Survey of standardized achievement testing programs in selected Montana public elementary schools

Earl Barlow
*The University of Montana*

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A SURVEY OF STANDARDIZED ACHIEVEMENT TESTING PROGRAMS IN SELECTED MONTANA PUBLIC ELEMENTARY SCHOOLS

by

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B. S. Western Montana College of Education, 1948

Presented in partial fulfillment of the requirements for the degree of

Master of Education

MONTANA STATE UNIVERSITY

1959

Approved by:

[Signatures]

Date

AUG. 21 1959
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CHAPTER I

SIGNIFICANCE OF THE PROBLEM

One of the major goals of our educational processes is to evaluate or appraise the results obtained in our schools after the objectives we seek have been defined. Many methods have been advanced to do this satisfactorily and undoubtedly each has some merit. One phase of the testing program of a school which is designed to aid in determining whether the pupils in a particular school are really doing as well as pupils in schools in other communities is a program of testing using standardized achievement tests. Achievement tests are also useful in determining if the pupils are progressing at a somewhat normal rate throughout their elementary schooling.

The use of standardized group tests, so common in the elementary schools of today, requires classroom time that might otherwise be devoted to instruction. These tests often require special in-service training for teachers, involve considerable time for scoring and interpretation, and cost money. These group testing programs should be examined to discover how maximum value can be obtained from them.

The proportion of Montana public elementary schools conducting standardized achievement testing programs should
be determined on a state-wide basis to ascertain the popularity of such tests. The programs in operation in the schools should be investigated to determine if they are effective and conducted in the light of current trends.

Sound educational practice dictates that the objectives and curriculum of a school be given foremost consideration when selecting achievement tests. Is this what is being done in Montana schools or is a particular test selected and the objectives and curriculum geared to meet the needs of the test?

Theory set forth by educational authorities should be compared to actual practices instituted by the schools and the only means to ascertain this is to obtain the information from the schools. In this study a survey of selected Montana public elementary schools was designed to reveal how achievement tests are used and how the results are interpreted in these elementary schools.

Montana has many rural schools which have standardized achievement testing programs conducted by the county superintendents. This phase was investigated to discover how these programs compare with those of larger school systems.

An important question to raise about any pupil is: How does his educational achievement compare with his capacity to achieve? A complete achievement testing program will have provision for determining if a pupil achieves to the level of
his ability. The most common method of discovering pupil capacity for learning is through the use of intelligence tests and a good testing program will include them.
CHAPTER II

PURPOSE OF THIS STUDY

The primary purpose of this study was to survey existing standardized achievement testing programs in selected second- and third-class district elementary schools, two- or three-teacher schools, and in the rural schools supervised by county superintendents to learn what proportion had achievement testing programs and to determine if existing programs were effective and conducted according to acceptable procedures.

More specifically an attempt was made to evaluate existing programs in selected elementary schools along the following lines: (1) procedures utilized in the selection of tests, (2) criteria followed in setting up the achievement testing program, (3) the role of the administrator in the achievement testing program, (4) pupil motivation practices which are utilized, (5) procedures followed in administering the tests, and (6) utilization of the test results.

Broader purposes of this study were to establish findings which may serve as a guide for installation of effective standardized achievement testing programs, assemble information to enable future researchers in this field to have a tentative pattern upon which to plan their studies, and to
interpret findings and offer recommendations which seemed warranted as a result of this study.
CHAPTER III

ASSUMPTIONS, DELIMITATIONS, LIMITATIONS,
AND DEFINITIONS OF TERMS

Assumptions. In a survey type of research it is assumed that a questionnaire properly constructed and distributed is accurate for securing adequate answers and that people will answer the questions honestly and to the best of their knowledge when their names are not associated in any way with the answers they give. It is also assumed that the administrator of an elementary school is its educational leader and as such will know and understand the testing program in his school.

Delimitations. "It is generally conceded that the process of education includes three main goals: (1) the determination of goals or objectives, (2) the manipulation of materials so these objectives are achieved, and (3) the evaluation or appraisal of results obtained."¹ This study is limited to the phase of evaluation or appraisal but it must be kept in mind that goals one and two determine goal three to a great extent.

Because of the broad field of various testing programs


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and testing instruments, this study is concerned only with standardized achievement tests.

This study is limited to selected Montana public elementary schools excluding elementary districts of the first class because of their limited number. Each of the nine first-class districts is supervised by one superintendent of schools and undoubtedly has a uniform testing program for all of the elementary schools within the district.

Because of the large number of second-class districts, third-class districts, and two- or three-teacher schools, this study was limited to a survey of twenty-five per cent of the schools in each category. All fifty-six Montana County Superintendents were surveyed since many of them supervise the testing programs of the one-room rural schools in their counties. The 1957-1958 Montana Educational Directory stated there were approximately eight hundred one-room rural schools in the State with an enrollment of approximately 8,750 pupils.¹

Limitations. The questionnaire method was employed to gather data for this study and one must be aware of the shortcomings of such instruments. Words and phrases used in such instruments are subject to different interpretations by different individuals. It must be realized that there

is a tendency to answer questions in such a way so as to make them acceptable rather than giving an answer that correctly describes the actual situation. For this study respondents were instructed not to sign their names. It was thought that anonymity would encourage more accurate responses. The problem of postmarks identifying the returned questionnaires could not be avoided.

Since selected elementary schools participated in the study, there is the possibility that the method of selecting the sample was faulty even though accepted procedures suggested by Good and Scates were followed.¹

**Definitions of Terms.** For this study standardized achievement tests are those tests which are designed to measure academic achievement and are commercially prepared. Public elementary schools are schools below the secondary level regulated under the laws of the State of Montana and are tax supported. Elementary school administrators refer to the person responsible for the administration and functioning of the elementary school.

CHAPTER IV

PROCEDURES

The use of related literature. Related literature was studied to determine what constitutes an effective standardized achievement testing program. Further study was made of related literature to determine procedures of selection, administration, and interpretation and application of standardized achievement test results.

The procedure for gathering data necessary to survey standardized achievement testing programs in selected Montana elementary schools consisted of the construction and distribution of a questionnaire and the tabulation of returns.

Items for the questionnaire were selected on the basis of acceptable practices as revealed by a study of related literature.

According to Ross, a complete program, regardless of its size, includes the following steps: (1) determining the purpose of the program, (2) selecting the appropriate tests, (3) administering the tests, (4) scoring the tests, (5) analyzing and interpreting the test scores, (6) using the results, (7) retesting, and (8) making suitable records and reports.¹

Jordan devotes a chapter to achievement test batteries and offers recommendations in planning the testing program, defining the purpose, selecting the tests, selecting the testing time, administering the tests, scoring the tests, and interpreting and utilizing the results. Jordan says:

The testing program requires the cooperation of all teachers if it is to achieve maximum efficiency. One of the best ways to achieve this cooperation is to enlist their assistance in determining the needs of the school and the particular areas to be studied. When the needs have been decided upon and the purposes defined, the selection of the best tests to meet those needs and purposes is undertaken. After the tests are selected, their details of administering, scoring, and interpreting must be reviewed with the teachers before these activities are undertaken. Following the quantitative and graphical arrangement of records comes the planning of materials and methods for improving conditions found. This is the capstone of the testing program.

Achievement test batteries at the elementary level sample rather well the major outcomes of the more formal aspects of education. Since they are standardized on the same population, comparisons may be made between standings in the several subjects of instruction. It makes possible the study of levels of achievement of pupils, classes, schools, and school systems. The achievement levels of pupils may be used to group them within a class and may be highly suggestive of the types of material suitable for each child's educational progress. For these reasons achievement test batteries have become customary in American schools.¹

Greene, Jorgensen, and Gerberich deal with the following points concerning the classroom uses of standardized tests:

1. tests in relation to classroom instruction, 2. instructional

uses of achievement tests, (3) planning the testing program, (4) selecting the tests, (5) administering the tests, (6) scoring the tests, and (7) analyzing and interpreting test results.¹

Traxler stresses the importance of accurate administration and scoring of tests. He says:

The realization of the potential values of educational measurement depends largely upon the understanding, accuracy, and competence with which tests are administered and used by the multitude of nonspecialists in measurement responsible for the teaching and guidance of the pupils in our schools. If test specialists are to avoid having their efforts to construct precise, well-standardized tests negated, they must take every precaution to safeguard the application and use of the tests. If school administrators are to find the results of tests worth the time and expense, great care must be taken to insure that the accuracy of the scores is not vitiated through misunderstanding or carelessness in the administration and scoring of the tests.²

Thus a questionnaire containing criteria set forth by the above writers was devised for use in the survey.

The same questionnaire was not suitable for the various types of schools to be surveyed, and this necessitated altering the form so it would be suitable for administrators in second- and third-class district elementary schools, upper-grade teachers in the two- or three-teacher schools, and the county superintendents.


To secure criticisms and a check of validation in terms of practical use the questionnaire was tried out in the elementary schools of Sanders County. The questionnaire for third-class district elementary schools was sent to Dixon and Noxon. Two- or three-teacher schools which were sampled were Heron, Lonepine, Paradise, Trout Creek, White Pine, and Camas Prairie. The Sanders County Superintendent of Schools completed the questionnaire for county superintendents.

In each case respondents were requested to make comments which might be used to construct an improved questionnaire.

A study of the pre-samples which were returned indicated that no revisions were necessary.

**Distribution of the Questionnaire.** Because of the large number of public elementary schools in Montana, all were not surveyed. Schools to be included in the survey were determined by stratified random sampling using a proportional approach.

All of the public elementary schools in the state excluding first-class district elementary schools were divided into three strata. Stratum one consisted of eighty-one second-class district elementary schools as listed by the 1957-1958 Montana Educational Directory. Stratum two included 115 third-class district elementary schools listed in the
Directory. Stratum three was made up of the 163 two- or three-teacher schools listed in the Directory.

After stratifying the elementary schools, twenty-five per cent in each stratum were selected for the survey by drawing by lot numbered slips of paper from a container. The using of small samples resulted in savings of both time and expense. A sampling of twenty-five per cent of the schools was decided to be sufficient for a study of this type since the universe was stratified thus assuring all groups representation.

The schools thus selected were sent questionnaires with instructions and a self-addressed stamped envelope. The questionnaire prepared for second- and third-class district elementary schools was mailed to the elementary principal, if one were listed in the Montana Educational Directory. If an elementary principal was not listed, the questionnaire was mailed to the district superintendent.

The questionnaire prepared for two- or three-teacher schools was mailed to the upper grade teacher for answering.

The questionnaire prepared for county superintendents was mailed to all fifty-six county superintendents. The twenty-five per cent sampling was not followed in this area since a valid survey of testing programs in the rural schools depended upon a return of at least half of the county superintendents.
Two weeks after mailing the questionnaires, follow-up postal cards were sent reminding the people involved to return the completed questionnaire.

**Treatment of Data.** Upon receipt of the completed questionnaire, the responses were tabulated in routine manner and tables constructed from some of the data.

Information from the completed questionnaires formed the basis for the greater part of the text of this study. The number of responses necessary for a valid study of this type is not known but it is generally agreed that the more homogeneous the population the smaller the size of the sample may be. A rule of thumb states there should not be less than ten in a sample.

Data in Table I show the size of the sample in each category surveyed and the number of responses received.

