

THE USE OF THE
GENERAL APTITUDE TEST BATTERY RECORDED INTERVIEWS
IN VOCATIONAL COUNSELING

by

JESSIE BAILEY BLACKBURN

A THESIS

submitted to

OREGON STATE COLLEGE

in partial fulfillment of
the requirements for the
degree of

MASTER OF SCIENCE

June 1955

APPROVED:

Redacted for Privacy

Head of Department of Education

In Charge of Major

Redacted for Privacy

Chairman of School Graduate Committee

Redacted for Privacy

Dean of Graduate School

Date thesis is presented August 4, 1954

Typed by Jessie Blackburn

TABLE OF CONTENTS

Chapter		Page
I	INTRODUCTION	1
	The Purpose of the Study	2
	The Method of the Study	2
II	DESCRIPTION OF THE GENERAL APTITUDE TEST BATTERY . .	7
III	ANALYSIS OF THE USE OF THE GENERAL APTITUDE TEST BATTERY BY THE PUBLIC SECONDARY SCHOOLS IN OREGON. .	11
IV	ANALYSIS OF THE SERVICES OF THE EMPLOYMENT SERVICE COUNSELORS AS INTERPRETERS OF THE GENERAL APTITUDE TEST BATTERY RESULTS TO SENIOR STUDENTS OF CENTRAL HIGH SCHOOL	41
V	ANALYSIS OF THE USEFULNESS OF THE GENERAL APTITUDE TEST BATTERY AND THE RECORDED INTERVIEWS TO THE STUDENTS OF CENTRAL HIGH SCHOOL IN VOCATIONAL APPRAISEMENT.	80
VI	SUMMARY AND RECOMMENDATIONS	106
	Summary	107
	Recommendations	112
	BIBLIOGRAPHY	114
	APPENDIX	116

LIST OF TABLES

Table	Page
I Distribution of the Questionnaire to Oregon Public Secondary Schools by Geographical Areas in Oregon . .	4

THE USE OF THE
GENERAL APTITUDE TEST BATTERY RECORDED INTERVIEWS
IN VOCATIONAL COUNSELING

CHAPTER I

INTRODUCTION

In a society where individuals have freedom of job choice, systematic assistance in formulating plans for the future is one way of laying a good foundation for assuring the happiness and growth of the individual. In the past, it was thought to be the duty of only the parents or guardians to furnish this assistance. (2, p.8). At the present time, it is considered also a function of the school to help youth lay this foundation. It is being recognized that counseling in the high schools can be an effective means of enabling the students to systematically formulate plans for their life's work.

The writer felt that when the senior students of Central High School took the General Aptitude Test Battery and received the interpretation of the results from the Employment Service counselors, they did not necessarily understand the meaning of the data given them or know how to apply the information in arriving at a solution to their vocational problems. Therefore, the writer questioned whether or not this program of testing was meeting the specific needs of these students. The writer felt there was need to develop a procedure whereby the students would receive more assistance in effectively using the General Aptitude Test Battery results for vocational appraisalment.

The Purpose of the Study

The purpose of the study was (1) to determine what, if any, use was being made of the General Aptitude Test Battery by the public secondary schools in Oregon; (2) to evaluate the services of the Oregon Employment Service counselors as interpreters of the General Aptitude Test Battery results to the senior students of Central High School, Independence, Oregon; and (3) to determine the usefulness of the General Aptitude Test Battery and of the recorded interviews of the Employment Service counselors to the students at Central High School in choosing an occupation.

Method of the Study

The following procedures were used in the conduct of this study:

(1) Mailing List. In December 1952, the State Unemployment Compensation Commission branch offices were asked by the writer for a list of the Oregon public secondary schools using the General Aptitude Test Battery. A directory of the public secondary schools in Oregon was used to compile the mailing list of the sixty-six principals or superintendents of those schools which were using the General Aptitude Test Battery.

(2) Questionnaire. A questionnaire (Appendix A) was developed to obtain the following objectives: (a) to discover what use was made of the General Aptitude Test Battery results by other

secondary schools in Oregon; (b) to obtain an account of successful practices; and (c) to obtain comments from the principals and counselors relative to their experiences with the General Aptitude Test Battery.

The questionnaire was sent on April 14, 1953, to the principals or superintendents of the sixty-six secondary schools in Oregon which used the General Aptitude Test Battery in their testing program. Return envelopes were included with the questionnaires for the convenience of the recipients. A major reason for sending the questionnaire at this time of year was that (a) some schools had had the General Aptitude Test Battery administered, had received the test interpretations, and were planning the program for the next year; (b) others were in the process of scheduling the tests; (c) still others were somewhere between scheduling of the tests and planning for the next year's program. The distribution of the questionnaires sent and returned are represented in Table I. The largest number of the Oregon secondary schools sent the questionnaire were in the Willamette Valley. Table I also reveals that the largest number of schools which returned the questionnaire were also in the Willamette Valley. The rank order changed for the other two areas returning the questionnaire so that the public secondary schools in the Eastern part of the State were second and in the coastal area were third in the series.

TABLE I

Distribution of the Questionnaire to
Oregon Public Secondary Schools by
Geographical areas in Oregon

Geographical Areas	Sent		Returned	
	Rank	Number	Rank	Number
Willamette Valley	1	42	1	36
Coastal	2	13	3	8
Eastern	3	<u>11</u>	2	<u>7</u>
Total Questionnaires		66		51

(3) Recorded Interviews. The interpretation of the General Aptitude Test Battery results to the Central High School seniors by the Employment Service counselors were recorded. During the periods 1951-1952 and 1952-1953, one hundred five recordings were made on two Audiograph machines. During 1953-1954, sixty-eight recordings were obtained on two Dictaphone machines. The writer then transcribed these records, in triplicate. A sample for each of these three years is included in the Appendix B.

These recorded interviews were prepared for the purpose (a) of providing the students a written record of the interpretation of the General Aptitude Test Battery results as given by the Employment Service counselors; (b) of supplying both the students and the teacher with supplementary material for the planned unit on vocational information; (c) of furnishing the writer with a

record for use in this study; and (d) of filing the written interview in the cumulative record of the student.

(4) Follow-up conferences by the writer. During 1952-1953 and 1953-1954, conferences were conducted by the writer with the seniors of Central High School as a follow-up after the original interview with the Employment Service counselors and after the planned vocational unit in the American Problems course. This procedure was used (a) to help the students to understand the test results better and to assist them in making wiser vocational choices; (b) to furnish, also, the writer with information concerning the use the students made or intended to make of the information afforded by the General Aptitude Test Battery.

During 1952-1953, individual interviews for sixteen senior students and group counseling in units of five or less students for twenty-eight seniors were conducted. The individual counseling was first used because the writer believed that the method would be most beneficial to the students and in the study. However, the time was limited and expediency dictated the use of group counseling. But provisions were made for individual counseling relative to problems growing out of the group sessions.

During 1953-1954, group counseling was used exclusively. The choice of the students for group counseling was based on likenesses in academic achievement, similarity of social background or of status among the students.

(5) Notes. During the interviews with the seniors of Central High School comments made by the students were recorded by the writer. This procedure was followed so as to provide the writer with a record of the comments of the students for evaluation.

(6) Test Appointment Forms (Form OSES-517-A). The test appointment forms, (Appendix C), of the State Unemployment Compensation Commission contained scores pertaining to the aptitudes and to the occupational aptitude patterns of each student as determined by the General Aptitude Test Battery. These scores were used by the State Unemployment Compensation Commission counselors in interpreting the tests and by the writer during the interviews.

The observation study approach was used to investigate the problem. A review of the pertinent literature was made to ascertain the contributions and limitations as well as to locate the research studies pertaining to the use of the General Aptitude Test Battery with the senior high school students.

While there are a few follow-up studies on the use of the General Aptitude Test Battery in connection with the placement of the graduating seniors of the secondary schools, at the present time there are no available published studies on the use of the General Aptitude Test Battery recorded interviews.

CHAPTER II

DESCRIPTION OF THE GENERAL APTITUDE TEST BATTERY

The United States Employment Service has been one of the pioneers and developers of aptitude tests for use in employment of industry. A milestone in the work of the Employment Service was the development of the General Aptitude Test Battery by one of its departments, the Division of Occupational Analysis and Industrial Services(11, p.5).

In 1934 the United States Employment Service started a systematic program of occupational research to develop authentic information concerning industries and jobs and to discover the qualifications required for success in various occupations. At this time very little was known concerning the content of jobs (12, p.441).

The basis for the development of the General Aptitude Test Battery began in 1935 when the Division of Occupational Analysis and Industrial Service of the United States Employment Service inaugurated its testing program to measure occupational skill and knowledge of employed workers. Through this study of employed workers, standardized aptitude tests were developed.

This research work on development of aptitude tests reached its peak in the defense period (12, p.389).

During the Second World War period, the Employment Service was called upon to develop batteries for the selection of trainees for specific occupations. During the period of war emergency all manpower was channelled through the local United States Employment Service offices, and it became the responsibility of these offices to allocate the needed workers to the various essential employers. The Employment Service interviewers needed tools for the proper screening of the workers. As a result of this need, the specific aptitude batteries of the United States Employment Service were developed (11, p.5).

The General Aptitude Test Battery (5, p.372) is a combination of fifteen tests chosen as a result of factor analysis studies of a large number of tests. Of the fifteen tests, eleven are paper-and-pencil and four are apparatus tests. This battery requires about two and one-fourth hours for administration. Form B-1001 of the General Aptitude Test Battery, that was used for testing the seniors of Central High School of the classes 1951-1952 and 1952-1953, measures the following ten aptitudes which, in varying degrees and combinations contribute to occupational success:

G - Intelligence; V - Verbal Aptitude;- N - Numerical Aptitude; S - Spatial Aptitude; P - Form Perception; Q- Clerical Perception; A - Aiming or Eye-hand Coordination; T - Motor Speed; F - Finger Dexterity; M - Manual Dexterity.

Form B-1002 of the battery, which was used for testing the seniors of Central High School of the year 1953-1954, identifies

nine aptitudes instead of ten. According to the Employment Service psychometrist at Salem, Oregon, the aptitudes that were changed are the Aiming or Eye-hand Coordination and the Motor Speed. These two aptitudes have been combined into one - Motor Coordination.

Norms have been developed for twenty fields of work representing approximately two thousand occupations. These norms are expressed as occupational aptitude patterns and consist of minimum aptitude scores required for occupations grouped according to the Part IV classification code structure of the Dictionary of Occupational Title.

The General Aptitude Test Battery (5, p.372) furnishes information regarding the potentialities of the individual for successfully learning job performances in a great many occupations grouped together into fields of work. The combination of tests is used by the various branches of the Employment Service to select the best qualified individual of all the applicants for a specific job opening. Often the General Aptitude Test Battery is used by the Employment Service counselors to explore the possibilities of various kinds of work for a person. It is for the purpose of exploring possibilities of various types of work that the aptitude battery is administered to the high school seniors by the Employment Service counselor. Through these tests, the students may be helped to discover the fields of work for which they have the greatest potentialities. The battery aims to find out, not "how smart an individual is, but what he is smart at."

While this battery is considered one of the best extant, it has definite limitations. One of these limitations is that it does not measure such important factors as eye-hand-foot coordination, or musical aptitude. A second limitation is that it does not cover all jobs existing in the American industry today (11, p.14).

To a limited extent the General Aptitude Test Battery has been given experimentally in high schools. The Employment Service feels that the results have been encouraging. However, the fact that the present norms are based on adult working populations must be kept in mind (11, p.14).

CHAPTER III

ANALYSIS OF THE USE OF THE GENERAL APTITUDE TEST BATTERY
BY THE
PUBLIC SECONDARY SCHOOLS IN OREGON

"Test results are valuable in the degree to which constructive use is made of them in securing improved educational and vocational adjustment and distribution." (15, p.187)

In order to determine the use and the opinions as to the value of the General Aptitude Test Battery to seniors in the secondary public schools of Oregon, a questionnaire (Appendix A) was sent to the principals or superintendents of the schools using the testing service furnished by the local offices of the Oregon State Employment Service.

The questions were phrased in the particular form because the writer felt that there probably was a variability among the secondary public schools in the use of the General Aptitude Test Battery. It seemed that questions allowing the subject to express himself as he saw fit would be likely to indicate the variance. The replies received showed that there were differences in the use of the test.

One reply indicated that the counselor was using the results as supplementary material in interest inventory work and in vocational guidance. Another questionnaire stated that the counselor went over the test results with the staff members after initial

conferences with the students; then again interviewed the students about the test findings and about any changes in the plans of the students.

Another variation in the use of the test results was reported:

At this school seniors take the GATB tests in the fall, followed by an interview during which the results are analyzed and some recommendations made. Then counseling is carried on concerning openings in particular fields, opportunity for advancement, job applications, phases of behavior that need improvement or change. Then in the spring a second interview is held with students by a representative of the State Unemployment Service and some fairly definite job and training plans are made.

A correlation of the test findings with the career day choices and the referral of students to summer and permanent jobs on the basis of the General Aptitude Test Battery scores was another use made of the tests.

One school official reported using the General Aptitude Test Battery only with those seniors who were interested in job placement upon graduation and who planned to attend the vocational school. The results determined the placement of "the students in the particular shop situation for which they seemed best fitted."

Some students of another school found the test results more useful several years after graduation. As seniors, the students were more interested in getting a job and in making money. A year or so later, however, some of the students came back to the school and asked for a re-interpretation of the test results as an aid for determining the type of work to enter.

A feeling was expressed by one school official that the tests were not used very extensively by the students of the school as the job choices were made "more or less by the opportunities that (came) along."

The foregoing variations, together with many other utilizations of the test results reported, probably would not have been indicated through questions that required answers of "yes" or "no."

Analysis of the replies received to the questionnaire will be made in this chapter by reporting the findings and stating the probable implications for each question asked.

1. What use is being made of the General Aptitude Test Battery results at your school: (a) by the counselor; (b) by the teacher; (c) by the parents?

In order to have a basis for the analysis process and to present in a meaningful fashion the complex data received from the replies to question number one, the following methods for the use of the test results have been set up, and the replies to the question have been classified according to these methods:

	<u>Number of Schools Using</u>
(1) Follow-up Employment Service counselor's interviews with conferences by a school counselor or by a member of the school staff	34
(2) Make available the General Aptitude Test Battery results to the teachers of senior subjects . . .	20
(3) Inform the teachers of senior subjects about the purpose and the limitations of the General Aptitude Test Battery and instruct them in the interpretation of the test results	13

- | | |
|--|----|
| (4) Discuss test results with parents | 12 |
| (5) Use the General Aptitude Test Battery results in
some class work or unit on vocational information | 8 |
| (6) Confer with teachers about the General Aptitude
Test Battery scores of individual pupils | 5 |
| (7) Make a follow-up study of the influence of the
General Aptitude Test Battery results on the
vocational choices of the students | 1 |

Method number one - follow-up the Employment Service counselor's interview with a conference by a member of the school staff - is advocated because the first interview of the student taking the test battery with the Employment Service counselor does not seem to give the student adequate understanding of the information he has been given. After the original interview of the Employment Service counselors, there should be a follow-up conference with the students taking the test by some of the school staff qualified for vocational counseling. The interview conducted by the Employment Service counselors is generally an information-giving situation. It averages about fifteen to twenty minutes for each student. In this short time the Employment Service counselor tells the student about his high, his average, and his low aptitudes, and about the occupational aptitude patterns indicated by his test results; also, names some types of jobs included in the occupational aptitude patterns. The Employment Service counselor has had no opportunity to know about the student. School records which indicate his achievements, his needs and his attitudes are not used by the Employment Service counselor. The student has had

no opportunity to formulate questions prior to coming to the interview. Furthermore, as a rule, there is no follow-up interview by the Employment Service counselor unless the student, of his own volition, wishes to go into the local Employment Service office which administered the test to him.

A follow-up conference by a member of the school staff should give the student the opportunity to (a) raise any questions or correct any misunderstanding he may have about the information he was given; (b) use the obtained information for better self-appraisal; (c) develop plans and set goals for careers after graduation consistent with his best aptitudes or apply the information about his aptitudes to the pertinent facts about the vocations in which he may be interested; and (e) handle any emotional upset that may result from the findings. Thirty-four schools said that they used the counseling technique as a follow-up of the Employment Service counselors' interviews. In twenty schools conferences are not scheduled for all the students but are held only when there is a need felt by the counselor or when it is requested by the student. Replies from fourteen of these schools indicated that the counseling was conducted on a systematic basis of conferences for all senior students taking the General Aptitude Test Battery.

In many cases where the school does not have a counselor, as such, the senior social studies teacher conducted the follow-up conference.

Evidence of some usages of the test results were indicated by the following answers:

(The tests are used) to aid in course selection; to aid in college selection and course; many use it as a start to find summer work.

Used in conjunction with other tests such as student nursing tests and secretarial tests.

This is the first year that special time has been given any staff member to counsel students. We (staff members) went over, together, the test results of the student. In most cases I had already had a conference with the students. Now I shall try to have another to talk to them about the results and any change in their plans. The students were very much interest in the results and want to discuss further what is indicated regarding probability of success in their chosen field of work.

The need for the follow-up conference by a member of the school staff was indicated by such replies as:

We found that careful preparation was very much needed. Our first experience with the testing showed that the students tended to accept the General Aptitude Test Battery results as a final evaluation of their possibilities and many a good college project was temporarily side-tracked by the GATB showing him to be a plumber or a bricklayer candidate.

We question the value of the GATB tests because of the guidance techniques used by the Employment counselors. Some students were told they didn't have the mental ability to go to college and would be wasting their time and money. They have since made good in college.

Some have a particular talent in a given field and on the borderline of being interested in or not sure about it. Conferences help them consider the matter.

Analysis of the answers to the questionnaire indicated that more schools used the follow-up conference by a member of the school staff with students taking the General Aptitude Test

Battery than any of the other six methods discussed in this chapter. Because of the extent to which the follow-up conference method was used by the schools included in this study, it is judged to be the one most acceptable and practical to the schools. The students covered by this study that received a follow-up conference to discuss the results of the General Aptitude Test Battery probably are better able to use the information for vocational appraisalment than those who do not.

Method number two - make available the General Aptitude Test Battery results to teachers of senior subjects - is based on the fact that the students may wish to discuss the results of the tests with their teachers. In order to be better able to discuss with and to interpret the information to the students, teachers of senior subjects should not only know how to interpret the test results, but also should have the scores available. These scores offer another tool to the teacher for studying the student for the purpose of obtaining a better understanding of the individual. The answers to the questionnaire indicated that twenty of the schools made the test results available to the teachers. Seven out of the twenty replies did not indicate any training program for informing the teachers about the interpretation of the tests. In some situations only the social studies teachers were given the scores to use in their vocational units. In other situations "all teachers were urged to make use of the information." Five schools said that the results were not left by the Employment Service.

One questionnaire stated that "teachers see results and use to the best possibilities."

Because of the nature of the replies, it was not possible to determine if many of the senior subject teachers to whom the test scores were available, referred to them.

From examination of the data it would appear that, although the availability of the test results to the teachers vary with the different schools included in this study, the extent to which the teachers of senior subjects have access to these results is limited. The teachers were not able to correct misunderstandings of the student as to the findings reported to him at the initial interview when the test scores were not available to them. The test scores as another source of information about the student was not being used by teachers in many of the schools of the study.

Method number three -inform teachers of senior subjects about the purpose and the limitations of the General Aptitude Test Battery and instruct them in the interpretation of the test results - was based on the fact that classroom teachers do much of the actual guidance work. In order to aid in the vocational guidance, the teachers must be able to interpret the test results to the student so that these findings are meaningful to him. Traxler (15, p.197) states that the value of tests is almost directly proportional to the interest of the teachers in them and their understanding of the results.

Examination of the replies indicated that out of fifty-one schools, thirteen have some program for orienting the teachers concerning the purpose and the interpretation of the General Aptitude Test Battery results. Because of the nature of the replies, it is not possible to determine how extensive or thorough this orientation program was, nor whether the orientation was given by a member of the school staff or by the counselor of the Employment Service. Eight of the schools orient only one or two of the teachers. One school discussed the results of the tests at a faculty meeting "so that all teachers can 'follow through'." Another school stated that the commercial teacher was the one using the results.

In general, it would appear that in about thirteen schools included in this study there was a program for some orientation of teachers as to the purpose, the interpretation and the limitations of the General Aptitude Test Battery; that, in the remaining schools considered in this study, there was very little done to inform the teachers about the test battery.

