

THE EFFECTS OF TRADITIONAL REPORT CARDS UPON THE GRADING
OF STUDENTS OF SOUTH PARK ELEMENTARY SCHOOL, BEAUMONT,
TEXAS

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THESIS

Presented to the Graduate Council of the
North Texas State Teachers College in
Partial Fulfillment of the Requirements

For the degree of

Masters of Arts

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Beaumont, Texas

August, 1938

69817

TABLE OF CONTENTS

| | Page |
|---|------|
| LIST OF TABLES | iv |
| LIST OF ILLUSTRATIONS | viii |
| Chapter | |
| I. INTRODUCTION | 1 |
| School Marks and Grades | |
| The Problem | |
| Evaluation of Child's Accomplishments | |
| Source of Problem | |
| Source of Data | |
| Testing Programs | |
| Abolishment of Traditional Type of Report Card | |
| Initiation of Letter Reports | |
| Limitations | |
| Procedure of Determining Teachers' Marks | |
| Procedure of Making Scatter-grams | |
| Procedure of Computing the Pearsonian Coefficients of Correlation | |
| Data Used | |
| II. EFFECTS OF THE TRADITIONAL REPORT CARDS UPON TEACHERS' GRADES | 16 |
| Comparison of Correlations | |
| Arithmetic | |
| Spelling | |
| Increase in Coefficients of Correlation for all Students | |
| III. CONCLUSIONS AND RECOMMENDATIONS | 20 |
| APPENDIX | 22 |

LIST OF TABLES

| Table | Page |
|--|------|
| 1. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1930, 1931, and 1932. (Arithmetic) | 25 |
| 2. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1933, 1934, and 1935. (Arithmetic) | 26 |
| 3. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1930, 1931, and 1932. (Reading). | 27 |
| 4. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1933, 1934, and 1935. (Reading). | 28 |
| 5. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1930, 1931, and 1932. (Spelling) | 29 |
| 6. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1933, 1934, and 1935. (Spelling) | 30 |
| 7. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1930, 1931, and 1932. (Language) | 31 |
| 8. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1933, 1934, and 1935. (Language) | 32 |
| 9. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1930, 1931, and 1932. (Arithmetic) | 33 |

LIST OF TABLES (Continued)

| Table | Page |
|--|------|
| 10. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1933, 1934, and 1935. (Arithmetic) | 34 |
| 11. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1930, 1931, and 1932. (Geography). | 35 |
| 12. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1933, 1934, and 1935. (Geography). | 36 |
| 13. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1930, 1931, and 1932. (Spelling) | 37 |
| 14. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1933, 1934, and 1935. (Spelling) | 38 |
| 15. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1930, 1931, and 1932. (Language) | 39 |
| 16. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1933, 1934, and 1935. (Language) | 40 |
| 17. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1930, 1931, and 1932. (History). | 41 |
| 18. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1933, 1934, and 1935. (History). | 42 |

LIST OF TABLES (Continued)

| Table | Page |
|---|------|
| 19. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1930, 1931, and 1932. (Arithmetic) | 43 |
| 20. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1933, 1934, and 1935. (Arithmetic) | 44 |
| 21. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1930, 1931, and 1932. (Geography). | 45 |
| 22. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1933, 1934, and 1935. (Geography). | 46 |
| 23. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1930, 1931, and 1932. (Spelling) | 47 |
| 24. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1933, 1934, and 1935. (Spelling) | 48 |
| 25. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1930, 1931, and 1932. (Language) | 49 |
| 26. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1933, 1934, and 1935. (Language) | 50 |
| 27. Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1930, 1931, and 1932. (History). | 51 |

LIST OF TABLES (Continued)

| Table | | Page |
|-------|---|------|
| 28. | Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1933, 1934, and 1935. (History) | 52 |
| 29. | Complete Tabulation of All Coefficients of Correlation Between the Teachers' Grades and the Subject-ages For Grades Three, Five, and Seven, For the Years 1930-1935, inclusive. | 53 |

LIST OF ILLUSTRATIONS

| Figure | Page |
|--|------|
| 1. Illustrations of Test Rolls Used By South Park Schools For Recording Subject-ages Obtained From Standard Tests. | 4 |
| 2. Illustration of Permanent Record Card Used By South Park Schools. | 6 |
| 3. Traditional Report Card Used By South Park Schools. | 8 |
| 4. New Type of Report Card For Pupil Doing Poor Work Because of Lack of Ability. | 10 |
| 5. New Type of Report Card For Pupil Doing Poor Work Because of Irregular Attendance | 11 |
| 6. New Type of Report Card For Pupil Doing Satisfactory Work. | 12 |