The sample for the second-class district schools consisted of twenty schools and completed questionnaires were received from seventeen or eighty-five per cent of the schools sampled. There were thirty schools in the sample for third-class district schools and responses were received from twenty-six or approximately seventy-seven per cent. Responses were returned by twenty-six of the two- or three-teacher schools for a sixty-five per cent return. Of the fifty-six county superintendents forty-three or approximately seventy-seven per cent returned completed questionnaires.
<table>
<thead>
<tr>
<th></th>
<th>Second-Class District Schools</th>
<th>Third-Class District Schools</th>
<th>Two- or Three-Teacher Schools</th>
<th>County Supts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total in each stratum</td>
<td>81</td>
<td>115</td>
<td>163</td>
<td>56</td>
</tr>
<tr>
<td>Number in 25% sample</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Responses received</td>
<td>17</td>
<td>23</td>
<td>26</td>
<td>43</td>
</tr>
<tr>
<td>Per cent of return</td>
<td>85.0%</td>
<td>76.7%</td>
<td>65.0%</td>
<td>76.8%</td>
</tr>
</tbody>
</table>
The lowest per cent of return came from the two- or three-teacher schools and this result was anticipated. The second- and third-class district schools generally attract more highly qualified personnel who know and understand testing programs and experience little difficulty in answering a questionnaire of the type used for this survey.

Of the seventeen responses received from second-class districts, nine were completed by district superintendents and eight were completed by elementary principals. Of the twenty-three responses received from third-class districts, thirteen were completed by district superintendents, seven were completed by elementary principals, one was completed by the fifth and sixth grade teacher, and one completed return failed to indicate the position of the respondent.

Of the twenty-six returns from two- or three-teacher schools, nineteen were from two-teacher schools and six were from three-teacher schools. One school listed as a two- or three-teacher school actually had six teachers in the system. This return was neither tabulated nor were the results used. Of the twenty-five responses from two- or three-teacher schools which were tabulated, upper grade teachers completed twenty of the returned questionnaires and elementary principals completed five.

Montana county superintendents were included in this study since many of them supervise the testing programs of
the rural schools in their counties. Forty-three of the fifty-six county superintendents returned completed questionnaires. Thirty-seven stated that they supervised the standardized achievement testing programs in the rural schools in their counties. Six county superintendents answered that they did not supervise such programs. These six county superintendents evidently attached a different connotation to the term "supervise" as used in the questionnaire as they completed the questionnaires and seemed to know and understand the achievement testing programs in detail.

Thirty county superintendents said they supervised the achievement testing programs in the two- or three-teacher schools. The thirty county superintendents listed a total of 109 two- or three-teacher schools under their supervision.

Thirty-six county superintendents stated they supervised the achievement testing programs in the one-teacher schools and listed a total of 457 such schools under their supervision.

When reading the results of the survey, one should bear in mind the tremendous task which the county superintendents face in administering so many far-flung schools under their supervision.
The first step in instituting an achievement testing program involves the selection of the tests to be used. If the purposes of the testing program are clearly defined, the selection of tests is made easier. The tests must be selected to carry out the aims and purposes of the program and definite criteria should be observed.

Part I of the questionnaire was designed to reveal procedures observed by the selected schools in selecting achievement tests.

Data in Table II show the number of schools in each classification which have standardized achievement testing programs.

Of the seventeen second-class district schools in the sample, sixteen indicated having achievement testing programs. The one second-class district school which did not use standardized achievement tests explained that so much time and energy were expended on administration and correction of achievement tests that proper use was not made of the results. This particular school sent a form setting forth what information was desired about each pupil and how this information was obtained without using achievement tests. However, a
### TABLE II

**NUMBER OF SCHOOLS WHICH USE STANDARDIZED ACHIEVEMENT TESTS**

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)*</th>
<th>Third-Class District Schools (N=23)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>16</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

*In this and in subsequent tables, N equals the number of responses tabulated.
completed questionnaire was received from this same school as an achievement testing program was to be instituted the following year and a program had been planned. The results were tabulated and used in this study.

Another second-class district elementary school indicated having a standardized achievement testing program but stated it was a restricted program for financial reasons. The questionnaire from this school was completed on the basis of the previous year when the testing program was in complete operation.

Of the twenty-three third-class district schools in the sample, twenty-two indicated having achievement testing programs. One school in this category preferred to go on record as not having a program although a restricted program was conducted. No information was received from this school.

All twenty-five schools in the two- or three-teacher classification indicated having standardized achievement testing programs.

On the basis of data shown in Table II it appears that standardized achievement tests are practically universally used in Montana second- and third-class district elementary schools and two- or three-teacher elementary schools.

Data in Table III show the standardized achievement tests in use in the selected schools and those used by county superintendents. The total number of preference indications
is greater than the number of respondents because some schools use one kind of test in the fall and another kind in the spring or they give one kind of test to certain grades and another kind to other grades. The questionnaire was not devised to gather information on such plans and they are not discussed in this study.

The Stanford Achievement Test published by the World Book Company proved to be the most popular test in use. This test organizes the testing material into four levels, or batteries, and allows inclusion of functional material to measure a wide range of achievement at each grade level.

The content is based on detailed analysis of contemporary textbooks, courses of study, and professional literature in each of the various subject fields. The test was standardized on a nation-wide basis. The directions for administering are clear and easily followed. Scoring time varies from seven minutes for the primary battery to ten minutes for the advanced battery.

The Metropolitan Achievement Tests were the next most widely used tests as tabulated in the survey. These tests are a comprehensive series of achievement tests covering the subjects taught in all grades from one through eight.

The California Achievement Tests ranked third in popularity. These tests, published by the California Test Bureau, are comprehensive tests designed for the dual purpose of
### TABLE III

STANDARDIZED ACHIEVEMENT TESTS IN USE AT THE TIME OF SURVEY, MAY, 1958

<table>
<thead>
<tr>
<th>Tests</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford Achievement Test</td>
<td>9</td>
<td>14</td>
<td>11</td>
<td>26</td>
</tr>
<tr>
<td>Metropolitan Achievement Tests</td>
<td>4</td>
<td>7</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>California Achievement Tests</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Coordinated Scales of Attainment</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Iowa Every-Pupil Tests of Basic Skills</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Kansas State Teachers College</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sequential Tests of Educational Progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minneapolis</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Gray-Votaw-Rogers General Achievement Tests</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>American School Achievement Tests</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
facilitating educational measurement and individual diagnosis. They indicate the level of performance of each pupil in the attainment of basic curricular objectives.

The Coordinated Scales of Attainment consists of eight batteries of achievement tests. The test items go evenly from the easy to the difficult thus making a test of power rather than of speed.

The Iowa Every-Pupil Tests of Basic Skills are in the process of being replaced by the new Iowa Tests of Basic Skills for grades three through eight.

When the purpose of the testing program has been determined, the achievement tests or test to be used is selected and the best qualified person or persons available should make the selection. In large school systems the director of research or guidance director usually does this. Regardless of the size of the school system, the selection should be made on a co-operative basis including the teachers.

Data in Table IV show who selected the achievement tests in use in the Montana schools which were surveyed. State-wide surveys made in Massachusetts and New Jersey indicated that the major responsibility of selecting achievement tests was usually entrusted to the principal or superintendent.\footnote{C. C. Ross, Measurement in Today’s Schools (New York: Prentice-Hall, Inc., 1947), p. 183.} Montana schools are no exception as may be noted in the table.
## TABLE IV

PERSONNEL RESPONSIBLE FOR THE SELECTION OF STANDARDIZED ACHIEVEMENT TESTS IN USE IN THE SELECTED SCHOOL TESTING PROGRAMS

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two-or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Superintendent</td>
<td>5</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary Principal</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>County Superintendent</td>
<td>2</td>
<td>21</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>County Superintendent and Teachers</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidance Teacher</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary Principal and Teachers</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendent and Teachers</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendent, Principal and Teachers</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District Superintendent and Elementary Principal</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>County Superintendent and District Supt.</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian Education Director and District Supt.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don't Know</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In the second-class districts six respondents indicated using the co-operative approach in selecting the tests in use. Ten respondents indicated that the selection was made by a single individual.

In the third-class districts twelve respondents indicated using the co-operative approach and nine indicated a single individual selected the achievement tests in use.

In the selection of achievement tests a committee of teachers is helpful in judging the content of the tests while the principal and superintendent can pass on the technical phases of their construction. A sound principle in all evaluation is to rely, whenever possible, upon the combined judgment of a group of competent persons rather than upon the judgment of any one individual. Teachers who help choose the tests to be used will have a better understanding of the program and the goals of the educational program.

The recommendation of using the co-operative approach in the selection of standardized achievement tests was apparently violated in the case of the two- or three-teacher schools. Whether this disregard of an acceptable practice is defensible is debatable. Such schools generally are administered by the county superintendents and in the vast rural areas of Montana this can be a challenging task. On the basis of the remarks voiced by the teachers in the two- or three-teacher school, the Montana county superintendents might do well to schedule
more teacher meetings and provide more educational leadership which seems to be lacking at the present time.

Data in Table V show how the respondents learned of the tests which were in use in their schools. Of the 107 respondents thirty-nine indicated the tests were in use when they came to the school, thirty replied the tests had been recommended by others, seventeen respondents learned of the tests through advertising by the publisher.

The greatest number of respondents admitted that the tests were in use when they came to the school. This would suggest that ample research was lacking in selecting suitable achievement tests.

When selecting achievement tests it is good policy to consider several tests and gather useful information on them. This procedure assures the selection committee of having a choice before making the final selection. In the survey fourteen of the second-class district schools stated several achievement tests were considered before final selection was made, two respondents indicated this was not done, and one did not know. Of the third-class district schools thirteen respondents replied that consideration was given several tests, six indicated this was not done, and three did not know. In the two- or three-teacher school classification four respondents stated this was done, one said it was not, and twenty did not know. Of the county superintendents thirty-one stated several
tests were considered, five indicated not, and seven did not know.

Another worth-while practice to follow when selecting standardized achievement tests is to try out several such tests before making a final choice. This practice enables the selectors to gain first-hand knowledge of the tests which may not be learned through study alone.

Of the second-class district schools ten stated that several achievement tests were tried out before making the final selection and seven said no tryouts were carried on. Of the third-class district schools six said tryouts were conducted, eleven answered that the tryouts were not conducted, and five respondents did not know. In the two-or three-teacher schools six indicated that several tests were tried out, four indicated not, and fifteen did not know. Of the county superintendents twenty-two indicated various tests were tried out, eleven indicated this was not done, five did not know, and five failed to answer.

In selecting standardized achievement tests certain criteria should be considered in order to select the best test for a particular school system. Topic number six of part one of the questionnaire asked the respondents to rank several listed items in order of importance to be considered when selecting achievement tests.

Tabulation of the returns resulted in the following
TABLE V

HOW RESPONDENTS LEARNED OF THE STANDARDIZED ACHIEVEMENT TESTS BEING USED

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was instituted previously</td>
<td>2</td>
<td>10</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Recommended by others</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Learned of it while in college</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Advertising by publisher</td>
<td>2</td>
<td>1</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
rank given to the items in order of importance: (1) worthwhileness and usefulness of test results, (2) validity, (3) reliability, (4) able to diagnose specific learning difficulties for each pupil, (5) objectives of the school curriculum, (6) simplicity of directions, (7) ease of giving, (8) ease of scoring, (9) length of time to take, and (10) cost.