Because of a lack of a definite orientation program, it appears that the findings of the General Aptitude Test Battery administered to the high school seniors as a part of the vocational guidance program for the schools included in this study were, perhaps, not as useful to the students or to the teachers as the information might have been. Because the teachers were not thoroughly familiar with the meaning of the test results, students probably did not receive as much assistance from the teachers as

they might have in the use of the General Aptitude Test Battery results for self-appraisal and for vocational choices. The teachers, not knowing the significance of the test findings could not use the test battery for understanding the students better.

Method number four - discuss test results with parents - is based on the fact that the school should work with the parents for the best interest of the student. A knowledge of the test results and their significance may help the parents to (a) obtain more understanding of the strengths, the weaknesses and the probable potentialities of the child; (b) aid and discuss more purposefully with the student his vocational and educational plans.

Twelve schools signified that the test results were discussed with parents. Only two replies indicated any systematic plan. One of the schools reported that it notified all parents, by letter, of the results of the General Aptitude Test Battery taken by their child. The other school stated that the counselor discussed the results with parents of the student who did not seem to have chosen a field within his abilities. The remaining schools indicated that the results of the tests were discussed with those parents who requested the information. However, "sometimes" or very seldom did parents show any interest in the matter. Another school invited the parents to be present at the interview of their child with the Employment Service counselor. Again, very seldom did any parents come to the interview.

From these results it would seem that there was no systematic program carried on by the schools in this study to inform or to discuss with the parents the General Aptitude Test Battery results. Also, the interest shown by the parents about the purpose, findings or interpretation of the General Aptitude Test Battery taken by their children appears to be very slight.

Method number five - use the General Aptitude Test Battery results in some class work or unit in vocational information - is predicated on the fact that the student needs guidance in how to use the test results for vocational plans. Through a vocational unit and through the guidance of the classroom teacher, the student may be afforded experiences that will make the test information more meaningful and useful to him.

The student may be helped to (a) use this new tool for self-appraisal and for self-development in line with his potentialities; (b) find a field of work in which he may have a greater chance to succeed, and discover the fields of work in which he may be likely to fail; (c) compare his aptitudes with his interests and with the requisites of various vocational areas; (d) realize the limitations of measuring instruments and the fact that the ratings of the General Aptitude Test Battery should not be considered final.

Eight replies stated that the General Aptitude Test Battery results were used by the students in class work on vocational information and planning. This work was accomplished

through a written unit in the senior English class by one school and through vocational information units in the social studies classes in the other schools.

Some evidence of follow-up practices is indicated by the following replies:

GATB scores used as basis of discussion in selecting a job field.

A unit in American Problems class on career selection is given at the time of exams by GATB administrator. Students gain some insight into future occupations seemingly best suited to them and talk over with American Problems instructor.

Social science teacher uses it as a research project in a given area.

Some replies indicated that not much help is afforded the student in the use of test results:

We do not make the best use of the test results. We have left it up to the student to make whatever use of the tests he sees fit. We do of course encourage our seniors to consult with the teacher or the deans if they would like further guidance in choosing a vocation. We do not get a very large number of requests, however.

The tests are given too late for educational guidance.

(Student) discover his own prospects for success.

It (the test battery) stimulates a few of them to enough action to ask further questions.

No use (made of the results) unless the student needs special help. Sometimes (the information) considered seriously -sometimes given very little thought (by the student.)

It would appear that there is a limited use of the General Aptitude Test Battery results in some class work or units on

vocational information as a learning experience for the high school seniors included in this study who took the test. For many high school seniors in the study, the General Aptitude Test Battery findings were not as meaningful or as useful as might have been if the students had been afforded learning experiences through classroom work on the use of the test information.

Method number six - confer with teachers about the General Aptitude Test Battery scores of individual pupils - is based upon the fact that tests are one means for studying the student and for obtaining information about individual differences. The school counselor or some members of the staff so designated should confer with the teachers of a student whose test scores indicate exceptionally strong or weak aptitudes. The teachers may be able to make provisions for some special learning experiences for the student. They may help the student to become more conscious of his probable potentialities and may encourage him to develop the strong aptitudes to the fullest extent. They may redirect the student's ambitions into areas of educational or vocational fields that will utilize the strong aptitudes.

The school counselor might be able to help teachers discover the learning difficulty of a student showing low scores in some aptitudes.

Analysis of the replies indicated that only five schools inferred that significant scores of a senior were called to the attention of teachers of that student. One school indicated that

significant findings were referred to teachers, while several stated that the teachers might talk to the counselor concerning the scores of a student or students.

Another reply stated that the results were used to "point out weaknesses and strengths in aptitudes required to predict abilities to enter certain occupations"; that teachers used the test to help "develop abilities in areas where test show achievement needs to be and can be improved."

Only one reply indicated the specific uses made of special scores. The report stated that the shop man made use of the information concerning significant scores for aptitudes required for industrial arts work; that the home economics teachers used the scores in connection with her unit in designing and that the social science teachers used such information for research projects. Students having a particular talent in a given field who were on the borderline of being interested in the field were given special help by the teacher working in the field.

It would seem that very little systematic use is made of the General Aptitude Test Battery as a device for identifying and studying students with exceptionally high or low scores. Rather, it would seem that any use of the information for identifying exceptional students was a by-product of the interest of the teacher in the student.

Method number seven - make a follow-up study of the influence of the General Aptitude Test Battery results on the vocational choices of the students - is one means of evaluating the effectiveness of the General Aptitude Test Battery as a part of the testing program. The test battery results may be filed in the cumulative folder for use in a follow-up study of the graduates of the school who were administered the tests. The record will furnish the information to the administration about the number of students who went into the fields of work that utilized their highest aptitudes; and about the extent of the effectiveness of the program in aiding the student in his self-appraisal and in a vocational choice.

Only one school indicated that the General Aptitude Test Battery results would be used " in a future follow-up study."

The filed record of the General Aptitude Test Battery may help the graduate student, or the drop-out, of the school. While in school or immediately after leaving school, the student may not realize a need for the information about his aptitudes. Often at such a time in the life of the student, the drive is to get a job that "pays good money." It may be several years before he feels the need to seriously consider a life's work. When he commences to think seriously about the vocation suited for him, he might want a re-interpretation of the test battery results. If the scores have been filed in the cumulative folder, they will be available when the student requests it.

One school reported that only two boys have actually made use of the results immediately; that they have had a number of students come back one, two, or three years later asking for a re-interpretation of the General Aptitude Test Battery results to help them get into the right kind of work. Another school also stated that "they (the students) use them later more than they do right away."

Apparently no follow-up studies have been made by the schools using the General Aptitude Test Battery to determine the effectiveness of the test battery in vocational guidance.

In reviewing the data about the use made of the General Aptitude Test Battery by the public secondary schools of Oregon, some seeming discrepancies are noted in the replies to the question concerning what use was being made of the General Aptitude Test Battery results by the counselor, by the teacher and by the parents. One questionnaire stated that the use of the test results for the counselor was "to indicate what field of work the student may be interested in." The General Aptitude Test Battery does not measure interest.

Another reply to the question indicated that the only use made of the General Aptitude Test Battery was,

The student is cautioned to regard these tests as merely suggestive, not as conclusive, except when they fortify the conclusion already reached by the student.

One counselor stated that the tests are used to "direct students who are not entering college into those fields as indicated

by his aptitudes." It would seem that the results might have been interpreted as being absolute and final.

Such statements as "All teachers are urged to make use of the test information" raised the questions: How much actual use did the teachers make of the test results; how adequate was the understanding of the General Aptitude Test Battery; and how much guidance in the use of the test results for vocational appraisement did the students receive from the teachers?

The reply that the "tests are given too late for educational guidance" seemed to indicate poor practice. What use, if any, was being made of the test results was not indicated.

What utilization was made of the aptitude testing program was not indicated by the comments:

Most of the students here have made up their minds when they are born that if boys, they will work in the timber; if girls, get a man at any cost."

In our small school most graduates already have their immediate future cut out for them.

2. Do the students definitely decide on an occupation as a result of the General Aptitude Test Battery scores?

Examination of the questionnaires revealed the following:

(a) Twenty-three replies said that the students did not definitely decide on an occupation as a result of the General Aptitude Test Battery scores. No indication was given as to whether the test results were a factor in the vocational planning of the students in

this group. There is no indication as to how many of this group did or did not formulate plans for the future.

(b) Twenty schools indicated that the findings of the General Aptitude Test Battery was a factor or influence in the decision of some of their students. There is no indication as to the proportion of the students under this classification who made or did not make decisions about an occupational choice after taking the test.

(c) Four replies indicated that the answer to the question, do the students definitely decide on an occupation as a result of the General Aptitude Test Battery, was not known. Of the four, one person expressed the opinion that this was a "silly question" and two stated that the answer was not known because the tests were given for the first time and there were no data on the question.

(d) Three persons did not answer the question.

(e) One answered "yes". There was no indication as to the proportion of the students included in the reply.

The following comments indicated the aid in making vocational decisions that students may have received from the General Aptitude Test Battery results:

A few students have said they were in doubt before the tests were given and are planning to follow their guidance.

It does help some to come to a definite decision, but only one factor in swaying them.

. . . Some are influenced to develop a plan to reach an occupational goal; we feel this is one of the primary values of the test.

. . . some of them are influenced by it, but a lot of them have more money than is good for them and parents want to make college students out of them whether they are equipped for it or not.

A few doubts as to the helpfulness of the test were expressed by such a comment as "the students tend to question the validity of the tests."

Some emotional reaction to the test seemed to be indicated by such replies to the question concerning the extent students definitely decided on an occupation as a result of the General Aptitude Test Battery scores, as: "No!!", and "No! we don't want it--."

An understanding of the limitations of the test seemed to be noted by such comments as:

The students aren't advised to use the scores as the final answer.

The results are accurate enough as far as they go but there are other things to be taken into account.

The possibility of the use of the information by the post-graduate or the drop-out student was inferred from the following comments:

Some students attached importance to tests with the thought of applying them to future occupations; however, they seem to feel that the information was too meager.

Students use results later more than they do right away. Later they come in and ask about the aptitudes shown on the test.

The test results seemed to give confidence to some students in their decisions:

They may be more certain of their decisions.

Will help conscientious ones substantiate their choice; others go ahead with their interests and others are conditioned by traditions at home.

The results seem to reaffirm some earlier decisions of the student.

The possibility of the use of the information for job placement was indicated by the statements:

It helps in job getting through employment service.

Fifteen of our students were placed by the Oregon Employment Service as a result of these tests.

It seems that very few of the students in the schools returning the questionnaire definitely decided on an occupation as a result of the General Aptitude Test Battery scores. Apparently, a greater number of the students included in this study were influenced or aided in the formulation of their vocational plans for the future by the aptitude test findings. It would appear that the General Aptitude Test Battery scores may be an aid to some students in the formulation of their future plans (a) by showing scores indicating the high aptitudes required in the occupation being considered; (b) by motivating the formulation of occupational goals; (c) by helping in suitable job placement; (d) by confirming and creating confidence in choices of an occupation; (e) by furnishing information that will help in making a change from one occupation to another at some future date.

3. Do students go into the fields of occupation for which the General Aptitude Test Battery scores indicate strong aptitudes?

(a) Twenty-four of the fifty-one replies stated that some of the students went into the fields of occupation for which the General Aptitude Test Battery scores indicated strong aptitudes.

(b) Seventeen persons indicated an uncertainty as to whether the students went into the fields of occupation that would utilize the strong aptitudes identified by the General Aptitude Test Battery. The reasons expressed for the uncertainty were: (1) it was too early to tell because it was the first year for the counselor in the school system; (2) it was the first year that the test battery was administered at the school; (3) most boys go into the service; (4) "there were not enough cases to be significant yet."

(c) Six returns indicated that students did not go into the fields of occupation indicated by the high scores of the test battery. There was no indication as to whether this answer included all the students of the school who were administered the test. One questionnaire punctuated the reply with an exclamation mark - "No!" This would seem to indicate that the person who completed this form had some strong feelings concerning the test battery.

(d) One reply answered "yes" to question number three. Again there was no indication as to whether the answer included all the students of the school who were administered the test.

(e) Three persons did not answer the question.

That the labor market rather than the General Aptitude

Test Battery results influenced the choices of some students was inferred by the following remarks:

The over-supply of labor in this area doesn't allow for much student choice.

While some do (go into the fields of occupation for which the test scores indicated strong aptitudes), the choice is more or less according to the opportunities that come along.

Inference as to the practicality of the interpretations of the test battery was made by the remark:

Some tests refer applicants to jobs that there is no chance to follow an occupation in this area.

An opinion that the test scores may be more influential at some future date than at the present time was expressed:

Only two boys have actually made any immediate use of the test results; both of them were in the field of electricity. Can't tell what the future effect (of the tests) will be -it is too early to tell.

It would appear that the greatest number of the school officials included in this study were of the opinion that some of the students entered the fields of occupation for which the General Aptitude Test Battery indicated strong aptitudes. The next largest number of persons completing the form were uncertain as to whether the students go into the fields of occupation for which the General Aptitude Test Battery scores indicated strong aptitudes.

The opinion frequently expressed, however, was that some students took the program seriously and were helped in the formulation of future plans and that other students did not make use of the information.

It would appear that the General Aptitude Test Battery was helpful to some students, but there is need for statistical information concerning the number of students benefitted from the program.

4. Are the students more interested in vocations and in their vocational choices after taking the General Aptitude Test Battery?

(a) Twenty-five persons indicated that the students were more interested in vocations and in their vocational choices after taking the General Aptitude Test Battery. The opinion that the taking of the aptitude test battery was a stimulating factor in formulating plans for vocational choice was enthusiastically expressed by such responses as "definitely", "very stimulating," and "very much more."

There seems to be considerable interest generated by the tests and subsequent discussion of results.

A stimulating factor.

Definitely - we feel there is value in giving these tests.

(b) Ten reports said that some of the students showed an increased interest.

(c) Seven persons thought an increased interest in vocations was shown as a result of the administration of the General Aptitude Test Battery.

(d) Two replies indicated that the students were only interested in seeing the test battery results.

(e) Two persons felt that the test battery did not change the interest of the students who took the General Aptitude Test Battery.

(f) Two reply did not know whether the test battery increased the interest of the students in vocational choices.

(g) Three persons did not answer the question.

Several replies inferred that the interest in vocations and vocational choices was present before taking the tests:

It seemed that only those interested took the tests.

For those who are actually searching, yes; they were sincerely interested in finding something. But for those who are killing time, it is just another timekiller.

One questionnaire stated that twenty-five per cent of the students who took the test showed more interest in their vocational choices after taking the General Aptitude Test Battery; and another replied "just a few" showed an increase in interest. Another person stated:

This is hard to measure. I believe there is some added interest.

One respondent expressed the opinion that the program of aptitude testing should come in the junior year. It was felt that, on the basis of the test results, the junior students could be helped to select subjects for their senior year that would tend to use and to develop the strong aptitudes; also, that the students would have more time to study and to explore vocations employing their strong

aptitudes. The opinion is shared by Harold L. Reeves (8, p.38) in his unpublished Masters thesis. He recommended that the "General Aptitude Test Battery be given in the junior year of high school so that more time can be spent in counseling the student."

It seems that the majority of school administrators included in this study were of the opinion that for most high school students who took the test, the General Aptitude Test Battery was a strong motivating factor for creating interest in and discussion about vocations and vocational choices. The opinion was also expressed in a few of the questionnaires that for a few students the General Aptitude Test Battery (a) only created an interest in the test scores; (b) was more confusing than helpful.

There is reason to believe that the General Aptitude Test Battery when administered to high school seniors can be a motivating factor in the formulation of future vocational plans. The administration of the aptitude test battery to juniors might be given consideration. The information obtained might help the junior students select more beneficial courses for the senior year.

5. In your judgment does the fields of work indicated by the General Aptitude Test Battery correlate high or low with the better grades of the student?

(a) Sixteen replies to this question stated that the answer was not known. Three of the sixteen returns indicated the reason the information could not be furnished was that the test results were not left with the school. An examination of the replies

made to the other questions on these three forms revealed that (1) for two schools no use was made of the test findings by the counselor, by the teaching staff or by the parents, and (2) for one school the statement "Tests were given, but have never heard of the man since" was written across the face of the form. For thirteen of the sixteen returns classified as "not known", most of the replies indicated that no studies were made of the correlation; one stated that "not enough (tests) were given in the school;" and another said,

This is difficult to say as students may not have had any opportunity to experience related educational material in some of the fields indicated by the test -we consider the test a reliable one.

(b) Fifteen answers stated that there was a high correlation between the fields of work indicated by the General Aptitude Test Battery and the better grades of the student.

(c) Twelve questionnaires were classified as not furnishing information. Seven of the twelve replies did not complete the item. Five forms gave replies that did not answer the question as to whether the fields of work indicated by the General Aptitude Test Battery correlated high or low with the better grades of the student: one stated "not always;" another "no;" two stated "yes;" and one reply answered "sometimes contradicted earlier data." The inference of the last remark was not understood by the writer.

(d) Four replies indicated that there was a close correlation.

(e) Four forms said there was a low correlation.

Question number five was left unanswered or had replies indicating that the information was unknown more times than any of the other six items of the questionnaire. Twenty-eight replies furnished the writer no information about the correlation; and twenty-three indicated a high, close or a low correlation.

Apparently, the opinions expressed by the fifteen school administrators that the correlation was high between the fields of work indicated by the test scores of the General Aptitude Test Battery and the better grades of the student were not based on any statistical data procured on the subject.

Those schools that did not procure a record of the test results from the Employment Service counselor were limited in the use made of the General Aptitude Test Battery with the students and with the teachers.

There is reason to believe that since no systematic evaluation of the effectiveness of the General Aptitude Test Battery has been made by the schools included in this study, the data furnished for the question as to whether the fields of work indicated by the General Aptitude Test Battery correlated high or low with the better grades of the student were based on opinion or conjecture rather than on statistical data. It would appear that there is a need for the schools covered by this study to evaluate or to make a follow-up study of the effectiveness of the General Aptitude Test Battery for vocational guidance. !

6. Prior to taking the General Aptitude Test Battery, how are the students informed or oriented as to the purpose of the test?

(a) Twenty-six schools orient the students to the General Aptitude Test Battery through a brief class discussion or an explanation by the teachers of senior students.

(b) Nine schools orient the students through a unit on vocational information in the American Problems class or in the Social Economics class.

(c) Three replies stated "yes" to the question, but did not explain the extent or the amount of the orientation given the students.

(d) Two of the schools gave the Employment Service counselor time to explain the General Aptitude Test Battery in the Social Economics class.

(e) Two schools had the school counselor explain the test to the seniors.

(f) One school called a class meeting of the seniors.

(g) One school oriented the members of the junior class through the World History class. The reason for the orientation of the juniors was explained: "The World History class, a junior subject, is the only subject offered in the last two years of school in which all students are required to enroll."

(h) Five replies indicated that no orientation was given students prior to taking the General Aptitude Test Battery. In such

a case the only orientation received by the students at these schools would be that given by the Oregon State Employment Counselor just before he administered the test. Of the five schools that do not orient their students, one stated that "several days prior to their coming it is announced that the tests will be given on a certain date." Another stated that since the program has been in operation for some time, the "students are already aware of what seniors previously had."

(i) Two questionnaires did not have the item completed.

Several schools indicated that they caution the students that the test results are not the final answer but that they are merely indicative.

That orientation may arouse interest in the test is suggested by the following:

All seniors except those planning on college were asked to take the test and the purpose explained. However, all of the seniors asked permission to take them.

Another reply seemed to indicate a lack of understanding of what the test battery measured:

Explained what they are for and what interests are to be determined.

Such comments concerning the use of the test results as "used for advising students as to college" ; "to help guide him or her into college" bring up the question as to whether the test was used by some schools as the only basis for appraising scholastic aptitude. While this test battery may give some

indication of the scholastic aptitude for college, yet the General Aptitude Test Battery was not devised for the purpose of prognosing college success.

It appears that a large number of the students were oriented to some extent by the schools included in this study concerning the General Aptitude Test Battery. A very small number of the students received an extensive orientation through some learning experience such as a class unit in vocational information or class discussions conducted over a period of time. Because of the incidental orientation given in most of the schools covered in this study, students (a) might not have as great an interest in taking the test; (b) might not be as highly motivated to give the best performance possible; (c) and might not take the opportunity as seriously as they should; or (d) might be more nervous about the situation than if they had been given a better understanding of the purpose of the General Aptitude Test Battery.

