

**TESTING OF VETERANS
AT THE PORTLAND
GUIDANCE AND COUNSELING CENTER**

by

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TESTING OF VETERANS
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CHAPTER I

RECOGNITION OF THE PROBLEM
IN THE EDUCATIONAL PLACEMENT OF THE VETERAN

As the first of large groups of veterans began to return to civilian life in the Spring of 1945, one of the necessary postwar readjustments was in the field of Education. These boys wanted to "get on" with their education as quickly as possible. It seemed absurd to place these men in high school on the basis of credit, yet what other means was there of earning a diploma. Thus there was a need for some new methods of meeting the educational needs of the veteran. The veteran who had not completed high school obviously presented the greatest problem in educational placement. The following pages will describe the plans and procedures used by the Portland Public Schools in facing this problem.

The first veterans were placed in school on the basis of credits. This proved unsatisfactory to the veteran and to the school administrator. The day high school was equipped to handle younger students and had a fairly inflexible program based on 34 credits to be earned in four years. Here were young men who wished accelerated courses, men whose experiences had been such that their educational development put them ahead of their actual academic standing. It was not

meeting their need to place them in fifth or sixth term classes with young adolescents. Too much time had been lost for them already to expect them to be content to march at a pace set by immature 15 and 16 year olds.

High school principals felt the inadequacy of placement of these veterans on the basis of credits and therefore appealed to the Superintendent for assistance in the development of some new method. At the same time, some high school principals turned to the Guidance Department for aid.

As these principals referred veterans who returned to their schools to the Guidance Center, it attempted to perform an individual analysis for the purpose of recommending individual placement for each veteran. They had a record of credits earned in high school. If the veteran had had any specialized training in the service an attempt was made to evaluate it. Then the Stanford Achievement Test and Otis Self Administering Test were administered. On the basis of the achievement levels indicated in the test and the scholastic aptitude evidenced by the intelligence test the maximum level of placement was recommended.

This experiment proved that school placement for the adult level based upon the level of ability and achievement was far better than placement based solely upon number of credits earned. Principals reported the morale of the boys to be much higher--their work to be of better quality and the total school situation to be better. The placing of mature boys in lower term classes was up-setting not only to the boy but to the class as well.

Even though this placement was an improvement over the original method, it was not satisfactory because it was an optional procedure and in consequence there was no uniformity in practice among the high schools. The principals who were "guidance minded" believed in adjusting the program to fit the needs of the pupils, but the veteran whose community school did not follow that philosophy found himself at a disadvantage.

The Guidance Department then became aware of the need for some standard method of procedure which would give these veterans equal opportunity in every school. It need be a procedure which the Superintendent would endorse and then lead high school principals toward approval and adoption of this method.

CHAPTER II

STUDY OF THE PROBLEMS

AND RECOMMENDATION FOR A NEW PROCEDURE IN THEIR SOLUTION

Study of Methods Used by Other Cities

As a first step, the Guidance Department undertook to study the experiences of other cities in adjusting veterans to their high school programs. Correspondence was carried on with: Baltimore, Maryland; Chicago, Illinois; Cincinnati, Ohio; Cleveland, Ohio; Davenport, Iowa; Denver, Colorado; Los Angeles, California; Milwaukee, Wisconsin; Minneapolis, Minnesota; Omaha, Nebraska; Philadelphia, Pennsylvania; and San Francisco, California. The following excerpts from letters¹ show in some way what they were doing:

Baltimore's Educational Program for Veterans: "The high schools permit former students to study intensively and then take examinations provided by the school. They give them full credit for subjects completed in the Armed Forces Institute and give whatever credit is possible for special work completed in their specialized training."

What the Chicago School System is Doing for Veterans: "A basic policy in this connection provides for a flexible and adaptable program which will aim to meet needs as they arise. The services available to the veteran are: courses in the regular high school;

1. Taken from correspondence file of the Guidance and Counseling Center.

courses thru the special technical and vocational schools; courses at the Chicago Junior College for the veteran who is not a high-school graduate but thru tests indicates that he can choose courses of a post-high school nature."

Philadelphia's Accelerated High-School Diploma Program:

"The veteran may complete his work toward a high-school diploma, thru special tutoring, as fast as he is capable of mastering the subjects which he needs to qualify him for a diploma."

Milwaukee, Wisconsin's Plan: "If the problem of a veteran is an educational one on the secondary level he is referred to the testing bureau where he is given the opportunity of attending a Milwaukee public high school, parochial school, or the Milwaukee Vocational High School...All Milwaukee district high schools are prepared to evaluate and credit towards graduation armed forces training and experience in accordance with the policy of the Armed Forces Institute."

Letters were sent to the Metropolitan School Study Council, The American Council on Education and The National Educational Association for assistance. Through the latter sources information was received describing the plan that was being developed by the American Council on Education for the evaluation of experiences in the Armed Forces.

During the Summer of 1945, the Superintendent of the Portland Schools assigned the problem of veteran school placement to a study group with the Supervisor of Guidance as chairman. The committee continued the work done by the Guidance Department and carried on further correspondence with school districts in the United States and with educational organizations.

Estimate of the Number of Veterans Who Would Return to Secondary School

Through the United States Office of Education the committee received Bulletin No. 4, 1945, "Data for State-Wide Planning of Veterans' Education" by Ernest V. Hollis. This bulletin provided data on the

number of Oregon students in the Armed Services with a breakdown of their educational experience. This analysis included in Table I furnished a basis for planning by the Portland School District as it provided an estimate of the number of veterans who would return to the secondary schools.

In June 30, 1944, the Army made a survey of over seven million personnel with the following report that 70% had less than a high school education; 23.3% had completed four years of high school; and the remainder had attended or completed 4 years of college.² In the analysis of the personnel in Oregon, those completing the 8th grade or less comprised 28.6%; one, two, or three years of high school, 32.6%; enrolled in the fourth year of high school or a graduate of high school, 27.6%; one, two or three years of college, 8.2%; and in their fourth year of college or a graduate, 3%.