All of the items are important and are to be considered when selecting tests, and, of course, no one can rigidly prescribe the order of importance of the items and have them satisfactory for all elementary schools. One trend which is becoming widely accepted holds that the main concept guiding evaluation programs is that evaluation should be in terms of the extent to which pupils have attained the objectives of elementary education.

Jordan maintains, "first and foremost, the test must cover the same ground and reflect the same objectives as the instruction in the grades."^1

Another phase to be considered when selecting standardized achievement tests is local validity. A standardized test may possibly contain test items which are not suitable for a certain school in terms of common knowledge. One popular

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achievement test which was standardized on a nation-wide basis several years ago contained a section of questions on television schedules as printed in newspapers.

At the time television was not available in Montana and pupils in Montana schools were placed at a disadvantage when taking this test as they were not familiar with such schedules.

Since it is a good practice to check standardized achievement tests for local validity before they are adopted, this was asked in the questionnaire.

In the second-class district elementary schools, six respondents indicated that the achievement tests in use had been checked for local validity, nine indicated it had not been done, and two did not know. In the third-class district schools eight respondents stated the achievement tests in use had been checked for local validity, thirteen stated they had not been, and two did not know. In the two- or three-teacher schools six respondents indicated the tests had been checked, five indicated the tests had not been checked, and fourteen did not know. For the county superintendents twenty-four stated they had checked the local validity, thirteen stated they had not, one did not know, and five did not answer.
CHAPTER VI

ADMINISTERING STANDARDIZED ACHIEVEMENT TESTS

Following the selection of suitable standardized achievement tests the next step in the testing program is the administering of the tests. In general a sound achievement testing program meets the following criteria. The tests should be given systematically. The same skills should be measured year after year at about the same time of year affording an opportunity to measure growth and status in the most important functional skills and enabling a graphic portrayal of the results to be placed on the permanent record of each child. This graphic record of growth and status over a period of years is valuable in the educational and vocational guidance of the pupil.

Several of the items in the questionnaire were designed to gather information on practices which are followed in selected Montana elementary schools and which are recognized as being educationally sound. Other questionnaire items for this section were included to gain insight on procedures which as yet have not been decided to be good or poor practices.

Data in Table VI show the times during the school year when the achievement tests are given in the selected schools.

-31-
## Table VI

**Time During the School Year When the Achievement Tests Are Given**

<table>
<thead>
<tr>
<th>Time</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong> (Sept.—Oct.—Nov.)</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Mid-year</strong> (Dec.—Jan.—Feb.)</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong> (March—April—May)</td>
<td>8</td>
<td>12</td>
<td>16</td>
<td>30</td>
</tr>
<tr>
<td>Fall and Spring</td>
<td>6</td>
<td>8</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fall testing is a very definite trend in testing programs and there are numerous reasons which support this trend. Fall testing prevents the results from being used as a basis for promotion. It avoids the tendency of teachers to feel that, primarily, they are preparing pupils to pass examinations at the end of the year. Thus it reduces the tendency to drill pupils only in the learnings to be tested. Fall testing discourages administrative officers from putting too much emphasis on the limited results of the tests and rating teachers in terms of these results. The tests will tend to measure the more permanent learnings, because, coming after the vacation period, the temporary learnings will be reduced to a minimum. Almost always some pupils will enter school for the first time and their status can be determined and the teacher will have the entire school year to remedy any deficiencies revealed. In a fall testing program the results of the tests give the teacher a sound basis for grouping and planning the instructional program for the year. The use of test results in planning educational experiences for children thus becomes more important than the practice of using them for post mortems after a period of instruction is ended.

The second- and third-class district schools surveyed appear to be taking up the fall testing idea and the two- or three-teacher schools and county superintendents appear
to be lagging.

One criticism of the fall testing program is that the pupils may be tempted not to do their best since their promotion does not depend on the test results. A good testing program should resolve this problem in that the pupils will have the purposes of achievement tests thoroughly explained to them. When a pupil knows his status relative to improvable skills at the beginning of a year and considers his progress during the preceding year, there is usually an urge on his part to better his previous record.

There seems to be disagreement over the amount of importance to be attached to temporary learning. Some educators deem it wise to administer achievement tests shortly after school commences in the fall and thereby measure the more permanent learnings since the temporary learnings will be reduced to a minimum.¹

Information from the "men in the field" was sought on this theory and the results are shown in Table VII.

Of the 107 respondents twenty-five of them or approximately twenty-three per cent thought achievement tests should be given early in the school year to eliminate the measuring of temporary learning and approximately thirty-one per cent

### Table VII

**Should Achievement Tests Be Given Early in the School Year to Eliminate the Measuring of Temporary Learning?**

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3</td>
<td>5</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>8</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Not important enough to consider</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Don't know</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>
of them did not think this should be done. Approximately thirty-three per cent of the respondents indicated it was not important enough to consider and approximately six per cent indicated they did not know.

A study made by Irvin Rock shows that material is forgotten most rapidly soon after learning and more than half is forgotten during the first nine hours. This would seem to suggest that the truly temporary learning is too temporary to worry about measuring with an achievement test.

A sound achievement testing program dictates that tests should be given systematically, that is, about the same time of year. This affords an opportunity to measure growth and status on an orderly basis at regular intervals. The testing program has no place for haphazard planning as to the time of the year the tests will be administered.

All seventeen second-class district schools in the survey stated that the achievement tests were given approximately the same time each year. The twenty-three third-class district schools also indicated the tests were given the same time each year. In the two- or three-teacher schools twenty-three said the tests were given the same time each year and two indicated they were not. All county superintendents surveyed stated they gave the tests about the same time each year.

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Systematic achievement testing is important and the survey indicated the surveyed schools in Montana practice systematic testing.

Data in Table VIII show the day or days preferred by the respondents for administering standardized achievement tests.

This information was sought since a study of related literature failed to disclose any studies which advocated the preference of any particular day or days of the week for testing purposes.

The task of drawing valid conclusions from the results of this question is difficult since the limited nature of the questionnaire prevented the listing of reasons for preferring a certain day or days. Monday and Friday are evidently not desirable test days as indicated by data in the table. The middle days of the school week appear most desirable on the basis of the choice of the respondents.

The majority indicated that selection of a particular day or days was not considered. The survey revealed that several schools sprang the achievement tests unexpectedly in an attempt to eliminate pre-test worrying on the part of the students.

A search of related literature failed to disclose any recommendations pertaining to the part of the day best suited for achievement testing purposes. The respondents were asked
TABLE VIII

DAY OR DAYS PREFERRED FOR ADMINISTERING STANDARDIZED ACHIEVEMENT TESTS

<table>
<thead>
<tr>
<th>Day or Days</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Tuesday</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Wednesday</td>
<td>2</td>
<td>3</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Friday</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Tuesday-Wednesday</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Tuesday-Wednesday-Thursday</td>
<td>4</td>
<td>3</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Monday-Tuesday-Wednesday</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Wednesday-Thursday</td>
<td></td>
<td>3</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Monday-Tuesday</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Wednesday-Friday</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>When all are present</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Not considered</td>
<td>5</td>
<td>8</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>
to indicate their preference in an attempt to determine if this is a worth-while consideration.

In the second-class district schools nine respondents indicated the achievement tests were given in the morning only, seven said they were given both in the morning and afternoon, and one said this factor was not considered. In the third-class district schools seven stated the tests were given in the morning only, thirteen stated they were given both in the morning and afternoon, and three said this was not considered. In the two- or three-teacher schools eight indicated the tests were administered in the morning only, twelve indicated they were given in both the morning and afternoon, three indicated this was not considered, and two did not answer. For the county superintendents seven stated using the morning only, thirty-two indicated using the morning and afternoon, and four said no consideration was given to this factor.

The majority of the respondents as a group utilized both morning and afternoon for administering achievement tests while approximately thirty per cent preferred testing in the morning only.

Data in Table IX show which grades in the selected schools are given standardized achievement tests.

A good achievement testing program in a school system will include all grades in the system. According to the results of this survey this criterion is followed by the majority of
<table>
<thead>
<tr>
<th>Grade Description</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Sufts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One through eight</td>
<td>12</td>
<td>17</td>
<td>14</td>
<td>35</td>
</tr>
<tr>
<td>Two through eight</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>One through six</td>
<td>1</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Three through six</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three through eight</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Four through eight</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Five through eight</td>
<td></td>
<td></td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Seven and eight</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Four through six</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>
the schools. Because of the limited scope of the survey, the respondents were not asked to tell why all the grades were not tested.

Data in Table X indicate who administers the standardized achievement tests in the selected schools.

Only competent persons should administer standardized tests but it is not an easy matter to tell who is really competent. The tests must be carefully and judiciously administered to each class separately. An indifferent attitude on the part of the examiner may be reflected on the students.

In the ordinary testing program employing group achievement tests the regular classroom teachers should usually administer the tests. There seems to be no good reason for selecting a test whose administration is so difficult as to be beyond the mastery of average teachers.

Naturally the classroom teachers who administer achievement tests should be familiar with them. There are several ways to prepare a group of teachers for this important task. One way is to give a demonstration with a regular class and follow this by a discussion with the examiners of the procedure they have seen.

Another point in favor of teachers administering achievement tests is the idea that it is usually best to have the tests given in the familiar environment of the pupils and this includes the classroom teacher.
TABLE X

PERSONNEL WHO ADMINISTER THE STANDARDIZED ACHIEVEMENT TESTS

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>15</td>
<td>19</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Principal</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>County Superintendent</td>
<td>2</td>
<td>8</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Teachers and County</td>
<td>5</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ross states, "as a rule, anyone can administer a group test successfully who meets three requirements: (1) the ability to read well, (2) the ability to keep time accurately, and (3) the ability to follow directions accurately." Perhaps this represents an oversimplification of the requirements but it is fairly correct.

In the selected Montana schools it is common practice in the second- and third-class district schools to have the teachers administer the achievement tests. In the two- or three-teacher schools the county superintendents assume this responsibility in many of the systems. Comments from the teachers in these schools indicate a feeling of mistrust on the part of the county superintendents as the motive for giving the tests and not giving the responsibility to the teachers.

The next item on the questionnaire was included to determine how common was the practice of having teachers who administer the achievement tests give them to grades other than their own. If the teachers are trusted enough to administer the tests, they should give them to their own grades.

In the second-class district schools in the survey fifteen stated the teachers gave the tests to their own grades and two stated they did not. In the third-class districts

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the nineteen schools which stated the teachers gave the achievement tests indicated they all gave them to their own grades. In the two- or three-teacher schools in the survey the seventeen which stated the teachers gave the tests indicated that fourteen gave them to their own grades and three did not.

Data in Table XI who who corrects and scores the standardized achievement tests.

The correcting and scoring of achievement tests involves considerable time. It is desirable to have the tests scored as quickly as possible and with the highest possible degree of accuracy. The survey revealed that in the second- and third-class district schools the correcting and scoring is generally done by the classroom teachers. The county superintendents assume this detail in the majority of the two- or three-teacher schools and in the schools under their supervision.

Having the teachers correct the tests has the advantage that the work can be done promptly. In addition, the teachers can probably learn something of value about the types of errors made on the achievement tests. The disadvantages of having the teachers correct the tests are they frequently make errors and often they do not have the necessary time.