CHAPTER I

INTRODUCTION

School marks and grades.--During recent years there has been a growing doubt in the minds of those engaged in the work of education concerning the accuracy of marks and school grades. It is a fact that often a child who makes high daily and monthly grades falls low on an achievement test. The reverse is also true. Many children who fail to attract the attention of the instructors because of high daily and monthly grades during the school term do a standard type of work, which is neither of spectacular highness or lowness. However, it is not at all a rare case when one of these pupils falls either in the upper or lower ten percentile of an achievement test. Such inaccuracies have become a cause for much study and thought on the part of school people.

The Problem.--It is with the above thought in mind, therefore, that an effort has been made in this study to judge the effects of different types of report cards upon the accuracy of the teachers' grades of South Park Elementary School.

Evaluation of child's accomplishments.--It is evident, after a minimum amount of reflection and thought, that numerous outside elements are quite likely to influence a teacher's evaluation of a child's accomplishments. In the first place, it is regrettable, but true, that there

are often cases where the financial, social, or political status of the parents in the community has its effect upon the grades of the child. Second, the monthly tests are not always infallible measures of the pupil's knowledge and achievements. Third, the great number of teacher-pupil contacts make it impossible for even the most conscientious teacher to give a great amount of time to the consideration of each of his students. Fourth, the fact that there is a variance in the human attributes of perception tends to keep the average teacher from being constant in her standards of grading. Fifth, even the most alert of teachers is at times unable to detect the pupil who cheats. A sixth cause to be mentioned here is the fact that the physical condition of the student, such as sickness or nervousness, often misleads the instructor who is trying to give true grades. Undoubtedly these, and many other factors, tend to take away from the accuracy of the grades which pupils receive.

Source of problem.--South Park Elementary School, the source of the problem and the data used in this study, is located in Beaumont, Texas. It has an average of one thousand pupils attend each year. The administrative staff consists of a principal, a secretary to the faculty, one nurse, one doctor, one dentist, three music and auditorium teachers, two health and physical education teachers, and twenty-eight teachers of fundamental subjects. The average teacher tenure in South Park Elementary School is

fourteen years. Seventy-five percent of the faculty have a college degree and all others have over fifteen years teaching experience. There is only about nine percent teacher turn-over each year.

The school plant is modern, consisting of three buildings. These are the gymnasium, the shop, and the main building, all of which have adequate lighting, ventilation, and sanitary arrangements. There is a modern auditorium, a filing room for test data, a rest-room for teachers, and a music room in which pupils are given instrumental instruction, as well as a place for practice of band and orchestra.

Because of the fact the South Park District is in a better financial condition than the average school district in Texas, every consideration is given to the needs and comforts of its faculty, each member of which has at least one period for rest during the day. The physical needs of its pupils are also carefully provided for. Many must be supplied with food, clothing, and medical attention.

Source of data.--The students of South Park Elementary School come from homes of an industrial community, made up of skilled and unskilled laborers and small farmers. Many come from an area that extends as far as sixteen miles. Due to the fact that Beaumont is a port city, there are a number of children of foreign blood attending its schools. Many of these have parents who do not speak English at all. Only a small percent of the student-body comes from homes that could be

Grade _____ Date _____
 Subject _____ Form _____
 Administered by _____

| Name of Pupil | C.A. | S.A. | Name of Pupil | C.A. | S.A. |
|---------------|------|------|---------------|------|------|
| 1. | | | 36. | | |
| 2. | | | 37. | | |
| 3. | | | 38. | | |
| 4. | | | 39. | | |
| 5. | | | 40. | | |
| 6. | | | 41. | | |
| 7. | | | 42. | | |
| 8. | | | 43. | | |
| 9. | | | 44. | | |
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Fig. 1.- Illustration of the form upon which the results of all standard test given at South Park Elementary School, were reported.

considered as having even an average American standard of living. It would seem, therefore, that no place could be found in which teachers could be more free from any outside influence in dealing with their students as they deem best.

