soil is (1) barley (2) corn (3) oats (4) clover.

5. One of the great sources of nitrates is (1) Chile (2) Borneo (3) Russia (4) India.

6. The inventor of the electromagnetic telegraph was (1) Franklin (2) Bell (3) Ohm (4) Morse.

7. An animal that suckles its young is called (1) a rodent (2) a ruminant (3) an ungulate (4) a mammal.

8. The velocity of light in miles per second is about (1) 1100 (2) 186,000 (3) 240,000 (4) 13,000,000.

9. The structures in the germ cell which bear the determiners of the unit characters of heredity are the (1) genes (2) mutants (3) nuclei (4) placenta.

10. The formula for hydrochloric acid is (1) NaOH (2) HCl (3) HNO_3 (4) H_2SO_4.

11. The length of a meter in inches is about (1) 12 (2) 27 (3) 39 (4) 72.

12. A chemical element characteristic of the proteins but not found in carbohydrates or fats is (1) oxygen (2) carbon (3) nitrogen (4) hydrogen.

13. As you approach in a speeding train, the ringing of the crossing bell (1) rises in pitch (2) seems to be coming from all directions (3) becomes a hissing sound (4) drops in pitch.

14. The center of our universe is the (1) earth (2) moon (3) sun (4) center of the earth.

15. The force needed to raise a weight of 1200 pounds on a hydraulic press whose piston areas stand in the ratio of 1:6 is (1) 100 lb. (2) 200 lb. (3) 300 lb. (4) 7200 lb.

16. A famous astronomer was (1) Agassiz (2) Copernicus (3) Huxley (4) Lamarck.

17. The common grass frog should be classified as (1) a fish (2) an amphibian (3) a mammal (4) a reptile.

18. One of the first telescopes was made by (1) Galileo (2) Newton (3) Kepler (4) Archimedes.

19. When it is noon in San Francisco it is 2 P.M. in (1) Chicago (2) New York (3) Denver (4) Honolulu.

20. A gas which supports combustion is (1) hydrogen (2) nitrogen (3) carbon dioxide (4) oxygen.

21. Mendel is chiefly noted for his studies of (1) bacteria (2) heredity (3) cell structure (4) feeble-mindedness.

22. Low voltage alternating currents are "stepped up" by means of (1) interrupters (2) condensers (3) rheostats (4) transformers.

23. On a weather map the lines connecting the places having the same barometric pressure are called (1) isobars (2) isotherms (3) thermographs (4) barographs.

24. $H_2SO_4 + BaCl_2 = 2HCl$ and (1) H_2O (2) $Ba(OH)_2$ (3) SO_3 (4) $BaSO_4$.

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25. A collection of tissues specialized for a definite function is called (1) an organism (2) a cell (3) an organ (4) a tissue.

26. A dry cleaning fluid used because it is not inflammable is (1) carbon sulfide (2) carbon tetrachloride (3) ethyl alcohol (4) sodium hydroxide.

27. A substance often used in testing for carbon dioxide is (1) ferrous sulfate (2) lime water (3) silver chloride (4) Fehling's solution.

28. A tarantula is classified as (1) a centipede (2) an insect (3) a crustacean (4) a spider.

29. The most chemically reactive constituent of the air is (1) nitrogen (2) argon (3) oxygen (4) carbon dioxide.

30. Substances which hasten a chemical action without themselves undergoing any chemical change are called (1) catalysts (2) electrolytes (3) allotropes (4) anhydrides.

31. An example of the halogen group of elements is (1) sodium (2) mercury (3) bromine (4) silver.

32. An example of a chemical change is the (1) oxidation of sugar (2) dissolving of salt (3) osmosis of glucose (4) exchange of gases in the lungs.

33. The collection of hydrogen on the copper plate of a galvanic cell is called (1) hydrogenation (2) adhesion (3) polarization (4) insulation.

34. The pitch of a sound depends upon its (1) amplitude (2) frequency (3) intensity (4) velocity.

35. "Mature" rivers are characterized by (1) V-shaped valleys (2) numerous waterfalls (3) swift currents (4) U-shaped valleys.

36. The circulation of the blood was discovered by (1) Harvey (2) Newton (3) Weismann (4) Pasteur.

37. An instrument depending on atmospheric pressure for its operation is the (1) telephone (2) hydraulic press (3) thermometer (4) siphon.

38. Glucose is converted to glycogen and stored for future use in the (1) pancreas (2) gall bladder (3) liver (4) spleen.

39. Ore known as pitchblende yields (1) aluminum (2) mercury (3) iron (4) radium.

40. The number of calories of heat needed to raise the temperature of 10 grams of water from 15° to 16° is (1) 1 (2) 10 (3) 100 (4) 1000.

41. The attraction between molecules of a body is called (1) adhesion (2) magnetism (3) inertia (4) cohesion.

42. The percentage of O_2 in air is about (1) 4% (2) 20% (3) 50% (4) 80%.

43. Barometers are used to measure (1) humidity (2) rainfall (3) air pressure (4) gravity.

44. Electric charges can be detected by means of (1) a condenser (2) an electroscope (3) a dynamo (4) a voltaic cell.

45. Another term for an anticyclone is a (1) low-pressure area (2) tornado (3) high-pressure area (4) typhoon.

46. The processes by which foods are incorporated into living matter are termed (1) absorption (2) circulation (3) digestion (4) assimilation.

47. Seven hundred and forty-six watts is equivalent to one (1) foot pound (2) kilowatt (3) dyne (4) horsepower.

48. Hydrogen may be made by the action of hydrochloric acid on (1) zinc (2) sodium chloride (3) copper sulfate (4) potassium chlorate.

49. Color in light corresponds to (1) quality (2) intensity (3) amplitude (4) pitch in sound.

50. $pv = p'v'$ refers to (1) pendular vibrations (2) gas pressures (3) falling bodies (4) levers.

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51. Of the following gases, which is used in electric light bulbs in addition to nitrogen to increase the brilliancy and life of the filament? (1) argon (2) neon (3) krypton (4) xenon.

52. The planet which is nearest the sun is (1) Earth (2) Mars (3) Mercury (4) Jupiter.

53. The inertia of a body is directly proportional to its (1) size (2) mass (3) momentum (4) acceleration.

54. If an ordinary thermometer is suddenly plunged into hot water the mercury first falls slightly (and then rises rapidly) because of (1) expansion of glass (2) expansion of mercury (3) contraction of glass (4) contraction of mercury.

55. $CO_2 + Ca(OH)_2 = H_2O$ and (1) $CaCO_3$ (2) $2CO_2$ (3) CaOH (4) $CaCO_2$.

56. The intensity of light varies (1) inversely as the distance (2) directly as the square of the distance (3) inversely as the square of the distance (4) inversely as the square root of the distance.

57. A beam of light striking a mirror at an angle of 30° is reflected at an angle of (1) 15° (2) 30° (3) 35° (4) 150°.

58. A ring-shaped island of coral is called (1) a fiord (2) a tundra (3) an atoll (4) a pampas.

59. The process of passing heat from one molecule to another is known as (1) absorption (2) conduction (3) convection (4) radiation.

60. The internal secretion of the pancreas is (1) adrenalin (2) epinephin (3) insulin (4) ptyalin.

61. The tubes within an insect through which air passes are the (1) spiracles (2) mandibles (3) maxillae (4) tracheae.

62. Pepsin, a constituent of the gastric juice, acts upon (1) fats (2) carbohydrates (3) proteins (4) hydrocarbons.

63. The miner's lamp was invented by (1) Davy (2) Bunsen (3) Edison (4) Marconi.

64. Gasoline has been made from coal by (1) oxidation (2) hydrogenation (3) liquefaction (4) dissolution.

65. The most ductile of these metals is (1) iron (2) copper (3) lead (4) platinum.

66. Acidity of a solution may be measured by (1) titration (2) sublimation (3) filtration (4) substitution.

67. The part of the central nervous system which contains the nerve centers controlling respiration and circulation is the (1) cerebellum (2) cerebrum (3) cranium (4) medulla oblongata.

68. A substance often used in testing for chlorides is (1) iodine (2) silver nitrate (3) ferrous sulfate (4) barium chloride.

69. An example of an igneous rock is (1) granite (2) marble (3) sandstone (4) limestone.

70. Acids can be distinguished from bases by means of (1) catalyzers (2) anhydrides (3) indicators (4) colloids.

71. When a solid changes to a gas without melting first, it is said to (1) condense (2) humidify (3) sublimate (4) fuse.

72. Nitric acid can be made from ammonia by (1) electrolysis (2) reduction (3) neutralization (4) oxidation.

73. The negative pole of the common storage battery is made of (1) lead (2) zinc (3) carbon (4) copper.

74. One degree of longitude at the equator equals about (1) 45 mi. (2) 70 mi. (3) 24 mi. (4) 360 mi.

75. Trees which shed their leaves in the fall are (1) angiosperms (2) annuals (3) deciduous (4) gymnosperms.

End of Section 3.

Do not turn to Section 4 until told to do so.

Section 4

HISTORY AND SOCIAL STUDIES

1. "Free trade" means (1) protective tariff (2) revenue (3) equal competition of foreign and domestic goods (4) ad valorem tax.

2. The chief purpose of the Monroe Doctrine was to (1) prevent foreigners from coming to the U. S. (2) prevent European control in the Western Hemisphere (3) protect the rights of American investors (4) protect the new world against European propaganda.

3. The economic reward of the laborer is (1) profit (2) interest (3) capital (4) wages.

4. The operation of the (1) railroads (2) telegraph system (3) postal system (4) public utilities is an example of a government monopoly.

5. New York was settled by the (1) French (2) Dutch (3) English (4) Spanish.

6. A name prominently mentioned in connection with the Red Cross in the U. S. was (1) Clara Barton (2) Jeannette Rankin (3) Leonard Wood (4) Jane Addams.

7. The term "carpet bagger" is associated with the (1) Florida land boom (2) reconstruction days (3) forty-niners (4) Thermidorian reaction.

8. (1) England (2) Portugal (3) France (4) Spain at one time controlled most of the southern half of the Western Hemisphere.

9. The Magna Charta is part of (1) Roman law (2) English law (3) the American Constitution (4) French jurisprudence.

10. A poll tax is a tax on (1) a male voter (2) personal property (3) land (4) income.

11. Aristotle was a great (1) dramatist (2) general (3) philosopher (4) orator.

12. Ft. Dearborn was the beginning of the present city of (1) Chicago (2) St. Louis (3) New Orleans (4) Philadelphia.

13. The president of the Confederacy was (1) Robert E. Lee (2) "Stonewall" Jackson (3) Jefferson Davis (4) George B. McClellan.

14. (1) Egypt (2) Rome (3) Russia (4) Persia most influenced the development of law.

15. The first transcontinental railroad was the (1) Southern Pacific (2) Santa Fe (3) Northern Pacific (4) Union Pacific.

16. The "Rough Riders" became famous during the (1) days of the open cattle range (2) time of the "Pony Express" (3) Spanish-American War (4) War of 1812.

17. The policy of the U. S. toward Latin America since 1932 has been characterized by (1) enforcement of the Monroe Doctrine (2) exploration (3) territorial expansion (4) hemisphere solidarity or mutual understanding.

18. The man who during the Civil War marched his army from Atlanta to the sea was (1) Sheridan (2) Grant (3) Thomas (4) Sherman.

19. A very significant population trend of recent years has been (1) from city to country (2) from city to city (3) from country to city (4) from one rural region to another.

20. Cornwallis surrendered at (1) Yorktown (2) Jamestown (3) Saratoga (4) Appomattox.

21. Craft guilds of England might be compared to our (1) political parties (2) unions (3) lodges (4) Ku Klux Klan.

22. A person prominently associated with Hull House was (1) Clara Barton (2) Jane Addams (3) Julia Lathrop (4) Mary E. Richmond.

23. The law-making body of a city is its (1) legislature (2) township board (3) municipal court (4) council.

24. The British Prime Minister in 1918 was (1) Winston Churchill (2) David Balfour (3) Lloyd George (4) Lord Northcliffe.

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25. Louisiana was purchased primarily in order to (1) get more land (2) grow more cotton (3) increase the size of the nation (4) secure a new water route for commerce.