The problem of errors can be partially corrected by teaching the scorers the proper procedures and demonstrating acceptable practices which will insure greater accuracy.
<table>
<thead>
<tr>
<th>Personnel</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>15</td>
<td>16</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Principal</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>County Superintendent</td>
<td>2</td>
<td>9</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-school personnel</td>
<td>1*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers and County</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers and Principal</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machine scored</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

*One school administers different tests in the fall and spring. One set is machine scored and a non-school person is employed to score the other set.
The problem of limited time is not as easily resolved. Administrators in the various school systems might consider employing competent non-school personnel to correct the tests or have the tests machine scored. Most of the test publishing companies provide machine scoring service at reasonable rates and give fairly rapid service.

Data in Table XII show the number of schools in the survey which allow teachers school time to correct achievement tests.

If the teachers are going to be saddled with the job of correcting the achievement tests, it is important to get the scoring done without producing an unfavorable attitude toward the testing program on the part of the teachers. Giving the teachers school time to do the correcting might be the answer to the problem. This might be an effective way of emphasizing the important fact that teaching and testing are processes that are intimately related.

Information in Table XII indicates that this suggestion could be explored in more schools.

Because the tests are scored primarily by teachers and the chance of error is great, it is good practice to have the tests checked preferably by someone other than the original scorer. This practice is essential to accuracy in scoring.

Item ten in the questionnaire sought information as to whether or not the scoring was rechecked. In the second-class
TABLE XII

NUMBER OF INSTANCES WHEN TEACHERS ARE ALLOWED SCHOOL TIME TO CORRECT ACHIEVEMENT TESTS

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools</th>
<th>Third-Class District Schools</th>
<th>Two- or Three-Teacher Schools</th>
<th>County Supts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>11</td>
<td>14</td>
<td>9</td>
</tr>
</tbody>
</table>
district schools, seven stated the tests were rescored and ten indicated they were not. In the third-class district schools, seven respondents indicated the tests were rescored and eleven stated this was not done. In the two- or three-teacher schools, fourteen respondents indicated the tests were rescored and six replied that this was not done. Of the county superintendents twenty-seven indicated the tests were rechecked and twelve stated it was not done.

Again the limited time factor may prohibit checking the scoring in more schools. However, this is an essential procedure and should be done.

A sound achievement testing program includes all pupils in the grade which is tested. Data in Table XIII indicate whether or not the selected schools give the achievement tests to all pupils.

If the achievement tests are administered to select pupils and others left out, erroneous conclusions may be drawn concerning the ability and achievement in the school as a whole. The schools which were surveyed are not guilty of violating this recommended practice. The one second-class district school which indicated the tests are not given to all pupils stated that absentees only are excluded from testing. The one third-class district school replied that non-readers are excluded. This is a questionable practice since the tests are standardized. The same holds true for the one county
### TABLE XIII

Are the standardized achievement tests administered to all pupils in the grade?

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two-or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>16</td>
<td>21</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>1</td>
<td>25</td>
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<tr>
<td>No response</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

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superintendent who replied that low I. Q. pupils are not tested.

An acceptable achievement testing program acknowledges the importance of informing the pupils of the purposes of achievement tests. Data in Table XIV show the number of schools in the survey which explain the meaning and use of the test results to the pupils.

Care must be taken to maintain pupil morale in an achievement testing program. Most achievement tests are designed to measure achievement over a range of grade levels. When this is the case, the low achievers in all grades will be discouraged by the many questions they are unable to answer.

The majority of the schools in the survey indicated that the meaning and use of the test results are explained to the pupils.

In an achievement testing program uneasiness and tension may affect pupils to the point where the results are affected. Item fourteen sought opinions on this and the results are shown in Table XV.

In the second-class district schools two indicated that uneasiness and tension among pupils are problems. In the third-class district schools twelve stated it was a problem. In the two- or three-teacher schools eighteen indicated it was a problem. Of the county superintendents sixteen replied that it was a problem.
### TABLE XIV

ARE THE MEANING AND USE OF THE ACHIEVEMENT TEST RESULTS EXPLAINED TO THE PUPILS?

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
<td>17</td>
<td>20</td>
<td>33</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Don't know</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

### TABLE XV

ARE UNEASINESS AND TENSION AMONG PUPILS TAKING ACHIEVEMENT TESTS A PROBLEM TO THE EXTENT THAT THE RESULTS ARE AFFECTED?

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>2</td>
<td>12</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>9</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>Don't know</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

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The results of the responses to this item are curious. As the schools decreased in size the admissions that uneasiness and tension were a problem increased. Principals and district superintendents were respondents in the second- and third-class district schools while the majority of respondents for the two- or three-teacher schools were teachers. Perhaps the teachers are closer to the problem and recognize it as such or perhaps they are subject to greater pressure to achieve the "norm" and unwittingly transfer their uneasiness to the pupils.

The respondents were requested to list the means they employ to relieve pupils of anxiety and uneasiness during testing. The most common method was to adequately explain the purposes of the achievement tests to the pupils. Others told the pupils well in advance when the tests would be given. Others stated that after the tests were given for a period of years uneasiness was no longer a problem. A few respondents stated that no mention was made of the tests beforehand. One told the students frankly that the tests had no bearing on promotion. One school sent notices to the parents two days previous to the testing. This same school stressed the importance of proper physical features of the testing room. Another school gave recess breaks after each division of the test was completed. One respondent said they made a game of the tests--everyone urged to do his best. Another stressed
having familiar atmosphere and everything explained. One replied, "no preparation whatever, the county superintendent just comes in some morning and bingo." One explained the tests were approached as an everyday affair. One teacher utilized group singing before the start of the tests. One teacher tells the pupils the tests are not for final grades but to see how they rate with pupils in other states. One teacher tells the pupils the county superintendent is coming and they like him very much. One teacher reviews with the pupils.

There are no hard and fast methods to control the problem of uneasiness. Each individual examiner should be familiar to the students, and he should strive to reach that happy medium where the pupils are not too keyed up and yet not relaxed to the point of not putting forth their best efforts.

One of the thorny issues in most schools which conduct achievement testing programs is the question of permitting teachers to review with their classes for the tests.

This question was included in the questionnaire and the results are shown in Table XVI.

The majority of the respondents indicated reviewing was not permitted. Those who stated it was permitted assumed the attitude, "How are you going to prevent it?"

Research findings do not favor review for achievement tests. Too often this review can get out of control and lead
TABLE XVI

ARE TEACHERS PERMITTED TO REVIEW THEIR CLASSES
IN PREPARATION FOR ACHIEVEMENT TESTS?

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N 17)</th>
<th>Third-Class District Schools (N 22)</th>
<th>Two- or Three-Teacher Schools (N 25)</th>
<th>County Supts. (N 25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
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<td>7</td>
<td>10</td>
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<td>No</td>
<td>15</td>
<td>19</td>
<td>17</td>
<td>29</td>
</tr>
<tr>
<td>Don't know</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
to teaching from the tests themselves. In situations where
the teachers feel they are being rated and must make a good
showing, fall testing may be the answer. When the tests are
given at the close of the school year, the efforts of the
teacher are more likely to be centered on preparing children
for the tests and may result in undesirable cramming procedures.

Another desirable feature in an achievement testing
program is to inform the teachers well in advance exactly when
the tests will be given. An even better procedure is to have
the teachers help decide when the tests are to be given.

Data in Table XVII show how many of the selected schools
inform the teachers when the achievement tests are to be given.

The majority of the respondents indicated that the
teachers are informed exactly when the tests will be given
but a number of them indicated this was not done. Several
respondents who indicated having a spring achievement testing
program stated that giving the tests unexpectedly prevents
reviewing by the teacher. Other respondents stated that such
a procedure reduced anxiety and uneasiness among the pupils.
Both are lame reasons and can be corrected by other methods.

Remembering that the co-operative approach is best in
an achievement testing program, the teacher should be called
into confidence on every phase of the program. The individual
responsible for scheduling achievement tests must be able
to defend his schedule or else it cannot be good.
**TABLE XVII**

ARE THE TEACHERS INFORMED IN ADVANCE EXACTLY WHEN THE ACHIEVEMENT TESTS WILL BE GIVEN?

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
<td>13</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>9</td>
<td>10</td>
<td>16</td>
</tr>
</tbody>
</table>
CHAPTER VII

APPLICATION AND INTERPRETATION OF ACHIEVEMENT TEST RESULTS

The application of the results of the achievement tests is the crucial part of the achievement testing program. Whatever usefulness the tests are to have depends, in the last analysis, upon the utilization made of the test results. The ultimate utilization of the test results should be determined in the main by the purposes of the achievement testing program in each local school situation. The important consideration is that remedies be undertaken which will resolve situations revealed by the test scores. To fail to apply the results in some practical way is to fail in the testing program.

One of the purposes of this study was to discover current practices of utilization of achievement test results by Montana elementary schools and to compare them to established practices and current trends. This information was obtained in Part III of the questionnaire.

All school personnel concerned with the achievement testing program must know and understand the program completely if full benefits are to be derived. This is especially true of the phase which is concerned with making proper use of the test results. A common procedure to insure this is an
in-service program for educating teachers in the use of achievement test results. Data in Table XVIII show the number of systems in the survey which stated they have such in-service programs.

No school administrator or person charged with the responsibility of an achievement testing program should assume the teachers are completely familiar with the program and its ramifications. Teacher turnover and the fact that teachers forget preclude any such assumption. In-service training is a valuable method of educating teachers in the use of achievement test results.

The second-class district schools in the survey to a great extent use the in-service technique for educating teachers in the use of the achievement test results. This does not hold true in the third-class district schools as indicated from the data in Table XVIII. Over half of the third-class district schools in the survey indicated they do not have in-service programs. The situation is still worse in the case of the two- or three-teacher schools where twenty-two of the twenty-five schools in the survey stated they did not have in-service programs. Again the situation is evident that when the size of the school decreases so does the use of a worthwhile procedure. The majority of the county superintendents indicated they do not have in-service programs for educating teachers in the use of achievement test results.
TABLE XVIII

DO YOU HAVE AN IN-SERVICE PROGRAM FOR EDUCATING TEACHERS IN THE USE OF ACHIEVEMENT TEST RESULTS?

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
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<td>10</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>11</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>Don't know</td>
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</tr>
<tr>
<td>No response</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

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The respondents who indicated having in-service programs were asked to state who conducted the programs. The majority indicated the district superintendents were in charge of the programs. Others listed were principals, county superintendents, and one listed a teacher.

Many schools prepare a guide or handbook on evaluation for the teachers. Data in Table XIX show how many schools in the survey have such instruments.

The second-class district schools in the survey were about evenly divided on the policy of having a guide or handbook on evaluation available for teachers. The majority of the third-class district schools stated such handbooks were in use. In the two- or three-teacher schools only seven of the twenty-five schools surveyed indicated having a handbook on evaluation. Of the county superintendents fifteen of the forty-three stated they had a handbook on evaluation for teacher use.

Preparing a handbook for teacher use is an involved task and the finished product may not be good. However, it is an established practice in the better schools and the results of this survey point up the need of consideration of such instruments by more Montana schools. The important thing is to utilize all procedures which will produce better or improved achievement testing programs.

The results of achievement tests are of interest to
<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
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<tr>
<td>Yes</td>
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<td>7</td>
<td>15</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>9</td>
<td>18</td>
<td>27</td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
the pupils, teachers, administrative officers, and the parents or public. It is not sound educational practice to deny pupils access to the results of their achievement tests and yet the pupils are most apt to be excluded. The attention and emphasis commonly given to reporting educational progress frequently neglects the fact that the pupil is the most interested of all in knowing his progress.

Data in Table XX show how many of the schools in the survey show or inform all the pupils of their individual achievement test results.