Testing program.—There has, for the past fifteen years, been a carefully planned testing program carried on in South Park Elementary School. Either New South or New Stanford Achievement tests have been given at least once during each school year, as well as many other special tests. In such a way, the students have become well accustomed to taking tests of all kinds. This fact, as well as the fact that the teachers have become well acquainted with the techniques of administering tests, makes the results of this study much more reliable than they would otherwise be. At all times the general director of the testing program has been a teacher who has had at least one advanced college course in tests and measurements. The results of these tests have been kept on rolls and filed. They are represented in original form in Figure 1.

Besides keeping the records of the standard tests, the administrative officers have always kept a permanent record of all of the yearly average grades that have been given to the students by the teachers. These have been filed on cards at the close of each school year. Figure 2 represents the original form used for the permanent records.

It is by no means a proven fact that an achievement

test is an absolutely accurate measure of a pupil's accomplishment. However, for this study it was assumed that the 10,582 subject-ages, obtained by standard testing of the third, fifth, and seventh grades each year over a period of six years, was a fairly accurate measure of the factual material actually taught during those years. These subject-ages were considered in parallel with the grades received by these students at the hands of their teachers.

PERMANENT RECORD CARD

Pupil _____ Age _____ Parent _____

Address _____ Phone _____ Occupation _____

Entered from _____

| Subject | Gr. | Gr. | Gr. | Gr. | Gr. | Gr. | Gr. | Gr. | Gr. |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | Yr. | Yr. | Yr. | Yr. | Yr. | Yr. | Yr. | Yr. | Yr. |
| Days. Pres. | | | | | | | | | |
| Times Tardy | | | | | | | | | |
| Department | | | | | | | | | |
| Language | | | | | | | | | |
| Spelling | | | | | | | | | |
| Reading | | | | | | | | | |
| Arithmetic | | | | | | | | | |
| Geography | | | | | | | | | |
| History | | | | | | | | | |
| Music | | | | | | | | | |
| Writing | | | | | | | | | |
| Drawing | | | | | | | | | |
| Voc. Guid. | | | | | | | | | |
| E. A. | | | | | | | | | |

Fig. 2.-Permanent record card used by the teachers of South Park Elementary School to record the yearly average grade for each student.

Abolishment of traditional type of report card.--The administrative staff of the district has always welcomed and encourages experimentation on the part of its teachers. One phase of this experimentation resulted in the abolishment of the traditional type of report card during the school year of 1932-33. Until this time a list of the child's grades had been sent to his parents at the end of each six weeks during the year on the traditional report cards. The form used for this card is represented by Figure 2. Grades were determined by teachers in the usual manner and were given in the form of letters, their numerical values which is as follows:

| | |
|-----------|-----------------|
| A+-96-100 | C -73-76 |
| A -93-96 | C--70-73 |
| A--90-93 | D+-66-70 |
| B+-86-90 | D -63-66 |
| B -83-86 | D--60-63 |
| B--76-80 | E -less than 60 |
| C+-76-80 | |

This traditional report card, as will be seen by an examination of Figure 3, will not be found greatly different from those in common use in schools throughout the country.

Initiation of letter reports.--Beginning in 1933, however, letters were substituted for reports to be sent home. These were personal letters written to each parent. In these the child's outstanding characteristics, both good and bad, were mentioned. Teachers gave reasons for these qualities wherever

South Park Public School 1931-1932

Report of _____

| | 1 | 2 | 3 | 4 | 5 | 6 | Aver. |
|-------------|---|---|---|---|---|---|-------|
| Days Pres. | | | | | | | |
| Days Ab. | | | | | | | |
| Days Dis. | | | | | | | |
| Times Tar. | | | | | | | |
| Department | | | | | | | |
| Language | | | | | | | |
| Grammar | | | | | | | |
| Spelling | | | | | | | |
| Reader | | | | | | | |
| Arithmetic | | | | | | | |
| Geography | | | | | | | |
| History | | | | | | | |
| Music | | | | | | | |
| Writing | | | | | | | |
| Drawing | | | | | | | |
| Dom. Arts | | | | | | | |
| Man. Train. | | | | | | | |
| Hygiene | | | | | | | |

 Superintendent

Figure 3.- A typical traditional report card used in South Park Elementary School before the school year of 1932-33.

it was possible, and suggested various ways in which the child could improve, as well as ways in which his parents might help and encourage him. Figures 4, 5, and 6 represent the forms of letters used. This form of report has continued until the present time and has met with the approval of both parents and pupils. The traditional report card has always been sent upon request but these requests have decreased from year to year. During the year of 1937-38 only three requests were received and these were from parents who had only recently moved into the district.