26. The number of U. S. Senators to which each state is entitled is (1) 1 (2) 2 (3) 3 (4) determined by population.

27. Bismarck's chief work was the (1) unification of Germany (2) establishment of schools (3) establishment of freedom of the people (4) development of industry.

28. The federal principle is the voluntary surrender on the part of a state of some of its sovereign power to (1) a central government (2) a benevolent ruler (3) local units of government (4) a body of technical experts.

29. Iraq has been a center of conflict between nations because of its (1) agricultural resources (2) source of food (3) mineral resources (4) transportation facilities.

30. The document giving cities permission to organize a government is called a (1) constitution (2) resolution (3) charter (4) permit.

31. The architectural style of the great cathedral at Amiens is (1) Gothic (2) Corinthian (3) Romanesque (4) Moorish.

32. The "Open Door" policy is associated with (1) Cuba (2) Philippines (3) Japan (4) China.

33. Sutter's Mill is connected with (1) colonial days in Virginia (2) the California gold rush (3) the St. Anthony Falls at St. Paul (4) the iron rolling mills of Pittsburgh.

34. (1) The Constitution (2) the Bill of Rights (3) the Supreme Court (4) the President's order is the highest law in the U. S.

35. The war of 1812 was between (1) England and France (2) France and the United States (3) Germany and France (4) England and the United States.

36. Monopoly is based on limitation of (1) supply (2) cost (3) demand (4) price.

37. The U. S. became the world's greatest producer of iron as a result of the vast ore deposits in the region of (1) Alabama (2) Lake Superior (3) Colorado (4) the Rocky Mountains.

38. A fundamental issue in the labor union program is (1) sabotage (2) the right of labor to work (3) rioting (4) collective bargaining.

39. The three most famous ideals of the Declaration of Independence are liberty, equality, and (1) fraternity (2) the pursuit of happiness (3) religious toleration (4) security.

40. The first state to secede from the Union was (1) South Carolina (2) Virginia (3) Georgia (4) Missouri.

41. The Spanish-American War started in (1) 1890 (2) 1895 (3) 1898 (4) 1902.

42. A war with Mexico was fought by the U. S. in (1) 1789 (2) 1848 (3) 1898 (4) 1879.

43. The only non-Protestant English colony in America was (1) Pennsylvania (2) Rhode Island (3) New York (4) Maryland.

44. The Civil War ended in (1) 1861 (2) 1865 (3) 1867 (4) 1870.

45. The President is elected by (1) Congress (2) the governors of the states (3) the people (4) the electoral college.

46. Poland has repeatedly lost its place as an independent nation through (1) revolution (2) weak colonial policy (3) partition by neighboring powers (4) lack of democratic principles.

47. The (1) income tax (2) anti-vivisection law (3) referendum (4) protective tariff is a safeguard of the people's rights.

48. The most brilliant writer in France during the 18th century was (1) Molière (2) Dumas (3) Bunyan (4) Voltaire.

49. The first "trust" was the (1) U. S. Steel Company (2) the Union Pacific Railroad (3) the Standard Oil Company (4) the Western Union.

50. An American contribution to the industrial revolution was the invention of the (1) reaper (2) electric light bulb (3) Atlantic cable (4) automobile.

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51. Our common numerals are usually said to have originated in (1) Arabia (2) Egypt (3) Phoenicia (4) Greece.

52. The names of Dante and Petrarch are associated with the (1) unification of Italy (2) development of the modern Italian language (3) "Patrimony of St. Peter" (4) Byzantine Empire.

53. The Roman Empire fell to the barbarians in (1) 150 B. C. (2) 150 A. D. (3) 476 A. D. (4) 1000 A. D.

54. American business between 1865 and 1900 was characterized by (1) small industries (2) rigid federal regulation (3) rapid growth and consolidation (4) rapid growth of chain stores.

55. It is very probable that the Argentine in 1960 will continue to be an agricultural competitor rather than becoming an industrial competitor of the U. S. because (1) she produces the products we need (2) she lacks power resources (3) she lacks coal and iron for industry (4) her population is not suited for manufacturing.

56. (1) Japan (2) India (3) Canada (4) Australia has about one-half the area of the United States and about twice the population of the U. S.

57. The zoning of a city is especially valuable for (1) city beautification (2) law enforcement (3) traffic regulation (4) protection of property values.

58. The 18th amendment dealt with (1) income tax (2) prohibition (3) woman suffrage (4) immigration.

59. (1) Frederich Geiber (2) Wilhelm Goetz (3) Eugene V. Debs (4) Karl Marx was a leading German Socialist.

60. Hannibal was a general of the (1) Romans (2) Persians (3) Carthaginians (4) Goths.

61. The incident which started the first World War occurred at (1) Sarajevo (2) Prague (3) Basra (4) Santiago.

62. The process of changing free goods into economic goods is called (1) production (2) invention (3) consumption (4) distribution.

63. The name of (1) Marco Polo (2) Thomas Jefferson (3) John Hay (4) Franklin Roosevelt is associated with the "open door policy" in China.

64. Price is essential to (1) consumption (2) production (3) raising crops (4) exchange.

65. The effect of the Industrial Revolution was first felt in (1) transportation (2) agricultural machinery (3) the manufacture of cloth (4) building construction.

66. The name of Robert Clive is associated with (1) India (2) Union of South Africa (3) Australia (4) English journalism.

67. Education is particularly important in a democracy because (1) nonreaders cannot read the laws (2) the people make their own laws (3) an education is required for office holders (4) radicalism results from lack of education.

68. Passports are issued by the (1) Department of State (2) Department of Commerce (3) Department of Interior (4) War Department.

69. In the past European nations have had the greatest number of "spheres of influence" in (1) China (2) India (3) Turkestan (4) Japan.

70. The "Third Estate" suggests the (1) nobility (2) bourgeosie and peasantry (3) clergy (4) king's family.

71. Demosthenes was a great (1) ruler (2) dramatist (3) philosopher (4) orator.

72. The chief effect of French diplomacy between 1789 and 1815 was to (1) establish better trade relations (2) spread revolutionary ideas to the rest of Europe (3) win sympathy for Napoleon (4) guarantee the monarchial form of government in Europe.

73. (1) Increased impetus to English Nationalism (2) England's loss of most of her European territory (3) successful invasion of England by France (4) increased dependence of the English crown upon the middle class was not a result of the Hundred Years War.

74. The "Hanseatic League" is associated with (1) colonization (2) commerce (3) Italian cities (4) democratic government.

75. "The golden age of the cattle drive" was the period (1) 1760-1800 (2) 1825-1850 (3) 1869-1879 (4) 1880-1900.

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76. The French at the battle of Quebec were under the command of (1) Wolfe (2) Burgoyne (3) Braddock (4) Montcalm.

77. Cicero delivered his orations against Catiline in (1) 271 B. C. (2) 63 B. C. (3) 381 B. C. (4) 267 A. D.

78. Cavour is associated with the (1) unification of Italy (2) French Revolution (3) partition of Poland (4) first World War.

79. The populist movement in America (1) proposed needed reforms (2) secured the Australian ballot (3) curtailed monopolies (4) tried to secure Government ownership of railroads.

80. (1) The President (2) the Supreme Court (3) the Constitution (4) the Bill of Rights prevents Congress from passing any kind of legislation it chooses.

81. The disease most widespread in densely populated areas is (1) typhoid fever (2) diphtheria (3) scarlet fever (4) tuberculosis.

82. The country which lost the most territory at the close of the first World War was (1) Germany (2) Austria-Hungary (3) Bulgaria (4) Russia.

83. In World War I, Haig commanded the forces of (1) Russia (2) France (3) Italy (4) England.

84. The Magna Charta was signed in (1) 1066 (2) 1215 (3) 1612 (4) 1648.

85. The battle of Thermopylae was fought in (1) 480 B. C. (2) 166 B. C. (3) 100 B. C. (4) 100 A. D.

86. The "Bonus Bill" first became a problem under President (1) Coolidge (2) Harding (3) Hoover (4) Roosevelt.

87. A code of laws was organized by (1) Napoleon (2) Henry IV (3) Voltaire (4) Richelieu.

88. (1) Humanitarianism (2) international cooperation (3) national sovereignty (4) decline of nationalism best characterizes the attitude of nations between 1900 and 1939.

89. Henry George is associated with the (1) growth of unionism (2) development of natural resources (3) settlement of Western land (4) the Single Tax program.

90. Between 1890 and 1920 the increase in emigration to the United States was greatest from (1) Central Europe (2) Northern Europe (3) Southern Europe (4) the British Isles.

91. The most significant factor in the South's struggle back to prosperity following the Civil War was its (1) leaders experienced in government (2) undamaged industrial areas (3) predominantly agricultural region (4) freed Negro population.

92. Francis Drake visited America as a (1) colonizer (2) pirate (3) trader (4) royal governor.

93. Plutarch was a great (1) biographer (2) scientist (3) mathematician (4) sculptor.

94. (1) Hiram Johnson (2) Nicholas Murray Butler (3) Col. House (4) William J. Bryan opposed the U. S. joining the League of Nations.

95. Zoroaster was the prophet of the (1) Hebrews (2) Egyptians (3) Persians (4) Spartans.

96. The American who was nominated for president of the Permanent Court of International Justice was (1) Elihu Root (2) Charles Hughes (3) Frank Lowden (4) William Howard Taft.

97. (1) John Calvin (2) Zwingli (3) Melanchthon (4) Donizetti was not associated with the Protestant Reformation.

98. As a result of the Russo-Japanese War (1) Japan gained Manchuria (2) Russia gained Korea (3) Russia and Japan agreed to stay out of Manchuria (4) Russia lost Port Arthur.

99. Massasoit is associated with (1) Cortez in Mexico (2) the English in New England (3) the Portuguese in India (4) the colonists at Jamestown.

100. The Romans can be described best as having been (1) artistic (2) practical (3) imaginative (4) idealistic.

End of test; close your paper.

1950
REVISION

MOONEY PROBLEM CHECK LIST

Ross L. Mooney
Bureau of Educational Research
Ohio State University

H HIGH SCHOOL FORM

Cir.	Tot.
HPD	
FLE	
SRA	
CSM	
SPR	
PPR	
MR	
HF	
FVE	
ASW	
CTP	
TOTAL. . . .	

Age.....Date of birth.....Boy.....Girl.....

Your class, or the number
of your grade in school.....

Name of school.....

Name of the person to whom
you are to turn in this paper.....

Your name or other identification,
if desired.....

Date.....

DIRECTIONS

This is not a test. It is a list of problems which are often troubling students of your age—problems of health, money, social life, home relations, religion, vocation, school work, and the like. Some of these problems are likely to be troubling you and some are not. As you read the list, pick out the problems which are troubling you. There are three steps in what you do.

First Step: Read through the list slowly, and when you come to a problem which suggests something which is troubling you, *underline* it. For example, if you are troubled by the fact that you are underweight, underline the first item like this, "1. Being underweight." Go through the whole list in this way, marking the problems which are troubling you.

Second Step: When you have completed the first step, look back over the problems you have underlined and pick out the ones which you feel are *troubling you most.* Show these problems *by making a circle* around the numbers in front of them. For example, if, as you look back over all the problems you have underlined you decide that "Being underweight" is one of those which troubles you most, then make a circle around the number in front of the item, like this, "(1.) Being underweight."

Third Step: When you have completed the second step, answer the summarizing questions on pages 5 and 6.

50-125T
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First Step: Read the list slowly, and as you come to a problem which troubles you, underline it.