Of the second-class district schools nine of the seventeen inform all the pupils of the results of the achievement tests. Of the third-class district schools nine of twenty-two follow this practice. Of the two- or three-teacher schools sixteen of the twenty-five make it a practice to inform all of the pupils. Of the county superintendents twenty of the forty-three stated they inform all the pupils of their test results. In this area it is evident that the two- or three-teacher schools surpass the larger systems.

Some school leaders advance the theory that showing the results of achievement tests to all pupils will embarrass those in the lower ranks and make snobs out of those in the higher brackets. Precaution should be taken not to shatter the morale of low achievers and their morale can be maintained if the results are explained in a satisfactory
TABLE XX

ARE ALL THE PUPILS SHOWN OR INFORMED OF THEIR INDIVIDUAL ACHIEVEMENT TEST RESULTS?

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>9</td>
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<td>20</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>13</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
manner. Most pupils desire to improve and not knowing when improvement occurs takes all the zest out of learning.

In fairness to the respondents attention is called to the fact that many of them indicated that a part of the pupils were shown their test results. A few respondents stated the first and second grade pupils were not informed of the results, or grades one, two, and three were not but the rest of the pupils were. Other respondents indicated students with high ability who had low achievement were shown the results, students who needed help, and those who were interested were informed of the results.

There is a conflict of opinions regarding the policy of showing the pupils their corrected achievement tests and pointing out their errors. Data in Table XXI show the number of schools and county superintendents which inform the pupils of their errors.

Information in Table XXI indicates this is not a standard practice in all instances. In the second-class district schools four of the seventeen respondents stated the students were shown their errors. In the third-class district schools eight of the twenty-two followed this practice and seven of the twenty-five respondents from the two- or three-teacher schools indicated this was done. Of the forty-three county superintendents twelve stated this was the policy for them.

In certain cases involving pupils in need of remedial
### TABLE XXI

ARE PUPILS SHOWN THEIR CORRECTED ACHIEVEMENT TESTS AND THE ERRORS POINTED OUT?

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>4</td>
<td>8</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>14</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

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assistance the **showing of errors on achievement tests** is apparently sanctioned. All schools conducting standardized achievement testing programs should change forms of the tests each year if such are available. The policy of showing the pupils the corrected tests may lead to the undesirable practice of teaching *from* the tests.

As stated previously the results of achievement tests are of interest to parents and a sound achievement testing program takes the parents into consideration. Data in Table XXII show the number of schools and county superintendents in the survey who inform parents the results of the achievement tests if they inquire.

Of the one hundred seven in the survey one hundred stated parents were informed of the achievement test results if they inquired. The releasing of such information to interested parents does not daunt the schools in the survey. Perhaps the people in the schools who are responsible for this policy realize that parents can reconcile themselves to low scores on achievement tests by placing the blame on the schools.

The schools which conduct complete achievement testing programs go one step further and make a special effort to inform parents of the results. Data in Table XXIII show how many schools and county superintendents in the survey do this. An interesting result to note is that the two- or three-teacher schools surpass the larger schools in this respect.
TABLE XXII

ARE PARENTS INFORMED OF THE RESULTS OF THE ACHIEVEMENT TESTS IF THEY INQUIRE?

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
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<tbody>
<tr>
<td>Yes</td>
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<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

TABLE XXIII

DO YOU MAKE A SPECIAL EFFORT TO INFORM PARENTS OF THE ACHIEVEMENT TEST RESULTS?

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>9</td>
<td>13</td>
<td>17</td>
<td>21</td>
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<tr>
<td>No</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Of the twenty-five two- or three-teacher schools surveyed seventeen indicate special effort is made to inform parents of achievement test results. In other terms sixty-eight per cent of the two- or three-teacher schools surveyed make a special effort to inform the parents and this compared with approximately fifty-three per cent for the second-class district schools, fifty-nine per cent for the third-class district schools, and forty-nine per cent for the county superintendents.

Methods which are utilized to inform parents of achievement test results are parent-teacher conferences and sending copies of the results to the parents.

An unusual suggestion for use of achievement test results is in the field of public relations. The individual scores of pupils should not be used for this purpose but it would be permissible to use the class medians. Data in Table XXIV show the number of schools and county superintendents in the survey who release information to newspapers for publicity purposes.

Only four of the 107 respondents stated they released information such as class medians for publication. This idea should be investigated and tried out by the schools. The public in general is interested in education and perhaps information on achievement test results would generate even more interest. If the class medians are above the national norms, there can be no harm in informing the public of this.
TABLE XXIV

IS SUCH INFORMATION AS GRADE MEDIANS RELEASED TO THE LOCAL NEWSPAPER?

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
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<tr>
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<tr>
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<tr>
<td>No response</td>
<td></td>
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<td></td>
<td>2</td>
</tr>
</tbody>
</table>
Since the application of the achievement test results is the important part of the standardized achievement testing program, the respondents were requested to list the uses which are made of the test results. This was necessary although it is not a good idea to require lengthy responses to questionnaire items.

A myriad of uses were listed by the respondents and it was a difficult chore to categorize them into the thirty-four listings shown in Table XXV. The thirty-four items were further classified into four categories depending on whether they alluded to the pupils, teachers, educational program or none of the three. Because of the numerous uses listed, only those considered to be questionable practices are discussed in the ensuing paragraphs.

The most popular use of the results for aiding the pupils was in determining remedial work. The standardized achievement test batteries are not sufficiently diagnostic to pin down exact technical difficulties for remedial purposes. Their chief value in this respect is to indicate a need for remedial attention when progress in an area is stopped or slowed down over a period of time. Achievement tests are adequate for indicating need for remedial procedures in broad areas.

The use of achievement test results to determine promotion or non-promotion of pupils was indicated by thirteen
TABLE XXV

VARIOUS APPLICATIONS MADE OF ACHIEVEMENT TEST RESULTS AS LISTED BY RESPONDENTS

<table>
<thead>
<tr>
<th>Applications</th>
<th>Second-Class District Schools</th>
<th>Third-Class District Schools</th>
<th>Two- or Three-Teacher Supe. Schools</th>
</tr>
</thead>
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<tr>
<td>Pupils</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pupil guidance</td>
<td>2</td>
<td>2</td>
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</tr>
<tr>
<td>Grouping</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Determine remedial work</td>
<td>4</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Cumulative records</td>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Individual pupil diagnosis</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Promotion or non-promotion of pupil</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Determine pupil weaknesses and growth</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Determine student capacities</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate of improvement</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Measure pupil progress</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Determine if pupil working to capacity</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Give pupils a sense of accomplishment</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Evaluate abilities</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>More difficult lessons for high achievers</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Grade placement</td>
<td></td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Applications</th>
<th>Second-Class District Schools</th>
<th>Third-Class District Schools</th>
<th>Two-or Three-Teacher Supts. Schools</th>
</tr>
</thead>
</table>

### Educational Program

- Curriculum planning: 3
- Compare with national norms: 2, 1, 1, 1
- Evaluate textbooks: 2
- Evaluate teaching materials: 1, 1, 1
- Parent-teacher conferences: 2, 1
- Evaluate school curriculum: 5, 2, 1
- Results sent to parents: 1
- Better scheduling: 1
- Improve course of study: 1
- Textbook adoption: 1

### Teachers

- Determine if teaching emphasis is correct: 1, 1, 2
- Correlation between teacher grades and test results: 1, 2
- Evaluate the teacher: 2, 5, 2, 6
- Determine strong and weak fields of teacher: 1, 1, 2
- Stimulation or motivation of teachers: 1, 1
TABLE XXV (continued)

<table>
<thead>
<tr>
<th>Applications</th>
<th>Second-Class District Schools</th>
<th>Third-Class District Schools</th>
<th>Two- or Three-Teacher Supts. Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Miscellaneous</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public relations</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fill up files</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filed in County Superintendents office</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>None--tests and results are not returned by County Superintendent</td>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
respondents. The use of achievement test results as a sole
determiner of promotion or non-promotion is not a valid use
as other factors should be considered. Another use of ques­tionable value was indicated by one respondent who used the
results to determine student capacities. In the literal sense
it is not possible to determine pupil capacity on the basis
of achievement test results.

Of the thirty-four uses listed it is interesting to
note that fifteen were concerned with the pupils and ten were
concerned with the educational program of the school.

A worth-while use of achievement test results is to
determine whether or not the objectives of the curriculum
are being achieved and yet this was not mentioned by any of
the respondents. If the objectives of the curriculum are
given primary consideration when selecting an achievement
test, it is relatively simple to use the test results to de­
termine if the objectives are being achieved. The most popular
use of the test results in regard to the educational program
as indicated by eight respondents is to evaluate the school
curriculum. If this is so, it follows that if the results
are below national norms then the curriculum will be altered
to suit the tests and this is one of the worst possible uses
of achievement test results. The one county superintendent
who indicated the results are used to determine textbook adop­
tions is guilty of selecting textbooks to meet the needs of
The most popular use of test results in respect to teachers as indicated by fifteen respondents is to evaluate the teacher. This is considered a grave abuse of achievement test results as they are limited in what they can measure and many factors other than the teaching contribute to the results. The county superintendents are faced with the problem of evaluating teachers whom they visit two or three times a year and this puts a great deal of pressure on them to use achievement test results for this purpose. They should not succumb to this temptation. Fear of being judged by the results of achievement tests leads teachers to teach for the tests at the expense of other valuable objectives.

The miscellaneous category lists uses which are not acceptable with the exception of using the results for public relations. Test results filed away defeat the purpose of the achievement testing program.

In an effort to gain further insight on viewpoints the respondents were requested to list factors which they felt may have been responsible when a grade in the system failed to measure up to the national norm.

Poor teaching was the most common reason advanced. Several qualified their answer for attributing low achievement to poor teaching in that poor teaching was responsible only if the same grade under the same teacher failed to measure
up to the national norm year after year.

Others expressed the idea that teaching emphasis was not in the right place; that is, the teacher spent too much time on music and art which are not covered in achievement tests.

Other factors held responsible were low ability of the class, textbooks not good, too many transient pupils, transfers from schools with low standards, achievement tests not suitable for the curriculum, teacher has too many grades, teacher has too many pupils, low teacher salaries which result in poor teachers, teacher turnover, class too small to be representative, too many Indian pupils, and poor testing conditions.

The respondents were asked to list factors which in their opinion may be responsible when individual pupils fail to show achievement on the tests.

The majority of the respondents listed low I. Q. as the most important contributing factor. Other factors listed were poor health, lack of interest, personality clash with the teacher, poor home environment, poor reader, poor attendance, nervousness or tension, poor vision, no motivation, too much television, and poor teaching.

The factors listed by the respondents are considered problems to be reckoned with in the achievement testing program. With the exception of low I. Q. the remaining factors
can be corrected or improved to the benefit of the child.

Before achievement test results can be adequately interpreted something must be known of the pupil's ability or capacity. The common procedure utilized to obtain such information is through the use of intelligence tests. Time will not be taken in this study to discuss the pros and cons of such instruments. Theoretically, intelligence tests are measures of learning capacity whereas achievement tests are measures of learning itself.

Data in Table XXVI show the number of schools and county superintendents in the survey who use intelligence tests in the testing program.

The second-class district schools lead the way in following this desirable practice with sixteen of the seventeen respondents indicating intelligence tests are used. In the third-class district schools fourteen of the twenty-two respondents stated such tests are used. The two- or three-teacher schools evidence considerable lag in this area as only one of the twenty-five respondents indicated using intelligence tests. Of the forty-three county superintendents thirteen stated intelligence tests were used.