In summarizing this report, it was found that 60% of the personnel enrolled from Oregon had not completed high school. In a further study, an effort was made to relate the educational status of these men with their intention to continue education after the war was over. This survey estimated the following: 8% to 10% planned full-time education after discharge; 10% to 15% desired part-time education. Another analysis of the same study was the following:³ (1) that 85% who had completed elementary school did not plan to complete their education; (2) that 78% of those who had completed one, two and three years of high school did not plan to continue; and (3) that 66% of the high

2. Hollis, Ernest V., "Data for State-Wide Planning of Veterans' Education," United States Office of Education Bulletin 1945, No. 4, p. 54.

3. Ibid., p. 59.

TABLE 1⁴

EDUCATION AND AGE OF A SAMPLING OF MALE ARMY OFFICERS AND ENLISTED MEN
FROM ORSOON

| Rank | Grade Schools ¹ 1-8 | | High School | | | | College | | | | Graduate work | | Total |
|-------------------|-----------------------------------|--------------|---------------|--------------|-------------|--------------|---------------|--------------|-------------|--------------|---------------|--------------|--------|
| | 1-8 | | 1, 2, 3 years | | 4 years | | 1, 2, 3 years | | 4 years | | | | |
| | Num- ber | Per- cent | Num- ber | Per- cent | Num- ber | Per- cent | Num- ber | Per- cent | Num- ber | Per- cent | Num- ber | Per- cent | |
| Officers..... | 268 | 3.3 | 1,140 | 11.1 | 1,341 | 16.7 | 2,078 | 25.8 | 1,957 | 24.3 | 1,274 | 15.8 | 8,058 |
| Enlisted men..... | 10,476 | 20.3 | 17,095 | 33.1 | 16,500 | 32.0 | 5,962 | 11.6 | 812 | 1.6 | 745 | 1.4 | 51,590 |

AN ESTIMATED DISTRIBUTION OF ABOVE ENLISTED MEN, BY AGE GROUP²

| Age Group | Grade Schools 1-8 | High School | | College | | Graduate work | Total |
|-------------------|----------------------|-------------|---------|---------|---------|---------------|--------|
| | | 1, 2, 3, | 4 years | 1, 2, 3 | 4 years | | |
| 20 and under..... | 524 | 1,993 | 3,026 | | | | 5,543 |
| 21-25..... | 3,592 | 6,746 | 6,269 | 3,794 | 68 | 68 | 20,537 |
| 26-30..... | 2,694 | 3,756 | 4,612 | 975 | 338 | 512 | 12,917 |
| 31-35..... | 1,945 | 3,067 | 2,017 | 434 | 135 | 135 | 7,733 |
| 36 and over..... | 1,721 | 1,533 | 576 | 759 | 271 | | 4,860 |

1. Includes some illiterates

2. Derived from a scientific random sample approximating 2 percent of Army enlisted men.

4. Hollis, op. cit., p. 48.

school graduates did not plan to continue their education. These statistics helped the committee to estimate the number of veterans returning to Portland who might desire completion of elementary school and high school.

In the above report the number mentioned were thinking in terms of school programs they had known. In other words the report indicated that schools were charged with the need to develop educational programs that would interest that disinterested group. The number of students returning to school could be greatly influenced by the availability of work. Many veterans would return to school in order to qualify for the G.I. money. With the increase in the surplus of labor, job requirements would also increase and the veteran would find himself confronted with a new problem: he must present a high school diploma or educational equivalent of a four-year high school course in order to qualify for a desired job.

Plan of Portland School District to Provide for This Group

At the beginning of the school Fall term of 1945, the Superintendent of Portland Schools, Dr. Willard B. Spalding, called a meeting of the administrative and supervisory staff which includes all elementary principals, principals and vice-principals of high schools, and departmental supervisors and directors of the school district to hear the report of the summer committee for the purpose of determining a program for Portland pertaining to Veteran Education.

The report of the committee included the following:

1. Statement of the present program.
2. Survey of experiences and procedures followed by other

school districts.

3. A description of the plan offered by the American Council on Education.

4. A recommendation for the adoption of the American Council Plan.

The administrative and supervisory staff accepted the report and adopted the recommendation.

The Guidance Department then published a bulletin⁵ which interpreted the plan and outlined the procedures to be followed. At this meeting it was further agreed that all veterans who desired educational counseling and placement were to be referred to the Guidance Center. The reason for this decision was that principals of the secondary schools felt that a more uniform program could thus be achieved. They felt that the Guidance Department should interview, evaluate the credits, administer such tests as were necessary and then make recommendations as to the veterans future program to the high school principal. It was also felt that if the Guidance Department worked with the veteran that there would be provided a more individualized service.

For example, if a veteran were to go to his former high school, the principal would interpret the offerings of that particular high school, while if the veteran were counseled at the Guidance Center, the educational offerings of the entire Portland Public School System would be explained and interpreted for him. To indicate the diversity of offerings, there are five high schools which offer specialized courses which can not be obtained in the six academic high schools.

5. This bulletin is included in the appendix, p. 34.

In addition to the day high schools, there are the Portland Evening School and the Evening Adult Vocational Education Courses.

CHAPTER III

THE AMERICAN COUNCIL PLAN

Method I

The plan for veteran education developed by the American Council on Education offered two methods of evaluating the veteran's educational status. First, the evaluation of learning experiences in the armed services by: (a) specialized training programs conducted by the Armed Forces; (b) specialized training programs conducted for the armed services by schools and colleges (Army Specialized Training Program and V-12); and, (c) the correspondence courses offered servicemen in their off-duty time by the United States Armed Forces Institute, Educational Services Section of the Navy, and the Marine Corps Institute.