1. Being underweight
2. Being overweight
3. Not getting enough exercise
4. Getting sick too often
5. Tiring very easily

6. Needing to learn how to save money
7. Not knowing how to spend my money wisely
8. Having less money than my friends have
9. Having to ask parents for money
10. Having no regular allowance (or income)

11. Slow in getting acquainted with people
12. Awkward in meeting people
13. Being ill at ease at social affairs
14. Trouble in keeping a conversation going
15. Unsure of my social etiquette

16. Having dates
17. Awkward in making a date
18. Not mixing well with the opposite sex
19. Not being attractive to the opposite sex
20. Not being allowed to have dates

21. Getting into arguments
22. Hurting people's feelings
23. Being talked about
24. Being made fun of
25. Being "different"

26. Losing my temper
27. Taking some things too seriously
28. Being nervous
29. Getting excited too easily
30. Worrying

31. Not going to church often enough
32. Not living up to my ideal
33. Puzzled about the meaning of God
34. Doubting some of the religious things I'm told
35. Confused on some of my religious beliefs

36. Worried about a member of the family
37. Sickness in the family
38. Parents sacrificing too much for me
39. Parents not understanding me
40. Being treated like a child at home

41. Unable to enter desired vocation
42. Doubting the wisdom of my vocational choice
43. Needing to know my vocational abilities
44. Doubting I can get a job in my chosen vocation
45. Wanting advice on what to do after high school

46. Missing too many days of school
47. Being a grade behind in school
48. Adjusting to a new school
49. Taking the wrong subjects
50. Not spending enough time in study

51. Having no suitable place to study at home
52. Family not understanding what I have to do in school
53. Wanting subjects not offered by the school
54. Made to take subjects I don't like
55. Subjects not related to everyday life

56. Frequent headaches
57. Weak eyes
58. Often not hungry for my meals
59. Not eating the right food
60. Gradually losing weight

61. Too few nice clothes
62. Too little money for recreation
63. Family worried about money
64. Having to watch every penny I spend
65. Having to quit school to work

66. Not enough time for recreation
67. Not enjoying many things others enjoy
68. Too little chance to read what I like
69. Too little chance to get out and enjoy nature
70. Wanting more time to myself

71. No suitable places to go on dates
72. Not knowing how to entertain on a date
73. Too few dates
74. Afraid of close contact with the opposite sex
75. Embarrassed by talk about sex

76. Wanting a more pleasing personality
77. Not getting along well with other people
78. Worrying how I impress people
79. Too easily led by other people
80. Lacking leadership ability

81. Daydreaming
82. Being careless
83. Forgetting things
84. Being lazy
85. Not taking some things seriously enough

86. Parents making me go to church
87. Disliking church services
88. Doubting the value of worship and prayer
89. Wanting to feel close to God
90. Affected by racial or religious prejudice

91. Not living with my parents
92. Parents separated or divorced
93. Father or mother not living
94. Not having any fun with mother or dad
95. Feeling I don't really have a home

96. Needing to decide on an occupation
97. Needing to know more about occupations
98. Restless to get out of school and into a job
99. Can't see that school work is doing me any good
100. Want to be on my own

101. Not really interested in books
102. Unable to express myself well in words
103. Vocabulary too limited
104. Trouble with oral reports
105. Afraid to speak up in class discussions

106. Textbooks too hard to understand
107. Teachers too hard to understand
108. So often feel restless in classes
109. Too little freedom in classes
110. Not enough discussion in classes

111. Not as strong and healthy as I should be
112. Not getting enough outdoor air and sunshine
113. Not getting enough sleep
114. Frequent colds
115. Frequent sore throat

116. Wanting to earn some of my own money
117. Wanting to buy more of my own things
118. Needing money for education after high school
119. Needing to find a part-time job now
120. Needing a job during vacations

121. Nothing interesting to do in my spare time
122. Too little chance to go to shows
123. Too little chance to enjoy radio or television
124. Too little chance to pursue a hobby
125. Nothing interesting to do in vacation

126. Disappointed in a love affair
127. Girl friend
128. Boy friend
129. Deciding whether to go steady
130. Wondering if I'll find a suitable mate

131. Slow in making friends
132. Being timid or shy
133. Feelings too easily hurt
134. Getting embarrassed too easily
135. Feeling inferior

136. Moodiness, "having the blues"
137. Trouble making up my mind about things
138. Afraid of making mistakes
139. Too easily discouraged
140. Sometimes wishing I'd never been born

141. Wondering how to tell right from wrong
142. Confused on some moral questions
143. Parents old-fashioned in their ideas
144. Wanting to understand more about the Bible
145. Wondering what becomes of people when they die

146. Being criticized by my parents
147. Parents favoring a brother or sister
148. Mother
149. Father
150. Death in the family

151. Choosing best subjects to take next term
152. Choosing best subjects to prepare for college
153. Choosing best subjects to prepare for a job
154. Getting needed training for a given occupation
155. Wanting to learn a trade

156. Not getting studies done on time
157. Not liking school
158. Not interested in some subjects
159. Can't keep my mind on my studies
160. Don't know how to study effectively

161. Not enough good books in the library
162. Too much work required in some subjects
163. Not allowed to take some subjects I want
164. Not getting along with a teacher
165. School is too strict

166. Poor complexion or skin trouble
167. Poor posture
168. Too short
169. Too tall
170. Not very attractive physically

171. Living too far from school
172. Relatives living with us
173. Not having a room of my own
174. Having no place to entertain friends
175. Having no car in the family

176. Not being allowed to use the family car
177. Not allowed to go around with the people I like
178. So often not allowed to go out at night
179. In too few student activities
180. Too little social life

181. Being in love
182. Loving someone who doesn't love me
183. Deciding whether I'm in love
184. Deciding whether to become engaged
185. Needing advice about marriage

186. Being criticized by others
187. Being called "high-hat" or "stuck-up"
188. Being watched by other people
189. Being left out of things
190. Having feelings of extreme loneliness

191. Afraid to be left alone
192. Too easily moved to tears
193. Failing in so many things I try to do
194. Can't see the value of most things I do
195. Unhappy too much of the time

196. Can't forget some mistakes I've made
197. Bothered by ideas of heaven and hell
198. Afraid God is going to punish me
199. Troubled by the bad things other kids do
200. Being tempted to cheat in classes

201. Being an only child
202. Not getting along with a brother or sister
203. Parents making too many decisions for me
204. Parents not trusting me
205. Wanting more freedom at home

206. Deciding whether or not to go to college
207. Needing to know more about colleges
208. Needing to decide on a particular college
209. Afraid I won't be admitted to a college
210. Afraid I'll never be able to go to college

211. Trouble with mathematics
212. Weak in writing
213. Weak in spelling or grammar
214. Trouble in outlining or note taking
215. Trouble in organizing papers and reports

216. Classes too dull
217. Teachers lacking personality
218. Teachers lacking interest in students
219. Teachers not friendly to students
220. Not getting personal help from the teachers

221. Trouble with my hearing
222. Speech handicap (stuttering, etc.)
223. Allergies (hay fever, asthma, hives, etc.)
224. Glandular disorders (thyroid, lymph, etc.)
225. Menstrual or female disorders

226. Parents working too hard
227. Not having certain conveniences at home
228. Not liking the people in my neighborhood
229. Wanting to live in a different neighborhood
230. Ashamed of the home we live in

231. Wanting to learn how to dance
232. Wanting to learn how to entertain
233. Wanting to improve myself culturally
234. Wanting to improve my appearance
235. Too careless with my clothes and belongings

236. Going with someone my family won't accept
237. Afraid of losing the one I love
238. Breaking up a love affair
239. Wondering how far to go with the opposite sex
240. Wondering if I'll ever get married

241. Wanting to be more popular
242. Disliking someone
243. Being disliked by someone
244. Avoiding someone I don't like
245. Sometimes acting childish or immature

246. Being stubborn or obstinate
247. Tending to exaggerate too much
248. Having bad luck
249. Not having any fun
250. Lacking self-confidence

251. Sometimes lying without meaning to
252. Swearing, dirty stories
253. Having a certain bad habit
254. Being unable to break a bad habit
255. Lacking self-control

256. Clash of opinions between me and my parents
257. Talking back to my parents
258. Parents expecting too much of me
259. Wanting love and affection
260. Wishing I had a different family background

261. Lacking training for a job
262. Lacking work experience
263. Afraid of unemployment after graduation
264. Doubting ability to handle a good job
265. Don't know how to look for a job

266. Don't like to study
267. Poor memory
268. Slow in reading
269. Worrying about grades
270. Worrying about examinations

271. Teachers not considerate of students' feelings
272. Teachers not practicing what they preach
273. Too many poor teachers
274. Grades unfair as measures of ability
275. Unfair tests

276. Poor teeth
277. Nose or sinus trouble
278. Smoking
279. Trouble with my feet
280. Bothered by a physical handicap

281. Borrowing money
282. Working too much outside of school hours
283. Working for most of my own expenses
284. Getting low pay for my work
285. Disliking my present job

286. Too little chance to do what I want to do
287. Too little chance to get into sports
288. No good place for sports around home
289. Lacking skill in sports and games
290. Not using my leisure time well

291. Thinking too much about sex matters
292. Concerned over proper sex behavior
293. Finding it hard to control sex urges
294. Worried about sex diseases
295. Needing information about sex matters

296. Being too envious or jealous
297. Speaking or acting without thinking
298. Feeling that nobody understands me
299. Finding it hard to talk about my troubles
300. No one to tell my troubles to

301. Too many personal problems
302. Having memories of an unhappy childhood
303. Bothered by bad dreams
304. Sometimes bothered by thoughts of insanity
305. Thoughts of suicide

306. Sometimes not being as honest as I should be
307. Getting into trouble
308. Giving in to temptations
309. Having a troubled or guilty conscience
310. Being punished for something I didn't do

311. Friends not welcomed at home
312. Family quarrels
313. Unable to discuss certain problems at home
314. Wanting to leave home
315. Not telling parents everything

316. Not knowing what I really want
317. Needing to plan ahead for the future
318. Family opposing some of my plans
319. Afraid of the future
320. Concerned about military service

321. Getting low grades
322. Just can't get some subjects
323. Not smart enough
324. Afraid of failing in school work
325. Wanting to quit school

326. School activities poorly organized
327. Students not given enough responsibility
328. Not enough school spirit
329. Lunch hour too short
330. Poor assemblies

TOTAL. . . .

Cir.	Tot.
HPD	
FLE	
SRA	
CSM	
SPR	
PPR	
MR	
HF	
FVE	
ASW	
CTP	

Second Step: Look back over the items you have underlined and circle the numbers in front of the problems which are troubling you most.

Third Step: Pages 5 and 6

Third Step: Answer the following four questions.

QUESTIONS

1. Do you feel that the items you have marked on the list give a well-rounded picture of your problems? .....Yes. .....No. Add anything further you may care to say to make the picture more complete.

2. How would you summarize your chief problems in your own words? Write a brief summary.

(Questions are continued on next page→)

3. Would you like to have more chances in school to write out, think about, and discuss matters of personal concern to you? .....Yes. .....No. Please explain how you feel on this question.

4. If you had the chance, would you like to talk to someone about some of the problems you have marked on the list? .....Yes. .....No. If so, do you have any particular person(s) in mind with whom you would like to talk? .....Yes. .....No.

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KUDER PREFERENCE RECORD

VOCATIONAL

FORM CM

228 SO. WABASH AVENUE, CHICAGO 4, ILL.

Machine-scoring

KUDER PREFERENCE RECORD

VOCATIONAL

FORM CM

Prepared by **G. Frederic Kuder**, Editor, *Educational and Psychological Measurement*
Professor of Psychology, Duke University

This blank is used for obtaining a record of your preferences. It is not a test. There are no right or wrong answers. An answer is right if it is true of you.

A number of activities are listed in groups of three. Read over the three activities in each group. Decide which of the three activities you like most. You have been given a separate answer sheet; each column on the answer sheet corresponds to a page in the booklet. When the answer sheet is correctly lined up with the booklet, there are two spaces for marking answers on the same line as each activity. Make a heavy, black mark with the special pencil in the left-hand space following the activity you like **most.** Then decide which activity you like **least,** and make a heavy, black mark in the right-hand space following this activity. Be sure that the letter by the space you mark is the same as the letter in front of the activity in the booklet.

In the examples below, the person answering has indicated for the first group of three activities, that he would usually like to **visit a museum most,** and **browse in a library least.** In the second group of three activities he has indicated he would ordinarily like to **collect autographs most** and **collect butterflies least.**

EXAMPLES

Put your answers to these questions in column O.