Still, the teachers have been required to give a grade for each six week's work and these have been averaged for the permanent record cards at the close of each school year. These grades have been used for record purposes only since 1933, and are not seen by the parents or pupils, except, as was mentioned before, by special request.

Limitations.--In determining the effect that the traditional report cards have upon the kind of grades given by the teachers of South Park Elementary School, the teacher's grades for the years of 1930, 1931, and 1932, the three years preceding the change in the type of report cards, and the grades of 1933, 1934, and 1935, the three years following this change, were considered.

A comparison was made between the letter or numerical grades given by teachers and the subject-areas as were revealed

South Park Elementary School
October 30 1935

Dear Mr. and Mrs. "X" _____,

Helen has improved in her personal appearance this time.
She has made the room much more attractive by her efforts to
keep the reading table in order.

She is doing unsatisfactory work, ESPECIALLY in
English. This appears to be because she resents criticism.
She seems to be careless in her written work, making many mis-
takes which we feel that she could avoid. We would appreciate
a visit from you, if possible.

Home room teacher

To the Parent:

We call every child's work satisfactory if he is doing the best he can.

We call any child's work unsatisfactory regardless of how high his grade if he is not doing the best he can.

We are working for honesty, fairness, loyalty, unselfishness, and a desire to achieve on one's own merits and not the demerits of another.

Please be patient with us in our efforts to establish this new communication. It would help us greatly if every parent would make suggestions. The School is only interested in being of greater service. We get nothing out of the plan but more work.

Sign on the back of this sheet and make any suggestions which you desire.

Yours truly,

Principal

Fig. 4.- An illustration of the new type of report sent from South Park Elementary School for a child doing poor work because of lack of ability.

South Park Elementary School
January 27 1935

Dear Mr. and Mrs. "X",

John did some very nice work in a recent dramatic production. We appreciate the way in which he comes to school so neat and clean. His spelling has improved some since last time.

He is doing unsatisfactory work. We believe that this is due to his irregular attendance. Try to encourage him to be here more, and when he must be absent, try to see that he studies at home. He needs to work especially hard in Arithmetic.

Present 17 days out of 30. Times tardy 4.

Home-room teacher

To the parent:

We call every child's work satisfactory if he is doing the best he can.

We call any child's work unsatisfactory regardless of how high his grade if he is not doing the best he can.

We are working for fairness, honesty, loyalty, unselfishness, and a desire to achieve on one's own merits, and not the demerits of another.

Please be patient with us in our efforts to establish this new form of communication. It would be a great help if every parent would make suggestions. The School is interested only in being of more service. We get nothing out of the new plan but more work.

Sign on the back of this sheet and make any suggestions that you desire.

Yours truly,

Principal

Fig. 5- An illustration of the new type of report sent from South Park Elementary School for a child doing poor work because of irregular attendance.

South Park Elementary School
 March 4 1934

Dear Mr. and Mrs. "X" .

We greatly appreciate the excellent work that Jane has done as pianist for the school orchestra. She is very dependable at all times. She seems to have made up the work that she missed during her recent absence.

She is doing satisfactory work.

Absent 7 days out of 30 . Tardy 0 .

Home-room teacher

To the parent:

We call every child's work satisfactory if he is doing the best he can.

We call any child's work unsatisfactory, regardless of how high his grade if he is not doing the best he can.

We are working for honesty, fairness, loyalty, unselfishness, and a desire to achieve on one's own merits and not the demerits of another.

Please be patient with us in our efforts to establish this new communication. It would help us greatly if every parent would make suggestions. The School is only interested in being of greater service. We get nothing out of our new plan but more work.

Sign on the back of this sheet and make any suggestions which you desire.

Yours truly,

Principal

Fig. 6.-An illustration of the new type of report sent from South Park Elementary School for a child doing satisfactory work.

by New Stanford and New South Achievement tests during three years when grades were sent home to the parents for inspection and the three years when grades were kept in the confidential files of the school and not sent home for inspection.

The study was limited to the third, fifth, and seventh grades. In the third grade, the subjects of Arithmetic, Language, Reading, and Spelling were considered. In grades five and seven, Arithmetic, Language, Spelling, Geography, and History were used.

Procedure of determining teachers' marks.--The first step in this study was to find the teachers' corresponding grades for each pupil listed on the standard test rolls. These included fourteen rolls for the three years preceding the change and fourteen for the three years that followed the change in report cards. This made a total of twenty-eight rolls with an average of three hundred and seventy-eight pupils on each. There were 10,582 cases considered.