CHAPTER IV

ANALYSIS OF THE SERVICES OF THE EMPLOYMENT SERVICE
COUNSELORS AS INTERPRETERS OF THE GENERAL APTITUDE
TEST BATTERY RESULTS TO SENIOR STUDENTS OF CENTRAL
HIGH SCHOOL

The effective interpretation of the test data is, perhaps, the most important aspect of the counseling process in assisting the student determine a valid occupational objective for himself. The method of the test interpretation affects the feelings of satisfaction of the counselee with self and the guidance service (14, p.113)

The interview for interpreting the General Aptitude Test Battery results conducted by the Employment Service counselors with the seniors of Central High School, during the period covered by this study, was generally an information-giving situation in which the counselor "carried" the action. It averaged from twenty to thirty minutes for each student. In this short time, the Employment Service counselor informed the student about his aptitude scores, talked about the occupational aptitude patterns indicated by the test results, named some types of jobs included in the occupational aptitude patterns and gave him printed materials on (a) the aptitudes and their definitions as identified by the General Aptitude Test Battery (Appendix D) and (b) on interviewing, "Things to Remember in Making an Interview and Selling Yourself," (Appendix E).

Shostrom and Brammer (14, p.113) have listed thirteen principles that are important to test interpretation. With these principles as a basis, the services of the Employment Service counselors as interpreters of the General Aptitude Test Battery results to the senior students of Central High School have been analyzed:

- (1) Structuring
- (2) Exploration
- (3) Meaning of Scores
- (4) Neutrality
- (5) Participation
- (6) Traits vs Scores
- (7) Prediction
- (8) Exact Scores
- (9) Clarity
- (10) Isolated Scores
- (11) Time for Client Evaluation
- (12) Facilitation of Self-evaluation
- (13) Low Scores

Structuring

Limitations of the tests and "their values for giving certain types of answers and leads" (14, p.113) should be stressed during the test interpretation. The maintenance of a permissive atmosphere during the interview can be important for promoting self-understanding by the counselee in his endeavor to formulate plans for the future.

At the office of the Oregon Employment Service in Salem, Oregon, the senior students of Central High School were administered the General Aptitude Test Battery by appointment in groups of five at a time. About a month later, for the interviews conducted in 1951-1952 and in 1952-1953, and about three months later for the

interviews in 1953-1954, two counselors from the Employment Service office came to Central High School and interpreted the General Aptitude Test Battery results to each of the senior students who took the test.

The senior girls were interviewed by the woman counselor of the Employment Service and the senior boys, by the man counselor. The writer was present at some of the interviews for the boys and for the girls.

Some of the statements that the writer has classified as structuring information are as follows:

a) You are qualified in these particular fields. You understand that the test itself covers only some 2,000 occupations out of a total of some 20,000; so there are quite a lot that are not covered by the test The occupations I have mentioned here are not all that you can do. There are a great many not covered by the test. Don't use the test as the last word in making your decision because there are so many other things to consider. First of all consider your interests, which are very important. You have to consider whether or not the type of work that you want is available in the area in which you live.

b) The results of this test is in no way the final answer to your problem. We want you to use the results only as a tool in helping you decide what you want to do. There are a great many other things to consider, such as your interest -whether or not the type of work you are interested in is available in the place you want to live. These fields of work that I will mention are jobs and fields of work that you were qualified in. By qualified I mean that you could enter into any one of them and have a good chance to succeed -that is, on the basis of your aptitudes.

Typical statements the writer has classified as "some" or "very little" structuring are:

a) These fields I mention are fields of work you could enter and have a reasonable chance of success in these fields in competition with other people.

b) I will give you a picture of your strong aptitudes and your weak ones. I am going to talk with you of the various occupations covered by the test. Of the 30,000 jobs, the test covers only 2,000. It is impossible for some occupations to be measured by these tests. We will give you an idea of what occupations or fields of occupations you could enter and have a reasonable chance of success in these fields. That doesn't mean that you can go out tomorrow and start as a machinist, let's say. You would have to start as an apprentice. You are going to have to train.

c) Because I mentioned a few things here, it doesn't mean that is all you could do. This is just a suggestion. There are other things we can talk about.

Other practices in relation to the structuring of the test interpretations were noted:

(1) The Employment Service counselor for the girls was the same for the three years covered in this study. Generally she structured her interviews by such statements as:

a) First of all, Alice, I will tell you about the different patterns that the test shows you are adapted to. Now we will go back and discuss some of the aptitudes in which you have the highest scores.

b) You have varying amounts of the aptitudes, as with all people.

c) We will go through these patterns which are checked on your chart which the test covered and very possibly we will talk about other things because maybe you will not be interested in these. Interest is very important in any kind of work you go into. It is just as important

as the aptitude - also training is important, and then the opportunity to put that training and interest and aptitude to work. We have to think about all those things when we think about a vocation.

d) Those (aptitudes) are related to a number of fields of work. We have some of those checked on your chart. When I tell you about these, it doesn't mean that this is what you are or this is what you have to be. These are merely some suggestions that we know you could be successful in if you are interested also and have the training to do them.

(2) The Employment Service counselor for the boys was a different person for the year 1951-1952 than for the years 1952-1953 and 1953-1954. The counselor for the year 1951-1952 generally opened his interview by asking the student what his plans were and then interpreting the scores and patterns of work in a seemingly dogmatic manner:

a) You have some aptitudes for some very highly skilled work. I will tell you what some of the jobs are.

b) The only thing I am going to consider in this talk today is aptitudes in relation to work. There are a number of factors that you must consider before you pick your occupation - one that you will be satisfied to work at for 10, 50 or 60 years. Aptitudes are only one of those things. But the first thing I want you to remember and that is before you can satisfactorily do any work, you must have three things: the first one is desire; the second, ability; the third one, opportunity. You must have all three of them at the same time. You are the only person who can measure the desire. You cannot manufacture desire.

At times the counselor seemed "carried away" with his own interpretations and, in the judgment of the writer, talked much more than was necessary for an effective test interpretation:

I would like to liken these aptitudes to one thing - that is a bucket we can put water in. Each person is carrying around ten of these buckets all the time. The idea is to make them do everything they can, but they can only do so much. These buckets that the individual is carrying around are different sizes - different capacities. We will say that you have one here - your verbal bucket - that is four-quart capacity. That is all you can put in - four quarts. You can pour water in all day long but you are not going to put more than four quarts in. Another is five quarts. If you pour four quarts in the one designed for five quarts, then you are short. You have waste space. We are concerned about filling each one of them and not trying to over-fill any of them. We want to get some place where we can get another quart in this one designed for five quarts, and we want to get some place where we do not continually try to add another quart to the one not designed to take it. This is based upon your ability to absorb. We have definite proof of that because we have tested people who have graduated from college, and those who have never gotten through grade schools, and we find that a lot of people who never got through the eighth grade have a higher power of absorbing knowledge than a lot of them who have gone through college. These aptitudes are something that have grown up with you. They have developed as you have grown up. They reach their full maturity somewhere between sixteen and eighteen years of age. The average is about seventeen. It is possible that some of yours have not fully developed, but I doubt it. However, I have no way of knowing. Your scores are somewhat erratic, but possibly not more than the average person.

The Employment Service counselor for the boys for the years 1952-1953 and 1953-1954 generally structured his interviews by such remarks as:

- a) (Giving the student the list and definitions of the ten aptitudes, he would say:)

These are the ten aptitudes covered by the test. I will name them in the order in which your aptitudes tested, from the highest to the lowest I will give you the occupational fields you are

qualified to enter and have some reasonable chance of success.

b) I want to impress on you that this test isn't the last word. It isn't supposed to decide your future. We only want you to use it as a tool in conjunction with other things that you know about yourself, such as your high school grades, your interests, etc., in helping you to decide what you want to do in your vocational future.

(3) A permissive attitude was not maintained at all times by the counselors, especially by the one for the boys during the year 1951-1952. The counselors often gave advice, frequently expressed definite opinions, sometimes attempted to persuade the counselee to take certain action, or did not accept the expressed feelings of the student:

a) You thought you would like to drive diesel trucks. Perhaps you might go into the air corps. As far as driving trucks are concerned, I doubt that you have the desire to become a truck driver by choice or for your life occupation.

b) (The counselee expressed a desire to go to college:)

If you have any inclination toward office work, you would be much better off to go to a business college. You won't have any trouble in college as far as it is concerned, but what would you study when you get there is the question. If you are going into the business world, the more you get in business the better you will be.

c) (The counselee expressed a desire to be an auto mechanic:)

Do not think you will be happy as an automobile mechanic; you will be further on if you will think of some of these other jobs (those he had listed for the student) and get more information on them and decide what you think about them. You will have

trouble in keeping a job. You will be going from one employer to another all the time. You do not have the aptitudes to actually like automobile mechanical work. What you need is to get out away from home and see the rest of the world. Best place you can do that is in the armed services.

d) Counselor: You just about qualified for bookkeeping if it hadn't been for your clerical aptitudes. That doesn't mean that you can't do bookkeeping as the main aptitude necessary is numerical. . . . Do you think you would be interested in the business field?

Student: I don't think so; I am still interested in farming.

C: I would like to see you utilize your numerical aptitude.

e) C: Your low points are. and verbal aptitude.

S: This is what I get my best grades in in school -- the ability to put information and ideas clearly.

C: Maybe so. I am not saying you can't do it, but it shows up on the test a little bit below average.

S: I can't understand it because this here is what I do best.

C: The test which measures it is supposed to be an accurate measurement. If you tried your best in it, and I am sure you did try your best --

S: I can't understand it because in school I always do best in that.

C: Of course, there are things like interest which enter in and being conscientious and working which will compensate for lack of actual aptitude.

The following quotations are typical of what appears to be expressed permissive attitudes on the part of the counselors:

C: You also mentioned something about the armed forces. Are you still interested in those?

S: It's in the back of my mind.

C: If you can't go to college, it might be a good idea to join one of the armed forces; it is a wonderful experience.

- b) C: Maybe you can tell me some of the other things you might be most interested in besides your stenographic work.
 S: Housekeeping.
 C: That is good field of work. If you are the best housekeeper in the work, or even if you are not the best, there is a definite demand for housekeepers, and the wages they pay are pretty good.
- c) C: What are your plans when you get out of school?
 S: I don't know; don't have very many. I would like to be a farmer though.
 C: Are you farming now?
 S: Yes -- work for one man as a buyer.
 C: Farming is a good business; if you get into it on your own, it will be a good deal.
- d) S: I would kind of like to work in an office -- typing.
 C: We have seen that you have most of the clerical patterns, and I didn't mention typing there. The only reason I didn't mention it was because of your verbal aptitude. Maybe that's why you are a little dubious about it. However, you do have all the other patterns and I see no reason in the world why you couldn't get a job where you could do a little typing maybe.
- e) C: I think you have picked a pretty good field -- there is a demand for good auto mechanics.
- f) C: If you went to college then, what do you think you would take?
 S: I don't know.
 C: Well, there is plenty of time to think of that yet. It might be a good idea if you did go to college, Ronald. The only thing which might bother you would be your verbal aptitude.
- g) S: I'm really undecided. My mother thinks it is funny that I don't have any idea.
 C: Some people who think they know now, sometimes change their minds before school is out a dozen times. It might be well for you to do a little investigating into some of these.
 S: I thought I might be interested in a job at Fairview at Salem -- like working in the baby cottage.
 C: That would be interesting to some.

(4) Other counseling practices were noted:

Most of the talking was done by the counselor. Very little attention was paid to the student or to his reactions.

- a) C: Your verbal aptitude is probably the lowest you have. It is below average. It means that you find it very difficult to talk lots of times.

 S: I don't agree with that too much.
 C: Do you have any trouble trying to understand what you read?
 S: If it is too deep.
 C: Watch your eyes. Frequently trouble with words are caused by eyes.

Often leads of the student were ignored:

- a) S: If I go to college, then I will have to work in order to keep up with the class?
 C: If you went to college would you have to work your way through?
 S: Yes, unless I get an athletic scholarship.
 C: You think you would major in agriculture?
 S: That or Physical Education teaching instructor.
 C: You don't think you would like to go in farming yourself?
 S: Yes, I would like to be on a farm some day.
- b) C: Do you think any of those interest you?
 S: Yes
 C: Construction or machine operating - aircraft electrician?
 S: Yes
 C: When you go to school do you plan to go to trade school or to a college?
 S: A trade school
 C: You liked carpentering or most anything in the construction field?
 S: Most anything
 C: How about mechanic?
 S: I am interested in that.
 C: Any particular phase?
 S: Automobiles.
 C: How about machine work? Metal machine work?
 S: Yes.

C: Then you are not too particular yet - how about about owning and operating a filling station for a short period of time?

S: Yes.

C: As far as we are concerned, we can't tell you how you will do in that because that is something that cannot be measured by paper and pencil tests. That would depend a great deal upon your interest and personality.

(5) Variations in the structuring of the commencement of the interviews were (a) questions about the plans of the student; (b) a reference to the Interest Check List of the United States Employment Service (Appendix F); (c) an explanation of the place of aptitudes in vocational appraisalment; or (d) a brief statement of the limitations of the test interpretation:

a) You have indicated you would like to be an automobile mechanic and attend a trade school. Is that your definite choice or is that a choice you are thinking about now?

b) It is difficult for me to tell you about all the opportunities there might be in the limited time we have here - we couldn't go into all that. We can only make a few suggestions.

c) Aptitudes are just one of the things you should think about in choosing a vocation. Your interest is another thing that is very important. Your opportunities to learn to do this job you are thinking about is important. Then you think far enough ahead to find out whether or not you can use this job in the area in which you live.

Analysis of the structuring of the General Aptitude Test Battery interpretation by the Employment Service counselors to the seniors of Central High school for the three years covered by this study indicates:

(a) The information given by the Employment Service counselors about the purpose, the limitations and the values of the test battery for vocational appraisement was generally inadequate for good test interpretation.

(b) For the year 1951-1952, the structuring of the test interpretations seemed to be the poorest, especially for the boys. For the two succeeding years, the structuring of the test interpretation given by the Employment Service counselors seemed to improve each year.

(c) The structuring of the test interpretations were generally stereotyped rather than fitted to the needs, goals and attitudes of the individual student.

(d) A permissive atmosphere was not maintained at all times. Some improvement in the permissive attitude of the counselors was noted in the test interpretations for 1952-1953 and for 1953-1954.

Examination of the recorded test interpretations between the Employment Service counselors and the seniors of Central High School showed that (a) for the year 1951-1952, the fifty-eight students interviewed received no significant information about the purpose, the value, and the limitations of the test; (b) for the year 1952-1953, twenty-four of the forty-seven testees received some or very little information, twenty received practically no explanation, and three had no recorded interviews;

(c) for the year 1953-1954, nine of the sixty-eight students received rather complete structuring information, thirty-two received some or very little explanation, twelve received practically no explanation, eleven did not have the interviews recorded, and four did not receive an interview.

Exploration

Covner (3, p.71) recommends that "as an introduction to the interpretation, it has been frequently found helpful to sound out a counselee on his reactions to the tests. His mode of response can serve as a guide and warning to the counselor as to what sort of session the test interpretation might be."

The recorded interviews did not reveal that any attempt was made to sound out the reactions of the student to the General Aptitude Test Battery. At the end of one interview the student asked:

- S: How many cases does this hold true, this test? How accurate is this?
- C: It is very accurate, in fact one of the most accurate of its kind. The United States Employment Service has been using it for eighteen years, and they are improving it all the time. It correlates very closely with other tests. We don't use this test as the sole determiner for finding your future occupation. It is only used as a tool which will help you decide on your occupation.
- S: A boy said his numerical, aptitude was the highest. I have been taking math classes right along with him and I have been getting just as good grades as he has.

C: It might be his highest and it might be your lowest
(he went on to give a long explanation about how the norms were worked out. Doubtful whether the student understood it.)

By exploring the attitudes of the student toward tests in general and his impressions about the General Aptitude Test Battery specifically, the Employment Service counselor might have been able to avoid making some of the students defensive and arousing a negative reaction to this part of the vocational guidance program. The point of view of the student might have been used as a starting point for the interview. More of the students might have gained a better understanding of the interpretation and of themselves if the Employment Service counselors had started with the impressions of the counselee about the General Aptitude Test Battery.

It appeared that very little attempt was made by the Employment Service counselors to explore the attitudes of the students toward tests in general, the reactions toward the General Aptitude Test Battery specifically, and the needs as an aid to structuring the test interpretation interview.

Meaning of Scores

The counselor should ascertain the understanding of the counselee as to the purpose of the test being discussed (14, p.114). The student needs to understand the nature of the tool or the aid that the test can be in arriving at a solution to his vocational problem. The interviewer should determine what the student expects

of the test results.

In order to obtain adequate understanding of the General Aptitude Test Battery results, the student must know the meaning and significance of the terms "aptitude" and "occupational pattern"; also the meaning of the occupational titles that the counselor used, e.g. optical unit assembling, journeyman, ornamental iron workers, wood structural work, cylinder web pressman.

a) You are qualified as a grocery checker, rifter trimmer, printer, cylinder-web pressman, forming press operator, hand compositor, machinist, stereotyper and grammar school teacher.

The comments of the student receiving this list of occupations were:

They read off the list of jobs you could do and didn't explain any of them. Cylinder web press operator -- I don't even know what it looks like.

The brief orientation that the student received from the psychometrist prior to the administration of the General Aptitude Test Battery would not necessarily insure sufficient orientation about the purpose and the limitations of the test or the understanding of the meaning of the aptitudes for which the test yielded scores.

The realization of the relativity of the aptitude test scores was important for understanding the purpose of the test. The test for an aptitude may indicate a potentiality for the acquisition of the sufficient amount of a skill in one field of work and yet may indicate a lack of potentiality for the acquisition of a sufficient amount of that skill in another type of work.

An examination of the interviews of the counselors did not reveal that any attempt was made to determine the awareness of the counselees as to the purpose and the limitations of the scores received on the General Aptitude Test Battery. There was, however, an endeavor on the part of the counselors to explain the relationship of the test results to the other phases of their vocational appraisal:

a) The aptitudes are important in thinking about vocations but there are other things just as important: Your interest for one, and whether you have the opportunity to learn to do that, whether you will have the opportunity to work at that job.

b) The only thing I am going to consider in this talk today is aptitudes in relation to work. There are a number of factors that you must consider before you pick your occupation. Aptitudes are only one of those things. But the first thing I want you to remember and that is before you can satisfactorily do any work, you must have three things: the first one is desire; the second, ability; the third one, opportunity.

c) The results of these tests are only to be used in conjunction with the other things that you know about yourself, such as your high school scores, your interests and the type of work available for you. These occupations that I will list are fields of work which you can enter, and you would have a good chance of succeeding on the basis of your aptitudes.

There was no indication that the Employment Service counselor attempted to ascertain the awareness of the seniors of Central High School during the test interpretation as to the meaning of the scores received on the General Aptitude Test Battery. The Employment Service counselors often gave, during the test interpretation interview, the explanation of the relationship of

the test results to other factors involved in vocational appraisement.

Neutrality

There is some question as to the amount of neutrality the counselor should maintain. Those who employ the nondirective method of counseling believe the counselor should avoid reacting to the results, should not give opinions and must not show pleasure or displeasure. Through the nondirective method the counselee formulates and expresses the ideas himself. Advocates of the nondirective method believe that the counselee receives greater benefit by drawing his own conclusions and making his own decisions than by having someone do the planning for him. Advocates of the directive method of counseling believe that the counselor, after interpreting the test data, should present several suggested plans of action from which the student could choose (14, p.114).

The recorded interviews for the three years covered by this study reveal that the directive method of counseling has been used by the Employment Service counselors and that often counselor opinion has entered into the test interpretations:

a) Another thing that a lot of youngsters are doing that I agree with is that as soon as they get out of high school, they are going into the armed forces and looking around at some different jobs, meeting different people.

b) (Counselee wasn't sure what he wanted to do, but wanted to go to college.)

Going to college would depend upon what you wanted to do and upon your life work. If you wanted to get in a trade, it would be silly. Bookkeeping, bank work -- go to college. If you go to college, you will have trouble with words.

c) (The student's expressed desire was to become a gunsmith.)

C: Keep it as a hobby; don't make a vocation out of it. I do not think you would care for it as a vocation. Think about telephone work in that work you have all the aptitudes necessary.

d) S: What I want to do for a living for the rest of my life, is something I don't know anything about. I would like to go to college and see what I could learn there.

C: You want to go to college just to see what you can learn? Don't you think it would be better if, when you went to college, you went to see what you could learn about a particular thing?

S: Yes -- I could take up math or science.

C: Why math?

S: I think I have the most ability in math.

C: If you think you have the most ability in math why don't you take up some kind of work that would use math?

S: I don't know what that would be.

C: How about bookkeeping, accounting, or something like that?

S: That would be awful dull, wouldn't it?

C: I don't know -- would it?

S: I don't know.

e) C: If we use your aptitude scores here as a basis, I think you would do all right because manual dexterity is one of your better aptitudes.

f) I wish you could go to college because you have the aptitudes that would help you do well in college.