P. **Visit an art gallery** . . . . . .

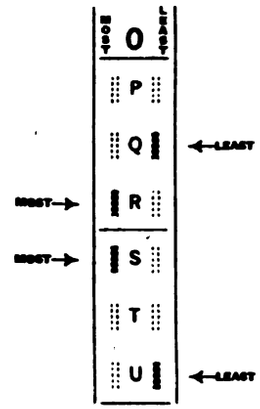
Q. **Browse in a library** . . . . . .

R. **Visit a museum** . . . . . .

S. **Collect autographs** . . . . . .

T. **Collect coins** . . . . . .

U. **Collect butterflies** . . . . . .



Some of the activities involve preparation and training. In such cases, please suppose that you could first have the necessary training. Do not choose an activity merely because it is new or unusual. Choose what you would like to do if you were equally familiar with all of the activities.

In some cases you may like all three activities in a group. In other cases you may find all three activities unpleasant. Please show what your first and last choices would be, however, if you *had* to choose.

Some activities may seem trivial or foolish. Please indicate your choices, anyway, for all of the groups. Otherwise we cannot give you a complete report. Your answers will be kept strictly confidential.

Please do not spend a lot of time on one group. Put down your first reaction and go on. Do not discuss the activities with anyone. An answer is worthless unless it is your own judgment.

If you want to change an answer, erase your first answer completely; then mark the new answer in the usual way. Be sure that you mark all your answers with the special pencil.

Now go ahead with the activities on the next page.

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A. Take special notice of people when you are traveling . . . . . .

B. Take special notice of the scenery when you are traveling . . . . . .

C. Take special notice of the crops when you are traveling . . . . . .

D. Read lessons to a blind student . . . . . .

E. Keep a record of traffic past a certain point . . . . . .

F. Interview people in a survey of public opinion . . . . . .

G. Go to the amusements at a country fair . . . . . .

H. See the exhibits of canned goods at a country fair . . . . . .

J. See the livestock at a country fair . . . . . .

K. Exercise in a gymnasium . . . . . .

L. Go fishing . . . . . .

M. Play baseball . . . . . .

N. Browse in a library . . . . . .

P. Watch a rehearsal of a large orchestra . . . . . .

Q. Visit an aquarium . . . . . .

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R. Collect the signatures of famous people . . . . . .

S. Collect butterflies . . . . . .

T. Collect pieces of different kinds of wood . . . . . .

U. Visit an exhibit of famous paintings . . . . . .

V. Visit an exhibit of various means of transportation . . . . . .

W. Visit an exhibit of laboratory equipment . . . . . .

X. Sell vegetables . . . . . .

Y. Be an organist . . . . . .

Z. Raise vegetables . . . . . .

a. Be the chairman of the social committee for a club dance . . . . . .

b. Decorate the hall for the dance . . . . . .

c. Send out the announcements of the dance . . . . . .

d. Visit a museum of science . . . . . .

e. Visit an advertising agency . . . . . .

f. Visit a factory in which typewriters are made . . . . . .

GO ON TO THE NEXT PAGE

g. Read a story to a sick person . . . . . .

h. Teach tricks to a dog . . . . . .

j. Take apart a toy that won't work to see how to repair it . . . . . .

k. Take a course in sketching . . . . . .

l. Take a course in biology . . . . . .

m. Take a course in metal working . . . . . .

n. Build bird houses . . . . . .

p. Write articles about birds . . . . . .

q. Draw sketches of birds . . . . . .

r. Tinker with a broken sewing machine . . . . . .

s. Play a piano . . . . . .

t. Sketch an interesting scene . . . . . .

A. Listen to a radio program on how to grow good fruit . . . . . .

B. Listen to a radio program on how to make things of plastic . . . . . .

C. Listen to a radio program on how to get natural photographs of wild animals . .

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D. Write a newspaper column of advice on personal problems . . . . . .

E. Raise fine dogs . . . . . .

F. Conduct studies on the effectiveness of different types of sales letters . . . . .

G. Be an authority on contract bridge . . . . . .

H. Be an authority on soil erosion . . . . . .

J. Be an authority on billboard advertising . . . . . .

K. Visit a motion picture studio . . . . . .

L. Visit a national park famous for its mountain scenery . . . . . .

M. Visit a former battlefield . . . . . .

N. Read about famous men and women in public life . . . . . .

P. Read various writers' descriptions of what an ideal world would be like . . . .

Q. Read about the lives of the early pioneers of the country . . . . . .

R. Advise people concerning improving their personalities . . . . . .

S Catch rare animals for a museum . . . . . .

T. Cash checks for people in a bank . . . . . .

GO ON TO THE NEXT PAGE

U. Belong to a group for the discussion of problems of modern life . . . . .

V. Belong to a literary discussion club . . . . . .

W. Belong to an amateur astronomy club . . . . . .

X. Associate with average people . . . . . .

Y. Associate with people who look queer and have unusual ideas . . . . .

Z. Associate with carefree people whose behavior attracts a good deal of attention .

a. Teach classes in English to applicants for citizenship . . . . . .

b. Sell stocks and bonds . . . . . .

c. Be the chief cook in a fine restaurant . . . . . .

d. Develop new varieties of flowers . . . . . .

e. Conduct advertising campaigns for florists . . . . . .

f. Take telephone orders in a florist's shop . . . . . .

g. Be the director of a group conducting research on propaganda methods . . . .

h. Be a dean in a university . . . . . .

j. Be an expert on color photography . . . . . .

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k. Draw the pictures for a history of the world . . . . . .

l. Develop a variety of pitless cherry . . . . . .

m. Coach a group that wins first place in a national dramatic contest . . . .

n. Earn part of your expenses in college by helping in a laboratory . . . . .

p. Earn part of your expenses in college by scoring examination papers . . . .

q. Earn part of your expenses in college by playing in an orchestra . . . . .

r. Write a history of the Red Cross . . . . . .

s. Search for information which would shed new light on a famous historical event

t. Write a musical comedy . . . . . .

A. Teach English . . . . . .

B. Take orders for merchandise over the telephone . . . . . .

C. Ask people's opinion over the telephone for a survey of public opinion . . .

D. Be a person who buys merchandise to be sold in a department store . . . .

E. Interview people applying for work in a store . . . . . .

F. Be a cowboy . . . . . .

GO ON TO THE NEXT PAGE

G. Be in charge of employing people for a business . . . . . .

H. Write articles about wild animals . . . . . .

J. Write a column of personal advice for a newspaper . . . . . .

K. Read about modern business methods . . . . . .

L. Read about customs of people in other countries . . . . . .

M. Read about modern farming methods . . . . . .

N. Work at a weather station in the Arctic . . . . . .

P. Work at a weather station in a city . . . . . .

Q. Work at a weather station in the mountains . . . . . .

R. Be well known as a director of scientific research . . . . . .

S. Be well known as a social worker . . . . . .

T. Be well known as a literary critic . . . . . .

U. Design the scenery for a play . . . . . .

V. Make a chemical analysis of a new toothpaste . . . . . .

W. Write an article for housewives on how to repair household appliances . . .

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X. Interview applicants for relief . . . . . .

Y. Try out different sales letters to see which type works best . . . . . .

Z. Work on the development of more efficient methods of handling office work .

a. Edit the financial news for a newspaper . . . . . .

b. Work on the development of a lighter and stronger metal . . . . . .

c. Manage a model village for factory workers . . . . . .

d. Visit a fine art museum . . . . . .

e. Visit a recreation center for people in the slums . . . . . .

f. Visit a famous medical research laboratory . . . . . .

g. Be responsible for dismissing unsatisfactory workers from a company . . . . .

h. Be responsible for talking to workers who are not doing very good work . . . .

j. Be responsible for hiring new workers for a company . . . . . .

k. Compile a dictionary of slang . . . . . .

l. Discover a cure for hay fever . . . . . .

m. Install improved office procedures in a big business . . . . . .

n. Read about the history of the drama

p. Read about early musical forms

q. Read about experiments on the effect of language on behavior

r. Make chemical analyses of new commercial products

s. Work on developing an artificial lung which will allow wearer to move about freel

t. Construct charts to show business conditions

A. Put advertising circulars in cars passing a street corner

B. Count the number of cars passing the corner at different hours

C. Direct traffic at the street corner

D. Give exercises to crippled children

E. Grow vegetables for the market

F. Teach basket-making and weaving

G. Solicit money for a community chest

H. Write daily reports of the progress of a community chest drive

J. Make a record of the community chest pledges as they come in

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K. Take charge of the arrangements for a big wedding

L. Address the invitations to a big wedding

M. Write a news article about a big wedding

N. Write novels

P. Conduct research on the psychology of music

Q. Make pottery

R. Conduct research on the effectiveness of various types of selling methods

S. Sort mail in a post office

T. Raise chickens

U. Write a newspaper column on current events

V. Give popular lectures on chemistry

W. Help young people select their vocations

X. Have someone you trust make your decisions for you most of the time

Y. Have someone you trust make your decisions for you once in a while

Z. Make all your decisions yourself

GO ON TO THE NEXT PAGE

Put your answers to this page in Column 6

a. Supervise a large department in a store . . . . . .

b. Conduct research on television . . . . . .

c. Be the director of recreation for a welfare organization . . . . . .

d. Supervise the work of several typists . . . . . .

e. Interview people who are applying for jobs . . . . . .

f. Be a private secretary . . . . . .

g. Draw a comic strip . . . . . .

h. Write advertising for electrical appliances . . . . . .

j. Operate a truck farm . . . . . .

k. Experiment with making some candy for which you don't know the recipe . .

l. Tell stories to children . . . . . .

m. Paint water colors . . . . . .

n. Do chemical research . . . . . .

p. Interview applicants for employment . . . . . .

q. Write feature stories for a newspaper . . . . . .

6

r. Sketch an interesting scene . . . . . .

s. Try out various types of sails on a toy sailboat to see which works best . . .

t. Write an essay in the style of a certain author . . . . . .

A. Sell tickets for an amateur play . . . . . .

B. Prepare the copy for the programs and tickets for the play . . . . . .

C. Be the treasurer for the play . . . . . .

D. Determine the cost of producing a new type of dishwasher . . . . . .

E. Convince financiers to back a company to make the dishwasher . . . . .

F. Teach people to use the dishwasher . . . . . .

G. Organize results from surveys of public opinion . . . . . .

H. Write editorials for a newspaper . . . . . .

J. Teach handicraft in a camp for children from the slums . . . . . .

K. Read about the causes of various diseases . . . . . .

L. Read about how leaders of industry achieved success . . . . . .

M. Read about how to raise livestock . . . . . .

GO ON TO THE NEXT PAGE

N. Go to a party where most of the people are strangers

P. Go to a party where you know most of the people

Q. Go to a party composed equally of strangers and people you know

R. Sell artists' supplies

S. Grow seed for florists

T. Raise white mice for scientists

U. Perform laboratory experiments

V. Make furniture

W. Sell insurance

X. Weigh packages and look up how much postage they should have

Y. Read manuscripts submitted for publication

Z. Try out new automobiles to find out how they can be improved

a. Be an expert on cutting jewels

b. Conduct research on developing a substitute for rubber

c. Be a radio music commentator

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d. Help in a sickroom

e. Sell musical instruments

f. Repair household appliances

g. Design flower pots

h. Supervise the manufacture of flower pots

j. Work out a more efficient method of making flower pots

k. Compute customers' bills in a cafeteria

l. Teach children to make model airplanes

m. Keep the records for a scientist conducting medical research

n. Direct a playground for underprivileged children

p. Be a cook in a restaurant

q. Sell chemical supplies

r. Assemble a good assortment of woodworking tools

s. Make a scrapbook of pictures of paintings you like

t. Get together a first-aid kit for use in an emergency

GO ON TO THE NEXT PAGE

A. Direct an amateur play . . . . . .

B. Get the programs and tickets printed for the play . . . . . .

C. Write the play . . . . . .

D. Play checkers with someone who usually beats you . . . . . .

E. Play checkers with someone who hardly ever beats you . . . . . .

F. Play checkers with someone of about your own ability . . . . . .

G. Prepare the advertising copy for a new dishwasher . . . . . .

H. Determine the cost of producing the dishwasher . . . . . .

J. Sell dishwashers . . . . . .

K. Write a column of local gossip for a newspaper . . . . . .

L. Write a column of personal advice for a newspaper . . . . . .

M. Write a column on gardening for a newspaper . . . . . .

N. Be an explorer . . . . . .

P. Be a designer . . . . . .

Q. Be an inventor . . . . . .

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R. Pick cherries . . . . . .