The American Council realized early in World War II that there would arise the problem of educational placement of these boys. The similar problem at the end of World War I had not been met satisfactorily. The American Council did not favor the granting of blanket credit as had been the general practice followed at the conclusion of World War I.

Consequently in 1942 the American Council in conference with the

War Department suggested a plan thru which educational credit might be granted by an actual evaluation of experience in the armed service.

The War Department granted permission to representatives of the American Council to evaluate all training programs. The American Council called upon educational specialists throughout the country and these professors were granted leaves from the universities to make these studies.

Thus any kind of training which resembled in content the subject matter of a course taught in high school or college was examined and evaluated and a recommendation was made for the amount of credit to be granted for such a training course. The findings of this committee appeared in the form of "The Guide to the Evaluation of Educational Experience in the Armed Forces". A description of an evaluation of credits is included in the appendix of this paper.⁶ The guide was used at the Guidance Center for the evaluation of training received in the armed services which fell under the three previously mentioned categories. The veteran's service record provided the evidence for credit.

The first veterans to return were those who had the longest service record and were naturally older and more advanced in school standing. Many among this first group were within a few credits of graduation, and evaluation of their military credits provided them with a sufficient number of credits to meet graduation requirements. Thus a recommendation for a diploma was possible.

The Portland Schools followed the national plan of granting four credits to boys who left school to enter the service. These credits were granted upon completion of basic training and many boys received their diplomas thru this means. Few veterans presented

6. Appendix p. 38.

records of correspondence courses taken under the United States Armed Forces Institute.

Method II

For those boys who did not qualify for diplomas by means of credits earned in the armed service training programs the second plan was necessary. Therefore a second project was undertaken by the American Council to devise a battery of tests which would establish the veterans educational status relative to a high school education. They were designed to establish the equivalency of a high school education but were to be different from the more pedantic achievement tests that were available. This project was undertaken in a similar way to the first project, namely that of evaluating training programs. Professors from various colleges were called upon to work in a group to develop tests which would evaluate the educational growth and establish the equivalent of a high school education in Mathematics, Natural Sciences, Social Sciences, English Literature, and Mechanics of English and Effective Expression. Thus the American Council on Education developed the tests of "General Educational Development" for the high school level and the college level.

High School Level Tests

The description here will be limited to the General Educational Development test on the high school level. The high school level tests are designed to measure general educational development and to determine to what extent one has the equivalent of a liberal or non-technical high school education. The tests are intended primarily for

use with service men or veterans who either have never attended high school or have completed only a part of their high school course before they entered the service. These tests aim to provide a measure of the general educational development which would naturally accompany or result from inservice educational opportunities. These opportunities depended upon the individual's interests and abilities to observe and absorb the experiences to which he was exposed. It was the belief that through their travels and their contacts with people and institutions of different cultures the men and women in service might learn equally as much as though they had remained in a classroom. Such things as physical and economic geography of areas and countries visited, the political and social customs and institutions of their inhabitants, and especially language, could be learned more effectively by daily contact and direct observation than could be learned thru books. Besides the possibilities for informal self-education--reading, self-directed study, educational movies, lectures, formal and informal discussions--there was the general educational growth incidental to military training and experience, such as experiences gained while "on the job", after completion of formal training.

For many individuals the informal experiences would be significant. The general educational values, however, vary for individuals, due to differences in general intelligence, previous educational status, interest, incentive, and educational objectives.

The United States Armed Forces Institute tests of General Educational Development thus enable the schools to proceed along sound lines in their evaluation of educational experience in the armed forces. The high school level battery consists of five comprehensive examinations.

Test 1. Correctness and Effectiveness of Expression: "The principal emphasis in this test is upon ability to avoid errors in spelling, punctuation, capitalization and grammar. Consideration is also given to ability to choose the best words or phrases and to organize and express ideas in clear, well-balanced sentences."

Test 2. Interpretation of Reading Materials in the Social Studies: "This test measures ability to read with understanding and to evaluate critically reading selections concerning social, political, economic, and cultural problems and issues. Since ability to do these things depends in large part on how well informed one is, the test also measures indirectly background of ideas and information in the field of social studies,"

Test 3. Interpretation of Reading Materials in the Natural Sciences: "This test places special emphasis on scientific vocabulary, upon ability to pay close attention to detail, upon rigid logical reasoning, and demands a considerable background of information concerning important scientific topics, law, generalizations and developments."

Test 4. Interpretation of Literary Materials: "This test is based on a variety of selections from world literature and emphasizes many special abilities not frequently needed in ordinary reading; such as the ability to interpret figures of speech, to cope with unusual sentence structure and word meanings, and to recognize mood and purpose."

Test 5. General Mathematical Ability: "This is a test of general problem solving of a practical nature, including such things as understanding some of the mathematical aspects of life insurance, installment buying, taxes, the ability to estimate costs of simple home construction and repair projects, as well as ordinary arithmetical skill and reasoning ability."⁷

The Norms for the Tests

The American Council's next project after the tests had been devised was to establish a means of interpretation. Hence they set about to establish norms. In the Spring of 1944, the tests in the high school battery were administered to over 33,000 students just

⁷ United States Armed Forces Institute, "Examiner's Manual", American Council on Education, 1945, pp. 6-7.

about to graduate from over 800 high schools throughout the United States. In Oregon, Eugene's high school seniors were tested. Excellent cooperation was secured from the high schools, possibly because the request for cooperation went out under a War Department letterhead. In the total sample every state in the union was represented in proportion to its total high school population, so it was possible to establish separate norms for different sections of the country. The norms were given in terms of regional distributions:

REGION I: NEW ENGLAND STATES

| | |
|---------------|---------------|
| Connecticut | New Hampshire |
| Maine | Rhode Island |
| Massachusetts | Vermont |