Examination of the recorded interviews with the senior students of Central High School show (a) that the Employment Service counselors did not maintain a neutral position during the test interpretation of the General Aptitude Test Battery scores; (b) that the

Employment Service counselors seemed to become less dogmatic in the test interpretations each succeeding year covered by this study.

Participation

If the test interpretation is to be a learning situation for the student, it is necessary for him to participate in the interview. Very little participation by the student took place in the test interpretations of the Employment Service counselors conducted during the three years covered by this study. Most of the talking was done by the counselor. Very little attention was paid to the student or to his reactions. Generally the counselor recited without a pause the results of the aptitude scores, the occupational patterns, and the jobs indicated by the scores.

a) First of all, Cora, I'm going to tell you about the patterns that you have on this test
 Now we will go and look at your aptitudes
 (this recorded interpretation took up one typed page, 8 $\frac{1}{2}$ x11, without the student uttering a word.)

b) C: What are you planning to do for a life's work?
 S: I don't know what I want to do. I am planning on taking, or trying to get, some diesel mechanics in the service. I have always liked mechanics.
 C: This test shows that you do not hit the mechanical pattern due to your arithmetic. On that basis the tests indicate that you would not be successful as a mechanic
 . . . (for about one-half typed page)
 My recommendation to you based on your aptitude test, would be to consider one of those jobs and consider going to a trade school and then taking an apprenticeship course. Become a journeyman

c) This is a list of the ten aptitudes covered by the test. I will name your aptitudes in the order from the highest to the lowest Your highest score being the form perception, was above average I will go over the occupational fields you are qualified to enter and will have a pretty good chance at success in. The first field is What plans have you made?

The lack of participation in the test interpretation interview was complained about by some of the students:

a) My interview went too fast. I thought of a lot of questions I would have liked to have asked her during the time. I was confused -- she told me it would be hard for me to go to college. Of course, I didn't agree with her and I wouldn't argue, but I would have liked to have talked to her more about it.

b) I don't think I got much out of the interview. Nobody knew her and didn't talk to her. When she asks you a question there are a lot of things you could have said, but you didn't.

c) I would like to have had more time to talk to the counselor because he went so fast I couldn't get much out of it.

Sometimes the student was asked what his plans were before he was given the recitation:

C: What are your plans, Jim?

S: I am interested in public relations work of some kind.

C: Do you mean selling?

S: Government work, personnel manager. I plan on attending Reed College and majoring

C: Why do you want to get into public relations work?

S: I like to be around people, to work with people. . .

C: If we find you are high in one, or low in another way, we are comparing that to a special job in relation to what is used in an average day by an average person. I am not going to tell you you should be a public relations man, or you should not be a mechanic, or that you should be anything

else. You are the one to determine that. I am going to try to point out to you some things that you should take into consideration in choosing your work. As far as attitudes are concerned, you have some very high ones.
(and so on for a typed page.)

All the possible occupational patterns indicated by the test results were given in a rote fashion without consideration to the pertinence of the information to the student from the standpoint of his interests, his attitudes, his values, or his socio-economic background. One student complained:

Didn't like the way she interviews us. The way she talked. She talked all the time and didn't give us too much chance to find out anything. When she was through, you left. More like a record playing it to you.

The following interpretation was given to a student whose socio-economic background was above average of the Central High School students.

One pattern is close and simple visual inspection. These jobs usually occur in factories. For instance, Hirsch-Weis or Jantzen in Portland might hire someone as a garment inspector
The other pattern you have is in machine operation. This covers many, many different kinds of machines -- it might be machine sewing. And there again we could mention Hirsch-Weis and Jantzen, where
you might like to make them (garments.)

The following information was given to a daughter of a doctor.

She was very interested in getting work that was related to traveling:

We have some specific jobs which use the scores from the General test: They cover such things on your chart as practical nurse, upholsterer, grocery checker, some jobs in the pharmaceutical industry in packing

liquid pharmaceuticals and special instruments that need special care; decorator in the millinery industry -- sewing on the decorations of hats; table worker that you get in the pharmaceutical work industry -- packaging dry pharmaceuticals; jobs in the packaging and weighing such products as potato chips and popcorn.

The interaction between the counselor and the counselee was very seldom sufficient enough to indicate to the interviewer whether he was "with" the student. The writer observed an interview in which the student intended to write down the names of the jobs the counselor was listing as possibilities for consideration. The student started to write the first occupation. By the time he had decided how to spell the occupation and had written the job down, the counselor had named about six additional vocations. The student was embarrassed. He did not want the counselor to see him unable to keep up; so he picked up the pad and went through the motions of taking down the list of occupations as the counselor talked. The interviewer never noticed that he was ahead of the student.

The recorded interviews indicated that the student participated very little in the test interpretations. It appeared that more participation took place by the students in the test interpretation interviews with the Employment Service counselors given during the school year 1953-1954 than for the preceding two years.

Traits vs Scores

By interpreting test results to the counselee in terms of traits or abilities instead of numerical scores, "test"

emphasis can be reduced and self-reference stressed (14, p.15). One way to make the interpretation of the General Aptitude Test Battery scores personal is to present the results to the student in the terms of the high or the low aptitudes. The test battery results were reported to the seniors of Central High School by the Employment Service counselors in the terms of "high", "average", or "low" aptitudes together with the occupational patterns of work that were indicated by the scores:

a) About your scores. Your eye-hand coordination and your manual dexterity were your highest scores. . . . All of your scores are above average from a little bit to quite a bit except your clerical aptitude - and that is a little low. . . . However, they may be a little bit low for nursing to really get through it. I am not saying that they are.

b) Like all people, you have varying amounts of these ten aptitudes. You have made your highest scores in form perception and manual dexterity and you also have well above average score in eye-hand coordination. Most of your other scores are pretty well average. . . .

c) You have a number of high aptitudes. . . . First I am going to tell you some of the different jobs that you are fitted for as far as your aptitudes are concerned To start off with, any of the jobs in a machine shop are good for you.

Shostrom and Brammer (14, p.115) cautions about the danger of overpersonalizing traits and scores. It appears that some of the interpretations of the Employment Service counselors may have been overpersonalized:

You will have trouble trying to convey an idea with words. Your verbal ability is low. Ministers are considered to be up with lawyers in talking ability. A lawyer must be in the upper ten per cent of the

population and you are not quite that high.

Some of the reports of the statements made by students that came back to the writer, after the test interpretations, would tend to verify the foregoing opinion. Some students would report to their classmates: "They say I'm too dumb to go to college"; "they really tell you how dumb you are": "you sure find out what you can do and what you can't do."

Scores of the General Aptitude Test Battery were reported to the seniors of Central High School by the Employment Service counselors in terms of aptitudes and occupational patterns. Examination of the recorded interviews seemed to indicate that often the predictions were over-personalized rather than generalized.

Prediction

One way to avoid the opinion of the counselor from entering into the test interpretations is for the results to be given in terms of the statistical prediction (14, p.115); e.g., "The majority of people with these high aptitudes can be successful in these fields of work."

The method of statistical prediction was seldom used by the Employment Service counselors in the test interpretations. Such statements as the following were rarely made:

I have tested some high school teachers and their scores were very similar to what you have, and they were successful teachers.

More often positive statements were made on the basis of the test scores and counselor opinions entered into the interpretations:

- a) You should work with your hands. You will do much better with your hands than with your brains.
- b) Your aptitudes are strong enough for cutting meat, but you would be happier in the mechanical work.
- c) Now let's come back to your nursing. Now it might be that nursing would be a little hard for you to complete. I'm not saying that you are dumb, as you aren't. You are a good average girl - a little above average in a number of things. But in nursing and other professions in which you have to go to college or specialized schools, they recommend that you have certain amounts of certain aptitudes. Although you are average or a little above, you aren't up there to the amount they recommend. That doesn't mean that you couldn't do it because if you are interested and have the opportunity, you might get enough of it to become an airline hostess. If you are particularly interested in nursing, it might be that there is some phase of the medical field in which you could work but which wouldn't require the overall training that a registered nurse would have to have.

Information was given as though the test results were final and definite:

- a) You will have no trouble with any of the routine clerical jobs. You will never have any trouble operating office machines.
- b) You just weren't born to work with your hands and fingers. It's just one of those things you either have it or you don't.
- c) (this student expressed intentions of eventually going into the ministry:)

Go ahead and be active in religious circles, but not necessarily the ministry.

- d) You have the general intelligence and retentative ability to comprehend college work.

e) Utilize these aptitudes and you will find your work easier and competition a little less.

f) We do have some kinds of teaching measured on this test. It so happens that you do not have the aptitude required for that. It doesn't mean you can't do it, but it means it is going to be hard for you.

It was noted that the test predictions made during the interviews for the years 1952-1953 and 1953-1954, in contrast to those made during 1951-1952, tended to convey the idea that the test results were not final:

a) As far as mechanical work is concerned, I am afraid you would have trouble with your math - there is quite a bit of math and I am afraid that you might have trouble in competition with other students. I do not want to say that you couldn't do it, but you would have a difficult time.

b) I am not saying that you can't do it, but I am pointing out that you will have to work hard in competing with the other students in that field.

c) I want to impress on you that this test isn't the last word -it isn't supposed to decide your future. We only want you to use it as a tool in conjunction with other things, that you know about yourself, such as your high school grades, your interests, etc., in helping you to decide what you want to do in your vocational future.

Method of statistical prediction was very seldom used by the Employment Service counselors in the test interpretations to the senior students of Central High School during the period covered by this study. Many test interpretations were made by definite and positive statements with the opinion of the counselor often included. The method of prediction appeared to show some improvement during the last two years covered by this study with

the greatest improvement made during the year 1953-1954.

Exact Scores

A good practice in test interpretation results is to indicate a range rather than to predict in terms of exact scores. Since every test scores has an "error", interpretations indicating a range are not so likely to be misleading as exact scores.

The interpretations of the General Aptitude Test Battery scores were given in terms of "high", "average", or "low", and of occupational patterns:

a) You do have very good finger dexterity. You are very high in that. Your eye-hand coordination and manual dexterity are also well above average. Your low point is numerical aptitude.

b) I will name your aptitudes going from your highest to your lowest That will give you a picture as to what aptitudes you should utilize and those you should possibly stay away from in choosing your occupation. All of your aptitudes were above average.

The test interpretations of the Employment Service counselors to the senior students of Central High School during the period covered by this study were given in terms of "high", "average" and "low" aptitudes and of occupational patterns.

Clarity

Test results, to be meaningful and useful, must be given in simple, non-technical manner with a vocabulary familiar to the student (14, p.116).

The Employment Service counselors did not attempt to discover whether the student knew the meaning of the term "aptitude". A printed list of the aptitudes and their definitions were handed the student as he came in to the interview. However, no time before the interpretation began was allowed for the student to read the definitions. There is reason to believe that many students did not have a clear understanding of the characteristics being measured by the General Aptitude Test Battery:

S: What does spatial aptitude mean?

C: Spatial is usually correlated with other aptitudes in order to be used in a particular occupational field. It is your ability to visualize something that isn't there. Just looking at a set of blueprints and picturing in your mind what it will be as a finished product.

(The statement: "Spatial is usually correlated with other aptitudes" probably meant nothing to the student.)

For the year 1953-1954 the students, before taking the General Aptitude Test Battery studied about the aptitude in relation to vocations in a study unit of the American Problems course. For the previous two years, the orientation of the student amounted to only a short explanation given by the school counselor when test appointments were made and by the Employment Service psychometrist at the time the test was administered.

The Employment Service counselors very seldom attempted to ascertain whether the student understood the occupational patterns or the jobs that they named as possibilities for him to enter. The student never heard of many of the vocations named.

- a) C: We also find that you have good finger use for mounting of prescription lenses and also for mounting of various optical lenses used in field glasses, etc.
 S: Will you explain that a little more?
 C: The mounting consists of taking the lense after it is ground and polished and putting it in its mount.
- b) C: You are not too interested in that clerical warehouse work?
 S: Could you explain that?

Such terms used as "Dictionary of Occupational Titles", "work to close tolerance", "heavy metal structural work", "warehouse stock control work", "cylinder web press operator" were used without defining:

Other jobs are transmission man, transmission engineer, manual equipment repairman, private branch exchange repairman. Look up these jobs in the Dictionary of Occupational Titles.

During the follow-up conferences of the writer for 1953-1954, some of the students mentioned the fact that the Employment Service counselor did not explain some of the terms used:

They read off the list of jobs you could do and didn't explain any of them. Cylinder web press operator - I don't even know what it looks like.

Very little attempt was made by the Employment Service counselors to ascertain whether the senior students of Central High School knew the meaning of the terms used and the occupations named during the interpretations of the General Aptitude Test Battery during the period covered by this study. Omission of the explanation of terms and occupations listed could have been due to the fact that the Employment Service counselors assumed that the students

had received some orientation through the school.

Isolated Scores

"Scores should not be interpreted in isolation Test data must be woven in with other personal data about the client (14, p.117). "The most helpful single principle in all use of testing is that test scores are merely data on which to base further study. They must be coordinated with background facts, and they must be verified by constant comparison with other available data (4, p.366).

The successful use of the General Aptitude Test Battery is dependent upon how expertly the counselor integrates results with other counseling facts (9, p.11). The school records showing the achievements, needs, interests, work experience, and attitudes of the student were not used by the Employment Service counselors.

While the writer was present at some of the interviews for the boys and for the girls, there was not the time nor was the opportunity provided to give the Employment Service counselor any idea of the background of the student until after the interview. Each senior student was called from a class for an interview. The Employment Service counselor did not know who the next interviewee would be until the student arrived and introduced himself. The vocational information furnished the senior students of Central High School by the Employment Service counselors was based on one testing situation, that of the General Aptitude Test Battery, and the

Interest Check List of the United States Employment Service (Appendix F), which was filled out at the office of the Oregon Employment Service in Salem, by each testee before the administration of the test battery.

The Interest Check List consisted of items representing various types of occupational activities - not names of occupations. It was intended as a clinical tool. No method of scores was provided; the answers were to provide clues for further questions to be asked in the counseling interview (12, p.441).

The need for the test data to be interpreted in the light of other personnel data about the client is illustrated in the following case:

She said I would be able to do work on watches, but my eyes aren't good enough.

The Employment Service counselors generally interpreted the General Aptitude Test Battery results to the senior students of Central High School during the period included in this study without reference to the achievements, needs, interests, work experience and attitudes of the student.

Time for Client Evaluation

After presentation of the test results, the student needs time to react to them, to determine what the interpretation means to him and to decide what he plans to do with the data, what he wants to accept, and what he wants to reject (14, p.117).

The general method of procedure in the test interpretation interview of the Employment Service counselors, with variations in the sequence, was to (a) give the student the printed list of the aptitudes; (b) name his high, average and low aptitudes, or ask him what his plans were and base the discussion of the aptitude scores on the reply of the student; (c) state the occupational patterns and some of the jobs that apply; (d) refer to the Interest Check List; (e) then, ask the student if there were any questions. This data was presented without any significant pauses during which the student might evaluate the information or ask questions. Some students commented:

a) He was very vague in my case. I was in there about three minutes and didn't realize what was coming off until I was sent out. The interview was a flop. If it wasn't for the typed interview, I wouldn't have gotten anything out of it.

b) My interview went too fast. I thought of lot of questions I would have liked to have asked her during the time. I was confused - she told me it would be hard for me to go to college. Of course, I didn't agree with her and I didn't argue, but I would have liked to have talked to her more about it.

Examination of the recorded interpretations showed that generally there was very little discussion between the counselor and the student. The comments of the students seemed to be composed of two or three words in reply to the questions of the counselor:

C: Have you made up your mind yet what you are going to do when you get out of school?
S: Not definitely - no.

- C: You might go into the service, you say -
is that still your plan? (referring to the
Interest Check List).
- S: Probably
- C: Don't have any idea what you want to take in
school?
- S: No.
- C: As far as the test is concerned you are qualified
for a number of jobs. Do you think any of those
interests you?
- S: Yes.
- C: Construction or machine operating - aircraft
electrician?
- S: Yes.
- C: When you go to school do you plan to go to a
trade school or to a college?
- S: A trade school.
- C: Did you like carpentering, or most anything in
the construction field?
- S: Most anything.
- C: How about mechanics?
- S: I am interested in that.
- C: Any particular phase?
- S: Automobiles.
- C: How about machine work? Metal machine work?
- S: Yes.
- C: Then you are not too particular, yet. How about owning
and operating a station for a short period of time?
- S: Yes.
- C: As far as we are concerned, we can't tell you how
you will do in that because that is something that
cannot be measured by paper and pencil test. That
would depend a great deal upon your interest and
personality.
- S: But I mean that type of work.
- C: That is something we can't measure
. Any other questions?
- S: Service man?
- C: Calculating machine?
- S: Like working for some company and going out fixing
some machine.
- C: Yes - calculating machine Like IBM
and International business.
- S: Visual inspection - can you give me examples of
what you would be inspection?
- C: Any variety of products
(End of interview)

Time was not always allowed for student-evaluation of the General Aptitude Test Battery data by the Employment Service counselor during the test interpretation interview with the senior students of Central High School for the period covered by this study.

Facilitation of Self-evaluation

How useful and effective a tool the test results can be to the student in his self-evaluation and his vocational appraisal, depends upon his attitudes and feelings toward the test interpretations (10, p.101).

Due to the fact that the Employment Service counselors were limited in the time allotment for each group of students to whom the General Aptitude Test Battery was administered, the test interpretation was necessarily a fact-giving interview. Very little opportunity or encouragement was given the student of Central High School to reflect his feelings, disappointments, elations about the data given him. The feelings expressed by some of the senior students in the follow-up conferences held by the school counselor indicated the need for evaluation:

a) I don't think I got much out of the interview. Nobody knew her and wouldn't talk to her. . . . She said it would be hard for me to go to college. So I decided I wouldn't go to college, and then I decided I would try to anyway. I looked at some of the other kids going over there, and I know I can get as good if not better than they.

b) I didn't like the way she interviews us. The way she talked - talked all the time and wouldn't give too much chance to find out. When she was through, you left. More like a record playing it to you.

During the years 1952-1953 and 1953-1954, a personal copy of the recorded interview by the Employment Service counselors of the General Aptitude Test Battery scores was made available to the senior student at Central High School in order to help him better understand the test data and for future references. By means of the recorded interview, through the follow-up conference with the school counselor and through a planned unit on vocational information, an attempt was made to help the senior student of Central High School use the test data as an aid toward the self-understanding necessary for vocational planning.

It seemed that due to the limited time for test interpretation by the Employment Service counselors to the seniors of Central High School during the period covered by this study, it was not expedient for the student to express, or to have reflected his feelings about the interview and to have questions about the tests answered to any extent, or to have misunderstandings about the test data corrected. It would seem that in order to facilitate this important step for the prevention of the distortion of the test results (14, p.117), the opportunity would necessarily have to be offered elsewhere - probably through the vocational guidance program of the school.

Low Scores

It is important to carefully and adequately interpret the low scores in order to keep at a minimum the emotional upset, the distortion and the rejection by the student that might result from the receipt of the information (14, p.118).

Employment Counselors, in a matter-of-fact manner, informed the student during the test interpretation interview of his low scores. Sometimes an explanation was made to help the student understand the significance of the low scores for an aptitude in the vocational appraisement:

a) Your low points are space perception and verbal aptitude. Your space perception is sufficient for many things, but there are some things which probably would be hard for you. The verbal aptitude is, of course, all right for many things, too, but there are some things that you need more for.

b) Your manual dexterity, finger dexterity and clerical perception are all below average. So take a quick glance at it. Probably you should stay away from jobs using your hands and fingers and anything to do with clerical work. You should probably try to take work in fields other than where those are involved.

Many times results of a low score was given without any attempt to determine what it would mean or how it would affect the counselee.

One student commented:

a) It seems funny to have you told you can't do something you have been planning on. Those tests were a little too much on the negative side instead of on the positive.

b) It more or less confused me. Always been interested in some form of math, but when my numerical aptitude was so low, it fouled me.

Evidence of rejection and dissatisfaction were noted in the recorded test interviews:

a) (The student expressed a desire to become a teacher,)

C:The second one (aptitude), your verbal ability, is very important in college. Take a good look at that aptitude and decide whether or not you are going to be a teacher. A teacher must have quite a bit of that. You do not have quite a bit. You are six points low on that. We feel that you can overcome three points low in any one aptitude, but we don't give you more than three points. If you go to college expect troubles from the verbal factor. If I were you, I would definitely take a good look at the capacity of that aptitude before I spent a lot of money on some trade or profession and suddenly find out that you flunk it, or you don't like it, or you are not interested in it any more.