S. Drive a tractor on a farm . . . . . .

T. Work in a chemistry laboratory . . . . . .

U. Take a course in public speaking . . . . . .

V. Study sociology . . . . . .

W. Study story writing . . . . . .

X. Operate a calculating machine . . . . . .

Y. Put together the parts of calculating machines . . . . . .

Z. Sell calculating machines . . . . . .

a. Build boats . . . . . .

b. Settle labor disputes . . . . . .

c. Compose music . . . . . .

d. Be the most successful tractor salesman in the country . . . . . .

e. Be a certified public accountant . . . . . .

f. Be an authority on taxation . . . . . .

g. Develop more efficient office methods for business concerns . . . . . .

h. Be a practical nurse . . . . . .

j. Develop improved recipes for baked goods . . . . . .

k. Repair a broken connection on an electric iron . . . . . .

l. Build a fire in a fireplace . . . . . .

m. Type a letter for a friend . . . . . .

n. Manage a music store . . . . . .

p. Draw plans for buildings . . . . . .

q. Investigate social conditions in various communities . . . . . .

r. Take apart a new mechanical toy to see how it works . . . . . .

s. Play checkers . . . . . .

t. Play chess . . . . . .

A. Keep the books for a business concern . . . . . .

B. Develop new flowers . . . . . .

C. Consult with people on their personal problems . . . . . .

9

D. Catch fish for a living . . . . . .

E. Pick out the trees to be cut down in forests . . . . . .

F. Paint cars in a factory . . . . . .

G. Be a social service visitor . . . . . .

H. Be the social secretary of a famous person . . . . . .

J. Prepare the advertising for a publishing house . . . . . .

K. Write up a true story for a magazine . . . . . .

L. Write an article on how to raise poultry . . . . . .

M. Write an article about first aid methods . . . . . .

N. Wait on table in a restaurant . . . . . .

P. Look up addresses of lists of people in a city directory . . . . . .

Q. Take care of sick people . . . . . .

R. Model in clay . . . . . .

S. Write an article on the psychology of convincing people . . . . . .

T. Be the prompter for an amateur play . . . . . .

GO ON TO THE NEXT PAGE

U. Be a physician . . . . . .

V. Be a sculptor . . . . . .

W. Be a journalist . . . . . .

X. Answer letters of inquiry about a new make of typewriter . . . . . .

Y. Compile data on the sales of the typewriter . . . . . .

Z. Keep the typewriters in order for customers . . . . . .

a. Study propaganda methods used in war . . . . . .

b. Make a study of office-efficiency systems . . . . . .

c. Make a study of immigration into the United States . . . . . .

d. Look for errors in the draft of a report . . . . . .

e. Wash dishes . . . . . .

f. Cook a meal . . . . . .

g. Teach architecture . . . . . .

h. Solicit advertisements for a magazine . . . . . .

j. Repair watches . . . . . .

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k. Cook a meal . . . . . .

l. Mend a broken toy . . . . . .

m. Give someone a shampoo . . . . . .

n. Go on expeditions to find rare animals . . . . . .

p. Go on expeditions to fight native epidemics . . . . . .

q. Do social welfare work . . . . . .

r. Be a portrait painter . . . . . .

s. Conduct research on the causes of earthquakes . . . . . .

t. Be a mechanical engineer . . . . . .

A. Help people on relief plan their budgets . . . . . .

B. Put the proper labels on library books . . . . . .

C. Be an expert on the care of trees . . . . . .

D. Sell in a store . . . . . .

E. Work on a ranch . . . . . .

F. Work in a publishing house . . . . . .

GO ON TO THE NEXT PAGE

G. Be a professor of mathematics . . . . . .

H. Be a publicity director for a big university . . . . . .

J. Be a professor of a foreign language . . . . . .

K. Take a course in business-letter writing . . . . . .

L. Take a course in printing . . . . . .

M. Take a course in selling . . . . . .

N. Draw plans for houses . . . . . .

P. Write the advertising for new real estate developments . . . . . .

Q. Write articles about new ideas in building houses . . . . . .

R. Buy an expensive article on the installment plan . . . . . .

S. Borrow money from a friend to buy the article . . . . . .

T. Save until you can pay cash for the article . . . . . .

U. Decorate furniture . . . . . .

V. Supervise workers in sugar beet fields . . . . . .

W. Raise turkeys . . . . . .

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X. Help young people select vocations . . . . . .

Y. Design new fabrics . . . . . .

Z. Make estimates on the cost of printing books and circulars . . . . . .

a. Build a hand loom . . . . . .

b. Derive mathematical formulas for predicting trends in business . . . . . .

c. Make a survey to discover youths' attitudes on attending church . . . . . .

d. Make a life mask of a famous person . . . . . .

e. Write an article on how dealers determine what prices to charge . . . . . .

f. Compose a theme song for a radio program . . . . . .

g. Test various brands of products for a co-operative store to see which are best . .

h. Take care of the bulletin boards in a large business organization . . . . . .

j. Keep accounting machines in good order . . . . . .

k. Have people treat you as a comrade . . . . . .

l. Have people treat you as superior to them . . . . . .

m. Have people pay no attention to you . . . . . .

GO ON TO THE NEXT PAGE

n. Be a music teacher . . . . . .

p. Be an artist for an advertising agency . . . . . .

q. Conduct research on what makes jokes funny . . . . . .

r. Go shopping for a sick person . . . . . .

s. Make a jigsaw puzzle for a sick person . . . . . .

t. Read to a sick person . . . . . .

A. Help in giving first aid at a hospital . . . . . .

B. Sell flowers in a florist's shop . . . . . .

C. Be a private secretary . . . . . .

D. Edit the financial pages of a newspaper . . . . . .

E. Farm a large tract of land . . . . . .

F. Sell real estate . . . . . .

G. Take care of deat people . . . . . .

H. Draw graphs based on statistical tables . . . . . .

J. Clerk in a store . . . . . .

12

K. Be a writer . . . . . .

L. Be an authority on billboard advertising . . . . . .

M. Be a religious leader . . . . . .

N. Have work you like with high pay . . . . . .

P. Have work you like with low pay . . . . . .

Q. Have work you don't like with high pay . . . . . .

R. Teach people on relief how to keep in good health . . . . . .

S. Write feature articles for a newspaper . . . . . .

T. Be an art dealer . . . . . .

U. Be the secretary of a Congressman . . . . . .

V. Teach children to model and paint . . . . . .

W. Write articles for an art magazine . . . . . .

X. Choose your own clothes . . . . . .

Y. Get advice on choosing your clothes . . . . . .

Z. Have someone else choose your clothes . . . . . .

GO ON TO THE NEXT PAGE

a. Draw plans for bridges . . . . . .

b. Do work which requires a lot of mental arithmetic . . . . . .

c. Do clerical work . . . . . .

d. Supervise the manufacture of greeting cards . . . . . .

e. Determine the cost of producing the greeting cards . . . . . .

f. Design the greeting cards . . . . . .

g. Take a broken lock apart to see what is wrong with it . . . . . .

h. Check for errors in the copy of a report . . . . . .

j. Add columns of figures . . . . . .

k. Have someone make you look foolish . . . . . .

l. Make someone else look foolish . . . . . .

m. Not have anyone made to look foolish . . . . . .

n. Be a psychologist . . . . . .

p. Supervise the erection of bridges . . . . . .

q. Be a landscape architect . . . . . .

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r. Investigate the causes of mental ills . . . . . .

s. Study music arrangement . . . . . .

t. Study shorthand . . . . . .

A. Be a street car conductor . . . . . .

B. Be a lighthouse keeper . . . . . .

C. Be a watchman at a railroad crossing . . . . . .

D. Write advertising . . . . . .

E. Be in charge of a public library . . . . . .

F. Publish a newspaper . . . . . .

G. Take a course in cost accounting . . . . . .

H. Take a course in salesmanship . . . . . .

J. Take a course in business English . . . . . .

K. Write a play . . . . . .

L. Be in charge of selling tickets for a play . . . . . .

M. Be the property manager for a play . . . . . .

N. Draw funny pictures of famous people . . . . . .

P. Paint portraits of famous people . . . . . .

Q. Paint pictures of scenery . . . . . .

R. Draw illustrations for magazines . . . . . .

S. Write articles for magazines . . . . . .

T. Be the sales manager of a magazine . . . . . .

U. Stay at a fashionable resort . . . . . .

V. Go on a camping trip . . . . . .

W. Take a trip over back country roads . . . . . .

X. Live with a famous dramatic critic . . . . . .

Y. Live with a famous social worker . . . . . .

Z. Live with a famous artist . . . . . .

a. Write articles on hobbies . . . . . .

b. Construct tables of figures on costs of living . . . . . .

c. Repair and refinish old furniture . . . . . .

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d. Read printer's proof of books for children . . . . . .

e. Tell stories to children . . . . . .

f. Make children's toys . . . . . .

g. Take a course in physical education . . . . . .

h. Take a course in shop work . . . . . .

j. Take a course in mathematics . . . . . .

k. Be a piano tuner . . . . . .

l. Be a school teacher . . . . . .

m. Be a dentist . . . . . .

n. Be a court stenographer . . . . . .

p. Be the business manager for a famous pianist . . . . . .

q. Be a vocational counselor . . . . . .

r. Visit a museum of natural history . . . . . .

s. Visit an airplane factory . . . . . .

t. Visit the slums of a city . . . . . .

A. Draw pictures for magazine stories . . . . . .

B. Raise beef cattle . . . . . .

C. Grow fruit for the market . . . . . .

D. Be a bell boy in a hotel . . . . . .

E. Carry out the dirty dishes in a restaurant . . . . . .

F. Live by yourself on an island . . . . . .

G. Be a guide on camping trips . . . . . .

H. Design camp equipment . . . . . .

J. Sell camp equipment . . . . . .

K. Sell life insurance . . . . . .

L. Write stories for magazines . . . . . .

M. Be a landscape gardener . . . . . .

N. Be known as modest . . . . . .

P. Be known as reliable . . . . . .

Q. Be known as happy-go-lucky . . . . . .

15

R. Teach arithmetic . . . . . .

S. Train dogs to lead blind people . . . . . .

T. Be the secretary of a famous scientist . . . . . .

U. Take a course in modern music . . . . . .

V. Take a course in the modern novel . . . . . .

W. Take a course in modern painting . . . . . .

X. Be considered hard-boiled . . . . . .

Y. Be considered fair-minded . . . . . .

Z. Be considered intelligent . . . . . .

a. Be an orchestra conductor . . . . . .

b. Be the manager of a large office . . . . . .

c. Direct slum clearance projects . . . . . .

d. Grow flowers . . . . . .

e. Operate a mimeograph . . . . . .

f. Compute bills for a store . . . . . .

g. Guide visitors in a national park . . . . . .

h. Make fine jewelry . . . . . .

j. Arrange music for an orchestra . . . . . .

k. Work at a telephone switchboard . . . . . .

l. Make linoleum block bookplates . . . . . .

m. Teach games to children . . . . . .

n. Repair a broken ironing board . . . . . .

p. Wash dishes . . . . . .

q. Put a room in order . . . . . .

r. Teach cabinet making . . . . . .

s. Read proof for a newspaper . . . . . .

t. Import oriental rugs . . . . . .

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A. Be a private secretary . . . . . .