REGION II: MIDDLE ATLANTIC STATES

| | |
|----------------------|--------------|
| Delaware | New Jersey |
| District of Columbia | New York |
| Maryland | Pennsylvania |

REGION III: SOUTHERN STATES

| | |
|-------------|----------------|
| Alabama | North Carolina |
| Florida | South Carolina |
| Georgia | Tennessee |
| Kentucky | Texas |
| Louisiana | Virginia |
| Mississippi | |

REGION IV: NORTH CENTRAL STATES

| | | |
|----------|------------|---------------|
| Arizona | Kansas | North Dakota |
| Arkansas | Michigan | Ohio |
| Colorado | Minnesota | Oklahoma |
| Illinois | Missouri | South Dakota |
| Indiana | Nebraska | West Virginia |
| Iowa | New Mexico | Wisconsin |
| | | Wyoming |

REGION V: NORTHWESTERN STATES

| | |
|---------|------------|
| Idaho | Oregon |
| Montana | Utah |
| Nevada | Washington |

REGION VI: CALIFORNIA

Norms were reported separately for each of the six geographical

regions and for the country as a whole. For example, on Test 1: Correctness and Effectiveness of Expression, in the New England States a standard score of 60 fell at the 78th percentile in the weighted summary distribution, that is, 78 percent of the New England high school seniors made a standard score below 60. In the Northwestern States, 86 percent of the high school seniors scored below the standard score of 60. Similarly, a standard score of 40 fell at the 24th percentile in the distribution for the Southern States, and at the 16th percentile in the distribution for the entire country.

On Test 5: Test of General Mathematical Ability, in the Northwestern States a standard score of 60 fell at the 80th percentile, that is, 80% of the high school seniors made a standard score below 60. In the Middle Atlantic States, 86 percent of the high school seniors scored below the standard score of 60. Similarly, a standard score of 40 fell at the 19th percentile for the New England States and at the 13th percentile in the distribution for the North Central States. The norm tables in the "Examiner's Manual" may be similarly read.⁸

Recommendations: National

In the "Guide to the Evaluation of Educational Experiences in the Armed Services", the American Council on Education has made these recommendations on use of the General Educational Development Tests: a veteran may demonstrate through the United States Armed Forces Institute Tests of General Educational Development that his general educational status is the equivalent of that of most high school graduates, and may thus qualify directly for a high school diploma, without

8. "Examiner's Manual", op. cit., pps. 9-13.

any counting of credits in specific subjects.

"It is recommended that a secondary school should grant a diploma if the examinee satisfies either (not necessarily both) of the following requirements, providing that legal requirements of local authority have been met:

1. The examinee has made a standard score of 35, or above on each of the five tests in the battery.

2. The examinee has made an average standard score of 45, or above, on the five tests in the battery."⁹

The American Council stated that approximately 80 to 85 percent of the students who are now graduating from public high school throughout the country would meet one of the alternative requirements, 1 and 2.¹⁰

Recommendations: Portland

Portland adopted the plan of requiring the veteran to meet both of the above mentioned requirements plus the following resident requirement: the veteran must have attended a local high school and satisfactorily completed a full high school course of one term which is interpreted as having earned a minimum of four credits.

The veteran who was not a former student of a Portland high school, of the veteran who was a former student and who failed to earn one full term of credits, could establish residence by attending a Portland high school, preferably the Portland Veteran Evening High School, and carry a full program for one term.

9. United States Armed Forces Institute, "Guide to Evaluation of Educational Experiences in the Armed Service", American Council on Education, Section 1 A, p. 2.

10. Ibid., p. 4.

Veterans who had become residents of Portland who attended high school in another state which followed the national program of granting diplomas to veterans as recommended by the American Council on Education, could take the General Educational Development Tests at the Guidance Center. A record of their accomplishment was forwarded to the principal of the high school they formerly attended and to the State School Superintendent with an explanation of the Portland Program. A fee for this service was charged veterans who were not former Portland high school students. Recently there has been published a United States Office of Education bulletin which explains the program in each state so that now the veteran may know before taking the examinations if the General Educational Development tests will be accepted by his school.¹¹

11. United States Office of Education, "High School Credit and Diplomas through Examinations and Out-of-School Experiences", Federal Security Agency, Bulletin, 1946, No. 7.

CHAPTER IV

THE PORTLAND PLAN IN OPERATION

Admission Procedure

The returning veterans who wished General Educational Development testing were referred to the Guidance and Counseling Center by school principals and vice-principals and many other referral agencies. Others included the United States Employment Service, Veterans Administration, Veterans Rehabilitation, and the Portland Veterans Information Center.

The Center's procedure in handling veteran General Educational development referrals has been done in the following way. An appointment was made for the testing. When the veteran arrived a preliminary interview was the first step. The veteran was questioned as to his future plans. Did he wish to go on to college? Where he wished to attend? What was the course he wished to pursue? Did he wish help in high school placement? After discussing his plans an appraisal was made of any credits he may have earned under special training courses while in the service.

Testing Procedure

In the beginning of this testing program at the Guidance and

Counseling Center the staff decided to use the Stanford Achievement, Otis Self-Administering Test of Mental Ability, Bernreuter Personality, plus the General Educational Development Tests. It was felt that such a testing program would offer some aid in subsequent counseling. The Center was also interested in continuing with the Stanford Achievement Test in order to check the results on the General Educational Tests. After a month of this procedure, the Stanford Achievement Test was discarded. Veterans who were being issued diplomas on the basis of the General Educational Development tests were not achieving a 12th grade placement on the Stanford Achievement Test. In using the Stanford Achievement Test, it was found that in the work-limit feature the veterans were handicapped. Probably because of their lack of recent academic experience and relative unfamiliarity with objective testing techniques, the veterans seemed unfairly penalized by uniform and relatively short time limits. The veteran was allowed two hours on each of the General Educational Development tests and hence there was removed any feeling of tension.