S: What do you advise about going to college?

C: I wouldn't advise it. I think you could probably get just as far, perhaps farther, by taking in a trade school and becoming a skilled mechanic.

S: I am taking bookkeeping this year, and I am doing pretty good on it. I figured if I can't get teaching, I am going to take bookkeeping.

C: I would take bookkeeping as primary and teacher as a secondary choice.

S: How about going to Willamette?

This senior expressed the opinion that the test was not worth much.

a) C: Your verbal aptitude is probably the lowest you have. It is below average. It means that you find it very difficult to talk lots of the times - if you find it difficult to talk, you do not have too much business trying to sell anything, because if you must talk when you find it difficult to talk, you are not going to make a sale.

S: I don't agree with that too much.

- b) C: Do you remember the test which measured it (aptitude)?
- S: No.
- C: It was the test in which you had words
. . . . It is supposed to be an accurate measurement. If you tried your best in it, and I am sure you did try your best--
- S: I can't understand it because in school I always do best in that.
- C: (after more test interpretation, the counselor again mentions the verbal aptitude). You say that that was what you got your best grades in?
- S: Just the ability to present information and my ideas clearly. Does that mean like getting up and explaining something to some and giving reports?
- C: It doesn't necessarily mean to give them orally, but it means to write them.
- S: I do get awful good grades in that - in speech and everything. I get good grades in all the tests and especially written work, I always get good grades in it.

This student ridiculed the General Aptitude Test Battery as a prediction instrument.

- C: Well, if you don't go to college have you thought about the type of work you would like to do?
- S: Oh, I am going to college, but I don't know what I will major in yet.
- C: Let's talk a little bit about college. The people who made up this test recommend that you have certain scores in learning ability, verbal aptitude and numerical aptitude in order to really get a lot out of college, and we find you don't have that. We particularly find that your numerical aptitude is low which probably, for instance, if you are interested in science, would make it quite difficult for you.
- S: I am not worried about this numerical part - I didn't try very hard - I skipped around on the addition problems. I can do them.
- C: Of course, every problem you had right in the test was counted toward your score; so regardless of whether you skipped around, the number you had right was counted. I did notice that you skipped, which was a bad thing to do because the farther you go the harder

- the problems get. I am not trying to say that you shouldn't go to college - don't misunderstand me. But I am trying to tell you that you probably will find college more difficult than some people do, and in order to get something out of it, you will probably have to work very hard.
- S: Actually this thing hasn't done me much good, because actually, I know I can do some of that stuff that I didn't do on that test. If I want to go into it in college, I am going to anyway.
- C: In other words, you are saying that when you came in to take the test, you didn't do your best on it.
- S: I wasn't in the mood to take it that day. I didn't care to take it anyway.

This student reported to her peers that the interviewer told her she was too dumb to go to college, that she couldn't do anything.

Several teachers of Central High School were very indignant about the reported interpretation, and the irate father went to the Superintendent about the matter.

The interpretation of the low scores sometimes were explained in such a way that the information might be more likely to be accepted, but many times the explanation of the low scores was not sufficient to help the student to understand fully and to accept the results for consideration. Frequently, there was evidence of emotional upset, distortion, rejection, and dissatisfaction on the part of the students to the test interpretations of the Employment Service counselors on the General Aptitude Test Battery.

CHAPTER V

ANALYSIS OF THE USEFULNESS OF THE
GENERAL APTITUDE TEST BATTERY AND THE RECORDED INTERVIEWS
TO THE STUDENTS OF CENTRAL HIGH SCHOOL
IN VOCATIONAL APPRAISEMENT

In order for the student to establish vocational goals in harmony with his capabilities, he must have facts necessary to achieve the objectives. The purpose of the administration and the interpretation of the General Aptitude Test Battery to the seniors of Central High School has been to provide information of significance to the student for self-evaluation and for self-direction in his search for an occupation.

The understanding, acceptance and the use of the data furnished for arriving at a solution of the vocational problems does not follow immediately upon the test interpretation. Vocational planning is a growth process (13, p.304).

One means of facilitating the student in the achievement of his growth toward self-understanding was to afford him opportunities to explore and to relate the test information to an occupational field through his classroom activities. This experience was made available to the student through the planned unit on vocational information in the American Problems course. For the period covered by this study, the interviews of the Employment Service counselors to the Central High School seniors on the interpretation of the General Aptitude Test Battery results were

recorded and transcribed. Fifty-eight test interpretations of the Employment Service counselors were recorded and transcribed for 1951-1952, forty-seven* for 1952-1953, and sixty-eight* for 1953-1954. These interviews were transcribed in order to (a) furnish the student a copy of his interview with the Employment Service counselor for use in the study of the vocations in the classroom and for future references; (b) provide the teacher of the American Problems class a written record of the test interpretations for use as supplementary material for the planned unit on occupational information.

For the years 1951-1952 and 1952-1953, before taking the General Aptitude Test Battery, the students were oriented by the writer during the American Problems class periods on the purpose and the limitations of the test. The brief explanation, together with the statement given by the Employment Service psychometrist at the time of the administration of the test, was the only orientation afforded the students. During the year 1953-1954, the teacher of the American Problems course and the writer worked together in the

* - Of the forty-seven test interpretations for 1952-1953, forty-four were transcribed recordings of personal interviews with the Employment Service counselors, three were transcribed recordings of the student's test profile. Of the sixty-eight test interpretations for 1953-1954, fifty-three were transcribed recordings of personal interviews, fifteen were transcribed recordings of the student's test profile.

planning of the unit on vocational information based on the General Aptitude Test Battery. The first part of the unit was started several days before the administration of the test battery by the Oregon Employment Service, at Salem, Oregon. This part of the unit was a two-day period of orientation of the senior students. The importance of choosing an occupational field for which one is well adapted, the many factors that determine vocational choices, and the purposes and the limitations of the General Aptitude Test Battery were discussed by the class. The importance of self-understanding, the significance of the aptitudes in self-appraisal, the meaning of the aptitudes as measured by the test battery, and the occupational patterns identified through the test scores were emphasized. The written assignment for this two-day orientation was to define the nine aptitudes measured by the test. The definitions for the aptitudes were discussed in the classes the next day.

During 1951-1952 the writer (a) duplicated for distribution to the teachers of senior subjects, an explanation of the General Aptitude Test Battery program (Appendix G); (b) gave to the teacher of the American Problems course, several suggestions for using the test results in the study of the unit on occupational information (Appendix H).

During 1952-1953, arrangements were made for two representatives from the Portland office of the Employment Service to explain the program to the teachers at one of the teachers' meetings.

During 1953-1954, the teachers were informed by the writer at a teachers' meeting about the phase of the testing program.

After the General Aptitude Test Battery interpretations had been given and the recorded interviews had been typed, the next part of the unit on occupational information in the American Problems classes was taken up. Each student was given the copy of his recorded test interpretation for use in the unit.

During the period covered by this study, the Kuder Preference Record was administered to the senior students in the American Problems classes. During the years 1951-1952 and 1952-1953, the results of the interest test and the recorded interviews on the interpretations of the General Aptitude Test Battery were used as a basis for the study of occupations. The student chose for study an occupational field indicated by his interests and his aptitude test results.

The class discussions in the unit on occupational information in the American Problems course for the first two years of this study covered such aspects as the importance of self-understanding, of the things to be considered in vocational choices, the purpose and the limitations of the General Aptitude Test Battery, the meaning and the significance of aptitudes, the consideration of the results of the Kuder Vocational Interest test and the test battery in choosing a vocation. The student was given an opportunity to clarify or to discuss various phases of the General Aptitude Test Battery. The teacher of the American Problems course provided

time for individual conferences for any student who wanted to discuss his problem individually. Very few students availed themselves of this opportunity.

For the year 1953-1954, the teacher of American Problems course introduced the unit in occupational information with the formula: Aptitudes (General Aptitude Test Battery) plus interest (Kuder Preference Record) plus opportunity (labor market and community) plus personality (personality rating sheet and self-understanding) equals job success.

About three weeks were spent on the unit. Two class periods were spent discussing the meaning and the significance of the aptitudes. The recorded interviews of the test interpretation were used in the discussions. The third day the results of the Kuder Preference Record was studied. The class reviewed their interests, the significance of interests in vocational adjustment, and the interpretation of the Kuder Interest profile. Time was spent on the problem of integrating the information on the aptitudes and the interests, as identified by the tests, with an occupation. The sources of occupational information were discussed. After these discussions, the student chose an occupation to study on the basis of the General Aptitude Test Battery and the Kuder Preference Record results and worked individually for several days gathering material. As a guide for the study, the student was given a Job Study Sheet for completion (Appendix I). The results of the study were compiled in a notebook on vocations.

The Job Study Sheet was patterned after the Career Study Outline proposed by Shostrom and Brammer (14, p.131). The reaction of a number of the students to the Job Study Sheet as a help in studying occupations was unexpected. Many students filled the form in without reference to the occupational material available. If the information was not already known, the item was left blank. During the previous years of this study, the students worked out their own outline. Most of them used the reference material extensively and wrote an average of two pages about the vocation.

The planned unit on occupational information in the American Problems course was terminated with a class discussion.

The structure for this unit in occupational information was very informal. While some students gathered into small groups for impromptu discussions on occupations, other students worked in the library. Often two or three students would confer with the teacher of the American Problems course about their vocational problems. Through such informal, small group discussions one student came to the realization that some of her interests identified by the Kuder Preference Record could be utilized through an avocation rather than a vocation. Another student who wanted to work in the field of art, realized from the General Aptitude Test Battery results that college probably would be very difficult for her. She discovered that she might satisfy her ambition through photography. In that type of work, she would not have to go to college, but her artistic aptitude, confirmed by the test battery, would be

utilized. One student said that she really wanted to be a high school teacher rather than an elementary teacher. However, from her observations, she had come to the conclusion that a beginning teacher, just out of college, had trouble with discipline in high school; therefore, a beginning teacher should get experience in the elementary school before becoming a high school teacher. The teacher of the American Problems course pointed out other factors that could influence discipline in the classroom.

The teacher of the American Problems course felt that the students derived more benefit from the General Aptitude Test Battery interview for 1953-1954 than for the previous two years. It seemed to her that the students accepted and gave more serious consideration to the test interpretations than during the other two years included in this study. She felt that the unit on occupational information during 1953-1954 was more effective for the senior students. In evaluating the benefits of the use of the General Aptitude Test Battery to the senior students, she believed, from her observations, that the administration and interpretation of the test was a strong motivating factor for the students in their unit on occupational information in the American Problems course. Her comments were:

The test became a topic of conversation if nothing else. The students compared notes on what they had found out. The test motivated them and created interest in the vocational study unit. From the teacher's standpoint, the test is well worthwhile as a motivating factor. It creates an interest

that cannot be aroused any other way. The students were interested from the time they took the test until they received their recorded interview. Hardly a day went by that some one did not ask when they were going to find out about the test results. This year has been much better. The students weren't so hostile after the interviews. The way the unit was handled this year seemed much better - to get them started with the orientation to the test; then put them on another unit and come back to the vocational unit as soon as the recorded interviews are available. The recorded interviews give the students something personal and definite to work with in studying occupations. It seems to work very well.

For the last two years covered by this study, after the test interpretations by the Employment Service counselors and the planned unit in occupations in the American Problems course had been given, the follow-up conferences with the seniors of Central High School who had taken the General Aptitude Test Battery were conducted by the writer. These interviews were for the purpose of (a) giving the student an opportunity to discuss further his vocational problems and his reactions to the General Aptitude Test Battery experience, and (b) furnishing the writer with information concerning the use the student had made of the recorded interview of the test interpretation, and the value that the student felt the data furnished by the test battery was to him.

During 1952-1953, the writer began the follow-up conferences with individual interviews. The individual counseling was first used because the writer felt that the method would be most beneficial to the students and to the study. However, as the time

became limited, the group approach was introduced. Provisions were made for an individual interview for any student who might request one.

During 1953-1954, the follow-up conferences were conducted in groups of five or less students. The choice of the members for each group was based as much as possible on likenesses in academic achievement, similarity of social background or of status among the students. Notes were taken by the writer during each conference in order to evaluate the comments of the students.

In comparing the two methods of counseling that were used, the writer felt that the group discussions were more beneficial to the students. Through the group discussions, it appeared that some of the students expressed their ideas more spontaneously and in more detail than did students at the individual interviews. The interaction between the members of the group seemed to help the individuals clarify their thinking concerning the benefits received from the data furnished by the General Aptitude Test Battery and the use of the recorded interviews. The following comments by a student would seem to indicate some clarification took place:

S: I thought it (the General Aptitude Test Battery) was a lot of nonsense.

(Other students expressed an opposite view.)

S: I am going to Seattle to get on at Boeing Aircraft to work on one of the metal lathes as an apprentice. I thought of this for about two or three years. I watched someone do this at Lebanon High School in the metal shop and I

liked it. I don't believe this (test) helps because you have made up your mind before you became a senior.

(discussion from other members of the group.)

S: I would like to have had more time to talk to the counselor because he went so fast I couldn't get much out of it.

(agreement from some other members of the group to this idea.)

S: I had thought I would like to be a draftsman, but the test said I would be too slow in that; so I decided against it. I took drafting at Lebanon. It took me longer to do the assignment than the others (in the class); so I knew I was slow at that. I was thinking about the two fields when I had the test. This helped me to decide between the two.

The comments of the students made during the conferences have been examined and analyzed by using the following questions as a basis:

1. What are you planning to do for your life work?
2. What information or benefit did you receive from the interview of the Employment Service counselors - what did it mean to you?
3. Were you able to plan definitely your life work as a result of the General Aptitude Test Battery interpretation?
4. Were you more interested in a vocation or a vocational choice after taking the General Aptitude Test Battery than you were beforehand?
5. What use have you or are you going to make of this information about your strong and weak aptitudes and of the fields of work named for you?
6. Should all members of the next senior class take the General Aptitude Test Battery?

7. Was it helpful to have for reference a copy of the recorded interview of the General Aptitude Test Battery with the Employment Service counselor?

Of the forty-seven students taking the General Aptitude Test Battery during 1952-1953, ten did not have interviews with the school counselor. During 1953-1954, of the sixty-eight students taking the test battery, seven were not interviewed.

What are you planning to do for your life work?

For 1952-1953, about twenty-five of the students and for 1953-1954 about sixteen of the students who named a vocation were not certain about their choices. Several students were debating between a couple of vocations.

During 1952-1953, nineteen of the thirty-seven students having follow-up conferences, planned to go to college. Examination of the expressed plans of the students for a life work revealed that three seniors had no definite vocational plans, and five planned to become homemakers. The remainder of the 1952-1953 class indicated the following choices: three telephone operators; three, teachers; three office workers or stenographers; two, mechanics; two, engineers; two, farmers; one for each of the following: mill work, telegraphy, some work in the accounting field, agriculture, agricultural engineering, pilot, grocery store, electrical work, baker, selling, parts man for Ford, electronics, police work and waitress.

During 1953-1954, twenty-one of the sixty-one students having follow-up conferences planned to go to college. Expressed plans for a life work by the students revealed that ten students did not have any idea what they wanted to do, and six planned to become homemakers. One of the homemakers planned to do stenographic work and the other, nursing. The remainder of the 1953-1954 class indicated the following choices: five, teachers; five, farmers or agriculturists; four, stenographers or office workers; three, nurses; three, telephone operators; three, carpenters; three, mechanics; two, journalists; two, career men in the Armed Forces; two, engineers; and one for each of the following: metal lathe operator, business administrator, scientist, food technician, veterinarian, supply salesman, dentist, engineer's aid, linotyper, beauty operator, draftsman, laboratory technician, artist.

From the tabulations for the school years 1952-1953 and 1953-1954 it is noted (a) that a large proportion of the students have some idea of the field of work they would like to follow; (b) that a variety of vocations are indicated; (c) that approximately fifty-one per cent of the 1952-1953 and thirty-four per cent of the 1953-1954 seniors who were interviewed by the Employment Service counselors and had a follow-up conference were planning to take some college training.

What information or benefit did you receive from the interview of the Employment Service counselor - what did it mean to you?

A variety of answers were received to this question. One student would give two or three answers.

For the year 1952-1953, the following feelings were expressed about the benefit of the test interpretations: (a) twenty-three opinions were expressed to the effect that none or very little benefit was received from the test interpretations. Several reasons given for this was that the test did not cover the interest of the student, many of the occupational patterns were for men, the information furnished was already known, the Employment Service counselor interviewed, or the test was not approved.

(b) Nine opinions were given that the test instilled the feeling of confidence in the choice of the vocation and in the ability of the student himself.

(c) Nine times the feeling was expressed that the test data gave some idea of the weak and the strong points, or what the student could do.

(d) Four comments were made about the new realization of the number of jobs that could be considered.

(e) Three times the opinion was given that while some benefit had been received, just what the benefit was could not be defined yet.

(f) Three feelings of confusion about the information received, was expressed.

(g) Three opinions were to the effect that the results were discouraging.

(h) One opinion expressed the feeling that the data was something to start from.

(i) One feeling conveyed the idea that it was a good test if taken seriously.

(j) Another idea was given that the information helped to decide what not to do.

(h) A feeling was expressed that the results could help in choosing a hobby.

Some examples of the comments are:

a) You may think we are not getting anything out of it, but you realize later that you do.

b) I got a little bit of help - it broke down other ideas I had. I figured I might be able to do laboring work - janitor, truck driving. I drove a truck all last summer and liked to do that. But I found how I had to use my head. It started me in the direction toward which I am working - electronics, radio.

c) I'll remember some of the things, but I can't see where she told me anything that will do me any good.

d) These tests didn't help me in my decision. They read off the list of jobs you could do and didn't explain any of them: "cylinder web press" - I don't even know what it looks like. For things I was interested in, it didn't give me any help. He said it didn't show whether you were adapted for it. I was interested in high school teaching and farming. He had me for an elementary teacher, but I am not interested in that.

e) . . . I was getting disgusted with shorthand thinking I could never learn it, but when I found out I could do clerical work, it encouraged me.

f) It helps us in a way we don't understand, but later different things come out that helps.

g) I don't know what information I have been given. She said I would probably have a hard time, but that I could go ahead and try. Now I know I will have to study hard if I am going (to college).

h) I don't think it actually helped me as yet. I haven't decided on anything. It still hasn't helped me to decide. It gave me different types of fields I could work in. More than I ever thought of.

i) She didn't say there wasn't anything you couldn't do; that wasn't too helpful. There were just a few of the things that I was interested in. Told me so many things that I could do -- have quite a wide variety. I don't know whether that is good or bad. For some people, it might be better. She has to tell you all those things because she might say something you don't like. . . . It will help some kids a lot more than it would others; some that think they can't do anything, it might help them. Like me -- I debated whether I could do beauty work. It always makes you feel good when it agrees with something you think. It confirms what you know.

j) Didn't like the way she interviewed us -- the way she talked. She talked all the time and didn't give too much chance to find out anything. When she was through, you left -- it was more like a record playing it to you.

k) He (the counselor) was very vague in my case. I was in there about three minutes and didn't realize what was coming off until I went out. The interview was a flop.

The follow-up conferences revealed the variety of reactions to the aptitude testing program of the school. Many students made contradictory remarks about their impressions of the test. Most of the students, whether they thought it was worthwhile or not, expressed the feeling that it was an interesting experience.

Were you able to plan definitely your life
work as a result of the General Aptitude
Test Battery interpretations?

For the school year 1952-1953, (a) thirty-three students claimed that the test information did not enable them to plan definitely for a life work, (b) two felt they had made definite plans as a result of the test battery information, and (c) two were making vocational plans under the supervision of the State Vocational Rehabilitation office.

For 1953-1954, (a) forty-nine replies indicated that the test information did not enable them to plan definitely for a life work, (b) nine felt that they had made definite plans as a result of the test battery, and (c) three said that their plans were influenced by the results of the test battery:

- a) It gave me some ideas about different jobs that are possibilities, but I am still all mixed up.
- b) It more or less confused me. I don't remember too much about it. I have always been interested in some form of math, but when my numerical aptitude was so low, it fouled me.
- c) I had already laid plans. It didn't change my plans. It helped me out in that it showed I could qualify for the work.
- d) It helped me to pin down a little more as to what job. It gave me more material to think on - something to base what I was thinking about. They told me I could be a draftsman. I went over to where my sister worked at the State Highway Department and got an application for this work.
- e) I was all set to go down to Oregon State to take up engineering. I found out I wasn't high enough in some

of the requirements for it, so I started thinking about journalism.

f) I don't know whether it was because of the tests, but I have looked into the pre-vet quite a bit more since the tests.

g) It showed me I wasn't quite good enough in some aptitude for mechanics; showed me what I would have to overcome to be a mechanic. It changed my interest somewhat. I had certain phases I wanted to go into, but it helped me eliminate one.

h) It helped me to choose my vocation. I didn't know before the tests. I had thought about working on a farm before that and afterwards I thought I would from what it said. It said I would be good in mechanical work for farming.