B. Be a bookkeeper . . . . . .

C. Be a salesman . . . . . .

D. Do figure skating . . . . . .

E. Play polo . . . . . .

F. Climb mountains . . . . . .

G. Work at a desk . . . . . .

H. Work on a ranch . . . . . .

J. Do house-to-house selling . . . . . .

K. Work in a candy factory . . . . . .

L. Keep bees . . . . . .

M. Give eye examinations . . . . . .

N. Be a farmer . . . . . .

P. Be a railroad conductor . . . . . .

Q. Be an office worker . . . . . .

R. Do clerical work . . . . . .

S. Teach English literature . . . . . .

T. Sell art supplies . . . . . .

U. Study accounting . . . . . .

V. Study irrigation methods . . . . . .

W. Study stenography . . . . . .

X. Deliver mail . . . . . .

Y. Collect garbage . . . . . .

Z. Sort mail in a postoffice . . . . . .

a. Be a poet . . . . . .

b. Be an artist . . . . . .

c. Be a social service worker . . . . . .

d. Work mathematical puzzles . . . . . .

e. Play checkers . . . . . .

f. Work mechanical puzzles . . . . . .

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g. Start a newspaper . . . . . .

h. Start an art school . . . . . .

j. Start an orchestra . . . . . .

k. Have friends . . . . . .

l. Have power . . . . . .

m. Have fame . . . . . .

n. Be a machinist . . . . . .

p. Be an architect . . . . . .

q. Be a chemist . . . . . .

r. Bind books . . . . . .

s. Look after sick children . . . . . .

t. Type letters . . . . . .

Be sure you have answered every question. Now fill in blanks for your name, etc. on answer sheet.

APPENDIX D

Description of a Typical Michigan State College

Counseling Clinic Program - Summer, 1951

Since many requests were received from other colleges concerning the nature of the clinic program, this material has been added to the dissertation in the hope that it can serve as a tentative guide for those colleges that may be interested in starting clinics. It is recognized that any plan must be adapted to suit the needs of a particular institution, hence, this plan may require careful revision if adopted by another college.

Each client who applied for admission to a Counseling Clinic at Michigan State College enclosed his $5.00 clinic fee when he submitted his application, whereupon a temporary receipt was mailed to him. At the same time he was informed that final instructions would be mailed approximately two weeks prior to the opening of the clinic.[1] A personal data sheet was also sent at this time and those people who had not made application for admission to Michigan State College were asked to furnish, or to have their high school principal furnish, a copy of their high school record. They were also requested to notify the Counseling Center concerning their time of arrival on the campus. This was necessary because special arrangments had to be made for clients who arrived the evening before the clinic began. Only those people who lived at a distance were supposed to be present the first evening. Actually, sixty per cent of the clients arrived early.

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[1] Copies of this information sheet and other essential materials are included immediately following this article.

The Program For Clients Who Arrived Early

Each client was greeted upon arrival by a counselor or official hostess. He was introduced to the person in charge of registration and was given a clinic program. He, also, officially arranged for his room and board at that time. The initial evening was occupied in becoming acquainted with the other clients and college personnel, as well as exploring the campus. One popular trip was to the Union Grill, where the newcomers had a chance to get acquainted with the campus building which is the center of many student activities. Included in the informal recreation of the first evening was ice skating, movies, bowling, ping pong, dancing and singing. Clients had to report to their assigned rooms at 10:00 P. M.

The Program - First Day

For those people who did not arrive until morning, some of the procedures of the previous evening were repeated. They, too, were greeted by a counselor or official hostess and were, in turn, introduced to the person in charge of registration and received a program. They also received a name tag which they were instructed to wear during the entire clinic. Each client who had a car listed it at the time of registration. They were not permitted to drive cars during the clinic but had to park them in a designated area.

At 8:30 A. M., the group assembled and counselors were introduced. Each counselor met for twenty minutes with his counselees. This time was used primarily for introductions and discussion of special problems.

The clients then went to the Testing Room where they assembled at 9:15 A. M. During the next thirty minutes they completed their questionnaires. The remainder of the morning was spent taking the A. C. E. Psychological Examination and the Kuder Preference Record. It was deemed advisable to administer the test which required accurate timing first. While the clients were writing the test, the guest counselors had a preliminary meeting from 10:00 A. M. to 11:00 A. M. to discuss special problems connected with the clinic that was in session.

Lunch was served from 12:00 P. M. to 12:30 P. M. and counselors and clients dined together. Following a half hour of relaxation, the clients reported for testing and for the next hour and a half worked on the Iowa High School Content Examination. At 3:00 P. M. the entire group made a complete bus tour of the campus. The guides in charge had been especially trained for this purpose and a special effort was made to visit all of the main centers of interest. Following the tour, the entire group had dinner together.

The First Evening Program

A special effort was made to have an attractive program. At 7:00 P. M.,,a counselor from the Michigan State College Counseling Center discussed the topic, "How the Counseling Center Can Help You." This was followed by a short question and answer period. At 7:15 P. M., a film, "Postmark, East Lansing," was shown. This gave an excellent pre-view of college life and served as an addition to the campus tour. Group singing and the learning of Michigan State College songs followed. Everyone seemed to enjoy this part of the program. The last hour and a

half was devoted to a "Get Acquainted Period and Party." Square dancing, with emphasis on simple dances and group mixers, proved very popular. Ample time was allowed at the end of the evening activities for refreshments. In general, the 10:00 P. M. "lights-out" rule was observed. Some steps were taken toward giving the clients information about dormitory living by a resident assistant who discussed dormitory rules and regulations. Everyone had to return to his assigned dormitory by 10:00 P. M.

The Program - Second Morning

Since the official program was scheduled to begin at 8:00 A. M., breakfast was served at 7:15 A. M. The first two hours in the morning were used in testing. Clients took the Cooperative Reading Examination and the Mooney Problem Check List at that time. At 10:00 A. M., an outstanding speaker who knew the vocational-educational world talked to the entire group. Following this presentation, the counselors had their second formal meeting with their clients. At this session, the counselor discussed with the client; student employment, housing, demonstrated the use of the college catalogue and emphasized things that he felt were of special importance to incoming freshmen, assigned special tests and helped the client arrange the remainder of his clinic schedule.

The Program - Second Afternoon

Following lunch the counselees had preliminary individual conferences with their counselors. These were usually thirty minutes in length. At these sessions many things were accomplished but, in general,

the period was used for getting better acquainted, for discussing special tests, for arranging special appointments, and in some cases, for test interpretations. The special testing was also accomplished during this second afternoon. Those clients who could arrange to do so used the period from 4:00 P. M. to 5:00 P. M. for ice skating, indoor swimming, ping pong, pool or tennis.

The Program - Second Evening

The Counseling Clinic committee could not unanimously agree as to whether this evening should be left completely free for the clients to follow their own desires, if it should be planned with options, or if the evening should be completely planned and attendance required. Under the middle plan, which was the most acceptable to everyone, three options for the evening were presented and the client selected that which he preferred. A typical evening program might include an ice skating party, a bowling party, or an informal dance and game party. Again, everyone was required to be in the dormitories by 10:00 P. M.

The Program - Third Morning

The program, again, was scheduled at 8:00 A. M. A representative from the Counselor for Men's Office and one from the Counselor for Women's office discussed campus orientation problems with the men and women respectively. A question and answer period followed this discussion. At 8:55 A. M., the entire group assembled for the final session. Following this meeting, the clients had an opportunity to meet representatives from the six schools of Michigan State College.

These Schools included Agriculture, Business and Public Service, Engineering, Home Economics, Science and Arts and Veterinary Medicine. In all cases, with the exception of the School of Business and Public Service they met with a single representative. Each department within the School of Business and Public Service had a representative available. All Schools agreed that forty-five minutes was a sufficient period of time with the exception of Home Economics, which requested two hours. As part of their meeting they included a complete tour of the department. The remainder of the morning, from 10:00 A. M. to 12:00 A. M., was allotted for final counseling interviews or for the completion of the special aptitude tests.

The Program - Final Afternoon

This period was reserved almost entirely for final interviews. Test interpretations, enrollment and a question period were features of this session. Following the interview, the client was requested to fill out a final questionnaire. After being presented with booklets concerning Michigan State College and printed information concerning vocations, a brief exit interview with the clinic coordinator closed the sessions.

INFORMATION FOR PARTICIPANTS IN COUNSELING CLINIC AT

MICHIGAN STATE COLLEGE

August 15 - 17

REGISTRATION: At Abbott Hall, 8:00a.m., Wednesday. Fees for room and meals will be payable. The detailed schedule of Clinic activities will be provided. Abbott Hall is located at the East end of the campus and is the first building off East Grand River (at the end of the boulevard section) on Bogue Street.

EARLY ARRIVAL: Those who cannot travel to East Lansing on Wednesday morning so as to arrive by 8:00 "in good condition" for taking tests and for other activities may check in at Abbott on Tuesday between 4:00 and 8:00p.m. Notice of Tuesday arrival specifying the approximate time must be sent in immediately.

TRANSPORTATION: Bus tickets may be purchased directly to East Lansing or to Lansing. All trains are to Lansing. City busses marked "College-Fisher" or "College-Capitol" travel between Lansing and East Lansing and will stop at Abbott Hall, on Bogue Street.

AUTOMOBILES: Private cars must be listed at the time of Clinic registration. They are to be parked in a designated area and are not to be driven during the Clinic.

EQUIPMENT: Participants should bring soap and wash cloths. Towels and bedding will be furnished. An iron will be available for pressing. Preparations for rainy weather and considerable walking are advised. Swimming pools will be open, with life guards provided. Also, the Ice Arena will be in operation and skates may be rented.

SPECIAL: Participants who have applied for fall admission to MSC but have not yet applied for housing, are asked to bring the pink slip from the Registrar acknowledging the application for admission.

REQUESTED INFORMATION: The enclosed blank is to be filled in and returned at once. Those who have not made application for admission to Michigan State College should furnish or ask their high school principal to furnish a copy of their school record.

Requested information, including notice of ~~Sunday~~ TUES. arrival, and any questions should be addressed to:

Counseling Center (Clinics)
A-2, South Campus
Michigan State College
East Lansing, Michigan

Note: The Clinic program is scheduled from 8:00a.m. Wednesday to 5:00p.m. on Friday; including Wednesday and Thursday evenings. Other activities should not be planned.

MICHIGAN STATE COLLEGE COUNSELING CLINICS

August 15-17, 1951

Tuesday August 14, 1951

4:00-8:00p.m.	ROOM ASSIGNMENTS may be secured at the desk at Abbot Hall, Miss Helen Goodrich will be available to complete Clinic Registration.
8:00-10:00	INFORMAL RECREATION (Information on recreational facilities may be secured from Miss Helen Goodrich or Mr. Dave Ruhmkorff.)
10:00	REPORT TO YOUR ROOMS.

Wednesday August 15, 1951

7:15-7:25a.m.	BREAKFAST, Dining Room, Abbot Dormitory.
8:00-8:20	CLINIC REGISTRATION, Main Lobby, Abbot Dormitory Bring your Temporary Clinic Receipt with you. After you have completed Clinic Registration, secure your room assignments and meal tickets. Don't forget to sign car registration if you have a car at the Clinic. (If you registered Tuesday night you may go directly to the Lower Lounge, Abbot Dormitory.)
8:20-8:30	WELCOME, Lower Lounge, Abbot D ormitory
8:30-8:40	INTRODUCTION OF COUNSELORS, Lower Lounge, Abbot Dormitory
8:40-9:00	GET ACQUAINTED PERIOD, Lower Lounge, Abbot Dormitory
9:00-9:15	REPORT FOR TESTING, Room 402 Electrical Engineering Building
9:15-9:45	QUESTIONNAIRE, Room 402 Electrical Engineering Building
9:45-12:00	TESTING, Room 402 Electrical Engineering Building
12:00-12:15	LUNCH, Dining Room, Abbot Dormitory
1:00-2:40	TESTING, Room 402 Electrical Engineering Building
3:00-5:00	CAMPUS TOUR, The tour will be by bus. The group will meet in front of the Electrical Engineering Building.
3:00-5:00	GUEST COUNSELORS will meet with Miss Wells, Room 36 (Conference Room) Union
5:30-5:45	DINNER, Dining Room Abbot Dormitory
7:00-7:15p.m.	"How the Counseling Center Can Help You," Gertrude E. Tew, Counselor. Lower Lounge, Abbot Dormitory
7:15-7:50	POSTMARK, EAST LANSING, M.S.C. movie. Lower Lounge, Abbot
7:50-8:15	M.S.C. Songs--Abbot Dormitory
8:15-10:00	GET ACQUAINTED PERIOD AND PARTY, Lower Lounge, Abbot Dormitory. Grill at Abbot dormitory will be open during the entire evening. (Refreshments may be obtained.)
10:00	REPORT TO ROOMS