At best only a rough comparison can be made between intelligence test scores and achievement test results but they do provide an indication to guide the examiner as to what should be expected.
TABLE XXVI

ARE INTELLIGENCE TESTS USED IN THE TESTING PROGRAM

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>16</td>
<td>14</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>8</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Such tests are considered worth-while and greater use of them should be investigated by the two- or three-teacher schools and county superintendents.

Since the teachers in the schools are generally charged with administering and making use of the test results, the respondents were asked to indicate how well they thought the teachers understood the purpose and value of achievement tests. Data in Table XXVII show the replies to this question.

The goal of all schools using achievement tests should be to have the teachers understand the purpose and value of such tests to the fullest extent. Of the second-class district schools in the survey thirty-five per cent of them felt the teachers understood the purpose and value of the achievement tests very well. This compares with twenty-three per cent in the third-class district schools, and fifty-one per cent as indicated by the county superintendents, and forty-seven per cent in the two- or three-teacher schools.

Only four respondents thought the teachers slightly understood the purpose and value of achievement tests. The educational leaders should strive to improve this condition.

In all types of evaluation certain problems and difficulties will arise. An effort was made to discover problems connected with standardized achievement tests by requesting the respondents to list problems they have encountered. The people directly concerned with the supervision of the tests
**TABLE XXVII**

HOW WELL DO THE TEACHERS UNDERSTAND THE PURPOSE AND VALUE OF STANDARDIZED ACHIEVEMENT TESTS?

<table>
<thead>
<tr>
<th>Reply</th>
<th>Second-Class District Schools (N=17)</th>
<th>Third-Class District Schools (N=22)</th>
<th>Two- or Three-Teacher Schools (N=25)</th>
<th>County Supts. (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very well</td>
<td>6</td>
<td>5</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>Well enough</td>
<td>11</td>
<td>16</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Slightly</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>
should be able to present valid findings in this respect.

The most common problem listed by the respondents was making effective use of the test results. One replied that he felt the uses of the results were never sufficient to make the test worth the time, effort, and expense involved.

A number of respondents considered the validity of the achievement tests a problem and doubted if the tests actually measured what they were claimed to measure. A teacher in a two- or three-teacher school did not think the tests were suitable for rural schools as the norms were established predominately by the city schools.

Another problem frequently mentioned was the amount of time involved in administering and correcting the tests.

Another problem listed by respondents was that the test results were used to rate the teachers. On the other hand, the problem of teachers who feel they are being rated by the results was listed. One respondent stated the biggest problem concerning achievement tests was controlling the reaction of the teachers who somehow feel the results will affect their tenure.

A number of respondents replied that the teachers never see the results of the tests and feel they are a waste of time. Two respondents stated the achievement tests do not cover the material presented in the textbooks. The problem of finding a time when all the pupils are present was listed
by two respondents.

Two respondents felt that placing total judgment on a single measure was a problem.

Other problems listed by various respondents were local validity of the tests was not good, difficult for tests to keep up with the changes in the curriculum, tests do not permit or require organization of ideas in answering, development of accurate norms, attempting to classify children like livestock with no allowance for individual methods of thinking, some bright students do not rank high on one test yet results are on file permanently, tendency of administrators to place too much emphasis on results, results determine if a pupil passes or flunks, tests are too easy, tests do not fit individual state requirements, tests are not suitable for curriculum, tests are given in the spring when it is too late to help the children, results discourage low achievers, pupil grades are based on results, pupils get too upset, do not cover a very wide range of scholastic ability, tests are used in place of state exams, giving the tests when every child is physically and mentally up to the examination, and one test a year is not sufficient to give an accurate measurement of a child's achievement.

Some items listed as problems by the respondents were actually shortcomings of the tests. The list does reveal what the persons closest to the tests experience.
CHAPTER VIII

RECOMMENDATIONS

Recommendations which seemed warranted on the basis of this study are offered in the areas of selection of achievement tests, administration, and application and interpretation of the test results.

A responsible leader should be in charge of the testing program. In small schools this leader is usually the principal or superintendent or a teacher who had had special training in tests and their interpretation. Regardless who the leader is, he must have free time for organizing and directing the program. The leader should see that the selection of a standardized achievement test is done on a co-operative basis involving the administrators and teachers. This study revealed that the co-operative approach was not followed in the majority of instances and this practice cannot be condoned. The leader of the testing program should provide himself with the most reliable, recent textbook on tests and measurements and be prepared to pass on the technical phases of various tests. However, a committee of teachers is helpful in judging the content of tests and supplying useful information.

Of the forty-three county superintendents in the survey, forty indicated they alone selected the tests to be used in
schools under their supervision. The difficult job facing the county superintendents is realized but they should strive to promote more teamwork and co-operation with the teachers under their supervision.

This study revealed that approximately thirty-six percent of the 107 respondents learned of the tests in use due to the fact they were in use in the schools when they arrived. Considering this information, it is difficult to conceive that acceptable criteria were followed in selecting the standardized tests. Each new administrator is not expected to change tests, but if the tests in use are retained they should be reviewed and proven to be satisfactory.

Any group that contemplates instituting an achievement testing program should consider several of the various tests which are available. In this survey fourteen of the 107 respondents stated this was not done. This represents a small minority but it indicates omission of a very worthwhile procedure. Information on various achievement tests is readily available from a number of sources. Schools of education in universities and colleges can usually supply the titles of tests and the addresses of the publishers. The test publishers issue catalogs with fairly good descriptions of the tests. Specimen tests may be purchased for examination for a reasonable price.

In the process of selecting an achievement test, it
is doubtful if a thorough study of various tests will provide sufficient information to enable the committee to make a prudent choice. Actual try-outs of achievement tests will reveal much valuable information on the administering, correcting, application of results, and general suitability of the tests. Of the seventeen respondents from the second-class district schools, ten indicated that several tests were tried out; six of the twenty-two third-class district schools stated this was done; six respondents from the two- or three-teacher schools indicated several tests were tried out; and twenty-two of the forty-three county superintendents said different tests were tried out before final selection was made. The number of instances in which this desirable practice was followed is not impressive. Trying out several tests takes time but the information gained will prove worth the effort.

When considering the adoption of an achievement test for a particular elementary school, primary consideration must be given to the objectives and curriculum of that school. As a group the respondents in the survey ranked this consideration fifth behind worthwhileness and usefulness of test results, validity, reliability, and ability to diagnose specific learning difficulties for each pupil. This ranking indicates that the emphasis may be placed on the wrong considerations. Sound educational policy dictates that the truly effective and efficient elementary schools set forth stated objectives and
strive to achieve them. The use of a standardized achievement test should help ascertain if some of the objectives of the educational program are being achieved. Only those tests which can do this should be selected. School authorities should bear in mind that many worth-while and valuable objectives cannot be measured by achievement tests and never must worth-while objectives be altered or eliminated to meet the needs of an achievement test.

Only forty of the 107 respondents stated that the achievement tests in use were checked for local validity. In a sense the practice of checking tests for local validity is closely related to the criterion of selecting tests which meet the needs of the curriculum. The possibility exists in achievement test batteries that a section of the test may not agree with the comparable portion of the curriculum it is to evaluate. The important thing is to check the tests for local validity before they are adopted. This precaution may prevent drawing mistaken conclusions concerning the effectiveness of the educational program or the portion of it evaluated by the test.

The second phase of the achievement testing program concerns the administering of the tests. The following recommendations seemed warranted on the basis of this study.

Fall achievement testing is a trend with considerable merit although there are certain advantages to testing in the spring. Approximately forty-seven per cent of the respondents
from second-class district schools indicated fall testing is practiced. This compares with approximately thirty-five per cent of the third-class district schools, thirty-two per cent of the two- or three-teacher schools, and twenty-one per cent of the county superintendents.

Possibly the major consideration which determines when the tests are given is the uses made of the results. Fall testing provides results mainly valuable for instructional purposes while spring testing primarily reflects the results of teaching during the school year. County superintendents charged with the responsibility of judging teachers whom they seldom observe might be influenced to use achievement test results to rate the teaching.

In a spring testing program the teachers are more likely to teach the items present in the test, which destroys the validity of the test results.

A re-appraisal of the best uses of achievement test results should convince most test users that fall testing is worth-while and contributes to a better testing program.

The question of administering achievement tests early in the school year to eliminate the measuring of temporary learning was not resolved by this study. Of the 107 respondents twenty-three per cent thought achievement tests should be administered early in the school year to eliminate the measuring of temporary learning, thirty-one per cent thought not,
thirty-three per cent said it was not important enough to consider, and six per cent did not know. Future researchers might consider this problem for investigation.

Achievement tests should be given about the same time each year. This affords an opportunity to measure growth and status on an orderly basis at regular intervals. All except two of the 107 respondents indicated this recommendation was followed.

For the ordinary achievement testing program the teachers should give the tests to their own pupils. This procedure is fairly well observed in the second- and third-class district schools. However, of the forty-three county superintendents in the survey, twenty-one indicated they administered the tests in the schools under their supervision. There seems to be no valid reason for depriving the rural teachers of the privilege of administering the tests. Preparing teachers to administer the tests properly is not too involved.

The common procedure for correcting the tests in the second- and third-class district schools is to have the teachers perform the task. Weighing the advantages and disadvantages of having teachers correct the tests, perhaps other methods of correction should be considered. Machine scoring service is available for most of the tests in use or competent non-school personnel could be employed for this onerous task. A recommended procedure to replace the method of one teacher
correcting the complete battery of tests is to assemble a group of teachers and assign each one the responsibility of scoring a single test in the battery. This procedure generally results in more rapid scoring as each teacher will be more proficient scoring but one test in the battery.

Since teachers generally are given the responsibility of correcting the tests, some schools have found it satisfactory to dismiss classes so teachers can devote school time to the work of scoring. This practice is not common in Montana schools as shown by this study but it deserves consideration. Teacher attitudes toward correcting would undoubtedly be improved and perhaps pupils would look forward to testing time.

If schools are to find the results of tests worth the time and expense, great care must be taken to insure the accuracy of the scores. Individuals who do the correcting need to be carefully trained and supervised. When the correcting is completed, it is good practice to have the scoring checked preferably by someone other than the original scorer. The majority of the second- and third-class district schools in this study make no provision for re-checking the scoring while the majority of the county superintendents do. If re-checking the scoring of all the tests is impractical, samplings of about one test in five should be adequate.

Proper interpretation and utilization of achievement test results are likely to be the weakest phase of the testing
program. For this reason every effort should be made to in-
sure proper interpretation and utilization of the results.

In-service programs are not conducted by a number of
schools in the survey. School administrators must keep in
mind that a testing program needs to be accompanied by a con-
tinuous program of teacher education. Testing programs vary
from school to school and for new teachers an in-service train-
ing program will be more valuable than the pre-service training
they received.

If in-service programs are impractical for the two-
or three-teacher schools and one room rural schools, the teach-
ers in these schools should be provided with guides or hand-
books on evaluation for their guidance.

This study revealed that a number of schools are not
making achievement test results available to those who are
probably the most interested--the pupils. A pupil who is in-
formed of the results may change his attitude toward his work
when he discovers how he ranks in the several areas represented.
The teacher who analyzes the results with the pupil has a
tremendous responsibility to make certain the pupil is not
harmed by the information. When analyzing the results with
the pupils, the teacher should be prepared to cope with the
high achievers as well as the low achievers.