The comments, classified under the question as to whether the student was able to plan definitely for his life work as a result of the General Aptitude Test Battery interpretation, indicated that although many of the students did not choose definitely a career as a result of the General Aptitude Test Battery (a) many students were confused about the information given them; (b) many students used the data as the basis for a starting point in working out the solution to their vocational problems.

Were you more interested in a vocation or a vocational choice after taking the General Aptitude Test Battery than you were beforehand?

For the school year 1953-1953, (a) twenty-four seniors stated that the test did not increase their interest, and (b) thirteen students believed that the experience did increase their interest. The comments made by those students who felt that the

test increased their interest indicated that it made them think more about the need to consider a vocational choice and about the future.

For 1953-1954, (a) thirty-six students said that the General Aptitude Test Battery did not increase their interest in a vocational choice, (b) twenty-five felt that it did increase their interest. Many students answering "no" to the question, already had definite plans as to a vocation or as to further schooling, or had been seriously considering the problem.

The notes on the interviews indicated that a number of the students had ambivalent feelings about the test battery. They would state at first that the test did not increase their interest about making vocational plans and then comment later in the interview that it influenced them to investigate and to question their choice. It would seem that while many students were enthusiastic about the help they had received from the tests, many others were confused, were not aware of the part the test had taken in their study of their vocational problems or were not aware of how to apply the data to their problems.

- a) It roused me up a little about the future.
It made me realize I would have to make a choice.
- b) It made me think about it more. Never had really thought too much about it.
- c) It hasn't changed my outlook on anything that I know of.
- d) Your natural ability doesn't really tell you too much. It tells you what you can do, naturally. I gained something from it. They told me what my

strong points were, where I was weak. If you stop and analyze it, you can see that plainly enough afterwards. It gave me a self-understanding. It is hard to look at yourself and see what you are good in, but by taking tests like that, they can tell you.

What use have you or are you going to make of this information about your strong and weak aptitudes and of the fields of work named for you?

For 1952-1953, (a) twenty-two students expressed the opinion that no use would be made of the information furnished by the General Aptitude Test Battery, or that it was not known what use would be made of the information; (b) ten felt that it would be good for future references; (c) three claimed that the results confirmed their vocational choice; (d) two were going to improve their low aptitudes.

Three opinions were expressed that the sheet of instructions on interviewing, given them by the Employment Service counselors were very helpful.

In the 1953-1954 class, (a) thirty-six students stated that either they did not think the data could be useful to them, or they did not know what use they could make of the information; (b) eleven thought that the results could be used for future references; (c) four thought they would be useful when applying for job; (d) three said it was a basis for their choice of work; (e) three indicated that they changed their field of work as a result of the

information they received from the test battery; (f) two felt it only helped them to choose a vocation to study in the unit on occupational information in the American Problems class; (g) one felt it helped him choose his college course; (h) one intended to improve his weak aptitudes.

This gives you something to aim for in the service. If you don't want to be a farmer when I get out, I can refer to this.

As in question number four concerning the motivation that the General Aptitude Test Battery was in arousing interest in solving the vocational problem, the replies relating to this question about the use of the test battery data would seem to indicate that there was confusion in the minds of many of the students about how to use this data to solve their vocational problems.

Should all members of the next senior class
take the General Aptitude Test Battery?

For 1952-1953, (a) twenty-five of the students believed that all seniors should be scheduled for the General Aptitude Test Battery; (b) nine believed that only those who desired to take the test should be given the opportunity; (c) three had no opinions about the subject.

For 1953-1954, (a) twenty-five of the students believed that all seniors should be required to take the General Aptitude Test Battery; (b) nineteen believed that only those who desired to should be given the opportunity to take the test; (c) eleven said they did

not know whether all members of the next senior class should be scheduled for the test battery; (d) five felt that the test battery should be given in the junior year; and (e) one thought the freshmen should be administered the test.

The reasons generally given for the belief that all seniors should be required to take the test were (a) that the ones who could profit from them might be afraid to take the test, (b) might think they did not need them, (c) might find out something they had not considered; and (d) that it was a good experience.

a) Just those who want to (take the test), because they come out saying "They are crazy."

b) Yes (they should be given the test), because it gives you more self-confidence. It helps prevent failures, of getting into something they can't do.

c) No, only those who do not have their minds made up (should take the test.)

d) Those that want to should. If they don't want to, it wouldn't do any good to take it anyhow.

e) They should - it gives you an idea of something to start on. Most people who don't want to take it are the ones who aren't sure or don't have any idea.

f) Yes, (all seniors should take the test). All because they might miss something; they might think they don't need it when they do.

g) If you leave it up to the kids, those who need to take them wouldn't do it probably.. Those who say they didn't get anything out of it, get something, really, I think.

h) They should be required. At the time they don't realize it would be good for them, but later on they would be glad they took it.

i) Junior year would be better. They could look this up in the senior year - coordinate it with career day. When they take them in the senior year, don't have time to make the change, if they would have to make one because they have to get out and find a job.

j) I would have everyone take it. Even if they think they are interested in something, they may be low in that; it will make them think twice. May save them some time.

Among those students who felt that only seniors who wanted to take the test should be scheduled for them, several said that only those who did not have their minds made up as to the work they wanted to do, others said that unless the students were interested, they would not take the opportunity seriously:

a) No. Only those who do not have their minds made up should take the test.

b) Those that want to should. If they don't want to, it wouldn't do any good to take it anyhow.

c) Maybe it shouldn't be compulsory, and they should take it outside of class because if they are not interested in it, they would take it to get out of school.

d) If they don't want to take it, may fool around and put down silly answers.

The students who thought that the test should be given during the junior year, expressed the following reasons:

a) The junior year would be better. They could look this up in the senior year - coordinate it with career day. When they take them in the senior year, don't have time to make the change if they would have to make one because they have to get out and find a job. It will clear up your mind definitely what you will be good in.

b) If they take it earlier, they might change the subjects that they would take.

c) Good to take it in the junior year. Have more time to plan this out; can look further into it.

d) I think if they took it in their junior year, it would be more helpful.

e) When you become a senior, it is too late. You have made up your mind. You have to have some idea when a junior or senior because of your classes. You probably know about the career you want to take up anyway; you have had to find out what you want to do for your courses.

f) It is too late in the senior year, because sometimes you should have had your chemistry, etc.

The student that said the freshmen should take the test stated:

Something should be given to the underclassmen to help them decide--freshmen are the ones that need to know.

It was noted that even though students said that the test did not help them, they still felt that seniors should be given the opportunity to take them. Several of this group thought all the seniors should be required to take them.

It appears that most of the students who took the General Aptitude Test Battery felt that the experience was interesting and worthwhile even though many were not able to tell what benefit they received from the information, or how they were going to use the data.

Was it Helpful to have a copy of the recorded interview of the General Aptitude Test Battery for reference?

For 1952-1953, (a) thirty-six of the thirty-seven students interviewed by the school counselor in the follow-up

conference, felt that the recorded interview was helpful for reviewing and would be useful for future references.

For 1953-1954, (a) fifty-two students said that it was helpful to have the recorded test interpretations of the General Aptitude Test Battery; and (b) nine said that it was not especially helpful to them.

a) It would be better to have the written interview without the counselor's interview.

b) Yes, if you want to look them up five years from now, you can.

c) It was helpful because you could refer back to it.

d) Could go over it again.

e) Yes, you can be able to see it then; otherwise you hear it and don't keep it so well.

f) It would be a good idea if you could see the results of your test ahead of time and then have a little time to think about it.

g) It would help to have the interview - you might need it for your employer to refer to.
(This student expressed the idea earlier in the interview that he did not think the tests were very accurate.)

h) Earl lost interest in the job he was thinking about. If a guy loses interest in a job he was on, he could check back on the jobs that the test showed.

i) It would be helpful to refer to if got into something you didn't like and wanted to go into something else.

j) It is better to have them typed because I get confused talking in an interview. I can study it better on paper.

k) Yes, the recorded interview made the whole thing clear and gave it meaning.

l) I used the interview as a guide and worked around it - you can look back and see what he had told you.

m) Better to have them written - you can look back and see how many jobs you would be able to do. Get more out of it when you have the interview first and then can read it.

Some comments of those who did not care to have a written record of the interview were:

a) I don't believe I care to see the written interview. I can remember everything they told me. If you can't, you can always go back and ask them.

b) I don't feel like I would like to. It would be interesting to go back five years from now and hear it.

Comments were made by the students about orientation to the General Aptitude Test Battery:

For 1952-1953, many felt that the students should have been informed more fully about the test:

They should take them, but they should understand what fields they cover. I don't believe this class understood enough (about the test.)

A number of the students felt that the orientation of two days in the American Problems course was helpful:

a) It made it clearer to study it beforehand.

b) It helped to have the lesson before going over there because you understood what you were doing.

Several of the seniors felt that from the orientation of two days, they had received the wrong impression about the purpose of the test. They had thought it was going to tell them the exact answer:

After being oriented on it, you had the wrong idea about the test. Thought it would tell me more than it did, that I would get more out of it than I did. I was expecting an exact answer.

Some of the comments of the students showed ambivalent feelings, rejection, acceptance, as well as serious thinking about the test interpretations:

. Even if you are low in one aptitude, you make it up in some other way. You might think if it helps one person, it is worth it. If you happen to be sick when you take the test, how is the test going to definitely tell? As far as they go they are okay. They are only a small part of the picture. But I don't consider whether the person has an aptitude is much. She told me things I already knew and she told me some things I didn't want to believe. She said, what are you going to take at college. I told her journalism; and she said, according to this, you will have a hard time in journalism. She implied I wouldn't be good at it, but I didn't believe her.

It seemed that the follow-up conferences with the senior students for 1953-1954 by the school counselor (a) facilitated the evaluations by the students of the test data they had received in the original interview of the Employment Service counselor; (b) furnished the school counselor significant information concerning the reactions and the impressions of the seniors to this phase of the vocational guidance program; (c) made apparent that the small group discussions were a valuable means for making the General Aptitude Test Battery results meaningful to the students and were timesaving compared to the individual counseling.

CHAPTER VI

SUMMARY AND RECOMMENDATIONS

This research was undertaken (a) to determine what, if any, use was being made of the General Aptitude Test Battery by the public secondary schools in Oregon; (b) to evaluate the services of the Oregon Employment Service counselors, Salem, Oregon, as interpreters of the General Aptitude Test Battery results to the seniors of Central High School, Independence, Oregon, during the school years 1951-1952, 1952-1953, and 1953-1954; and (c) to determine the usefulness of the General Aptitude Test Battery and of the recorded interviews of the Employment Service counselors to the students of Central High School in the formulation of future plans.

The observation study approach was used to investigate the problem. The methods used to make the study were: (a) a questionnaire sent to the principals or superintendents of the sixty-six public secondary schools in Oregon to determine the use made of the General Aptitude Test Battery results; (b) the recorded test interpretation interviews of the Employment Service counselors to the seniors of Central High School; (c) a planned unit in occupational information in the American Problems course; and (d) the follow-up conferences by the writer with the senior students who received the test interpretations from the Employment Service counselors.

Summary

(1) It appears that the teachers of the public secondary schools in Oregon included in this study received a minimum, if any, orientation as to the purposes and limitations of the General Aptitude Test Battery. It would seem that because of the lack of a definite orientation program in the schools covered by this study, the teachers were limited in their ability to aid the student in using the General Aptitude Test Battery results for vocational appraisement or to correct any misunderstandings of the student as to the findings reported in the initial interview with the Employment Service counselor.

(2) Analysis of the questionnaires returned by the public secondary schools in Oregon seemed to indicate that the seniors taking the General Aptitude Test Battery received only incidental orientation as to the purposes and limitations of the test. As a result of the incidental orientation, it would appear that the students (a) might be indifferent to the opportunity afforded for attaining some indication of their aptitudes; (b) might not be as highly motivated to give their best performance on the test; (c) might be more nervous about the test situation than if the purposes of the test were fully understood; (d) might be unaware of the use the General Aptitude Test Battery as a tool in vocational appraisement.

(3) There is reason to believe that the availability of the test results to the teachers was limited. As a result of

the limitation (a) misunderstandings of the students about the test interpretation might have been inadequately corrected; and (b) test scores of the General Aptitude Test Battery were probably used to a very limited extent by the teachers as another source of information about the student.

(4) Apparently class work or units on vocational information as a learning experience in order to give the students opportunities for the application of the General Aptitude Test Battery data to vocational problems, was limited. It would seem that, since the learning experiences for applying test interpretations were limited, the test data was, perhaps, not as meaningful and useful to the seniors as the information could have been.

(5) The follow-up conference was the method used most frequently by members of the school staff of the public secondary schools in Oregon included in this study. Indications are that the follow-up conference was considered the most practicable method to guide the student in the use of the General Aptitude Test Battery results for vocational appraisalment.

(6) The use made of the General Aptitude Test Battery as a device for identifying and studying students with exceptionally high or low scores seemed to be limited and to be only a by-product of the interest of the teacher in the student.

(7) Apparently, no systematic program was carried on by the schools in this study to inform the parents of the senior students taking the General Aptitude Test Battery about the test results.

(8) No follow-up studies have been made by the public secondary schools in Oregon included in this study to determine the effectiveness of the General Aptitude Test Battery in vocational guidance.

(9) It would appear that the General Aptitude Test Battery results was an aid to some students in the formulating of their future vocational plans by (a) showing high scores in the aptitudes needed for the occupation being considered; (b) motivating the student in the formulation of occupational goals; (c) helping in suitable job placement; (d) confirming and creating confidence in the choices of an occupation; (e) furnishing information that may help select an occupation at some future date when a change in the field of work might be considered.

(10) Judging from the replies given on the questionnaire returned by those public secondary schools in Oregon included in this study, there is reason to believe that (a) some students entered the fields of occupation for which the General Aptitude Test Battery indicated strong aptitudes; (b) those seniors who took the test results seriously were helped in the formulation of their future plans; (c) the General Aptitude Test Battery data can be a starting point for action in the formulation of future vocational plans.

(11) Evidence furnished by the recorded test interpretations of the Employment Service counselors to the seniors of Central High School, during the period covered by this study,

indicated that apparently (a) counseling was given without consideration of the fact that the counselee was a high school student; (b) the traditional techniques of counseling, such as highly organized interviews, advising, strong informational and psychometric emphasis and counselor-centered attitudes, were used; (c) for each succeeding year covered by this study, some improvement was made in the structuring of the test interpretation, as judged by the principles set forth by Shostrom and Brammer (14, p.111-124); (d) slightly more participation by the student in the interview took place each succeeding year of this study.

(12) It appeared that, due to the limited time allotted to the Employment Service counselors for the test interpretations, expediency required that the original interview be a fact-giving situation. Therefore, in order to facilitate the evaluation, by the student, of the test data so that distortion of the test results may be prevented, it would seem that the opportunity for questions, discussion, and evaluation would necessarily have to be offered elsewhere -- probably through the vocational guidance program of the school. The effective integration with the test results of all information pertaining to the student and the facilitation of the test evaluation for the student seemed to be an important part of the interpretation of the General Aptitude Test Battery, due to the fact that there was frequent evidence, in the recorded interview of the Employment Service counselors and in the follow-up conferences by the school counselor, of emotional upset, distortion, rejection and dissatisfaction on the part of the students to this phase

of the vocational guidance program.

(13) There was reason to believe that the General Aptitude Test Battery was a valuable device in the vocational guidance program (a) as an introduction and as a motivating factor in the unit on occupational information in the American Problems course; (b) as a personalizing factor and as supplementary material in the study of vocations; (c) as a topic of discussion among the students.

(14) There was reason to believe that the follow-up conferences, by the writer, with the senior students of Central High School taking the General Aptitude Test Battery during the period covered by this study (a) facilitated the evaluations by the students of the test data received in the original interview of the Employment Service counselor; (b) furnished significant information concerning the reactions and the impressions of the seniors to this phase of the vocational guidance program; (c) made apparent that the small group discussions could be a valuable means for making the General Aptitude Test Battery results more meaningful to the students.

(15) Students seemed to derive some satisfaction in being diagnosed and evaluated, even though often they could not state the value received or the use they could make of the General Aptitude Test Battery information.

(16) The follow-up conference revealed that (a) some students chose their life work as a result of the General Aptitude Test Battery; (b) many students were confused and had ambivalent

feelings about the value of the test battery as an aid to self-understanding and vocational appraisalment; (c) many students were able to use the data as the basis for a starting point in working out the solution of their vocational problems.

(17) Some students felt that the General Aptitude Test Battery should be given during the junior year in order to (a) choose school subjects the senior year that might develop the skills utilizing their strong aptitudes as indicated by the test results; and (b) have more time to investigate the various occupations of which the interpretations of the test battery caused them to become aware.

Recommendations

(1) Statistical information concerning the benefits of the administration of the General Aptitude Test Battery to seniors of Central High School as a phase of the vocational guidance program should be provided. During the course of this study, it was felt that probably the research should have been conducted so that various factors could have been controlled. It was felt that some method should have been used whereby observations could be statistically measured and evaluated.

(2) A follow-up study of the effectiveness of the General Aptitude Test Battery as a tool for vocational guidance of the high school students in the public secondary schools of Oregon should be made.

(3) Consideration should be given to the administration of some form of an aptitude test battery, as a part of the vocational guidance program, to the juniors in high school rather than to the seniors.

(4) Further study should be made to discover a practicable method of affording the student an accurate recall of the data given during the original interview with the Employment Service counselors. Since the test interpretation by the Employment Service counselors was only a fact-giving situation, an accurate recall would facilitate test evaluation by the student. It is believed that the recording and the typing of the interviews are more time-consuming than is practicable for most schools.

(5) It is recommended that the Employment Service counselors working with the secondary schools have an understanding of the high school student so that the test results may be interpreted (a) in terms familiar to the counselee; and (b) in a manner that will more readily meet the needs of and be less confusing to the student in his exploration of the possibilities of various types of work.

BIBLIOGRAPHY

1. Bixler, R. H. and V. H. Bixler. Test interpretation in vocational counseling. Educational and psychological measurement 6:145-155. 1946.
2. Brewer, John M. History of vocational guidance. New York, Harper, 1942. 344p.
3. Covner, B. J. Nondirective interviewing techniques in vocational counseling. Journal of consulting psychology 11:70-73. 1947.
4. Cronbach, Lee J. Essentials of psychological testing. New York, Harper, 1949. 475p.
5. Dvorak, Beatrice J. The new USES general aptitude test battery. Journal of applied psychology 31:372-376. 1947.
6. _____ . The USES general aptitude test battery. Occupations 26:42-44. 1947.
7. Kellogg, Ruther M. United States employment service. University of Chicago Press, 1933. 192p.
8. Reeves, Harold L. Use of general aptitude test battery in high school. Ph.D. thesis. Lincoln, University of Nebraska, 1951. 50 numb. leaves.
9. Potter, Ruth E. Youth counseling - and the general aptitude test battery. Employment security review 20:11. April 1953.
10. Rogers, Carl L. and John L. Wallen. Counseling with returned servicemen. New York, McGraw-Hill, 1946. 159p.
11. Seitz, Margaret Jane. A follow-up study of the use of the general aptitude test battery of the United States employment service in the placement of high school seniors. Masters thesis. Newark, University of Delaware, 1949. 41 numb. leaves.
12. Shartle, Carroll L., et al. Ten years of occupational research, 1934-1944. Occupations, 7:387-446. 1944.
13. Shellow, Sadie M. The increasing use of clinical psychology in vocational guidance. Occupations 28:302-305. 1950.

14. Shostrom, Everett L. and Lawrence M. Brammer. The dynamics of the counseling process. New York, McGraw-Hill, 1952. 213p.
15. Traxler, Arthur E. Techniques of guidance. New York, Harper, 1945. 394p.
16. U. S. Employment service. Guide to the use of general aptitude test battery B-1001, part 1. Washington, U. S. Government printing office, 1948. 85p.
17. U. S. Employment service. Standards and methods division, occupational analysis-industrial service division. Introduction to occupational testing in the employment service, B. Visual aids and glossary. Washington, U. S. Government printing office, 1947. 30p.