Thursday August 16, 1951

7:15-7:30a.m.	BREAKFAST, Dining Room, Abbot Dormitory
8:00-9:55	TESTING, Room 402 Electrical Engineering Building
10:00-10:45	"Planning Your Future," Clifford E. Erickson, Dean of Basic College, Room 31, Union.
10:45-11:30	GROUP MEETING WITH COUNSELORS, Room 31, Union
12:00-12:15	LUNCH, Dining Room, Abbot Dormitory

1:00-5:00p.m.	PRELIMINARY INDIVIDUAL COUNSELING INTERVIEWS (arranged), Room 31 and 34, Union.
1:00-5:00	SPECIAL APTITUDE TESTS (arranged), Room 33, Union
4:00-5:00	SWIMMING FOR MEN--Pool, Jenison Field House
5:30-5:45	DINNER, Dining Room, Abbot Dormitory
7:00-10:00	INFORMAL RECREATION--This part of the program will be announced Thursday. Billiards, pool, ping pong and television will be available. In addition other organized group activities have been arranged
10:00	REPORT TO ROOMS

Friday, August 17

7:15-7:30	BREAKFAST, Dining Room, Abbot Dromitory
8:10-8:50	ORIENTATION OF COLLEGE WOMEN TO CAMPUS LIFE, Mrs. Isabelle Gonon, Counselor for Women, Room 415, Electrical Engineering Building.
8:10-8:50	ORIENTATION OF COLLEGE MEN TO CAMPUS LIFE, Lyle A. Thorburn, Counselor for Men, Room 407, Electrical Engineering Building
8:55	ENTIRE GROUP will meet for last Group Meeting, Room 402 Electrical Engineering Building.
9:15-10:00	MEETING WITH REPRESENTATIVES OF SCHOOLS LISTED BELOW. Guides will conduct you to these places. (Special note to people going to Home Economics. You should <u>not</u> schedule your final interview for Wednesday morning since the Home Economics Meeting may last until 11:00a.m.)

SCHOOL	REPRESENTATIVE	ROOM
Agriculture	Dr. Clive R. Megee	113 Ag Hall
Business and Publice Service		
1-General Business	Mr. Edward A. Gee	5 Bus Adm
2-Other departments by special appointment		
Engineering	Mr. Lisle Smith	114 Olds Hall
Home Economics	Dean Marie Dye	7 Home Ec
Science and Arts	Dean Lloyd C. Emmons	101 Natural Science
Veterinary Medicine	Dr. Edward D. Devereaux	12c Bacteriology Bldg.

10:00-12:00	FINAL INTERVIEWS (arranged), Room 31 and 34, Union, South Campus, and Short Course Dormitory
10:00-12:00	SPECIAL APTITUDE TESTS (arranged), Room 33, Union
12:00-12:15	LUNCH, Dining Room, Abbot Dormitory
1:00-5:00	FINAL INDIVIDUAL INTERVIEWS (arranged), Room 31 and 34 Union

<u>Note</u>: Following your last individual interview, please report to the third floor of the Union to fill out your <u>Final Questionnaire</u>. This is extremely important.

General Information and Instruction (See attached sheet)

GENERAL INFORMATION AND INSTRUCTIONS

1. You are to report to your rooms by 10:00p.m. each evening. You should be reasonably quiet and not leave your rooms after that hour. Miss Helen Goodrich will be in charge of the girls. Mr. Dave Ruhmkorff will be in charge of boys.

2. Breakfast will be served from 7:15-7:25 each morning. Don't be late.

3. Ping pong paddles and balls, and pool equipment will be available during the Clinic at the main desk, Abbot Hall. They must be checked in when you are through with them.

4. You are responsible for your rooms. Be certain everything is in good condition when you leave.

5. The Campus Tour will be by bus. Everyone should participate if possible.

6. If there are any special places or people you are interested in seeing, consult your counselor about it. We will try to work it into your schedule whenever possible.

7. School catalogues are available and will be given out to you during the Clinic if you do not already have one.

8. Please wear your name tags during the entire Clinic. It is much easier to get acquainted with a new person if you can see his name.

Aug. 15, 16, 17

COUNSELOR ASSIGNMENTS

Mrs. Blackman

Akred, Robert D.
Allen, Glen K.
Andersen, Marjorie
Armstrong, Julia

Mr. Bradley

Baer, Gustave
Bennett, Orlie L.
Blackwell, Kenneth George
York, Shirley

Mr. Brown

MacDonald, Marcia
Masters, Jeanne
Mathews, Charles
McBride, Marilyn
Meyers, Carl W.

Mr. Courtway

Campbell, William F.
Copeland, Janenne
Cramer, James D.
Cummiskey, Mary H.

Miss DeLisle

Block, Ronald
Boucher, Eugene
Bennett, Marilyn

Mr. Eason

Koonmen, Ella
Kutschinski, Gretchen
Pennington, Howard
Phillips, Stanley
Prescott, Peter

Miss Giess

Dasher, Betty
Deason, Jerome
Dimmick, George
Dolliver, Geo. B.

Mr. Goulet

Foster, A. Eugene
Guthrie, Dale
Harkavy, Geraldine
Harris, Gordon Dean

Mr. Grayson

Hatton, Lois Ann
Heeke, Barbara
Hillock, James V.
Horn, Lillian C.

Mr. Inkster

Jackson, Mary E.
Jakobowski, Angeline
Kateley, Laura
Kessler, John

Mr. Miller

Miller, Patricia Ann
Montgomery, Pegi Jo
Nelson, Kenneth Guy
Newman, Virginia

Miss Paxton

Renkiewicz, James Joseph
Rynbrand, Marcia
Sisco, Ann
Smith, Geo. M.

Mr. Peets

Swing, Norman Leroy
Terry, Anne
Thayer, Richard
Turner, Jane

Mr. Petersen

VanHruska, James
Wagner, Ross
Whaley, Helen
Whipple, James

Mrs. Posz

Bruton, William
Hewett, John
Huver, Charles
Withrow, Barbara

Miss Zierleyn

Martin, Frank
Speers, Darryl
Sullivan, Merry
Vrooman, James

Mr. Comforte

Novak, Lewis J.
Klemm, Lois Ann
Coutchie, Denise
Burnett, Richard

COUNSELING CLINIC PARTICIPANTS
August 15-17, 1951

	School	Home Town	State
Akred, Robert D.	Port Huron High	Port Huron	Michigan
Allen, Glen T.	Howell High	Pinckney	"
Andersen, Marjorie	Lincoln Park High	Lincoln Park	"
Armstrong, Julia	Grand Ledge High	Grand Ledge	"
Baer, Gustave	Brooklyn High	Tipton	"
Bennett, Marilyn	Grand Ledge High	Grand Ledge	"
Bennett, Orlie L.	Coopersville High	West Olive	"
Blackwell, Kenneth G.	Newaygo High	Newaygo	"
Block, Ronald Edward	Harvey H. Lowrey	Garden City	"
Boucher, Eugene F.	East Jackson	Jackson	"
Bruton, William M.	Arthur Hill High	Saginaw	"
Burnett, Richard C.	Alpena High	Alpena	"
Campbell, William F., Jr.	St. John's Mil. Acad.	New Wilmington	Pennsylvania
Copeland, Janenne	Eastern High	Lansing	Michigan
Coutchie, Denise	St. Mary High	Jackson	"
Cramer, James D.	Van Wert High	Van Wert	Ohio
Cummiskey, Mary Hayes	Little Flower High	Birmingham	Michigan
Dasher, Betty	Wayne High	Wayne	"
Deason, Jerome	J.W. Sexton	Lansing	"
Dimmick, George	Constantine High	Constantine	"
Dolliver, George B., III	Battle Creek High	Battle Creek	"
Guthrie, Dale	Cass Tech.	Detroit	"
Harkavy, Geraldine	Hyde Park	Chicago	Illinois
Harris, Gordon Dean	Fordson High	Dearborn	Michigan
Hatton, Lois Ann	Pontiac Sr. High	Pontiac	"
Heeke, Barbara	J.W. Sexton	Lansing	"
Hewett, John V.	East Lansing High	East Lansing	"
Hillock, James V.	Eastern High	Lansing	"
Horn, Lillian C.	Carl Schurz	Chicago	Illinois
Huver, Charles	Battle Creek High	Battle Creek	Michigan
Jackson, Mary E.	Cass Tech.	Detroit	"
Jakobowski, Angeline J.	Roosevelt High	Inkster	"
Kateley, Laura	St. Mary Cathedral	Saginaw	"
Kessler, John	Catholic Central	Detroit	"
Klemm, Lois-Ann	Arthur Hill High	Saginaw	"
Koonmen, Ella	Grosse Ile High	Grosse Ile	"
Kutschinski, Gretchen	Lowell High	Ada	"
LaJoie, Sharleen	Caro High	Caro	"
Liberacki, Julia	Unionville High	Unionville	"
Luethjohann, Don	Grand Ledge High	Grand Ledge	"
MacDonald, Marcia	Jackson High	Jackson	"
Martin, Frank J.	Hartland High	Milford	"
Masters, Jeanne	Battle Creek High	Delton	"
Mathews, Charles L.	Mt. Pleasant High	Detroit	"
McBride, Marilyn	T.L. Handy High	Bay City	"
McKinley, Mollie	Gaylord Rural Agr.	Gaylord	"
Meyers, Carl W.	St. Mary of Redford	Detroit	"
Miller, Patricia Ann	Suttons Bay High	Suttons Bay	"
Montgomery, Pegi Jo	Muskegon Heights High	Muskegon	"
Nelson, Kenneth Guy	Blue Island Comm. High	Grand Rapids	"
Newman, Virginia E.	St. Mary's High	Lansing	"
Novak, Lewis J., Jr.	Grosse Pointe High	Grosse Pointe	"
Abbott, Lawrence	Frankfort High School	Frankfort	"
Nieman, George	Ada High	Ada	"

	School	Home Town	State
Pennington, Howard	Tecumseh High	Britton	Michigan
Phillips, Stanley	White Pigeon School	White Pigeon	"
Prescott, Peter	Brush High	Cleveland	Ohio
Renkiewicz, James J., Jr.	Pershing High	Detroit	Michigan
Rymbrand, Marcia	Ridgewood High	Ridgewood	New Jersey
Sisco, Ann	Monroe High	Monroe	Michigan
Smith, George M.	East Lansing High	East Lansing	"
Speers, Darryl	Plymouth High	Plymouth	"
Sullivan, Merry E.	Bay City Central	Bay City	"
Swing, Norman Leroy	Harlan High	Harlan	Indiana
Terry, Anne	Mackenzie High	Detroit	Michigan
Thayer, Richard	Clare High	Clare	"
Turner, Jane	South Hills High	Pittsburgh	Pennsylvania
VanHruska, James	Waterford Township	Pontiac	Michigan
Vrooman, James D.	Wabash High	Wabash	Indiana
Wagner, Ross R.	Monroe High	Erie	Michigan
Whaley, Helen E.	Midland High	Midland	"
Whipple, James	Northville High	Northville	"
Withrow, Barbara	Muskegon Heights High	Muskegon	"
York, Shirley	Mayville High	Mayville	"
Coulter, Douglas	Hargrave Military Acad.	Grosse Pointe	"

	School	Home Town	State
Pennington, Howard	Tecumseh High	Britton	Michigan
Phillips, Stanley	White Pigeon School	White Pigeon	"
Prescott, Peter	Brusk High	Cleveland	Ohio
Renkiewicz, Jmaes J., Jr.	Pershing High	Detroit	Michigan
Rynbrand, Marcia	Ridgewood High	Ridgewood	New Jersey
Sisco, Ann	Monroe High	Monroe	Michigan
Smith, George M.	East Lansing High	East Lansing	"
Speers, Darryl	Plymouth High	Plymouth	"
Sullivan, Merry E.	Bay City Central	Bay City	"
Swing, Norman Leroy	Harlan High	Harlan	Indiana
Terry, Anne	Mackenzie High	Detroit	Michigan
Thayer, Richard	Clare High	Clare	"
Turner, Jane	South Hills High	Pittsburgh	Pennsylvania
VanHruska, James	Waterford Township	Pontiac	Michigan
Vrooman, James D.	Wabash High	Wabash	Indiana
Wagner, Ross R,	Monroe High	Erie	Michigan
Whaley, Helen E,	Midland High	Midland	"
Whipple, James	Northville High	Northville	"
Withrow, Barbara	Muskegon Heights High	Muskegon	"
York, Shirley	Mayville High	Mayville	"
Coulter, Douglas	Hargrave Military Acad.	Grosse Pointe	"

APPENDIX E

[illegible] problem in the following areas:

(a) _____

(b) _____

(c) _____

In regard to my vocational future, I now feel:

___(a) confused.

___(b) a bit uncertain.

___(c) fairly certain of my choice and how to proceed.

___(d) certain and secure.

EVALUATION OF THE COUNSELING CLINIC

Please check the appropriate spaces below to indicate the extent to which you feel the Counseling Clinic has helped you toward achieving each objective.