Another area which seems to be overlooked is the area
of public relations. Wide publicity of testing instruments
in recent years has created considerable public interest. Achievement test programs and results might provide worthwhile news items or prove good topics of discussions at P.-T. A. or before civic groups.

This study indicated various abuses of achievement test results. The most popular use listed by the respondents was to determine remedial work. This point should be clarified. A general achievement test is one designed to express in terms of a single score a pupil's achievement in a given field of achievement. A diagnostic test is one intended to discover specific deficiencies in learning or teaching. The general achievement tests of the type in this study are not sufficiently diagnostic for technical remedial purposes.

Other useful applications are pupil guidance, grouping of pupils within the class for purposes of instruction, determining grade placement of new pupils, entering in cumulative records, determining pupil progress, and determining whether remedial work is needed. For the educational program the results are useful in determining whether or not teaching emphasis is correct, improving public relations, determining whether the objectives of the curriculum are achieved, determining if the grading practices reflect the true performance of the pupils as revealed by the test results, comparing with other schools, and planning improvements in the program.

Intelligence tests are conceded to be an integral part
of a testing program. Proper use of such instruments will provide valuable information which will be beneficial in the achievement testing program. This study revealed that the use of intelligence tests in the two- or three-teacher schools was limited to one school. Intelligence testing indicates the pupil's learning capacity and it is important to know this when interpreting achievement as measured by achievement tests.
CHAPTER IX

CONCLUSIONS

The primary purpose of this study was to determine the popularity of standardized achievement tests among selected Montana elementary schools and determine the effectiveness of the achievement testing programs in the light of current trends. The need for proper evaluation for our schools is recognized to be as great as it ever was but the difficulties of providing for it are vastly greater. However, no elementary school can have an efficient instructional program without knowing what it is accomplishing. This study is not meant to imply that standardized achievement tests should be used exclusively or at the expense of other methods of evaluation. They should be considered supplemental to other tried and proven means of evaluation. Teachers and school administrators must not only understand the functions of achievement tests but also realize their limitations.

More specifically this study indicated that standardized achievement tests are practically universally used in Montana public elementary schools. These tests furnish very important facts which are of aid in guidance of pupils toward defined objectives and in the appraisal of the results achieved.

The most popular test as revealed by the study is the
Stanford Achievement Test published by the World Book Company. Each classification of respondents favored the Stanford two to one over the next most popular, the Metropolitan Achievement Tests. Specific reasons were not sought in this study as to why particular achievement tests were preferred.

Several respondents revealed unique testing programs in which one kind of achievement test was administered in the fall and a different test was given in the spring or different tests were administered to different grades. Examination of such plans peculiar to certain schools was not within the scope of this study. These practices are apparently satisfactory if the purposes of the testing programs are met.

The achievement testing programs surveyed are generally effective but the potential value of the programs are sometimes impaired by certain abuses or questionable practices. Recommendations which seemed warranted as a result of this study were offered on various points in the testing programs.

This study indicated that generally the second- and third-class district schools had the more effective testing programs. The programs in the two- or three-teacher schools and the programs supervised by the county superintendents appeared generally to be less effective than those of the second- and third-class district schools. This conclusion appears to be sound if the criteria used to determine effectiveness of testing programs are valid.
There are several reasons why such a conclusion is possibly true. As a rule the second- and third-class district schools are larger units than the two- or three-teacher schools and possess the resources necessary to have effective programs. Without exception, the second- and third-class district elementary schools in this study employed administrators. These administrators theoretically are available and supervise the testing programs in these schools. Consider the problems encountered by the county superintendents who are charged with the responsibility of supervising all of the two- or three-teacher schools and one-teacher schools scattered throughout their counties. One county superintendent stated that he supervised the achievement testing programs in thirty-seven schools in his county.

The lack of previous studies on achievement testing programs in Montana elementary schools prevented the possibility of discovering trends or tendencies in this field.

Further research appears to be needed in the areas of temporary learning and fall achievement testing. Regular, periodic studies of achievement testing programs in Montana elementary schools should be made to determine the value and effectiveness of the programs.
BIBLIOGRAPHY
BIBLIOGRAPHY

A. BOOKS


B. PERIODICALS


C. OTHER


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APPENDIX
APPENDIX A.

Questionnaire for Montana Elementary School Administrators of Selected Elementary Schools in Second- or Third-Class Districts Concerning Standardized Achievement Testing Programs in their Schools.

Position of person answering

What is the classification of your elementary school district?
( ) Third-class district
( ) Second-class district

Do you have a standardized achievement testing program in your elementary school?
( ) yes
( ) no

If not, would you set forth any reasons you have for not having such a program?

____________________________________________________________________

____________________________________________________________________

If you do have a program, will you please answer the remaining questions which pertain only to your elementary school?

I. Selection of Standardized Achievement Tests

1. Which achievement test battery or batteries are in use in your elementary school?

2. Who selected this particular test?
( ) Elementary Principal
( ) Teachers
( ) District Superintendent
( ) Don't know
Other

3. How did you learn of this test?
( ) Advertising by the publisher
( ) Recommended by others
( ) Learned of it while in college
( ) Was being used in the school when you came
Other
4. Were several tests considered before this one was decided upon?
   ( ) yes
   ( ) no
   ( ) don't know

5. Were different tests given a tryout in your school before the final one was selected?
   ( ) yes
   ( ) no
   ( ) don't know

6. Rank the following in order of importance if you were selecting an achievement test. (Use 1-2-3 etc.) If you think two or more items are of equal importance, use the same number for each.
   ( ) Validity
   ( ) Reliability
   ( ) Simplicity of Directions
   ( ) Ease of giving
   ( ) Ease of scoring
   ( ) Cost
   ( ) Objectives of the school curriculum
   ( ) Worthwhileness and usefulness of test results
   ( ) Length of time to take
   ( ) Possible to diagnose specific learning difficulties for each pupil
   Other  __________________________________________

7. Is the test you use both diagnostic and standardized?
   ( ) yes
   ( ) no
   ( ) don't know

8. Has the test been checked for local validity?
   ( ) yes
   ( ) no
   ( ) don't know

II. Administering Standardized Achievement Tests

1. During which month or months during the school year is this test given?
   ( ) September
   ( ) October
   ( ) November
   ( ) December
   ( ) January
   ( ) February
   ( ) March
   ( ) April
   ( ) May
   ( ) Decided by testing bureau
2. Is the test given about the same time each year?
   ( ) yes
   ( ) no
   ( ) not considered

3. On which day or days is the test given?
   ( ) Monday ( ) Thursday
   ( ) Tuesday ( ) Friday
   ( ) Wednesday ( ) Not considered

4. Which time during the day is the test given?
   ( ) Afternoon only ( ) Both
   ( ) Morning only ( ) Not considered

5. Which grades are given these tests?
   ( ) First ( ) Fifth
   ( ) Second ( ) Sixth
   ( ) Third ( ) Seventh
   ( ) Fourth ( ) Eighth

6. Who gives these tests?
   ( ) Teachers
   ( ) Principal
   ( ) Supervisor
   ( ) Other ____________________________

7. If the teachers give these tests, do they give them to their own grades?
   ( ) yes
   ( ) no

8. Who corrects and scores these tests?
   ( ) Teachers
   ( ) Principal
   ( ) Supervisor
   ( ) Other ____________________________

9. If the teachers correct and score these tests, are they given school time to do so?
   ( ) yes ( ) no
   If so, about how much school time is given? ________

10. Are the tests rescored and rechecked after they have been corrected?
    ( ) yes ( ) no
    If so, by whom? ______________________ (Position of person)

11. Are the tests given to all pupils?
    ( ) yes ( ) no
    If not, which students are excluded? ________________
12. In your opinion how well do your teachers understand the purpose and value of these tests?
( ) Very well  ( ) Slightly
( ) Well enough

13. Is the meaning and use of the test results explained to the pupils?
( ) yes  ( ) don't know
( ) no

14. Do you think uneasiness and tension among pupils taking the tests are a problem in that the results are affected?
( ) yes  ( ) don't know
( ) no

15. How are pupils prepared for the tests to relieve their anxiety and uneasiness?

16. Are teachers permitted to review with their grades to prepare for the tests?
( ) yes  ( ) don't know
( ) no

17. Are teachers informed well in advance exactly when tests will be given?
( ) yes  ( ) don't know
( ) no

III. Interpretation and Application of Test Results

1. Do you have an in-service program for educating teachers in the use of test results?
( ) yes  ( ) don't know
( ) no
If so, who conducts it?  _______________

2. Do you have a guide or handbook on evaluation for teacher use?
( ) yes  ( ) no

3. Are all the pupils shown or informed of their individual test results?
( ) yes  ( ) no

4. If just part of the pupils is informed of their test results, which part is?
5. Are students shown the corrected tests and their errors pointed out?  
   ( ) yes  ( ) no

6. Are parents shown the results if they inquire?  
   ( ) yes  ( ) no

7. Do you make a special effort to inform parents of the results?  
   ( ) yes  ( ) no

8. Is such information as grade medians released to your local newspaper?  
   ( ) yes  ( ) no

9. Please list the uses made of the test results.

________________________________________________________________________

________________________________________________________________________

10. If a grade in your elementary system fails to come up to the national norm, what factors in your opinion may be responsible?

________________________________________________________________________

________________________________________________________________________

11. If an individual pupil shows lack of achievement, what factors in your opinion may be responsible?

________________________________________________________________________

________________________________________________________________________

12. Does your school administer intelligence tests?  
   ( ) yes  ( ) no
   If so, which test is used? ______________________

13. Which grades are given these intelligence tests each year?

________________________________________________________________________

14. What do you consider the greatest problem concerning standardized achievement tests?

________________________________________________________________________
15. Some students remember what has been taught for a time and then forget it. This is called temporary learning. Do you think achievement tests should be given early in September to eliminate the measuring of this so-called temporary learning?

( ) yes
( ) no
( ) not important enough to consider

16. It is possible to save money by using the tests over and printing your own answer sheets. Is this done in your school?

( ) yes
( ) no
APPENDIX B.

Questionnaire for the Upper Grade Teacher in Selected Two- or Three-Teacher Schools in Montana

Position of person answering: ___________________________

Kind of school
( ) Two-teacher school
( ) Three-teacher school

Do you have a standardized achievement testing program in your school?
( ) yes ( ) no
If not, would you set forth any reasons you know for not having such a program?

If you do have such a program, will you please answer the remaining questions which pertain only to your school?

I. Selection of Standardized Tests

1. Which achievement test battery or batteries are in use in your school? _______________________________________

2. Who selected this particular test?
( ) Teachers
( ) County Superintendents
( ) Don't know
( ) Other _______________________________________

3. How did you learn of this test?
( ) Advertising by the publisher
( ) Recommended by others
( ) Learned of it while in college
( ) Was being used in the school when you came
Other _______________________________________

4. Were several tests considered before this one was selected?
( ) yes
( ) no
( ) don't know
5. Were different tests given a tryout in your school before the present one was selected?  
( ) yes  ( ) don't know  ( ) no

6. Rank the following in order of importance if you were selecting an achievement test. (Use 1-2-3 etc.) If you think two or more items are of equal importance, use the same number for each.  
( ) Validity  
( ) Reliability  
( ) Simplicity of directions  
( ) Ease of giving  
( ) Ease of scoring  
( ) Cost  
( ) Objectives of the school curriculum  
( ) Worthwhileness and usefulness of test results  
( ) Length of time to take  
( ) Possible to diagnose specific learning difficulties for each pupil  
Other ____________________________

7. Is the test you use both diagnostic and standardized?  
( ) yes  ( ) don't know  ( ) no

8. Has the test been checked for local validity?  
( ) yes  ( ) don't know  ( ) no

II. Administering Standardized Achievement Tests

1. During which months during the school year is this test given?  
( ) September  ( ) February  
( ) October  ( ) March  
( ) November  ( ) April  
( ) December  ( ) May  
( ) January  ( ) Decided by testing bureau

2. Is the test given about the same time each year?  
( ) yes  ( ) not considered  ( ) no

3. On which day or days is the test given?  
( ) Monday  ( ) Wednesday  ( ) Friday  
( ) Tuesday  ( ) Thursday  ( ) Not considered

4. Which time during the day is the test given?  
( ) Morning only  ( ) Both  
( ) Afternoon only  ( ) Not considered
5. Which grades are given these tests?
( ) First  ( ) Fourth  ( ) Seventh
( ) Second  ( ) Fifth  ( ) Eighth
( ) Third  ( ) Sixth

6. Who gives these tests?
( ) Teachers  ( ) County Superintendent
Other ______________________

7. If the teachers give these tests, do they give them to their own grades?
( ) yes  ( ) no

8. Who corrects and scores these tests?
( ) Teachers  ( ) County Superintendent
Other ______________________

9. If the teachers correct and score these tests, are they given school time to do so?
( ) yes  ( ) no
If so, about how much school time is given? ___________

10. Are the tests rescored and rechecked after they have been corrected?
( ) yes  ( ) no
If so, by whom? _____________________

11. Are the tests given to all pupils?
( ) yes  ( ) no
If not, which students are excluded? ______________________

12. In your opinion how well do the teachers in your school understand the purpose and value of these tests?
( ) Very well  ( ) Well enough  ( ) Slightly

13. Is the meaning and use of the test results explained to the pupils?
( ) yes  ( ) no  ( ) don't know

14. Do you think uneasiness and tension among pupils taking the tests are a problem in that the results are affected?
( ) yes  ( ) no  ( ) don't know

15. How are pupils prepared for the tests to relieve their anxiety and uneasiness?

_________________________________________  _________________________
16. Are teachers informed well in advance exactly when the tests will be given?
( ) yes ( ) no ( ) don't know

17. Are teachers permitted to review with their grades to prepare them for the tests?
( ) yes ( ) no ( ) don't know

III. Interpretation and Application of Test Results

1. Do you have an in-service program for educating teachers in the use of test results?
( ) yes ( ) no ( ) don't know
If so, who conducts it? ________________________________________

2. Do you have a guide or handbook on evaluation for teacher use?
( ) yes ( ) no

3. Are all the pupils shown or informed of their own test results?
( ) yes ( ) no

4. If just part of the pupils is informed of their test results, which part is? ________________________________________

5. Are students shown the corrected tests and their errors pointed out?
( ) yes ( ) no

6. Are parents shown the results if they inquire?
( ) yes ( ) no

7. Do you make a special effort to inform parents of the results?
( ) yes ( ) no
If so, how do you do this? ________________________________________

8. Is such information as the grade medians released to your local newspaper?
( ) yes ( ) no

9. Please list the uses which are made of the test results.

10. If a grade in your elementary system fails to come up to the national norm, what factors in your opinion may be responsible?
11. If an individual pupil shows lack of achievement, what factors in your opinion may be responsible?

12. Does your school administer intelligence tests? 
   ( ) yes  
   ( ) no  
   If so, which test is used? __________________

13. Which grades are given these intelligence tests each year?

14. What do you consider the greatest problem concerning standardized achievement tests?

15. Some students remember what has been taught for a time and then forget it. This is called temporary learning. Do you think achievement tests should be given early in September to eliminate the measuring of this so-called temporary learning? 
   ( ) yes  
   ( ) no  
   ( ) not important enough to consider
APPENDIX C.

Questionnaire for Montana County Superintendents Concerning Standardized Achievement Testing Programs

Do you supervise the standardized achievement testing program in any of the elementary schools in your county?
( ) yes ( ) no

If not, would you briefly state why not or how this is handled?

If you do, would you please answer the remaining questions?

1. Do you supervise the achievement testing program in the two- or three-teacher schools in your county?
   ( ) yes ( ) no
   In how many of these schools do you do this? ______ (number)

2. Do you supervise the testing program in the one-room rural schools in your county?
   ( ) yes ( ) no
   In how many of these schools do you do this? ______ (number)

I. Selection of Standardized Achievement Tests

1. Which achievement test battery or batteries are in use in the schools in which you supervise the testing program?

2. Who selected this particular test or tests?
   ( ) County Superintendent ( ) Teachers
   ( ) Don't know
   Other ____________________________________________

3. How did you learn of this test?
   ( ) Advertising by the publisher
   ( ) Recommended by others
   ( ) Was being used when you took over
   Other ____________________________________________

4. Were several tests considered before this one was decided upon?
   ( ) yes ( ) no ( ) don't know

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5. Were different tests given a tryout before the final one was selected?
   ( ) yes    ( ) no    ( ) don't know

6. Rank the following in order of importance if you were selecting an achievement test. (Use 1-2-3 etc.) If you think two or more items are of equal importance, use the same number for each.
   ( ) Validity
   ( ) Reliability
   ( ) Simplicity of directions
   ( ) Ease of giving
   ( ) Ease of scoring
   ( ) Cost
   ( ) Objectives of the school curriculum
   ( ) Worthwhileness and usefulness of test results
   ( ) Length of time to take
   ( ) Possible to diagnose specific learning difficulties for each pupil
   Other _______________________________

7. Is the test you use both diagnostic and standardized?
   ( ) yes    ( ) no    ( ) don't know

8. Have you checked the test for local validity?
   ( ) yes    ( ) no    ( ) don't know

II. Administering Standardized Achievement Tests

1. During which month or months during the school year is this test given?
   ( ) September    ( ) February
   ( ) October      ( ) March
   ( ) November     ( ) April
   ( ) December     ( ) May
   ( ) January      ( ) Decided by testing bureau

2. Is the test given about the same time each year?
   ( ) yes    ( ) no    ( ) not considered

3. On which day or days is the test given?
   ( ) Monday    ( ) Wednesday    ( ) Friday
   ( ) Tuesday   ( ) Thursday    ( ) Not considered

4. Which time during the day is the test given?
   ( ) Afternoon only    ( ) Both
   ( ) Morning only    ( ) Not considered

5. Which grades are given these tests?
   ( ) First    ( ) Third    ( ) Fifth    ( ) Seventh
   ( ) Second   ( ) Fourth   ( ) Sixth    ( ) Eighth
6. Who gives these tests?  
   ( ) Teachers  ( ) County Superintendents  
   Other ________________________________________________

7. If the teachers give these tests, do they give them to their own grades?  
   ( ) yes  ( ) no

8. Who corrects and scores these tests?  
   ( ) Teachers  ( ) County Superintendents  
   Other ________________________________________________

9. If the teachers correct and score these tests, are they given school time to do so?  
   ( ) yes  ( ) no  
   If so, about how much school time is given? ___________

10. Are the tests rescored and rechecked after they have been corrected?  
    ( ) yes  ( ) no  
    If so, by whom? ____________________________

11. Are the tests given to all pupils?  
    ( ) yes  ( ) no  
    If not, which students are excluded?

12. In your opinion how well do your teachers understand the purpose and value of these tests?  
    ( ) Very well  ( ) Well enough  ( ) Slightly

13. Is the meaning and use of the test results explained to the pupils?  
    ( ) yes  ( ) no  ( ) don't know

14. Do you think uneasiness and tension among pupils taking the tests are a problem in that the results are affected?  
    ( ) yes  ( ) no  ( ) don't know

15. Are teachers informed well in advance exactly when the tests will be given?  
    ( ) yes  
    ( ) no  
    ( ) don't know

16. Are teachers permitted to review with their grades to prepare them for the tests?  
    ( ) yes  
    ( ) no  
    ( ) don't know
III. Interpretation and Application of Test Results

1. Do you have an in-service program for education of teachers in the use of test results?
   ( ) yes  ( ) no  ( ) don't know

2. Do you have a guide or handbook on evaluation for teacher use?
   ( ) yes  ( ) no

3. Are all the pupils shown or informed of their own test results?
   ( ) yes  ( ) no

4. If just part of the pupils is informed of their test results, which part is?

5. Are students shown the corrected tests and their errors pointed out?
   ( ) yes  ( ) no

6. Are parents shown the results if they inquire?
   ( ) yes  ( ) no

7. Do you make a special effort to inform parents of the results?
   ( ) yes  ( ) no
   If so, how do you do this? _______________________

8. Is such information as the grade medians released to your local paper?
   ( ) yes  ( ) no

9. Please list the uses which are made of the test results.

10. If a grade fails to come up to the national norm, what factors in your opinion may be responsible?

11. If an individual pupil shows lack of achievement, what factors in your opinion may be responsible?
12. Do you administer intelligence tests?
   ( ) yes
   ( ) no
   If so, which test is used? ____________________________

13. Which grades are given these intelligence tests each year?

14. What do you consider the greatest problem concerning standardized achievement tests?

15. Some students remember what has been taught for a time and then forget it. This is called temporary learning. Do you think achievement tests should be given early in September to eliminate the measuring of this so called temporary learning?
   ( ) yes
   ( ) no
   ( ) not important enough to consider
APPENDIX D.

Hot Springs, Montana
March 31, 1958

Dear ____________________:

I am conducting a survey of standardized achievement testing programs in Montana elementary schools and would appreciate your co-operation. I am asking school people in Sanders County schools to complete the enclosed questionnaire and return it to me as soon as possible.

Please, feel free to write in comments which will enable me to construct an improved questionnaire which will be sent to selected elementary schools throughout the state.

It is not necessary to sign your name. Thank you for your assistance.

Yours truly,

______________________________
Earl J. Barlow
Dear Administrator:

I am conducting a survey of Standardized Achievement Testing Programs in selected Montana elementary schools and would appreciate your co-operation.

Will you please complete the enclosed questionnaire and return it to me in the envelope which is provided? Since I am sampling a small portion of Montana schools, the results are very important to me.

Needless to say, I am writing a professional paper on the subject. It is not necessary to sign your name and thank you for your assistance.

Yours truly,

Earl J. Barlow

Hot Springs, Montana
April 30, 1958
Dear Upper Grade Teacher:

I am conducting a survey of Standardized Achievement Testing Programs in selected Montana elementary schools and would appreciate your co-operation.

Will you please complete the enclosed questionnaire and return it to me in the envelope which is provided? Since I am sampling a small portion of Montana schools, the results are very important to me.

Needless to say, I am writing a professional paper on the subject. It is not necessary to sign your name and thank you for your assistance.

Yours truly,

Earl J. Barlow
Hot Springs, Montana
April 30, 1958

Dear County Superintendent:

I am conducting a survey of standardized achievement testing programs in Montana elementary schools and would appreciate your co-operation. Part of my research concerns the role of the County Superintendent in administering such tests in the rural schools in his county.

Will you please complete the enclosed questionnaire and return it to me in the envelope which is provided?

Needless to say, I am writing a professional paper on the subject. Thank you for your assistance.

Yours truly,

Earl J. Barlow