-: APPENDIX A :-

APPENDIX A
QUESTIONNAIRE

Date:

Name:

Address:

Mail to:

Miss Jessie B. Blackburn
Guidance Coordinator
Central High School
Independence, Oregon

1. What use is being made of the General Aptitude Test Battery results at your school:
 - (a) by the counselor
 - (b) by the teacher
 - (c) by the parents
2. Do the students definitely decide on an occupation as a result of the General Aptitude Test Battery scores?
3. Do students go into the fields of occupation for which the General Aptitude Test Battery scores indicate strong aptitudes?
4. Are the students more interested in vocations and in their vocational choices after taking the General Aptitude Test Battery?
5. In your judgment does the fields of work indicated by the General Aptitude Test Battery correlate high or low with the better grades of the student?
6. Prior to taking the General Aptitude Test Battery, how are the students informed or oriented as to the purpose of the test?

-: APPENDIX B :-

APPENDIX B

INTERVIEW BY EMPLOYMENT SERVICE COUNSELOR
FOR THE BOYS
1951-1952

January 31, 1952

(Counselor exchanged greetings with student.)

Counselor: What are your plans for the future, Don?

Student: What I want to do for a living for the rest of my life is something I don't know anything about. I would like to go to college and see what I could learn there.

Counselor: You want to go to college just to see what you can learn? Don't you think it would be better if when you went to college, you went to see what you could learn about a particular thing?

Student: Yes, I could take up math or science.

Counselor: Why math?

Student: I think I have the most ability in math.

Counselor: If you think you have most ability in math, why don't you take up some kind of work that would use math.

Student: I don't know what that would be.

Counselor: How about bookkeeping, accounting or something like that?

Student: That would be awful dull, wouldn't it?

Counselor: I don't know, would it?

Student: I don't know.

Counselor: That list of aptitudes contains ten that each person has and uses each day. Those ten are used in various combinations in some 18,000 jobs that were tested by this test. Don't think that is all the jobs. We have some 26,000 jobs in the country. Those aptitudes listed there are required in these different jobs in amounts greater in every-day life. We find on there that your highest aptitude is your spatial perception. Next to that is general learning ability. After that comes your verbal ability and your numerical ability or your

arithmetic ability; it is average. In all those the only one that is outstanding is your spatial perception. Your learning ability is above average, but it is not exactly outstanding. The ones who are outstanding are in the upper ten per cent of the population. Your learning ability is just a little bit under that. Your spatial ability is in that.

So actually, if you would take the spatial perception and cut down the learning ability just a little bit, what we have left is an average American boy. No genius, no dumbell either.

Your hands are pretty good. Your fingers are not so good. So you would be much better in work which calls for the use of hands rather than work that calls for the use of fingers. The question arises as to how you may use your fingers without using your hands and vice versa. If you think of a job like carpenter who is grasping tools in his hands all the time, and a typist or pianist who is always using fingers, you will see what I mean.

You have aptitudes for a number of skilled jobs: automobile mechanic, diesel mechanic, carpenter, plumber, structural steel worker, steam fitter, pipe fitter, ornamental iron worker, boat builder, both wood and steel. Also in the grinding and tool dressing, including hand forging, working with metal. In the inspection of work of others or of products for flaws. Or a number of occupations in the rolling and drawing and extruding of metals as you will find in steel mills, lumber mills, aluminum tubing, steel tubing; also a stone mason.

You can see a number of those jobs don't exist around here. Before you can satisfactorily do any work, you must have three things: desire, ability, opportunity. You must have all three of them before you can satisfactorily do any work. Knowing some of the jobs that you can do and knowing some jobs that are in existence, you should be able to tell whether or not you have the desire to do those jobs. As far as carpenter and plumber, auto mechanic, diesel mechanic, you have a pretty good idea of what they do already. Do you like mechanics?

Student: As a hobby. I don't believe I would care to make a profession out of it.

Counselor: What do you have against it?

Student: It is not a clean type of work - heavy manual labor.

Counselor: Do you ever watch a tune-up man? Do you like that?

Student: In some ways. When it goes right, it is okay.

Counselor: Have you ever watched an ignition expert?

Student: Not as an expert in it, but a general mechanic.

Counselor: These might be something worth looking into. In Portland there are a number of garages who have specialists.

Student: I am not interested in carpentry work, especially.

Counselor: On this interest check list you indicated that you had either done or were interested in a number of things -- and your aptitudes as they came out of this test, checks up with some of these things pretty closely. One of the things it checks with pretty closely is in the field of combustion engine repairing. I think that if you can look around in that field that you will find there are jobs there that you will definitely like.

Student: If you chose something that was not manual labor, what would I be best suited for?

Counselor: On this list, it doesn't show anything other than this inspection field that is not manual labor.

Student: Then you wouldn't advise me to go to college unless it was a trade college?

Counselor: I would definitely advise a trade school. You have the necessary aptitudes for college, but what would you do with it? You can go to college, you can graduate from it, but what would you do with it? Why go if you can't do something with it. I would consider that as far as college studies are concerned, sure you won't have any troubles at all. You will get your diploma. But after you get it, then you have the problem of what are you going to do. Are there any other questions?

Student: No.

Counselor: Well, if you have any questions later, you can come in to our office at Salem and talk to Mr. Johnston.

INTERVIEW BY EMPLOYMENT SERVICE COUNSELOR
FOR THE GIRLS
1951-1952

January 31, 1952

(Counselor exchanged greetings with student.)

Counselor: Now you have lots of aptitudes here and lots of patterns, Patricia. I'll go through, first, and tell you what the patterns are and we'll miss some that are primarily for men. The very first one, for instance, is for men. And it wouldn't interest you at all to be a machinist, or something like that.

The second pattern is for artistic drawing and artistic arranging, and that includes such things as catalog illustrators, interior decorator, clothes designer, photographer, window trimmer, and all that kind of thing. And those require some kind of technical background.

The next one, again, is for men. Then you have the pattern for stenographic work, which is a very good one for girls in this day and age. It includes operating all types of machines like dictaphones, etc., teletype and stenotype machines in case you take shorthand by that instead of by hand.

The next pattern, again, is for men. Then, you have another clerical pattern. This one in equipment and material checking and routine recording work. Now, this includes some phases of bookkeeping, inventory work, and warehouse record clerks and some types of tellers, some types of payroll work, etc.

The next pattern, also, is a clerical pattern. This time in computing work and general recording work, using machines, bookkeeping machines, calculators, etc. Then, we have another pattern for men; you don't want to be a plumber, etc., I don't think.

The next pattern is in electrical unit assembling, and mechanical or metal unit assembling and optical unit assembling. Not very many girls go into this kind of work, but if you were really interested, there is no reason why you couldn't providing you go the training int.

Then there is a pattern for close and simple visual inspection, which we don't have much call for in this part of the country. Also, a pattern in electrical assembling which again is not very common around this part of the country. On the East Coast where there are the electrical factories, there is a great demand for them.

Then a pattern in close and simple visual inspecting, using your eyes; and some other types of men's work, like marble setting, etc., pattern number eighteen.

Next is a clerical pattern in classifying work and routine clerical work. Now those are jobs like file clerks, mail clerks, mail sorters, parcel post clerks, catalog compilers, directory compilers, and things of that nature. The last pattern is in all kinds of machine operation. Usually occurs in factories; and there are many, many different kinds: textile fibre machine tending, machine sewing, metal machine operation, food machine operation like you find in bakeries or candy factories, etc. paper machine operation - making envelopes, etc.

Now let's go back and look at your aptitudes and see which you are highest in. You were average or above in art of all kinds. Your lowest one was verbal aptitudes. And in that you are average, which is what most people are. Your highest one was in spatial perception. You are way upstairs there. Only ten per cent of the population would have scores as good as you. Your manual dexterity is way up there, too. Then your learning ability, your eye-hand coordination, your motor speed and your finger dexterity are all excellent - only twenty-five per cent of the population have scores as good as you. Your numerical aptitude is above average, and your clerical aptitude is above average quite a bit. So you see, you have all very good scores.

Now we'll look and see what you are most interested in.. Now, it might be well for you to go to college, but you may have a little difficulty because of your verbal aptitude - it isn't as high as it should be for college. However, I'm not saying don't go, because you probably can get along very well. Ordinarily, they say that your verbal aptitude should be sufficiently above average and in the twenty-five per cent of the population. Your learning ability is excellent and your numerical is almost what it should be, and I would say to go ahead and try it. It may be a little bit harder than you think it should be, but I certainly would try it.

Now, is there anything that you are interested in besides nursing?

Student: No, I've decided to go to college. I've decided to go to Good Samaritan Hospital in Portland, and take nurse's training.

Counselor: Well, I would try it. Now, there again, nurses have to know all sorts of strange and odd names, and it might be a little harder for you to get. But it is worth trying. There is a shortage of nurses and it is a good field for a girl to get into, if you like it. Of course, there are lots of things in

nursing that if you don't know about them now, might set you against them if you did know. For instance, the hours. You are going to work odd hours, perhaps. The hours run from seven to three, three to eleven, etc., and there will be work on week-ends, and that sort of thing. Some of the work is rather unpleasant. You should be sure to inform yourself of these things before you definitely decide to go into it. However, it still is a good field of work for women. It pays good, the opportunities are good, especially if you can work up to some specialized type of nursing, like surgical nursing, etc. It certainly is worth trying. If you can't make it, if you could make up your mind that you do like office work; but I'm not trying to talk you into it, because you certainly can make up your own mind. The test shows that you do have all the aptitudes for it, but don't do it if you are not interested in it. It's as bad as trying to do it if you are interested and don't have the aptitude.

Do you have any questions? In other words, you are pretty well set, have your school picked out, and there is not much to do except maybe following through with what is required. Or have you taken care of all that?

Student: Well, I have a rather close aunt who is a nurse.

Counselor: Then, you definitely know what it is all about. I would say more power to you, because we need nurses very badly. If you have no questions now, we will close this interview; except to say that if you do have more questions later, you are welcome to come and talk to us in the office, or I'm sure that Miss Blackburn or Mr. Hollister would be glad to talk to you. If you need help finding a temporary job during the summer, you can come in and talk to Mr. Johnston at our office.

INTERVIEW BY EMPLOYMENT SERVICE COUNSELOR
FOR THE BOYS
1952-1953

(Counselor exchanged greetings with student.)

Counselor: I will name the aptitudes covered by this test, starting with the highest down to the lowest aptitude: numerical, general learning ability, form perception, clerical, verbal, manual dexterity, finger dexterity, spatial perception, aiming, motor speed. You are qualified for a number of things. Some of them you won't be interested in, and I won't go into those very thoroughly.

The first of the things you are qualified for - these are occupations you could enter and have a chance of reasonable success in - the first is the field of accounting: Public accountant, tax accountant - work of that nature.

The next field is in the machine field - machine shop.

The next field is computing work. It isn't as difficult as accounting. It is usually concerned with bookkeeping and credit work. Not too complicated as far as math is concerned.

The next field is artistic drawing and related work. Found in such jobs as industrial design work, interior decoration, portraits and commercial photography. Anything where you are originating an idea for a design.

The next field is in the electrical wiring and related types of work. This includes construction electrical work, telephone switchboard insulation and repair and radio repair. You are qualified in the field of typing, stenographic, typesetting, machine operation and hand composing. The last two are found in the printing industry.

The next field is combustion engine repairing and aircraft engine repairing. You are qualified in construction fields, such as carpentry, plumbing, iron working, masonry - that is brick mason, tile setting, etc.

You are qualified in the field of electrical mechanical and optical unit assembling - that is the assembling of such small items as watches, thermostats, usually working from wire diagrams or blueprints. You are qualified to operate various types of machines in different industries; whether it be in the sawmill industry or the woodworking, automotive, etc. This is the mere operation of machines - the starting and stopping and feeding of

the machine; the utilization of your hands mostly.

What plans have you made?

Student: I haven't made any - thought about going through for engineering.

Counselor: Had you ever thought of using your ability in math?

Student: No.

Counselor: It could be used in engineering, but there are more things than math in engineering necessary. I am sure you could comprehend the work necessary in college engineering, but your spatial ability necessary for engineers is a little low. It doesn't mean you can't do it. It means in that particular type of work, it would include drafting. You would have to work a little harder than the next fellow in that particular type of work. As far as your form perception in engineering, you have the required amount.

You are very good in math, and your general learning ability is at such a point you can comprehend engineering work. Had you thought much about the accounting field?

Student: No, I don't think I would like it too well - it is too confining.

Counselor: How about statistics?

Student: Don't think so. Is my aptitude fairly high for electrical?

Counselor: Yes, you have the aptitudes for that. I think you would be wasting your talents there. Unless you utilize your fullest capabilities, unless you are doing your utmost, using all your better aptitudes, you are not doing yourself justice. Say you took the training as an electrician and you worked on the job, and maybe even before your training is over, you become bored with the job; more than likely you would, because you aren't utilizing your highest capabilities. Your general knowledge is above that. If you went to college, would you have to work your own way through?

Student: Yes, live at home and go to Oregon College of Education for a couple of years and then go to Oregon State.

Counselor: It would be worth your while to investigate these fields of engineering. You say you aren't interested in accounting. However, accounting is quite similar to statistics. Talk with

some people who are very well acquainted with those two fields. Look them over and see what you think of them. Try to make a decision before you enter college - as soon as possible - and then you can prepare yourself for it. There is a demand for physicists.

Any other questions?

Student: No.

Counselor: If you think of any other questions later, you may come to our office in Salem. We will be glad to answer questions.

INTERVIEW BY EMPLOYMENT SERVICE COUNSELOR
FOR THE GIRLS
1952-1953

(Counselor exchanged greetings with student.)

Counselor: You have a variety of amounts of these aptitudes like most people. You made your highest score in eye-hand coordination. Your motor speed also is very high. Your manual dexterity is very high. Your spatial perception and finger dexterity are well above average, but not quite as high as these others. Your clerical aptitude also is above average. Your learning ability is average, so you have nothing to worry about there. You do have a couple of aptitudes that are a little low.

Student: In numbers?

Counselor: Yes, although your numbers aren't as low as your verbal aptitudes - your words. I am not trying to say you don't have any aptitude in that line, but it is considered a little below average, and although they are plenty good for many kinds of work, there are some kinds in which you would have a little trouble perhaps. So it might be well to think of things in which you don't need them as much and in which you do utilize those of which you have more. These aptitudes were related to all these twenty fields of work, and you have quite a few of them checked on your chart. But some of them are for men, and of course you wouldn't be interested in those.

Your first pattern is a clerical pattern in equipment and material checking and routine recording. This might be called record-keeping. In other words, you are working with numbers and your clerical perception. Many different kinds of jobs are included in this field. It might be an inventory clerk or some phase of bookkeeping, like an entry clerk in a cash journal, or a balance clerk, or an accounts-payable clerk. It might be certain kinds of cashier or tellers, check auditor or check sorter; maybe a statement clerk or order clerk, or a billing clerk or a meter reading clerk. That amuses you like most girls, but there is no reason why a girl couldn't do that, if she likes walking and out-of-doors.

You have a pattern which all except two or three of the girls have had today, but which very few girls think about as a career for themselves. This covers such jobs as locksmith, jeweler, watch repairman, instrument man, clock maker, prescription lense mounters and many different kinds of jobs in which you utilize your finger dexterity to a great extent.

The next two fields of work are not too good for this area, because there is not too much opportunity in them, and probably you wouldn't be interested in them, because they do not utilize your highest aptitude. One of them is in close and simple visual inspection and the other one, in electrical unit assembling; both of them occur usually in factories.

The next pattern, again, is clerical. This one covers all the different kinds of file clerks and mail clerks, parcel post clerks, telephone order dispatchers, directory and catalog compilers, etc.

The last pattern is all kinds of machine operating. It might be sewing machine, metal work machines, woodworking machines, plastic working machines, steel or glass working machines, paper, food, etc. Fabric and leather pressing.

You said you thought you would like to be a stenographer. Is that still your main interest.

Student: Yes.

Counselor: We didn't say anything about a stenographer in these patterns. The only reason why we didn't was because of your verbal aptitude which is a little low for that kind of work. However, it doesn't mean that you can't do that kind of work, because if you have the interest, training and determination, you can do it. You have all the other aptitudes you need and more than enough of them. You can help yourself by concentrating on vocabulary building. And I would definitely suggest that you do work at it. If you plan to enter the field, the best way to get into office work of this kind probably is through State Civil Service. (explains in detail about State civil service examinations and how apply for work with a State office.)

However, there are many jobs in private industry. It might be a good idea to make personal application in the office in which you would like to work. Sometimes there are newspaper ads that are worthwhile. Maybe you have friends and relatives who can give you hints about whether there is a job opening, etc. In this case, I would suggest that you do not try to get a job where you work at shorthand all day long. It would be very nice to work at it part of the time, but I think because of your verbal aptitude, it would be better for you if part the day you did record keeping, filing, telephone reception, typing, etc., so that you don't have to concentrate on words all day. In the long run, if you do, you might become a little unhappy with it. But there is no reason why you couldn't do the job and do it well. If there are no more questions, that is all, Margaret.

INTERVIEW BY EMPLOYMENT SERVICE COUNSELOR
FOR THE BOYS
1953-1954

(Counselor exchanged greetings with student.)

Counselor: Gerald, your spatial perception and form perception are your best aptitudes. You are a little weak in verbal aptitude, numerical and finger dexterity. Have you made any plans, yet, as to what you want to do when you get out of school?

Student: Something to do with automobiles - service station; selling - I am more interested in selling parts, equipment.

Counselor: Selling is one thing the test does not cover. We can give you some idea as to your mechanical ability. The thing I want you to remember is that the results of these tests are in no way the final answer. They are only to be used in conjunction with the other things that you know about yourself, such as your high school scores, your interests and the type of work available for you.

These occupations that I will list are fields of work which you can enter and you would have a good chance of succeeding on the basis of your aptitudes. One field is in grinding and tool dressing - the kind of work you would find in machine shop keeping and cutting tools.

Another field is visual inspection - the type of visual inspection in which you are observing the object and on the basis of your previous knowledge of the product you can tell whether it is to be passed or rejected. Rubber tire industry, for instance; if you were inspecting rubber tires and you go down the line and find a tire, pick it out and test it. You pass or reject it.

Another field is rolling, drawing and extruding - those three types of work are found in steel manufacturing industry. That is rolling out the steel stock and making such things as wire and tubing.

There is the field of work as forming press operator, calculating machine serviceman, a laborer in the printing and publishing industry; hand dry cleaning; drill press operator and lathe operator.

The test itself covers some two thousand occupations. There are probably around twenty thousand they don't cover. Quite possible your interest may lie around those that are not covered. Do you think that any of these we mentioned this morning would interest you?

Student: That inspection deal might.

Counselor: For the Northwest, it would cover such occupations as log inspector and various grading jobs in a mill and woodworking plants, such as moulding grader in which no device or tool is used in inspecting other than your eyes. Do you have any questions?

Student: No.

Counselor: As far as auto mechanics are concerned - your math, I think, would give you trouble, in case you went into mechanics.

Student: I haven't had any math since I was in the eighth grade - I need brushing up. I used to get top grades in math.

Counselor: Actually these aptitudes cannot be increased to any great extent by study. Your aptitudes are born with you and you develop them up to say an age of seventeen years, and then they are stable up to about fifty years of age. So quite possibly you could increase your math aptitude a little, but not to any great extent.

As far as the sales field is concerned, that depends entirely upon your personality and your interest in working with people.

Student: I did work for a service station for about three years.

Counselor: Are you eventually going to have your own station?

Student: I'm not too greatly interested in that. I may go into a shop of some kind - like ski equipment. I'm interested in hot rods. I would like to sell equipment.

Counselor: You're not particularly interested in the mechanics.

Student: I used to be. I have a general knowledge.

Counselor: Possibly you could get into an auto parts company, maybe in Salem.

Student: I would like to maybe try right after school to get in this new State Highway Shops.

Counselor: If there are some other questions you might think of latter, come to our office at Salem, and we will be glad to help you.

INTERVIEW BY EMPLOYMENT SERVICE COUNSELOR
FOR THE GIRLS
1953-1954

(Counselor exchanged greetings with student.)

Counselor: Aptitudes are important in thinking about vocations. Interest is just as important. Your high aptitudes are your form perception and your spatial perception. Your lowest one is numerical. Your manual dexterity didn't come out too high. Because of some of these scores, there wasn't much on your chart. There are some jobs in the field of inspection. These jobs are not too plentiful around here, but there are some at Hirsch-Weis and Jantzen Knitting Mills at Portland. There are some specific jobs for consideration that are based on your scores on the general test:

Practical nurse; packaging and labelling liquid pharmaceuticals in the pharmacy business; sewing machine operator; decorator, in the millinery business, sewing decorations on hats; hand decorator in the pottery business; staling, assembling, etc., in the printing and publishing business; hand dry cleaner in the dry cleaning industry.

Besides these there are twenty thousand others. You mentioned you were planning on going to Oregon State to major in art. Any question about it?