	Helped a great deal	Helped some	Helped very little
1. Deciding whether to attend college	_____	_____	_____
2. Deciding what career to prepare for	_____	_____	_____
3. Deciding what subjects to take	_____	_____	_____
4. Improving orientation to college life	_____	_____	_____
5. Making new friends; social benefits	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(Add any other criteria)

Overall evaluation of the Counseling Clinic: _____

_____

_____

Features of the Counseling Clinic which were of most value to me: _____

_____

_____

Suggestions for improving the Counseling Clinics: _____

_____

_____

How did you learn about the Clinic Clinics? _____

_____

_____

C O U N S E L I N G C L I N I C

Q U E S T I O N N A I R E

MICHIGAN STATE COLLEGE

SUMMER 1951

DATE_____

NAME_____
(Last) (First) (Middle)

COUNSELOR_____

QUESTIONNAIRE

Part I

Directions: The Counseling Center is interested in finding out what assistance you obtain while you are on campus. We want to find out, for example, the extent to which you understand yourself, the nature of your present educational and vocational plans and your familiarity with Michigan State College. In order to make our Clinics of greater value to you, we are therefore asking you to fill out the following questionnaire. Please indicate how you feel at this time. You will be asked to fill out a second questionnaire at the conclusion of your final interview. We want your frank and honest answer to each of the questions and items listed. Read each carefully and be sure to answer every one.

1. Thinking in terms of numbers and thinking in terms of words are important and rather different abilities. My own abilities in this regard are:

   ____(a) about equal.
   ____(b) considerably stronger in numbers.
   ____(c) considerably stronger in words.
   ____(d) unknown to me.

2. In comparison with other students my capacity for college work is:

   ____(a) about average.
   ____(b) above average.
   ____(c) below average.
   ____(d) unknown to me.

3. Compared with other students, my reading skill is:

   ____(a) about average.
   ____(b) above average.
   ____(c) below average.
   ____(d) unknown to me.

4. Compared with my own general level of reading, I am:

   ____(a) weakest in vocabulary.
   ____(b) weakest in speed of reading.
   ____(c) weakest in comprehension.
   ____(d) about equal in all three.
   ____(e) uncertain about my relative strength in (a), (b), and (c).

* * * * *

For items 5 and 6 select from the following key:
Choose from the following ten:

1. Outdoor
2. Mechanical
3. Computational (working with numbers)
4. Scientific
5. Persuasive (influencing others)
6. Artistic
7. Literary
8. Musical
9. Social Service (helping others)
10. Clerical

5. My three highest vocational interest areas are:

   (a)_____
   (b)_____
   (c)_____

6. My three lowest vocational interest areas are:

   (a)_____
   (b)_____
   (c)_____

* * * * *

7. Compared with other students who go to college, my understanding and achievement in school courses generally are:

____(a) about average.
____(b) above average.
____(c) below average.
____(d) unknown to me.

8. I would rank my relative knowledge in the four areas listed below as follows: (use "1" for highest, "4" for lowest, etc.)

____(a) English and Literature
____(b) Mathematics
____(c) Science
____(d) History and Social Studies

* * * * *

Part II

Directions: Below are several items concerning your vocational future. Each item contains several alternate answers. Put an "x" in front of the alternative which comes closest to describing your feeling. Check only one response for each item.

9. In regard to attending college I now feel

____1. college is not for me.
____2. confused.
____3. fairly certain I should attend.
____4. positive that I should attend.

10. What are your plans for next year?

____1. To go to college.
____2. To go to a trade school.
____3. To go to a business school.
____4. To go to work.
____5. To go into military service.
____6. To go into my own business or a partnership.
____7. I have no definite plans at all.
____8. other plans. Whatare they?_____

_____

Note: If you are positive you are not coming to college, you may proceed to question No. 17 at this time.

11. If you have decided to come to college please indicate the reasons why (check as many as necessary), numbering the reasons 1, 2, 3, etc. in order of their importance to you.

_____To get a liberal education
_____To prepare for a vocation
_____For the prestige of a college degree
_____To be with old school friends
_____To make friends and helpful connections
_____For social enjoyment (college life)
_____Without a college degree (or training) there is less chance of getting a job
_____To please parents or friends or because of family tradition
_____To learn more of certain subjects
_____It was "the thing to do".
_____Foregone conclusion. I never questioned why.
_____To enable me to make more money
_____To get a general education

12. Do you anticipate coming to Michigan State College in the immediate future?

____Yes
____No
____Undecided

13. If you are coming to Michigan State College, in what school do you plan to enroll?

____1. Agriculture
____2. Business and Public Service
____3. Engineering
____4. Home Economics
____5. No Preference
____6. Science and Arts
____7. Veterinary Medicine
____8. Short Course

14. Do you plan to attend some other college or institution of training?

____Yes
____No
If yes, please specify which one_____

15. What is your major (if you are planning to attend college)?_____

16. Name one or more kinds of work that you have considered for your life work.

First Choice_____
Second Choice_____

17. If you could do just what you wish, what would you be doing ten or twelve years from now?_____

_____

18. It is possible to make a rough classification of occupations in terms of your general interests and abilities. In the following list, indicate in order of preference (1, 2, 3) the three groups in which you believe you best fit.

____Occupations involving business contacts with people such as the various fields of selling, promoting work, politics, etc.

____Occupations involving business detail work, such as accountant, business statistician, cashier, banker, stenographer, and office worker.

____Occupations involving social service activities, such as Y.M.C.A. worker, Boy Scout executive, personnel worker, social case worker, teacher, welfare worker.

____Occupations requiring special artistic abilities, such as musician, actor, artist, interior decorator, designer, etc.

____Occupations involving technical or scientific work, such as engineer, chemist, surgeon, architect, research worker, inventor, physicist, toolmaker, etc.

____Occupations involving verbal or linguistic work, such as lawyer, newspaperman, author, advertising man, professor, librarian, etc.

____Occupations involving executive responsibilities such as director, office manager, foreman, etc.

* * * * *

19. Who has helped you most in making your vocational plans? (Check any that apply, numbering them 1, 2, 3 etc. in order of their importance to you)

____1. Family
____2. Friends
____3. Teachers
____4. High school counselors
____5. High school superintendent or principal
____6. College counselors
____7. Choice was made on my own responsibility
____8. Others. Please specify._____

_____

20. How much have counselors and guidance workers helped you to understand your strong points, weak points, interests and other things about yourself?

____1. very little
____2. quite a lot
____3. a great deal
____4. I have never discussed these points with a counselor.

21. In regard to my vocational future, I now feel

____1. confused.
____2. a bit uncertain.
____3. fairly certain of my choice and how to proceed.
____4. certain and secure.

* * * * *

Part III

Directions: People coming to Michigan State College for the first time often are not familiar with the college. In order to check your understanding and feelings about Michigan State College will you please respond to each of the following items.

22. The services of the Counseling Center may be used by

____1. any college student.
____2. only Basic College students.
____3. only No Preference students.
____4. only students who are referred there by college officials.
____5. I do not know who can use it.

23. Are college officials friendly with students?

____1. always very friendly
____2. usually friendly
____3. sometimes friendly and sometimes not
____4. usually unfriendly
____5. almost always unfriendly
____6. I do not know.

24. To change his major (except within Science and Arts) a Basic College student must go to

____1. college registrar.
____2. counselors at the Counseling Center.
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25. To be eligible for admission to upper school at the completion of Basic College, a student must maintain:

____1. a "C+" average.
____2. passing grades in all subjects.
____3. a "C" average.
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____5. I do not know.

26. What individual quality of Michigan State College impresses you most?

____1. Its beautiful campus
____2. Its reputation as an institution of learning
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____4. Its friendly and helpful atmosphere
____5. Any other quality, good or bad. What is it?_____

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27. The number of credits a student should carry during his first term depends on his ability and the amount of outside work he may be doing. The average student with no outside work will carry:

____1. 7-10½ credits.
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DATE_____

NAME_____
(Last) (First) (Middle)

COUNSELOR_____

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_____5. I am not sure how M. S. C. representatives feel about new students.

Part IV

Directions: In this part of the questionnaire you are asked to provide certain facts about yourself, your high school, and your experience with counseling. All of the questions can be answered by a few words or by writing an "x" for the alternative that comes closest to describing your situation. Be as accurate as possible.

31. What high school subjects did you like best? (List in the order of preference)

    1._____
    2._____
    3._____

32. How large was the high school from which you were graduated?

    ____1. Class A - 800 and over
    ____2. Class B - 325-799
    ____3. Class C - 150-324
    ____4. Class D - less than 150
    ____5. I don't know how large it was.

33. To what extent did the high school from which you were graduated attempt to provide counseling and guidance services for you?

    ____1. To a great extent
    ____2. To a moderate extent
    ____3. To a very limited extent
    ____4. Practically no attempt to provide these services

34. Will you check any of the guidance services which were available in the high school you last attended?

    ____1. Individual conferences on future vocational plans
    ____2. Informational material on colleges, business and technical schools
    ____3. Informational material describing various kinds of work
    ____4. Individual help in planning high school courses
    ____5. Part and full time job placement
    ____6. Testing program with individual conferences concerning test results
    ____7. Individual conferences on personal problems
    ____8. What other counseling services were offered but are not mentioned above?_____

    _____

35. About how many individual conferences did you have with your high school counselor or advisor in regard to your vocational future during your senior year?

    ____1. None.
    ____2. One or two.
    ____3. Three to five.
    ____4. Six or more.

36. How did you learn about Counseling Clinics?

    ____1. Letter from the college
    ____2. From someone who attended previously
    ____3. From high school superintendent or principal
    ____4. From a high school career day
    ____5. From a high school counselor
    ____6. From_____

37. Has anyone from your high school previously attended the Counseling Clinics?

    ____1. Yes.
    ____2. No.
    ____3. Not sure.

38. If yes, how many?

    ____1. One or two.
    ____2. Three to five.
    ____3. Six to eight.
    ____4. Nine or more.
    ____5. I am not sure.

Part V

Evaluation of Counseling Clinic

Please check the appropriate spaces below to indicate the extent to which you feel the COUNSELING CLINIC has helped you. You may write statements of other benefits in numbers 46 and 47.

	Helped a great deal	Helped some	Helped very little
39. Deciding whether to attend college	_____	_____	_____
40. Deciding what career to prepare for	_____	_____	_____
41. Deciding what subjects to take	_____	_____	_____
42. Learning more about college	_____	_____	_____
43. Making new friends	_____	_____	_____
44. Understanding myself better	_____	_____	_____
45. Getting better acquainted with counselors and the ways in which they may assist students	_____	_____	_____
46. _____	_____	_____	_____
47. _____	_____	_____	_____

48. My general reaction to the Counseling Clinic:

____1. It was extremely helpful.
____2. It helped a great deal.
____3. It was satisfactory.
____4. It helped very little.
____5. It was of no value.

49. Features of the Clinic which were most valuable to me (list in 1, 2, 3 order)

1._____
2._____
3._____

50. What is the most important suggestion you would make for improving future clinics?

51. In the space below, we urge you to write further comments on this clinic and your feelings about this questionnaire.