Each of the Tests of General Educational Development was administered under work-limit conditions, that is, each student was given as much time as he needed to complete the test. These tests were designed to measure the student's intellectual power, rather than his rate of work. The examiner's manual published by the American Council on Education states that:

"...a period of 90 minutes per test is adequate for nearly all persons to whom the high school level tests may be given."¹²

¹²: Examiner's Manual, op cit., p. 14-

At the Guidance Center it was found that few veterans took the entire two hours allowed for each test.

In the processing of the tests, they were scored once and then an independent second scoring of all answer sheets was made. The Guidance Department sent a report of accomplishment to the veteran and to the school, with a recommendation regarding the issuance of the diploma.¹³ All failures were asked to return to the center for counseling and an attempt was made to encourage further high school education. Counseling for others was granted upon request by the veteran.

During the first year, before adequate service was granted by the Veterans Administration, a great many veterans requested assistance in the form of training information and counseling.

TABLE 2

NUMBER OF VETERANS TESTED

| | |
|---------------------------------------|-------|
| 1st Year (October, 1945 to May, 1946) | 984 |
| 2nd Year (June, 1946 to April, 1947) | 1,031 |

The Plan is Questioned

After the plan had been in operation for six months, several of the high school principals began to complain that a good many of their former problem students who were unsuccessful while in high school had earned their diplomas by means of the General Educational Development Tests. They criticized the program because of this fact and claimed the tests were so easy it was cheapening the value of a high school diploma.

13. Reports are included in the appendix, p. 36.

This latter statement had unpleasant implications and it was felt that an attempt should be made to evaluate or vindicate the program. There were several possible explanations for the fact that problem boys had earned good scores in the tests. It may have been that these boys were bright lads to whom the high school program had not offered sufficient challenge at the time they were in school. There may have been many factors in their home, social, or economic adjustment that had contributed to their poor performance in school. In several instances it was noticed on the Army record that these boys had completed officer's training courses. This successful achievement in the Army training program may be explained by their interest, or the factor that their objective was tangible. Maturity, of course, exerted its influence in a change of attitude which would influence the seriousness of their approach to the tests.

The Guidance Center testing laboratory was committed to a comprehensive aptitude testing program for all fourth term students. In addition to this, the Veteran testing program was undertaken with no addition in staff. Consequently, the laboratory was too busy to undertake the added task of testing high school seniors as a means of proving to high school principals that four years of residence in a high school and the accumulation of 34 credits did not always guarantee the possession of what was termed a high school education. Hence an experiment, with the consent of the Superintendent, was independently undertaken by the writer to evaluate the present Veteran Testing Program.

CHAPTER V

COMPARISON OF VETERANS AND SENIOR HIGH SCHOOL STUDENTS ON THE GENERAL EDUCATIONAL DEVELOPMENT TESTS

Administration of the Tests in the High Schools

Appointments were made with six of Portland's high school principals for an interview. At the interview the proposal to test the seniors who were to be graduated in January 1947 was discussed. The principals gave their consent and an appointment for the testing dates was made. The principals were interested in the proposal to test their seniors who were to be granted diplomas on the basis of $\frac{3}{4}$ credits earned. Then the scores of the seniors could be compared with the scores made by Veterans from their school who had been granted diplomas by means of the General Educational Development Tests.

In four of the six high schools, the entire January classes were tested. In the other two high schools, because of the size of the classes it was not possible to test all of them so half the class was tested. Every other name on the graduation list was selected so it would be a fair sample.

Two days were spent testing each class. The students were very interested in the project. When the scores were returned to the principals and counselors they too were tremendously interested in

the scores. In fact perhaps another paper could be written about the students who made very high scores whom the faculty had not suspected of possessing such ability. And on the other hand many from whom they expected very high scores were only mediocre. It may have been the old story of tests versus subjective judgment of teachers repeating itself.

All the tests were scored by the writer and then the results were checked by a second scoring. In all, 343 high school students completed the five tests, taking a total of 1,715 tests. There were a number who because of illness did not return the second day to complete their tests. These results being only partial were omitted from this study.

Comparison of Veteran and Student Test Scores

The first step was to go through the test record card of every Veteran tested at the laboratory since the inception of the program in October of 1945 up to January of 1947. There were 1,892. The five subject scores of the General Educational Development tests for each veteran by school were recorded with regard to those passing and those failing the tests. The tabulations in the Tables following indicate the findings.

There were 1,657 out of the 1,892 who earned diplomas by means of the General Educational Tests and 235 who failed. Converting this into percentages, there were then, 87.6% who passed and 12.4% who failed.

From the total number of veterans tested at the laboratory the largest percentage of failures was from Benson. It will be noted that Benson had with the exception of Jefferson High School, four times as

TABLE 3

NUMBER OF VETERANS PASSING AND FAILING
GENERAL EDUCATIONAL DEVELOPMENT TESTS

| School | Passed | Failed |
|---|--------|--------|
| Benson | 164 | 64 |
| Commerce | 95 | 7 |
| Franklin | 113 | 12 |
| Grant | 137 | 12 |
| Jefferson | 238 | 12 |
| Lincoln | 113 | 10 |
| Roosevelt | 60 | 8 |
| Sabin | 26 | 35 |
| Washington | 88 | 3 |
| Evening School | 125 | 14 |
| Cities in Oregon (Other than Portland) | 100 | 26 |
| Central Catholic | 8 | 1 |
| Portland Union Academy | 1 | 0 |
| Out of State | 48 | 27 |
| Multnomah College | 1 | 0 |
| Merchant Marines | 40 | 4 |

The above table shows the number of veterans, listed by schools, tested at the Guidance and Counseling Center who passed and who failed the General Educational Development tests. Of the total of 1,892 tested between October 1945 and January 1947, 1,657 passed the tests and 235 failed them. Diplomas were not issued to former members of the Merchant Marine; however, they were awarded Certificates stating that they had the equivalent of a high school education if they passed the tests.

TABLE 4

VETERANS AND STUDENTS WHO PASSED AND FAILED
GROUPED BY SCHOOLS

| School | Veterans | | High School Students | |
|------------|----------|--------|----------------------|--------|
| | Passed | Failed | Passed | Failed |
| Benson | 164 | 64 | 57 | 9 |
| Franklin | 113 | 12 | 62 | 11 |
| Grant | 137 | 12 | 38 | 2 |
| Jefferson | 238 | 12 | 80 | 10 |
| Roosevelt | 60 | 8 | 24 | 8 |
| Washington | 88 | 3 | 40 | 2 |

A comparison is made above of the total number of veterans tested at the laboratory (October, 1945 to January, 1947) and the students from the same schools who were tested just before their graduation in January, 1947, showing the number passing and the number of failures.

TABLE 5

PERCENTAGE OF FAILURES
FOR VETERANS AND STUDENTS

| School | % of Failures | |
|------------|---------------|----------|
| | Veterans | Students |
| Benson | 12.1 | 13.6 |
| Franklin | 9.6 | 15.1 |
| Grant | 8.1 | 5.0 |
| Jefferson | 4.8 | 11.1 |
| Roosevelt | 11.7 | 25.0 |
| Washington | 3.3 | 4.8 |

Table 5 gives the percentage of failures using the figures in Table 4. With the exception of Grant High School, the total number of veterans have a higher percentage of passing scores.

TABLE 6

AVERAGE SCORES ON EACH TEST FOR STUDENTS AND VETERANS

| | Roosevelt | Benson | Jefferson | Washington | Grant | Franklin | 1st 50 Veterans | Veterans 251-300 | Veterans 501-550 | Veterans 751-800 | Veterans 1251-1300 | Least 50 Veterans in 1946 |
|--------------------------|-----------|--------|-----------|------------|-------|----------|--------------------|---------------------|---------------------|---------------------|-----------------------|---------------------------------|
| English..... | 49.6 | 45.8 | 53.7 | 55.2 | 57.5 | 52.2 | 47.4 | 44.9 | 47.6 | 46.8 | 46.9 | 47.6 |
| Social Studies..... | 53.1 | 55.0 | 57.4 | 55.1 | 60.1 | 56.5 | 57.4 | 53.7 | 54.5 | 55.1 | 52.4 | 55.9 |
| Natural Sciences..... | 51.9 | 60.2 | 56.1 | 57.5 | 60.0 | 54.9 | 61.5 | 60.7 | 54.9 | 57.4 | 55.4 | 54.8 |
| Literary Materials..... | 50.7 | 52.8 | 57.7 | 59.8 | 61.7 | 56.1 | 57.4 | 55.8 | 55.9 | 55.8 | 55.3 | 55.2 |
| General Mathematics..... | 46.5 | 61.4 | 53.1 | 52.9 | 59.1 | 52.7 | 56.0 | 49.6 | 55.5 | 55.9 | 53.5 | 54.6 |
| Failed..... | 8 | 9 | 10 | 2 | 2 | 11 | 1 | 4 | 6 | 5 | 6 | 4 |
| Passed..... | 24 | 57 | 80 | 40 | 38 | 62 | 49 | 46 | 44 | 45 | 44 | 46 |
| Total..... | 32 | 66 | 90 | 42 | 40 | 73 | 50 | 50 | 50 | 50 | 50 | 50 |

The scores above are the averages made by each group on each test. The total number of persons taking the tests are listed according to their respective groups so that one can see the number passing and failing in each group. Of the 343 high school seniors, there were 42 failures; and in the veteran group of 300 persons, 26 were failures.

TABLE 7

AVERAGE SCORES ON EACH TEST FOR BOYS AND GIRLS

| | SENIOR BOYS | | | | | | SENIOR GIRLS | | | | |
|--------------------------|-------------|------------|-----------|----------|-----------|--------|--------------|------------|-----------|----------|-----------|
| | Grant | Washington | Jefferson | Franklin | Roosevelt | Penson | Grant | Washington | Jefferson | Franklin | Roosevelt |
| English..... | 50.7 | 50.6 | 49.5 | 52.1 | 46.7 | 45.8 | 60.7 | 57.1 | 56.3 | 53.8 | 50.8 |
| Social Studies..... | 58.6 | 57.7 | 55.9 | 56.5 | 51.6 | 55.0 | 63.3 | 57.0 | 53.9 | 51.9 | 51.6 |
| Natural Sciences..... | 58.1 | 57.6 | 58.3 | 56.7 | 50.2 | 60.2 | 59.2 | 55.8 | 53.0 | 52.1 | 50.5 |
| Literary Materials..... | 54.4 | 55.2 | 53.9 | 54.9 | 48.4 | 52.8 | 61.7 | 59.0 | 57.5 | 53.9 | 52.7 |
| General Mathematics..... | 58.2 | 60.7 | 58.4 | 54.6 | 51.8 | 61.4 | 57.0 | 49.8 | 49.0 | 50.0 | 46.1 |
| Failed..... | 1 | 0 | 3 | 2 | 3 | 9 | 1 | 2 | 7 | 9 | 5 |
| Passed..... | 17 | 16 | 34 | 24 | 9 | 57 | 21 | 24 | 46 | 38 | 15 |
| Total..... | 18 | 16 | 37 | 26 | 12 | 66 | 32 | 26 | 53 | 47 | 20 |

The above table shows the average scores made by the high school boys and those made by the high school girls on each test. The tabulation also shows the number of persons taking the test in each group, those passing, and those failing. Of the 175 senior boys, there were 18 who failed; of the 168 senior girls, 24 failed.

many students who took the examinations. Another explanation for the failure of Benson students may be the fact that a large percentage of these were enrolled in the vocational course which is much less academic in content than the high school course offered in the non-vocational schools. Furthermore, it has been an unfortunate practice for elementary school principals to refer the poor students in their 8th grade classes to Benson. This has been done without regard to mechanical aptitude.

The high percentage of failure found in former Sabin students is easily understood as they were a selective group. Boys in the regular high schools who were so seriously maladjusted or who suffered severe learning difficulties were transferred to Sabin which was a special school set up to handle these problems. Likewise boys who possessed severe learning problems in the elementary schools were given "Sabin Diplomas" which made them ineligible for entrance into any high school except Sabin.

To make the comparison between the veterans and the high school graduates of the January, 1947 class 300 veteran's cards were selected. The 343 high school seniors were from the following high schools: Benson, Franklin, Grant, Jefferson, Roosevelt, and Washington. The veterans scores were taken from these groups: the first fifty, then the veteran's cards from 251-300; 501-550; 751-800; 1251-1300; and the last fifty veterans tested in 1946.

The scores on these 300 cards were recorded by subject. Then the average for each group of 50 in each subject field was found. The average was found by adding the scores of all the persons in the group and dividing this total by the number of persons in the group.

The next step was to analyze the scores earned by the high school graduating seniors. All of the 343 students' scores were recorded by subject and the same procedure as followed with the veterans above was used. The mean score earned by each group in each subject was recorded.

The scores in Table 6 are the averages made by each group on each test. The number of persons taking the tests are listed according to their groups so that one can see the number passing and failing in each group. In the total of 343 high school senior students there were 42 failures, a percentage of 12.2%, and for the 300 veterans, there were 28 failures, a percentage of 9.3%.

Interesting results are evident in separating the scores made by the boys and girls on the high school level. The girls made consistently higher scores than the boys on Tests 1 and 4, English Expression and Literary Materials. Almost identical averages were made by the students on their interpretation of Social Sciences. The boys surpassed the girls on Natural Sciences and General Mathematics. Of the 175 high school senior boys, there were 18 failures, while the 166 girls accounted for 24 failures. Table 7 shows the tabulated results of the average scores for high school senior boys and girls.

The Benson high school boys made the highest Natural Science and General Mathematics scores of all the high school groups and were surpassed by only one veteran group (251-300 group). That was in the Natural Science test but only by .5% of a point. They were lowest of all high school groups on the English and only one veteran group (251-300 group) was lower on English Expression. This was the same group that surpassed the Benson boys high Natural Science score.

A comparison of these scores can be found in Table 6.¹⁴

In checking the reasons for failure it was noted that the greatest downfall of high school boys and veterans was a generally low average on the five tests or complete failure on the English test. Only one girl failed because of a low English score; however, girls had trouble in low averages for the combined tests and in mathematics.

It is the writer's belief that the high school principals who complained of the "easy" diploma will be pleased to note that the veterans General Educational Development method is not cheapening the value of a high school diploma. The American Council on Education states that 80% to 85% of the students graduating from public high schools throughout the country would pass these tests. The results have shown that 87.6% of the 1,892 veterans tested at the Portland Guidance and Counseling Center have passed. This is 2.6% above the highest expected percentage set by the American Council on Education.

14. Supra, p. 28.

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INTERPRETATION OF G.E.D. PLAN

GUIDANCE AND COUNSELING
 220 N. E. Beech Street
 Portland, 12, Oregon
 Trinity 2668

In the Fall of 1945 the School Board of the Portland Public Schools adopted Resolution No. 12394, which established a procedure for the granting of high school diplomas to ex-service persons. The Guidance Center was designated as the information center for veterans, to which principals may refer veterans for information or school placement, and may send veterans' in-service training and experience records for evaluation. The Guidance Center testing laboratory was assigned the administration of the United States Armed Forces Institute Tests of General Educational Development.

Eligibility for a high school diploma is determined by two factors, (1) residence, and (2) test scores.

(1) Residence requirements

The veteran must have attended a local high school and satisfactorily completed a full high school course for one term.

The veteran who is not a former student of a Portland High School, or the veteran who was a former student and who failed to earn one full term of credits, may establish residence by attending a Portland High School, preferably the Portland Veteran Evening High School, and carry a full program for one term.

(2) Minimum test score requirements

In the "Guide to the Evaluation of Educational Experiences in the Armed Services", the American Council on Education has made these recommendations on use of the General Educational Development Tests: A veteran may demonstrate through the United States Armed Forces Institute Tests of General Educational Development that his general educational status is the equivalent of that of most high school graduates, and may thus qualify directly for a high school diploma, without any counting of credits in specific subjects. "It is recommended that a secondary school should grant a diploma if the examinee satisfies the following requirements, provided that legal requirements of local authority have been met:

1. The examinee has made a standard score of 35, or above, on each of the five tests in the battery;
2. The examinee has made an average standard score of 45, or above, on the five tests in the battery."

The Guidance Department sends a report of accomplishment to the veteran and to the school, with a recommendation regarding the issuance of the diploma.

1. It is recommended that the veteran who meets the minimum score requirements may be granted a diploma by the school in which he had fulfilled the residence requirements. The principal of the high school is to determine this on the basis of the veteran's high school record.
2. It is recommended that the veteran who has failed to meet the minimum test score requirements be required to attend school for one term and take the full high school course offered, including courses in those fields in which the test scores indicate deficiencies. Upon completion of this additional term in school, provided satisfactory grades in the courses in which he is enrolled have been earned, he may return to be retested, if six months have elapsed since the first tests were taken.

Veterans who are now residents of Portland and who attended high school in another state which follows the national program of granting diplomas to veterans as recommended by the American Council on Education, may take the General Educational Development Tests at the Guidance Center. A record of his accomplishment will be forwarded to the principal of the high school formerly attended and to the State School Superintendent. A fee for this service is charged veterans who are not former Portland high school students.

This local plan is patterned after a national procedure, which you will find described in "A Guide to the Evaluation of Educational Experience in the Armed Services", published by the American Council on Education, in the front of the book, indexed as

U.S.A.F.I.

1 A

Parts 1 and 2

The test battery includes:

1. Correctness and Effectiveness of Expression.
2. Interpretation of Literary Materials in the Social Studies.
3. Interpretation of Literary Materials in the Natural Sciences.
4. Interpretation of Literary Materials.
5. General Mathematical Ability.

LETTER TO VETERAN PASSING G.E.D. TESTS

The United States Armed Forces Institute Tests of General Educational Development have been administered to:

Address _____

The test scores below indicate that he has met the minimum requirements for high school graduation and may be granted a high school diploma from _____ High School, if he has established residence there by earning four full credits. This diploma will be issued at the regular graduation time, (see Superintendent's Ruling below) and will be held at the high school until called for.

Superintendent's Ruling 1-21-47

"The accreditation policies of high schools may not permit men who leave the institution before graduation to obtain their diplomas before such time as they would have by normal attendance."

| G.E.D. TESTS (HIGH SCHOOL) | STANDARD SCORE | PERCENT H.S. GRADUATES IN NORTHWEST WHOSE SCORE IS LOWER ON SAME TEST | PERCENT H.S. GRADUATES IN U.S. WHOSE SCORE IS LOWER ON SAME TEST |
|--|----------------|---|--|
| Test 1 Correctness and Effectiveness of Expression | _____ | _____ | _____ |
| Test 2 Interpretation of Reading Materials in the Social Studies | _____ | _____ | _____ |
| Test 3 Interpretation of Reading Materials in the Natural Sciences | _____ | _____ | _____ |
| Test 4 Interpretation of Literary Materials | _____ | _____ | _____ |
| Test 5 General Mathematical Ability | _____ | _____ | _____ |

"It is recommended that a secondary school should grant a diploma if the examinee satisfies...the following requirements, provided that legal requirements of local authority have been met:

1. The examinee has made a standard score of 35, or above, on each of the five tests in the battery.
2. The examinee has made an average standard score of 45, or above, on the five tests in the battery.

Frances Dwane McGill
Supervisor, Guidance

DATE: _____

LETTER TO VETERAN FAILING G.E.D. TESTS

The United States Armed Forces Institute Tests of General Educational Development have been administered to:

Address _____

The test scores below indicate that he has failed to earn scores considered to be the equivalent of a high school graduate. He must attend school for one term and take the full high school course offered, including courses in those fields in which the test scores indicate deficiencies. Upon completion of this additional term in school, provided satisfactory grades in the courses in which he is enrolled have been earned, he may return to be retested, if six months have elapsed since the first tests were taken.

He may fulfill the above requirements by attending the Portland Veteran Evening School, which is located at Lincoln High School, 1620 S. W. Park Avenue. For registration he may report to the Portland Veteran Evening School Office after 6:00 P. M. Monday through Thursday. For further information he may call East 4119.

He may return to this office for an interview if he wishes.

| G.E.D. TESTS (HIGH SCHOOL) | STANDARD SCORE | PERCENT H.S. GRADUATES IN NORTHWEST WHOSE SCORE IS LOWER ON SAME TEST | PERCENT H. S. GRADUATES IN U.S. WHOSE SCORE IS LOWER ON SAME TEST |
|-------------------------------|-------------------|---|---|
|-------------------------------|-------------------|---|---|

Test 1 Correctness and
Effectiveness of Expression _____

Test 2 Interpretation of
Reading Materials in the
Social Studies _____

Test 3 Interpretation of
Reading Materials in the
Natural Sciences _____

Test 4 Interpretation of
Literary Materials _____

Test 5 General Mathematical
Ability _____

"It is recommended that a secondary school should grant a diploma if the examinee satisfies...the following requirements, provided that legal requirements of local authority have been met:

1. The examinee has made a standard score of 35, or above, on each of the five tests in the battery.
2. The examinee has made an average standard score of 45, or above, on the five tests in the battery.

Course: Clerical
 (Enlisted Men--Infantry, Field Artillery, and Armored Force)
 Service: Army (SGF)

1. Locations:

Camp Grant, Illinois (Infantry)
 Camp Roberts, California (Field Artillery)
 Fort Knox, Kentucky (Armored Force)

2. Length:

Eight weeks, Camp Grant and Fort Knox.
 Ten weeks, Camp Roberts

3. Objectives:

To train students in army clerical technique and procedures and to develop skill in the preparation and use of military forms, records, reports, and correspondence.

4. Plan of Instruction:

The course includes a total of about 320 clock hours in the eight weeks course and about 400 in the ten weeks course, exclusive of military drill, physical education, etc., One-third of the time is spent on touch typing, and the remainder of the time is spent on study and practice with reference to correspondence and various military forms in the Camp Grant and Camp Roberts courses. In the Fort Knox course only a limited review of typewriting is included.

5. Description of Subjects:

ORGANIZATION OF THE ARMY: A study of certain War Department circulars.

TOUCH TYPING: Practice; grammar, spelling, punctuation, syllabication.

SHORTHAND (Camp Roberts Only): A complete review of the Gregg Shorthand Manual with coordinated instruction in military dictation and transcription.

MILITARY CORRESPONDENCE: Channels of communication, company correspondence, radiograms, non-military letters, filing, classification.

COMPANY RECORDS: Various reports, duty roster, company fund and council book, field message center.

FINANCE: Payrolls, deductions, insurance, deposits, dependents, mileage vouchers, pay vouchers.

6. Recommendations:

To Secondary Schools.--It is recommended that 1 unit in office practice be granted for the eight weeks courses and 1½ units be granted in office practice for the course at Camp Roberts.

Note: Credit in typewriting and shorthand as separate subjects should be granted only on the basis of examinations, such as those prepared by USAFI.