Student: This here form perception - I don't understand it.

Counselor: That gives you the ability to distinguish between sizes and shapes.

Student: I sort of planned on going to college at first, but it has sort of left my mind at the moment. I like art; I like decorating; I like to be around people to mix with them.

Counselor: If you go on to school you are going to have to work very, very hard for two reasons: (1) because of your numerical aptitude and (2) verbal aptitude. College is much different than high school. It will be very very difficult for you, but if you have the time and money, there is nothing like trying it. But if time and money are important to you, then I would try to find some kind of work that would be interesting to you.

Student: The only thing I am really and truly interested in would be decorating and some fields of art.

Counselor: Your interest is in a field in which it is difficult to get into and usually you need a great deal of training in it. If they are outstanding in it, they have a difficult time getting. Lots of people use it as an avocation.

Student: I like sort of floral designing.

Counselor: You might look into that, then. If there are no more questions, Juanita, we will close for now. If we can help you, be sure to come to our office in Salem, and you can talk to one of the counselors there.

-: APPENDIX C :-

-: APPENDIX D :-

DEFINITIONS OF APTITUDES MEASURED

The nine aptitudes measured by the General Aptitude Test Battery are:

GENERAL LEARNING ABILITY - Ability to "catch on" or understand instructions and underlying principles; the ability to reason and make judgments. Closely related to doing well in school.

VERBAL APTITUDE - The ability to understand the meaning of words and ideas associated with them and to use them effectively. The ability to comprehend language, to understand relationships between words and to understand meanings of whole sentences and paragraphs. The ability to present information or ideas clearly.

NUMERICAL APTITUDE - Ability to perform arithmetic operations quickly and accurately.

SPATIAL APTITUDE - Ability to comprehend forms in space and understand relationships of plane and solid objects. May be used in such tasks as blueprint reading and in solving geometry problems. Frequently described as the ability to "visualize" objects of two or three dimensions, or to think visually of geometric forms.

FORM PERCEPTION - Ability to perceive pertinent detail in objects or in pictorial or graphic material. Ability to make visual comparisons and discriminations and see slight differences in shapes and shading of figures and widths and lengths of lines.

CLERICAL PERCEPTION - Ability to perceive pertinent detail in verbal or tabular material. Ability to observe differences in copy, to proof read words and numbers, and to avoid perceptual errors in arithmetic computation.

MOTOR COORDINATION - Ability to coordinate eyes and hands or fingers accurately so as to make precise movements with speed. Ability to control rapid movements of the hand in accordance with what the eye sees. Ability to make a movement response quickly.

FINGER DEXTERITY - Ability to move fingers, and manipulate small objects with the fingers, rapidly or accurately.

MANUAL DEXTERITY - Ability to move the hands easily and skillfully. Ability to work with the hands in placing and turning motions.

-: APPENDIX E :-

THINGS TO REMEMBER IN MAKING AN INTERVIEW
AND SELLING YOURSELF

1. Interviews are used for the following:
 - a. To seek employment -- a job.
 - b. To seek information about a job to find out if you are suited to that kind of work; what the qualifications are; how to succeed; education necessary; etc. The object of the whole interview is to make a contact -- a friend and therefore you should devote all your ability and personality so that you will be remembered and make it possible to return.
 - c. To be in line for a future job.
 - d. To create jobs.
2. State all facts and questions in such a manner that you get a (yes) answer. If you can, get the employer to think in a positive (yes) manner he will tend to say yes to your request for a job.
3. Try to know what kind of an answer your question will bring.
4. Never suggest anything negative about yourself.
5. Watch the reaction of your words on the man you are talking to.
6. People or persons are never interested at first. You must interest them.
7. Keep in mind that you have something to give, not get. Have your services to sell and know what they are. Know how you can be of value to his firm.
8. An objection to you, or the reason for not hiring you, as given to you by the employer, in most cases, may not be the real reason.
 - a. When an employer gives you an objection such as: There are no openings, or we are taking no applications.
 - b. Merely agree with him and go into your sales talk. Example: I realize, Mr. Jones, that you are not taking applications but I wanted very much to meet you -- get acquainted -- make this contact, etc.

Before starting out to look for work . . .

Be sure:

1. Your appearance is as attractive as you can make it. (Be conservative, not flashy)
2. Skin -- Clean and clear.
3. Teeth -- Carefully cared for.
4. Hair -- Neatly and becomingly dressed. Boys - do not wear long sideburns or goatees.
5. Hands -- Nails clean
6. Clothing -- Clean, free from spots, pressed, and carefully repaired; collars, handkerchiefs, and shoes clean, and heels straight. Dress suitable for the work you are applying for.
7. Jewelry -- Nothing gaudy or showy - avoid advertising pins and those suggesting political or religious preference.
8. You have money for any unforeseen situation such as extra carfare, lunch, etc.

When you go to interview an employer:

1. Arrive at your destination in time to be calm and self-possessed.
2. Ask for the person whom you wish to interview.
3. Remain outside a Private Office until you are asked to enter.
4. Show no impatience while you are waiting.
5. Enter room in a quiet, self-possessed manner. If the employer is busy, do not interrupt; wait until he is through.
6. Introduce yourself (Present card of introduction if you have one). State briefly your reason for calling. Look at the person with whom you are conversing.
7. Remain standing until you are asked to be seated. Do not lean on anything.
8. Sit comfortably -- do not slouch. Try to avoid signs of nervousness.
9. Hold your hands quietly in your lap.
10. Make no attempt to read private material.
11. Show no interest in conversation not directed to you.

12. Let the employer do most of the talking.
13. Smile now and then, whether you want to or not.
14. Answer all questions clearly and truthfully.
15. Avoid the use of slang.
16. Do not attempt to argue or joke with the employer.
17. Be sure that persons whose names you give as references are willing to act in that capacity.
18. Respect the right of the employer to interview other applicants before making his decision.
19. Remember that an offer of employment by the employer gives you the right to know definitely:
 - a. The kind of work you are to do.
 - b. Hours of service.
 - c. Salary.
 - d. Other details which might influence you in accepting or refusing the positions.
20. Remember that courtesy is always an asset.
21. Whether you get the job or not, say "Thank you, Mr. _____", when you leave.

THINGS TO REMEMBER THE FIRST DAY ON THE JOB

1. Be ahead of time
2. Listen to all instructions carefully.
3. Keep notes of everything you are told to do.
4. Be friendly to all fellow employees.
5. Be careful not to monopolize fellow employees duties.
6. Learn stock.
7. Watch fellow employees' methods of doing things.

8. Study everyone and everything.
9. Observe people's reactions to your methods of doing things.
10. Don't talk too much about yourself; be conservative yetr friendly.
11. Don't try to grasp everything at once; proceed slowly but thoroughly.
12. Be systematic in what you do.
13. Don't be too familiar with Department Heads.
14. Watch results of your work; look for opportunities to improve.
15. When you make a mistake report it to the one in charge and learn how to do it right.
16. Watch personal appearance.
17. Don't converse with fellow employees while on the job.
18. Don't watch the clock.
19. Learn the location of main departments the best you can.
20. Learn the organization rules and regulations.
21. Know what is expected of you and do it.
22. Get enough rest so you can do your job cheerfully.
23. Don't be in a hurry to leave at the end of the day. Help clear away the stock.
24. Don't ask unnecessary questions; think for yourself.
25. When you go out to lunch make a mental resume of what you were told to do in the morning.
26. Be enthusiastic about your work.
27. Be extremely courteous.
28. Don't forget to smile.
29. Enunciate clearly.
30. Learn the names of Department Heads.

31. Keep stock neat.
32. Watch fellow employees' mistakes and see that you do not make them.
33. Be alert; don't lean against the things giving the impression that you have nothing to do.
34. Keep bodily clean.
35. Keep busy.
36. Be prompt in returning after lunch.
37. Be patient.

The Oregon State Employment Service wants to help you find suitable work. Keep your registration active at any time you are unemployed and are able and willing to work.

We want to help any employer secure qualified (according to his requirements) applicants for any position that he wants to secure an employee.

An employment counselor will be pleased to discuss any employment problem with you individually.

-: APPENDIX F :-

4-46

DEPARTMENT OF LABOR
UNITED STATES EMPLOYMENT SERVICE
OCCUPATIONAL ANALYSIS AND INDUSTRIAL SERVICES DIVISION
WASHINGTON, D. C.

Interest Check List

Name _____ Date _____

This booklet lists different kinds of work which will help us find out what you are interested in doing.

Read carefully the different activities listed on the following pages. Place check marks in front of those activities you would like as jobs or hobbies whether or not you have ever done them.

You may check an activity even if you are interested in only one part of it.

Leave the space blank if you don't like the activity or if you are not sure that you do.

If you have any questions while filling out the blanks, feel free to ask them. Work quickly by not spending too much time thinking about any one kind of work.

EXAMPLES

- ..Y.. Feeding and tending livestock.
- Installing or repairing plumbing fixtures such as pipes or sinks.

The check indicates that you would like feeding and tending livestock. The blank space shows either that you don't like installing or repairing plumbing fixtures or that you don't know whether you would or not.

----- Sketching and painting portraits, landscapes, still life or figures on canvas.	0-X1	----- Copying figures or words neatly and orderly.	1-X2
----- Creating, designing and painting posters, signboards, showcards, charts, diagrams, labels and illustrations for advertising copy, books and magazines.		----- Keeping business records, such as sales slips, receipts, bills, attendance records, and amount of goods purchased or work done.	and 1-X4
----- Modeling or carving various objects from wood, clay, plaster, or stone.		----- Typing letters and reports.	
----- Sketching rooms and planning the arrangement of furniture, wall decorations, and color scheme.		----- Taking dictation in shorthand or on a stenotype machine.	
----- Creating and drawing to scale patterns for new types and styles of clothes.		----- Receiving, checking, counting, grading, examining, and storing supplies.	
----- Playing a musical instrument.	0-X2	----- Filing written reports according to subject matter or alphabetically.	
----- Singing various types of songs.		----- Sorting, indexing, and assembling papers and other written records.	
----- Creating and composing musical compositions or arranging a melody for orchestral use.		----- Collecting information to compile reports.	
----- Conducting an orchestra.		----- Demonstrating articles for sale.	1-X5
----- Studying musical theory and techniques, melody, and harmony.		----- Being a salesclerk, selling or taking tickets, handling money, or making change.	
----- Writing magazine articles, plays, short stories, poems or books.	0-X3	----- Answering the telephone.	
----- Translating from one language to another.		----- Giving people information such as street directions or location of merchandise in stores.	
----- Reporting news for a newspaper or magazine.		----- Talking to customers about complaints.	
----- Writing or editing news items for a newspaper, periodical, or book.		----- Selling merchandise in a department store.	
----- Doing literary research for historical publications.		----- Selling electrical equipment or machinery.	
----- Acting in a play or dramatic production.	0-X4	----- Selling insurance by pointing out advantages and disadvantages of various policies.	
----- Announcing radio programs.		----- Preparing lists of prospects and contacting them in order to make sales.	
----- Dancing for the entertainment of others.		----- Making personal calls on customers.	
----- Making a living by playing football, baseball, hockey or other sports.		----- Attempting to interest prospective buyers by showing sample articles or displaying a catalog.	
----- Entertaining others by juggling, sleight-of-hand, pantomime, or magic.		----- Teaching school.	0-X6
----- Developing advertising campaigns.	0-X7.1	----- Talking to individuals or families and assisting them in solving their personal or financial problems.	
----- Applying the principles of accounting, statistical analysis, contracts, credit, marketing conditions, and applied psychology to the problems of business.		----- Interviewing and advising individuals concerning their schooling, jobs, and social problems.	
----- Drawing up legal documents such as contracts, partnerships, deeds, and wills.		----- Studying social and economic conditions in order to help individuals or groups solve problems of general welfare.	
----- Conducting law suits.		----- Enforcing laws involving fire and crime prevention, traffic, sanitation or immigration.	
----- Working up sales methods.		----- Treating persons or animals for the cure or prevention of disease or injury.	0-X7.02
----- Figuring out arithmetic problems using multiplication, division, squares, and square roots.	1-X1	----- Being a nurse.	
----- Copying long lists of numbers and checking to be sure they are copied right.		----- Planning a balanced diet (planning a menu or a meal).	2-X1
----- Finding mistakes in answers to arithmetic problems.		----- Mixing foods to obtain new flavor.	
----- Doing addition and subtraction.		----- Going to some trouble to make foods look attractive.	
----- Working with fractions and decimals.		----- Learning the right way to season foods.	
		----- Selecting meats and vegetables in a grocery store for freshness and quality.	

<ul style="list-style-type: none"> ---- Playing games with children. ---- Telling stories to children. ---- Looking after children to see that they are kept clean and neat. ---- Taking care of children when they are sick. ---- Helping children dress or undress. 	2-X3	<ul style="list-style-type: none"> ---- Changing fuses, repairing electric irons, wiring lamps, fixing light plugs and short circuits. 	4-X6.2
<ul style="list-style-type: none"> ---- Giving first aid treatment. ---- Setting tables and serving food or drinks. ---- Acting as a hostess or headwaiter in a dining room. ---- Caring for people's hair and fixing their nails. ---- Waiting on other people and caring for their clothes. 	2-X5	<ul style="list-style-type: none"> ---- Working on scaffolds and climbing around on buildings or ships while assembling large pieces with a hammer, rivets or welding equipment. ---- Painting, plastering, or paperhanging. ---- Puttying or plugging up holes and caulking. ---- Working with hand tools such as saws, plumb lines, rulers, and squares. ---- Bending, threading and fitting pipes, fixing drains and faucets. 	
<ul style="list-style-type: none"> ---- Studying the soils, weather, climate, and so on, in which plants and animals live and grow best. 	0-X7.3	<ul style="list-style-type: none"> ---- Doing carpentry, plumbing, floor-laying, or roofing. 	
<ul style="list-style-type: none"> ---- Plowing, planting, cultivating, or harvesting crops. ---- Driving a farm tractor. ---- Picking, grading, or sorting fruit. ---- Trying out various methods of growing plants to find the best way. ---- Breeding, raising, and caring for livestock such as cattle, sheep, hogs, and chickens. 	3-X1	<ul style="list-style-type: none"> ---- Assembling or repairing instruments such as watches, locks, cameras, fountain pens, or field glasses. ---- Examining, inspecting, and separating objects according to quality, size, color or weight. ---- Cutting and shaping glass or stone for jewelry and similar small articles. ---- Cutting, shaping, and rolling dough for breads and pastries. ---- Cutting, sewing, or repairing clothing, shoes, or other articles from cloth, leather or fur. 	4-X6.3
<ul style="list-style-type: none"> ---- Catching fish with nets, hooks, harpoons, spears, or guns. ---- Cleaning fish. ---- Steering ships and plotting a course with the aid of a compass or sextant. ---- Standing watch on a ship to look out for rocks, lighthouses, buoys, or other ships. ---- Observing activity of fish to determine their habits and food requirements. 	3-X8	<ul style="list-style-type: none"> ---- Working from blueprints. ---- Making parts and tools from metal. ---- Working with gages and tools that make very fine measurements such as $\frac{1}{10,000}$ of an inch. ---- Running lathes, drill presses, and other machine-shop equipment. ---- Running machines that cut or grind small shavings from metal parts. ---- Making calculations to determine angles, curves, or shapes of small metal or wooden parts. ---- Pushing levers and buttons or turning hand-wheels to start, stop, slow down or speed up machines. ---- Driving an automobile. ---- Operating a steam shovel to move dirt or rocks. ---- Inspecting articles for quality or errors with precision instruments. 	4-X2.0 and 4-X2.4
<ul style="list-style-type: none"> ---- Using a trap to catch animals. ---- Acting as a guide for hunting parties. ---- Chopping or sawing down trees and trimming branches from trees using an ax or saw. ---- Moving or piling up stacks of logs and loading and fastening logs with chains. ---- Caring for forests by looking out for fires or tree diseases. 	3-X9	<ul style="list-style-type: none"> ---- Doing freehand lettering or copying sketches on wood, metal, canvas, or film. ---- Making photographic copies of drawings, records, or pictures for books or newspapers. ---- Setting type by hand or machine for printing, or working with sizes, styles, and spacing of type, or proofreading. ---- Using soft crayon to copy maps, charts, posters, and drawings. ---- Cutting designs or letters into metal, stone, or glass, using hand tools or engraving wheels. 	4-X6.5
<ul style="list-style-type: none"> ---- Designing machinery and mechanical or electrical equipment. ---- Developing and executing plans for the construction of buildings or bridges. ---- Using drafting tools to prepare detailed plans and drawings for buildings or machines. ---- Doing research in a chemical, physical, or biological laboratory. ---- Drawing maps. 	0-X7.0, 0-X7.4, and 0-X7.7	<ul style="list-style-type: none"> ---- Observing formulas, timing, temperature, and pressure directions. ---- Using delicate precision instruments in the testing of chemical reactions. ---- Handling or pouring hot metals, or plating metals. ---- Operating furnaces, boilers, ovens, and other equipment. ---- Grinding, mixing, or separating chemicals. ---- Mixing dough for baking. ---- Measuring, mixing, or cooking foods for canning. ---- Mixing solutions to make dyes or cleaning fluids. 	4-X6.6
<ul style="list-style-type: none"> ---- Taking apart mechanical things such as bicycles, automobile engines, pumps, typewriters, or guns and putting them back together again. ---- Examining mechanical equipment for wear or damaged parts to see what needs to be done. ---- Following complicated directions and diagrams to put parts of machines together. ---- Tuning up motors to see that they are running right. ---- Greasing and oiling machines. 	4-X2.1		
<ul style="list-style-type: none"> ---- Repairing electric stoves, refrigerators, vacuum cleaners, fans, and motors. ---- Studying the theory of electricity, including direct and alternating current, volts, amperes, ohms, etc. ---- Wiring, splicing, soldering, and insulating electrical connections. ---- Building and testing radio sets. 	4-X6.1		

-: APPENDIX G :-

January 28, 1952

TO TEACHERS OF SENIORS:

On January 30 and 31, two people from the State Employment Office, Salem, will interview the seniors (except members of the Distributive Education and Office Methods classes) about the results of the GATB tests they took early in December. This will necessitate calling, from time to time, various seniors from classes. This procedure will be done with the least possible amount of confusion.

The purpose of these tests is to give the student a means of gaining some insight into his aptitudes, abilities, and preference in his search for a life's work. The results of these tests do not dictate the kind of work he should do for a living; they are only a TOOL for him to use in his attempt to find himself in the world of work.

These interviews will be recorded on two machines similar to a dictaphone. This office will transcribe the interviews in triplicate, one copy for the files, one copy for the student and one copy for studying.

The Employment office has gone to a great deal of trouble to enable us to get these interviews in writing so that the students may have a copy for future reference and study, and in order that teachers who so desire may use these test results in their units on vocations. Through the influence of Mr. Baillie, Manager of the Employment Office, these transcribing machines are being loaned to the school by Needham's Book Store in Salem. In this way the cost of getting these interviews in writing is not prohibitive to the school.

DEAN OF STUDENTS

-: APPENDIX H :-

(Given to teacher using tests in study of vocations.)

January, 1952

GENERAL COMMENTS ON
THE GATB TESTS IN STUDYING VOCATIONS

1. Student could follow-up on one field of work the interviewers have listed, and do some research on that rather than try to cover the many different jobs they have listed for each.
2. Students could look at some of those fields of work that utilize certain aptitudes in the light of making them hobbies. Ordinarily the regular job does not use all aptitudes of an individual -especially if the work is highly mechanized.
3. An individual's aptitudes must be used and satisfied in some way - one way is through hobbies - as well as through one's life work.
4. Having an aptitude for certain types of work is not enough. Other factors influencing a choice is desire, opportunity, physical characteristics, personality.
5. The interviewers talked about apprenticeship, journeyman, and aptitudes. Some students probably have no idea of the true meaning of these terms.

-: APPENDIX I :-

(Patterned after Shostrom and Brammer (14, p.131))

JOB STUDY SHEET

OCCUPATION:

Name:

A. Opportunities:

Present _____

When I graduate _____

B. Salary

Beginning _____ Probable Maximum _____

Special Benefits _____
(Insurance, retirement, etc.)

Security _____
(Seniority)

C. Hours

Work Week _____

Regular or irregular _____

D. Entry and Related Jobs: _____

E. Qualifications and Restrictions:

Sex, marital, racial, etc. _____

Organization Memberships _____

Licenses required _____

Examinations required _____

F. Training

Where obtained _____ Cost: _____

Entrance Requirements _____

Length of Training Period _____

Scholarships, etc. _____

Other information _____

G. Advantages and Disadvantages: