A PROJECT IN TEST CONSTRUCTION AND IMPROVEMENT IN THE ODON-MADISON SCHOOL SYSTEM

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Contributions of the Graduate School Indiana State Teachers College Number 124

Submitted in Partial Fulfillment of the Requirements for the Master of Arts Degree in Education

1933
ACKNOWLEDGMENTS

The author wishes to express his appreciation to the faculty of the Odon-Madison School System for their splendid cooperation in formulating and administering the testing program. To his committee, Prof. E. E. Ramsey, Dr. J. R. Shannon, and especially Prof. E. L. Abell for his helpful assistance and kindly advice, he acknowledges his debt of gratitude.
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I. THE PROBLEM: TO CONSTRUCT AND IMPROVE NEW-TYPE TESTS

A. As It Pertains to the Superintendent or Other Supervising Official

It is an undeniable fact that one of the most important elements in supervision is "vision." There is a very old saying in a very old Book to the effect that "Where there is no vision the people perish." This is certainly true professionally of the superintendent or supervisor who fails to look and plan ahead. According to the current saying he is living from "hand to mouth" if he does otherwise.

The best time to find out whether a teacher is covering the course of study is before the course begins. If there were no other purpose in view no better means of insuring a proper comprehension of the course could be found than that of having the teacher build a preliminary test to cover the work of the semester.

The supervising official could, as is often done, dismiss the whole matter of testing either because he is too busy or because he considers it non-essential. Would not the wiser course, however, be to promote and supervise a well planned program of test construction and improvement in his school system?

B. As It Pertains to the Teachers

Many times a teacher teaches day by day giving no
thought to the end to be attained or to the organization of the work as outlined in the course of study. A textbook may be taught lesson by lesson with no attention given to its unity of purpose. These lamentable facts would be quite impossible if the teacher were to construct a preliminary test. A careful pre-analysis of the semester's work would thus be necessary and as a result the teacher's knowledge of the course would be greatly enhanced.

Educators are quite well agreed that one of the best means of motivating the learning process is by good objective tests and examinations. Thus the teacher by constantly improving her testing material would be increasing motivation. If this were done each teacher would soon have a well built series of tests that exactly conformed to the course of study, the textbooks in use, and his own particular methods of instruction.

If there is any one phase of educative process in which the teacher should seek to be absolutely fair and impartial more than in any other it is in the matter of giving marks and grades. No testing material can be too good or too accurate for measuring the work of the students. Here then is another very vital reason why the teacher should be interested in test construction and improvement.

In these times of depression, when retrenchment in school expenditures has been imperative there is a distinct advantage in, and need for, more local test construction and improvement. Under present conditions the cost of
standardized testing materials is prohibitive to most school systems. Thus as an economy measure the making and using of home made tests is to be encouraged, especially in view of the fact that they often fill local needs better than any standardized tests that can be secured.

C. As It Pertains to the Students

Often students fail to see any purpose in a course of study. A preliminary test may help them to get a panoramic preview of the whole intellectual field that lies out before them so far as that particular subject is concerned.

The greatest benefit to be derived directly by the students from a preliminary test is that of gaining some idea as to the nature of the course of study. The author heard one student say as he came from a preliminary test, "Well, I didn't make much but I have some idea of what we are going to learn this semester." Thus his own limitations became a motivating force to him.

If a pupil knows that at the end of a course he is to be subjected to a carefully prepared objective, valid, and reliable, examination he as a rule will have no resentment for the test. He will study the subject more zealously and make a greater attempt to organize it in his own mind if he knows it has been organized as far as the examination is concerned. He will approach the test without any "fear and trembling" is he knows there has been nothing purposely planned to trip him. The teacher who
works out a good valid and reliable test is making a real contribution to the course so far as the students are concerned.

D. Previous Studies in the Testing Field

The development of the science of tests and measurements is one of the most recent movements in the field of education. Just why it should be such a laggard among all the other well defined educational movements of the past century would be difficult to say, and anyway that problem is beside the purpose of this study. It was not until the present century was nearly a decade old that any appreciable effort was made toward discovering new and worthy techniques in examination methods. Associated with the beginnings of the movement are the names of such pioneers as Rice\(^1\), Thorndike\(^2\), Stone\(^3\), Courtis\(^4\) and Ayres\(^5\).

The movement, however, was slow in gaining impetus, probably because of the ultra-conservatism of teachers in general. It was not until after the World War that anything like a

\(^{1}\)Dr. J. M. Rice, formerly director of the Society of Educational Research.

\(^{2}\)Dr. E. L. Thorndike of Columbia University.

\(^{3}\)Dr. C. W. Stone, since 1920 Professor in Education, State College of Washington.

\(^{4}\)Dr. S. A. Courtis, Educator. Now professor in the School of Education, University of Michigan.

\(^{5}\)Dr. Leonard P. Ayres, Statistician, now vice-president of the Cleveland Trust Company, Cleveland, Ohio.
widespread interest in the movement began to manifest itself. Much has been written on the subject but almost all of the books now available bear copyright dates since the war.

The old essay type examination with its subjectivity as to grading and often its indefiniteness of purpose stood unquestioned for a long time and enlisted many stalwart defenders. The first brave souls who dared call its virtues into question had to suffer the taunts and derision of many of their professional comrades. But so it always is with the reformer.

Various names came to be applied to the new form of examination. The one most often used was "New Type Test," probably for the mere reason that it was opposed to or different from the old essay examination. Another, and perhaps a better name, as is suggested by one writer, is the "Objective Test." This appellation is quite acceptable since one of the primary purposes of the movement is to secure a more objective method of testing. Still another name applied by some authors is "Short Answer," which obviously arose from the very nature of the responses called for.

Much has been written concerning the advantages of the new-type test. Chief among those claimed for it are increased motivation and more accurate measurement due to objectivity and wider sampling. Its values to the individual teacher are set forth as comprehensiveness, ease of scoring and more

accurate placement of pupils.

Two general types of questions have been originated, the recall, and the recognition. The recall tests are of two principal kinds. They are the simple recall question, and the completion exercise. Some of the recognition types are the multiple response, true-false, best answer, matching and identification. Certain general and specific directions and precautions have been developed for the construction of each of these types of questions. Also, general and specific directions for scoring each kind have been evolved. The best methods of using the resultant scores in awarding grades and school marks have also been advanced.

Two general uses have been made of the new-type test, that of measuring intelligence and that of measuring achievement. The one was devised to determine mental ability while the primary purpose of the other is to determine extent of knowledge in a given subject matter.

Certain criteria have also been rather generally set up for determining the quality of a test as a whole. Those qualities are validity, reliability, objectivity, and standards or norms. Well defined methods of procedure have been outlined and established for standardizing tests. As a result of this process standards or norms are set up for a given test. The principal use of such standards is to compare groups of students. It was thought early in the movement and in fact until rather recently that a test was
of little value unless it was standardized but educators are coming to see a more intimate use for the objective test.

Horn⁷ says, "Through the interest which has been an outgrowth of the use of standardized tests, there has now developed a new type of test program which emphasizes the technique of testing rather than the test itself. These new and more perfect methods of testing fill a need which cannot be met by the use of standardized tests. In the first place, they are adapted to the measurement of the accomplishment of any educational objective no matter how small. They are therefore admirably suited for use in experimental work, either in the field of curriculum research or in the field of educational methods."

A number of other authors could be quoted to show the same tendency. Thus we see that the pendulum is swinging from an over-emphasis upon the standardized test as such, to a new attention upon the arts of test construction which have been gleaned from the movement.

Lang⁸ comments upon the fact of the discovery of a new and valuable method in education in the following quotation, "School people, however, came to realize that the standardized test is limited in its use, and that informal unstan-

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⁷G. M. Ruch, The Improvement of the Written Examination. Scott Foresman and Company, 1924. Editor's introduction by Ernest Horn, Professor of Education, University of Iowa.

Standardized examinations are necessary for meeting local conditions. With the development of standardized tests, there was developed an examination technique which markedly increased the reliability of test results."

It is evident that a comprehensive testing technique has been a very valuable by-product of the standardized testing movement. Not only will these new techniques result in better measuring instruments but they will contribute very materially to teaching efficiency as well.

To quote further from Lang⁹, "The construction of a good examination compels a teacher to determine the objective of the course and of the different units of work, to select and organize the subject-matter in a thorough manner, and to master the material in a way that otherwise would not be done. It is a main function of examinations to contribute to the improvement of teaching efficiency."

The teacher should not merely make and administer tests according to the new techniques but should study to utilize the whole value of the results. According to Paterson¹⁰, the diagnostic significance of each question should be determined and a large file of valid questions should be built up in order constantly to improve the accuracy of the examinations.

Then, too, there is a further field of study suggested

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¹⁰Donald G. Paterson, Preparation and Use of New-Type Examinations. World Book Company, 1926. P. 60.
and treated by a number of authors. It is that of utilizing properly examination scores in awarding grades, and pupil placement. Woollard\textsuperscript{11} has found that a much greater importance is attached to final examination scores than to improvement shown, in awarding term grades.

Outside of certain general and specific precautions to be taken in constructing each type of objective test item practically nothing has been done toward improvement or purification of the new type test. It is the purpose of this study to demonstrate the techniques to be followed in building up valid and reliable home made tests. If this procedure were followed by the individual teacher from year to year soon a vast amount of very valuable test material would be accumulated.

E. Limitations

No standardized tests were used except as correlating material. It was the purpose of this project to construct and perfect tests that would fit the local curricular needs.

The individual differences of students are always limiting factors in administering any testing program, especially when the number participating is not large. It is very difficult to give a test when every pupil taking it is mentally and physically at his best.

\textsuperscript{11}Charles Woollard. \textit{A Study in Pupil Achievement.} Contributions of the Graduate School, Indiana State Teachers College, Number 36.
The individuality of the teachers was another limiting factor in this project. Some of them had had more experience constructing new type tests than others. Some teachers have the art of conducting an examination in such a way as to get the best out of each student while others do not. Students often feel more free to cheat, if possible, under some instructors than they do under others.

Usually pupils do better on examinations given in the fore part than they do on those given in the latter part of the day. Some of the tests were given in the afternoon. In some of the classrooms artificial light had to be used during the examination. In some there were desks and in others, tablet arm chairs. With the chairs it was impossible to segregate the students to any great degree.

In some subjects such as shorthand, typing, or algebra it is more difficult to build a good new type test than it is in others such as English or history.
II. PROCEDURE

A. The Testing Program

1. Kind of Tests Used. The tests made were of the new type. It was the aim of the author and all the teachers concerned to secure as great a degree of objectivity as possible. Only a small percentage of the questions were of the true-false type. Multiple choice, completion, and matching items were the principal kinds used.

The tests varied in length from fifty to one hundred fifteen items. As a rule they were shorter in the lower grades than in high school.

It was the purpose of the author to develop a practical program of test construction that will serve as a guide or suggestive outline to the individual classroom teacher in making and improving objective tests to fit her own methods of instruction.

2. Constructing Valid Tests. Each teacher made the tests to cover the work in her own classes. The tests were constructed under the guidance and supervision of the superintendent. They were made during the last month of the first semester to cover the work of the second semester.

Other means were used to insure a high degree of validity besides objectivity. The textbooks were analyzed and the various divisions of each properly weighted in selecting the test items.

The courses of study were carefully examined with a
view to embodying the aims set forth therein in the tests. Former editions of the Indiana New Type Test edited by the state testing committee were used as suggestive material.

In a few instances tests edited by the publishers of the textbook were studied.

The tests were thus validated by using textbooks, courses of study, other tests, and teachers' judgments.

3. Administering the Tests.

a. The Inventory Test. The tests were given in practically all subjects from the fourth grade on through high school. They were given first as inventory tests on the first two days of the second semester. No warning had previously been given the students that such a course would be pursued. It was thought that such warning would lead some students to a hasty preview of the semester's work and thus true results could not be obtained.

Just before the tests were given the students were called together and the purpose of the project was explained. They were not told however that the same tests would be used at the end of the semester. A frank statement of the testing program as a part of an educational study by the super-
intendent was made to the students and an appeal given to them to do their best to make it a success.

Some were inclined to be discouraged at the probable results of taking a test over work that they knew little or nothing about. To counteract this tendency, however, the pupils were urged to look at the tests as a general outline of the coming semester's work. Their value in giving students some knowledge of the work that lay before them was pointed out. They were urged to do their best but not to guess. Most of them were thus motivated to do their best.

b. The Final Test. The same tests were given at the end of the semester as final examinations over the work covered during the half year. The results were felt to be reliable inasmuch as the students did not know the same tests would be used again and thus made no dishonest preparation.

There are a number of weaknesses, which will be mentioned later, in the plan of using the comparative results of a pre- and post-testing program for the purpose of grading and pupil placement. But since the primary purpose of this study is not that of pupil place-
ment but a test improvement project, these shortcomings are irrelevant.

4. Tabulating the Results. Each teacher scored his own tests and tabulated the results both for the inventory and final tests. The results were tabulated in raw and percentage scores. All score sheets together with all test papers were turned in to the superintendent.

The total number of grade and high school pupils tested was two hundred and seventy-five. The number of pupil-test responses was approximately eight hundred. Those tests selected for this project represent three hundred and forty-three pupil-test responses.

B. Improving the Tests

1. Selection of Certain Tests for Improvement. For the purposes of this project certain tests were chosen. First, those having the largest number of items were chosen. This choice was made because greater reliability is secured by a long test for it admits of wider sampling. Also, a long test gives greater possibility of purification by the elimination of weak items. If the test is too short not enough items will be left for a good test after the improvement process is completed. Secondly, those tests were selected which were administered to the largest number of pupils. As the class becomes smaller the chances become greater that one will get a select group of students. As the group becomes larger the more reliable will be the results
of the test.

2. **Elimination of Poor Items.** For each test to be improved a tally sheet similar to that illustrated in part in Figure 1 was made. The vertical columns, numbered, in this case, from one to seventy-three, inclusive, indicate the individual items of the test. The individuals taking the test are shown in the column on the left--there being thirty-four in this particular class. They were listed from highest to lowest according to grades made on the final test. The check marks in the upper left corners of the spaces indicate items answered correctly on the inventory test and the zeros in the lower parts of the spaces signify items missed on the test when given at the close of the semester. Across the bottom of the sheet, as indicated, is the summation of the number of correct responses on each item for both the inventory and final examinations.

On a strip of paper, as illustrated in Figure 2, with columns congruent to those of the tally sheet, items were likewise numbered from one to seventy-three, inclusive. The number of correct responses for each item on the pre-test was listed on the next line. The strip was then placed across the tally sheet just below the line for the seventeenth individual with columns corresponding to the tally sheet. The number of correct responses on each item was then listed on the third line for the upper, or better half, of the class. On the next line the same information for the lower, or poorer half, of the class was recorded.
American Literature, Sophomore English

<table>
<thead>
<tr>
<th>Pupil</th>
<th>Item</th>
<th>Number</th>
<th>Original Test</th>
<th>Improved Test</th>
<th>Chance Halves</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pre Post Pre</td>
<td>Post Pre Post</td>
<td>Odds Even</td>
</tr>
<tr>
<td>1. VS</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2. IW</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3. HV</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4. MG</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5. HS</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>31. PF</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>32. OS</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>33. RS</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>34. LL</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Correct Responses per Item on Test</td>
<td>Pre</td>
<td>0</td>
<td>20</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>26</td>
<td>32</td>
<td>6</td>
<td>32</td>
</tr>
</tbody>
</table>

Figure 1. Illustration of tally sheet made for each test.
<table>
<thead>
<tr>
<th>Number of item on original test</th>
<th>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct responses pre-test</td>
<td>0 20 0 27 0 4 1 3 0 0 0 1 1 8 12 3 4 20 3</td>
</tr>
<tr>
<td>Correct responses post-test</td>
<td>G 14 16 4 17 16 17 17 17 12 16 16 15 13 17 16 17 16 15 17</td>
</tr>
<tr>
<td>Good and poor half</td>
<td>P 12 16 2 15 16 14 11 10 10 11 9 13 8 14 10 15 9 8 11</td>
</tr>
<tr>
<td>Items eliminated</td>
<td>x x x x x x x x</td>
</tr>
<tr>
<td>Number of item on improved test</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
</tbody>
</table>

![Figure 2. Sample of check sheet to accompany tally sheet shown in Figure 1.](image)
| 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 11 | 0  | 1  | 0  | 0  | 3  | 17 | 0  | 1  | 3  | 3  | 0  | 6  | 7  | 9  | 13 | 0  | 1  | 2  | 0  | 3  | 0  | 5  | 7  | 2  | 14 | 3  |
| 17 | 16 | 16 | 17 | 15 | 15 | 16 | 14 | 14 | 17 | 16 | 13 | 15 | 17 | 14 | 15 | 8  | 13 | 11 | 11 | 9  | 8  | 15 | 15 | 14 | 17 | 16 |
| 14 | 7  | 5  | 12 | 8  | 10 | 12 | 4  | 4  | 11 | 15 | 6  | 7  | 8  | 8  | 7  | 1  | 5  | 6  | 2  | 5  | 2  | 5  | 6  | 3  | 16 | 5  |
| x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  |

Figure 2. (Continued.)
Since one of the qualifications of a good test is the degree to which it measures what has been taught during a given period of time, those items answered by an unduly large number of individuals on the inventory test were eliminated. For example, on item number four there were twenty-seven out of a possible thirty-four correct responses on the inventory test. On item number thirty-five there were twenty-four correct responses. Thus these questions are of no value as measuring tools since the information required is already known. The test will therefore be better if items number four and thirty-five are discarded.

A good test should discriminate between the better and poorer halves of the class. Any item, therefore, which does not do that to a fair degree, at least, is unsatisfactory. On every valid item the upper half of the class should contribute more correct responses than the lower half. Guided by these standards, those questions on which the lower half of the class did better than the upper half were eliminated. On number thirty-seven it will be noted that the poorer half of the class made sixteen correct responses while the better half made only twelve. This item was therefore discarded.

Then those items, such as number two, on which the lower half of the class did as well as the upper half were cast out. The question might arise just here as to why such an item as number five was not eliminated. By way of explanation, in the first place, this item was hooked up with numbers six and seven as a multiple question. The other two parts were
satisfactory so it was allowed to stand with them. In the second place, it will be noted that there was not a single correct response on it when given as an inventory test. The item was therefore valid as a measure of knowledge gained during the course. Such items as numbers one, three, nine, twelve, fourteen, etc. on which the upper half of the class did but very little better than the lower half were likewise dropped.

By these processes from this particular test twenty-three items were eliminated, thus leaving the improved test with fifty items.

3. Rescoring the Improved Test. Through the columns representing those items thus eliminated red lines, as further illustrated in Figure 1, were drawn. Each individual was then very easily rescoring on the improved test by simply counting the number of items answered correctly not thus crossed out. The resulting scores were placed in the Improved Test column on the tally sheet. (See Figure 1.)

Thus was determined what each student would have made on the improved test under exactly the same conditions and at the same time that the original test was given. This was better than giving it to a different group, for then the variable factor of the individual differences of a different class would have been brought in; which factor is quite large especially when dealing only with small groups.

4. Reliability by Chance Halves Method. To determine the reliability of each of the improved tests the chance
halves method was used. Here again the check sheet (Figure 2) was used to good advantage. Those items not eliminated were numbered one to fifty inclusive on the bottom row. By sliding it down the tally sheet from one student to another it was quite easy to count the "odd" items which were answered correctly. The difference could then be found quite readily between these "odd" scores and the total scores on the improved test. The differences, of course, were the "even" scores. The "odd" and "even" scores were entered in the chance halves column on the tally sheet.

By the Pearson-Product-Moment method the coefficient of correlation was computed for each test. The resulting coefficient was stepped up by the Spearman-Brown formula to determine the reliability of the test as a whole. Table I gives the results of the calculations on eleven tests. It will be noted that for seven out of the eleven, coefficients above .90 were secured. These results seem to be a very good reward for the labor expended in the improvement process. If tests of this high a degree of reliability can be secured by such a simple process of purification and such a reasonable outlay of time should not every classroom teacher be building up a very valuable body of testing material based upon her work?

5. Validity. Table II gives the degrees of correlation between the tests which were improved and various other tests—some of them achievement and some intelligence tests as indicated in the table. The coefficient of .756 between
### TABLE I

**RELIABILITY COEFFICIENTS**

**CHANCE HALVES METHOD**

<table>
<thead>
<tr>
<th>Test</th>
<th>$r \pm P. E.$</th>
<th>$r_{nn} \pm P. E.$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elson's History</td>
<td>.957 ± .01</td>
<td>.978 ± .005</td>
</tr>
<tr>
<td>Sophomore English</td>
<td>.95 ± .011</td>
<td>.974 ± .006</td>
</tr>
<tr>
<td>Citizenship</td>
<td>.939 ± .016</td>
<td>.968 ± .008</td>
</tr>
<tr>
<td>U. S. History</td>
<td>.905 ± .028</td>
<td>.95 ± .015</td>
</tr>
<tr>
<td>Bible Study</td>
<td>.87 ± .032</td>
<td>.93 ± .018</td>
</tr>
<tr>
<td>Reading—Seventh Grade</td>
<td>.843 ± .033</td>
<td>.915 ± .019</td>
</tr>
<tr>
<td>Freshman English</td>
<td>.839 ± .041</td>
<td>.912 ± .023</td>
</tr>
<tr>
<td>Grammar—Sixth Grade</td>
<td>.792 ± .04</td>
<td>.884 ± .023</td>
</tr>
<tr>
<td>Plane Geometry</td>
<td>.718 ± .056</td>
<td>.836 ± .035</td>
</tr>
<tr>
<td>Grammar—Seventh Grade</td>
<td>.713 ± .059</td>
<td>.832 ± .037</td>
</tr>
<tr>
<td>General Science</td>
<td>.511 ± .079</td>
<td>.676 ± .058</td>
</tr>
<tr>
<td>Test</td>
<td>Indiana New Type</td>
<td>Grades Made In Previous years</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Freshman English</td>
<td>.756 ± .068</td>
<td></td>
</tr>
<tr>
<td>U. S. History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English--Seventh Grade</td>
<td>.546 ± .101</td>
<td></td>
</tr>
<tr>
<td>Reading--Seventh Grade</td>
<td>.539 ± .102</td>
<td></td>
</tr>
<tr>
<td>Bible Study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plane Geometry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English--Sixth Grade</td>
<td>.374 ± .106</td>
<td>.515 ± .106</td>
</tr>
<tr>
<td>General Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomore English</td>
<td>.240 ± .15</td>
<td>.206 ± .108</td>
</tr>
<tr>
<td>Citizenship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elson's History</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Freshman English and Literature and the Indiana New Type Test on Eighth Grade Reading and Grammar is high enough to be significant, as is also that of .716 between United States History (high school) and grades made in the History Department for the two previous years. A correlation of from .40 to .60 between an achievement test and an intelligence test scores is considered significant. Four of the six correlations with intelligence tests given in the table are therefore fairly significant, since they have coefficients of about .40 or above.

Any teacher having access to intelligence test or standard achievement test scores for her pupils would have available some valuable criteria by which to judge the results of her own testing program.

6. Re-arrangement of Items. The next step in the improvement of the test was to re-arrange the items. Those in each group should be listed in the order of difficulty from easiest to hardest. The tally sheet (Figure 1) supplies all the information needed on each item. The row giving the responses on each in the final test was inspected and from that information the items were easily arranged according to difficulty. In this final form the improved test is ready for use.

C. Comparison of Teacher's Instruction

The correlation between the averages for three years of high school and the gains made on the post-test over the
pre-test in Medieval and Modern European History is shown in Figure 3. As can be readily seen, only about half the class made gains reasonably consistent with their previous records. Some individuals were very erratic in their performance.

Figure 4 shows the same thing for American Literature, sophomore year, and Figure 5, the same for United States History, junior year, with the exception that in the latter the averages are for four years of high school. Figure 5 reveals slightly more relationship in United States History but it is evident from Figure 4 that there is much less correspondence in American Literature.

In no class including grades four to twelve was there even a fair degree of consistency between past records and gains made on the tests.

Many elements enter in to make the plan of pre- and post-testing in order to rate the teachers according to gains made by the pupils, a very doubtful method of procedure in school administration. These will be further discussed under the summary and conclusions.
Figure 3. Chart showing correlation between averages for three years of high school and gains made on Medieval and Modern European History Test. Sophomore Year.
Figure 4. Chart showing correlation between averages for three years of high school and gains made on American Literature. Sophomore year.
<table>
<thead>
<tr>
<th>Rank of Rank of Gains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Averages for Made</td>
</tr>
<tr>
<td>Four Years Over Pre-Test</td>
</tr>
</tbody>
</table>

1. LD 1. OH  
2. OH 2. ML  
3. HN 3. LD  
4. EW 4. RS  
5. NS 5. NS  
6. RS 6. LB  
7. HC 7. EW  
8. ML 8. HC  
9. DH 9. RH  
10. DW 10. ZB  
11. ES 11. HN  
12. LB 12. ES  
13. RH 13. RH  
14. CD 14. DW  
15. RH 15. CD  
16. CW 16. CW  
17. ZB 17. DH  

Figure 5. Chart showing correlation between averages for four years of high school and gains made on United States History Test.  
Junior Year.
III. SUMMARY AND CONCLUSIONS

A. As a Supervisory Project

1. Planning the Semesters Work. The principal value that accrued from constructing the inventory tests was in outlining and organizing the semester's work. Each course had to be carefully mapped out in order to build any semblance of a satisfactory examination. Every division and topic had to be properly weighted and related to every other in constructing the tests. This previous preparation for the semester precluded any possibility of teaching from day to day without comprehending the course as a whole.

2. Course of Study Must Be Used. In many cases the state course of study is used in somewhat the following manner. On the first day of the semester the teacher investigates the state course to see just what pages in the textbook are to be covered and begins at the proper page. Toward the close of the semester the teacher will have forgotten just how far the class is to go so she will again consult the course of study. If the proper number of pages have been covered the class will stall for time until the end of the term. If an unduly large number of pages remain to be studied the teacher will double the assignments and "cover" the work. Having thus proceeded she dwells with sweet satisfaction upon the fact that the course of study has been followed.

Requiring a careful analysis of the course of study
by each teacher before the semester begins is not so easily accomplished unless some means can be found to enforce the regulation. A peremptory command often arouses opposition, mental at least, to the thing commanded. The whole problem is very easily and tactfully solved by the building of the inventory test before the beginning of the semester. Thus a comprehension of the course of study is insured.

3. Results in an Active Interest in Better Tests. The interest aroused in building and improving testing material was of the utmost value. Each teacher came to see that if new items were added from year to year and the refining process continued soon a very valuable store of testing material would be built up. Sufficient items would soon be accumulated so that each test could be broken into two or three forms.

As is illustrated in Figure 6 each teacher can demonstrate the actual improvement in her tests as a measuring device. The smoothing out effect of the improvement process can be easily noted. The scores are much more smoothly distributed on the improved than on the original test. The same result in sixth grade English can be noted in Figure 7.

4. Basis of Comparison of the Work of the Teachers. An inspection of the improved tests made by each teacher forms a valuable basis of comparison of teaching efficiency. It is said that President Eliot followed the practice of reading the examinations which the teachers made in order
Figure 6. Chart showing the distribution of grades on the original and the improved test in American Literature, Sophomore Year.
Figure 7. Graph showing the distribution of scores before and after improving the test in Sixth Grade English.
to formulate his judgment of the teaching ability of the Harvard faculty. Lang\(^\text{12}\) says, "An inspection of a set of examination questions reveals something of a teacher's familiarity with the testing technique, and perhaps something also as to his comprehension of the subject-matter."

The gains made on the post-test over the pre-test would be very unreliable as a basis of comparison of the work of the teachers. Many factors enter to make it unsatisfactory. Some of them are the natural capability of the students; the nature of their previous preparation; their physical condition; the length of the school day; the light, heat and ventilation of the schoolroom; the length of class periods; the teaching load; the kind of supervision; the help received at home; and so on.

B. As a Teaching Project

1. **Motivates the Work of the Pupils.** The greatest direct value of the preliminary test to the pupils was to be found in the idea it gave them of the nature of the work of the semester.

   By comprehending their own limitations the pupils were led to a more active interest in the learning process.

   Using the gains of the students as a basis of grading and ranking has some very serious limitations. It would require no very great degree of intelligence on the part of

the student, if this plan were used, to arrive at the conclusion that the less he made the first time and the more he made the last time the greater would be his gain and consequently his grade. Hence he would make no effort to do his best on the pre-test. Then if he knew the same test were to be given again the temptation would be very great to secure a sample of it. Various ways could be readily found for doing this without actually stealing a copy of the test.

With the better examinations resulting from the improvement process the students would be more accurately measured and ranked. The majority of pupils are satisfied when they feel they have had a square deal. Nothing insures this quite so much as valid and reliable methods of measurement.

2. Teachers Must Look Ahead. The test improvement project gives aim or purpose to the teacher. A careful analysis of the responses, item by item, helps her to discover the weak spots in her teaching. As far as the teacher is concerned, not even the best use of a test has been found when it is merely used for determining pupil placement. To quote from Buckingham13, "The most valuable information obtainable from testing is usually neglected. Teachers give tests--no doubt you yourself have given tests--and after they have served the needs of the moment they

are either thrown away immediately or filed and forgotten. This procedure applies just as much to informal testing as to the more formal use of standardized materials. Not half the use is made of the responses of pupils to the tests as could and should be made.

The test improvement could be carried on without administering the examination as a pre-test. The majority of those items which were known when the course began would show up in a preponderance of correct responses at the end of the semester. Hence they would be discarded as items of insufficient difficulty.

By accumulating a large number of items in each subject the teacher would soon have enough material for the different forms of the tests. These could be used in alternating years to further remove the possibility of cheating. As new items suggested themselves they could be worked into the tests and the purification process continued indefinitely so that the teacher would never run out of experimental material in connection with her work.

C. The Improved Tests

The tests were given in practically all subjects from the fourth to the twelfth grades. As a basis for this project eleven of the tests having the largest number of items and having been administered to the largest numbers of pupils were selected and improved. Three of the best are given herewith in Appendix B as samples of the results.
of the project. The author, together with his teachers, intends to further use, add to, and improve the tests that have accrued as a result of this experiment.
IV. APPENDIX

A. Bibliography


May, Mark A. "Measuring Achievement in Elementary Psychology and in Other College Subjects." School and Society, XVII, 472-476 and XVII, 556-560.

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Ruch, G. M. and Stoddard, G. D. Tests and Measurements


B. Specimens of the Improved Test

I. UNITED STATES HISTORY
Junior Year, Second Semester

I. Some of the following statements are true and some are false. Underscore T for true and F for false. See examples 1a and 1b.

1a. T F William H. Seward was Secretary of State in President Lincoln's cabinet.

1b. T F The United States bought Alaska from England in 1867.

1. T F Wm. Lloyd Garrison, a Publisher in Alton, Illinois, for his willingness to give abolition a fair hearing, was brutally murdered.

2. T F The Wilmot Proviso provided that slavery should be forever excluded from the territory obtained from Mexico.

3. T F The battleship Maine was blown up in 1898 at the harbor of Havana.

4. T F Congress provided for the abolition of Foreign slave trade on January 1, 1808.

5. T F In 1860 Dred Scott who was a slave in the state of Illinois, sued his master for his freedom.

6. T F The Interstate Commerce Commission was created by the President in 1887.

7. T F Sara J. Hale founded a Seminary at Troy, New York, for girls.

II. Supply the word or group of words needed to make each of the following statements correct. Study example 8a.

8a. It was __Roosevelt__, who sent a fleet of sixteen battleships around the world in 1908.

8. In 1920 about what part of the population of the United States lived in cities of 2500 or more? __________
9. United States obtained Cuba from ________ at the close of the Spanish-American War.

10. The "Open Door" policy in China was brought about by whom? ____________________________

11. That system of government by party leaders is referred to by Hon. Elihu Root as ________________.

12. Tariff rates that are changed suddenly to favor certain shippers are known as ________________.

13. A bill or writ issued by a judge ordering some person or corporation to do or refrain from doing something is called an ________________.

14. The elective officers of Indiana are nominated by the ________________.

15. William Lloyd Garrison founded in Boston his anti-slavery paper, ________________.

16. America, says ex-president ________________ is to find out "whether it was a nation or a boarding house."

17. At the First Battle of Bull Run the ____________ was defeated.

18. Most of the Indians had been placed in reservations by the year ____________.

19. Before the United States could build the Panama Canal they had to undo the ________________ treaty with Great Britain.

20. The Noble Order of the Knights of Labor was founded in the city of ________________ in 1869.
21. A ruling passed by the House of Representatives in 1836 which prevented the reading of appeals and consigned them to the waste basket was known as the ________________.

22. The President of the Confederacy was ____________.

23. By the ________________ act passed June, 1917,

24. and the ________________ act passed May, 1918, the United States Government was given drastic power over the expression of opinion.

25. The native revolt against foreigners in China in 1900 was known as __________ Rebellion.

26. ________________, Alabama became the greatest iron manufacturing center of the South.

27. The Spanish Ambassador at Washington just preceding the Spanish American War was ________________.

28. Mount Holyoke College in Massachusetts was founded by ________________.

29. The first woman's Rights Convention met at Seneca Falls, New York in the year ________.

30. The ____________ tariff act of 1913 made a downward revision in tariff rates.

31. The matron at Sing Sing penitentiary, who was known throughout the nation for her social work and especially prison reforms was ________________.

32. In a message April 2, 1886, President ____________ proposed arbitration as a method for disposing of industrial disputes.
33. In 1924 Congress did away with the ________ and put Japanese immigration on the same basis as Chinese.

34. ________ law of 1916 fixed a standard 8 hour work day for trainmen on railroads.

35. During the reign of President ________ in Mexico many of our business men invested huge sums in Mexican lands, oil fields, and mines.

36. Denver, Colorado was founded by ________.

37. The woman's suffrage amendment to the United States constitution was passed by Congress in the year ________.

38. The federal reserve banking system was established in the year ________.

39. The prohibition amendment went into effect in the year ________.

40. The Prohibition Party was founded in the year ________.

41. The Lusitania was sunk by a German submarine on ________________. (give month, day, and year.)

42. The mill girls of Lowell, Massachusetts, published a magazine, known as ____________.

43. The American Educational Association was founded in the year ________.
III. Match the number of the expression in Column B with its corresponding work in Column A. 44a is a sample of a correct response.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>44a.</td>
<td>1. Andrew Johnson</td>
</tr>
<tr>
<td>44.</td>
<td>2. Alabama</td>
</tr>
<tr>
<td>46.</td>
<td>4. John Hay</td>
</tr>
<tr>
<td>47.</td>
<td>5. Merrimac</td>
</tr>
<tr>
<td>49.</td>
<td>7. James Bryce</td>
</tr>
<tr>
<td>52.</td>
<td>10. Gomez</td>
</tr>
<tr>
<td>53.</td>
<td>11. Weyler</td>
</tr>
<tr>
<td></td>
<td>13. Gomez</td>
</tr>
<tr>
<td></td>
<td>15. Elected president in 1890.</td>
</tr>
</tbody>
</table>
IV. Check the word or words necessary to make each statement correct as is shown in sample 54a.

54a. The founder of modern Socialism was:

- [x] Carl Marx
- _____ Horace Greeley
- _____ Wendell Phillips

54. The commander-in-chief of the Allied Armies during World War was:

- _____ General Pershing
- _____ General Foch
- _____ General Joffre

55. Before the United States could construct the Panama Canal it had to undo the following treaty made with Great Britain:

- _____ Treaty of Paris in 1783
- _____ Hay-Pauncefote treaty of 1901
- _____ Clayton-Bulwer treaty of 1850

56. The two women who were outstanding in their work for women's suffrage were:

- _____ Sarah G. Bagley
- _____ Julia Ward Howe
- _____ Elizabeth Cody Stanton
- _____ Dorothea Dix
- _____ Susan B. Anthony
- _____ Mrs. John Adams

57. Most of the Indians were concentrated in reservations where they were mainly supported by the Government by:

- _____ 1876
- _____ 1871
- _____ 1869
- _____ 1837

59. The Speaker of the House of Representatives at this session of Congress is:

- _____ Joseph C. Cannon
- _____ Nicklos Longworth
- _____ John Garner
The Homestead Act of 1862 provided for the granting without cost save a small registration public lands in lots of:

- 40 acres to each citizen
- 60 acres to each citizen
- 120 acres to each citizen
- 160 acres to each citizen
- 320 acres to each citizen
2. MEDIEVAL AND MODERN EUROPEAN HISTORY

Sophomore Year, Second Semester

I. Check the word or group of words that makes the statement correct. Note the sample given below:

1a. The Reign of Terror was:

- the Reign of King Terror in Russia.
- [X] a period in French history when many persons were punished unjustly.
- [ ] a war between the French and English.

1. The legislative body of Norway is called:

- [ ] Riksdag.
- [ ] Parliament.
- [ ] Storting.

2. Versailles is a:

- [ ] city of Italy.
- [ ] royal city built by Louis XIV.
- [ ] battle between the French and English.

3. Frederick the Great was:

- [ ] Ruler of England.
- [ ] Ruler of France.
- [ ] the most famous character in the Hohenzollern line of Rulers in Prussia.
- [ ] a son of Louis the XIV of France.

4. Brandenburg was a:

- [ ] noble family in Germany.
- [ ] an elector of Rome.
- [ ] a German state.
- [ ] line of rulers in France.

5. The man in the iron mask was:

- [ ] a brother of Louis XIII.
- [ ] a son of Oliver Cromwell.
- [ ] an ambassador for an Italian state.
6. Colbert was:
   • a prime minister in England.
   • a leader of the French Revolution.
   • Minister of Finance under Louis XIV of France.

II. The following statements are incomplete. Supply the required words or phrases. Some will be dates, some, names of persons, and some, names of places or events. The first two given are samples of the nature of responses required.

7a. The Parliament that met late in 1640 came to be called the ______ Parliament.

7b. The reign of _______, king of France, was the longest in European history.

7. The privileged classes of France about the middle of the 18th century were the _______ and _______.

8. ________________.

9. The Partitioning of Poland took place in the following years: ___________

10. __________

11. __________

12. Trafalgar was a naval battle between the French and _______.

13. The protestants of France were called _________.

14. King Henry of France, by the ________________ granted the protestants the right to worship as they pleased.

15. Catherine the Great was ruler of ___________.
16. The greatest French statesman between Charlemagne and Napoleon Bonaparte was ________________.

17. The Bill of Rights was passed by Parliament under the reign of ____________ and ____________.

18. The three great reforms brought the French people: ________________

19. __________________________

20. __________________________

21. __________________________.

22. __________________________

23. __________________________

24. __________________________.

25. Otto von Bismarck was ____________ of Germany.

26. The upper house of the lawmaking body of Austria is the ________________.

27. The lower house of the lawmaking body of Germany is the ________________.

28. The leader of the Gunpowder Plot was ____________.

29. In November, 1806, Napoleon issued the ____________, declaring a blockade of the British Isles.

30. The third great document in the Bible of English Liberties is the ________________.

Three great dramatists of France during the reign of Louis XIV were:

31. __________________________

32. __________________________

33. __________________________.
34. The Parliament elected in 1661 was known as the ____________ Parliament.

35. The Liberator of Italy was ____________.

36. Gladstone was known in England in his later career as the ____________.

37. On January 30, 1649, King _______ was beheaded.

38. After the Battle of Waterloo, Napoleon was exiled to the ____________.

39. The two most interesting non-royal figures attending the Congress of Vienna were ________________

40. and ________________.

41. The Petition of Rights was passed by Parliament under the reign of King ________________.

42. Slave trade was abolished in Great Britain in ____.

43. The creator of modern socialism was ________________.

44. Louis XIV, king of France for 72 years was known as the ________________.

45. The "Declaration of Indulgence" was issued by ________________.

46. The treaty at the close of Queen Anne's war was called the ________________.

47. What event in French History is celebrated as we celebrate the Fourth of July? ________________.

48. The Congress of Vienna met in ________.

49. The home of Queen Victoria was in __________ castle.

50. The "citizen king" in France was ________________.
51. Greece became independent of Turkey in _______
52. Who was the philosopher of Italian liberty?

__________________
53. The leading Statesman of the French Revolution was

__________________
54. Napoleon became master of France in _______.
55. The German Empire was formed in _______.
56. Metternick issued the __________ in 1817 denying the German people the right of free speech and press.
57. Definite political parties first arose in England in the latter part of the reign of _________.
58. The blockade of English ports by Napoleon was known as the _____________.
59. It was ________________, who dubbed Louis Napoleon "Napoleon the Little."
60. The two principal races of Belgium are _________ and _____________.
62. The Dominion of Canada was created in _________.
63. The act passed during the reign of Charles II to prevent Catholics from holding office was the _____________.
64. The person who acted as Napoleon's agent in the sale of Louisiana to the United States was _____________.


III. Some of the following statements are true and some are false. For those that you consider true underscore the T and for those you consider false underscore the F. Thus:


65b. T F Henry Bessemer invented the dynamo.

65. T F The German Howitzer was a long range gun.

66. T F Any bill passed by the house of Commons at two successive sessions becomes a law without the consent of the Lords.

67. T F Eugenie was the wife of Napoleon III.

68. T F The legislative body of Spain is called the Cortes.

69. T F The First Peace Conference, called into existence by Czar Nicholas II of Russia, was held at the Hague, in Holland, in 1899.

70. T F Theirs was a noted French statesman and historian.

71. T F In 1861, Alexander II issued his famous decree emancipating the Russian serfs.
IV. Place the number of the expression in Column B on the blank by the word or expression it defines in Column A as illustrated by the sample 72a.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>72a. 5 The great Puritan Poet</td>
<td>1. The man who refused to pay ship tax.</td>
</tr>
<tr>
<td>73. ___ Cromwell</td>
<td>3. First ruler of Holland.</td>
</tr>
<tr>
<td>75. ___ LaHogue</td>
<td>5. John Milton.</td>
</tr>
<tr>
<td>77. ___ Gustavus Adolphus</td>
<td>7. Battle between English and French in 1692.</td>
</tr>
<tr>
<td>78. ___ Newton</td>
<td>8. King of Sweden during 30-years War.</td>
</tr>
<tr>
<td>79. ___ King Pym</td>
<td>9. Premier under George I and II.</td>
</tr>
<tr>
<td>81. ___ Robert Walpole</td>
<td>11. A place in Calcutta Bay where water is black.</td>
</tr>
<tr>
<td>83. ___ Disraeli</td>
<td>13. Where 146 English Prisoners were kept over night by the Nabob of Bengal.</td>
</tr>
<tr>
<td>84. ___ Thomas Wentworth</td>
<td>14. Discovered the law of gravity.</td>
</tr>
<tr>
<td>85. ___ Diderot</td>
<td>15. Wife of Louis XVI.</td>
</tr>
<tr>
<td></td>
<td>16. Inventor of power loom.</td>
</tr>
<tr>
<td></td>
<td>17. A great French Scholar and Philosopher.</td>
</tr>
<tr>
<td></td>
<td>18. Wife of Napoleon III.</td>
</tr>
<tr>
<td></td>
<td>19. Political party in France.</td>
</tr>
<tr>
<td></td>
<td>20. An ardent Republican who was executed.</td>
</tr>
</tbody>
</table>
3. AMERICAN LITERATURE

Sophomore Year, Second Semester

I. Fill the blanks by the characters named in Column A with the numbers corresponding to the selection in Column B to which each belongs. Number 1a is a sample of a blank properly filled.

1a. 6. Touchstone 1. The Three Strangers
1. ____ Tammas 2. How Gavin Birse Put It To Mag
2. ____ Mrs. Fennel 3. The Red-Headed League
3. ____ Audrey 4. The Purloined Letter
4. ____ Captain Hunnewell 5. The Man Who Was
5. ____ Dirkovitch 6. As You Like It
6. ____ Dupin 7. Dr. Heidegger’s Experiment
7. ____ Mr. Gascoigne 8. The Third Ingredient
8. ____ Mr. Wilson 9. Drowne’s Wooden Image

II. Fill the following blanks with the word or words needed to complete the sentence or definition. Study the samples given 9a. 9b.

9a. The drama had its beginning in the __________ church.
9b. Thanatopsis means __________ view of death __________

9. A sonnet is a poem of how many lines? __________
10. An example of a story of horror is __________
11. "As You Like It" is called a pastoral romantic comedy. Give the meaning. __________
12. __________ wrote the Leatherstocking Tales.
13. Who was the "Tenth Muse"? __________
14. An idyl is a poem __________
15. An example of a sonnet is ____________________.

16. Local color means ________________________.

17. An example of an idyl is ____________________.

18. The only real poet of Revolutionary times was ____________.

19. A lyric is a poem _________________________.

III. As shown in the example, 20a, underscore the proper response in each of the following:

20a. Who first showed to Europe that America was destined to produce a worth national literature? ____________.

   Irving, Bryant, Franklin.

20. The first really great American poet was:

   Longfellow, Bryant, Freneau, Poe.

21. "Sweet are the uses of adversity
Which like the toad, ugly and venomous,
Wears yet a precious jewel in his head;
And this our life, exempt from public haunt.
Finds tongues in trees, books in the running brooks,
Sermons in stones, and good in everything."

   The above quotation was said by: Jaques, Rosalind, Duke Sr., Orlando.

22. Which of the following was noted for his "occasional" verse? ____________.

   Lowell, Holmes, Emerson, Whitter.
IV. Column A is a list of selections. Column B is a list of authors. Match each selection with the proper number in Column B as illustrated in number 23a.

23a. 12 The Declaration of Independence 1. Emerson

23. ____ The Third Ingredient 2. Bryant
24. ____ The Purloined Letter 3. Whittier
25. ____ The Red-Headed League 4. Longfellow
26. ____ Dr. Heidegger's Experiment 5. Walt Whitman
27. ____ O Captain! My Captain! 6. Poe
28. ____ Annabel Lee 7. O Henry
29. ____ The Vision of Sir Launfal 8. Hawthorne
30. ____ Essay on Friendship 9. Lowell
31. ____ In School-days 10. A. Conan Doyle
32. ____ The Marshes of Glynn 11. Lanier
33. ____ The Arsenal at Springfield 12 Jefferson
34. ____ Skipper Ireson's Ride 13. Holmes
35. ____ The Last Leaf 14. Cooper
36. ____ The Antiquity of Freedom

V. Fill each of the following blanks with the word or phrases called for as is done in the sample, number 37a.

37a. The first regular theater in England was built just outside the city of London in the year 1576.

Shakespeare's life in London may be divided into the following forms of work:

37. ___________________________________
38. ________________________________
39. ________________________________
40. ________________________________
41. Widow Wycherly was the only woman in the story written by
42. ________________________________
Two of the periods in the history of American Literature are:
43. ________________________________
44. ________________________________
45. The first book published in America was
46. It was published in the year ________.
47. The two eminent divines of the Colonial Period were: _______________________
48. ________________________________
49. The two greatest Southern poets studied are
50. ________________________________