Procedure of making scatter-grams.--The second step was to make scatter-grams showing the relationship between the subject-ages and the teachers' grades. These scatter-grams were made for the following years and subjects:

Grade Three

| <u>Before Change</u> | <u>After Change</u> |
|----------------------|---------------------|
| 1930-1931-1932 | 1933-1934-1935 |
| Arithmetic | Arithmetic |
| Language | Language |

Grade Three (continued)

Spelling

Spelling

Reading

Reading

Grade Five

Before ChangeAfter Change

1930-1931-1932

1933-1934-1935

Arithmetic

Arithmetic

Language

Language

Spelling

Spelling

History

History

Geography

Geography

Grade Seven

Before ChangeAfter Change

1930-1931-1932

1933-1934-1935

Arithmetic

Arithmetic

Language

Language

Spelling

Spelling

History

History

Geography

Geography

Procedure of computing the Pearsonian coefficients of correlation.--The third step was to compute the Pearsonian coefficients of correlation between the teachers' grades and the subject-ages of the twenty-eight scatter-grams. In order to make the computations, it was necessary that numerical values be given to the letter grades. In so doing, the standards of grading for the South Park Schools were used.

Since on the test rolls, all students who had subject-age of fifteen years or above were classed as adults, it was an impossible task to find the exact age for these. An average of fifteen years and five months was taken. The average values of the various grades were taken to the mid-points of the intervals, thus:

| | | | |
|----------|----------|----------|----------|
| A+ -98 | B+ -88 | C+ -78 | D+ -68 |
| A -94.5 | B -84.5 | C -74.5 | D -64.5 |
| A- -91.5 | B- -81.5 | C- -71.5 | D- -61.5 |
| | | | E -50 |

The following formula was used in the computation of the coefficients:

$$r = \frac{\sum_{i=1}^m (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{[\sum_{i=1}^m (x_i - \bar{x})^2][\sum_{i=1}^m (y_i - \bar{y})^2]}}$$

Data used.--There were two sources of data used. First, the permanent record cards were checked. From these were found the teachers' average grades given for the above subjects and years. The second source was the standard test rolls, on which were the subject-ages.

CHAPTER II

EFFECTS OF THE TRADITIONAL REPORT CARDS UPON TEACHERS' GRADES

A complete tabulation of the coefficients of correlation between the teacher's grades for years 1930, 1931, and 1932, the three years preceding the change from the traditional type of report card, and 1933, 1934, and 1935, the three years following this change is seen in Table 1.

TABLE I

COEFFICIENTS OF CORRELATION BETWEEN THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR GRADES THREE, FIVE, AND SEVEN FOR THE YEARS 1930, 1931, 1932, 1933, 1934, and 1935.

| Subject | Coefficients of Correlation | |
|------------------------|-----------------------------|------------------|
| | 1930, 1931, 1932 | 1933, 1934, 1935 |
| Third Grade | | |
| Arithmetic | .21 | .78 |
| Reading | .19 | .73 |
| Spelling | .14 | .57 |
| Language | | |
| Average | .18 | .71 |
| Fifth Grade | | |
| Arithmetic | .38 | .69 |
| Geography | .24 | .62 |
| Spelling | .35 | .74 |
| Language | .19 | .62 |
| History | .38 | .53 |
| Average | .31 | .65 |
| Seventh Grade | | |
| Arithmetic | .43 | .70 |
| Geography | .38 | .68 |
| Spelling | .21 | .70 |
| Language | .37 | .89 |
| History | .37 | .63 |
| Average | .35 | .73 |
| Average For All Grades | | |
| | .29 | .69 |

Comparison of correlations.--As can be easily seen by comparing the correlations in the column for the years 1930, 1931, and 1932 with those in the column for 1933, 1934, and 1935, there is no case in which the correlation failed to become higher after the new style report card was introduced.

Arithmetic.--In all three grades, Arithmetic showed a higher correlation between the teacher's grades and the subject-uses than did any other subject during the period of the traditional report card. A plausible reason for this seems to be that Arithmetic is a subject that lends itself easily toward objective grading, so it was much easier for a teacher to judge a pupil more correctly than in a less objective subject.

The correlation for Arithmetic in the third grade during the three years when the traditional report card was used was .21. In the fifth grade, for the same years, it was .33 and for the seventh, .43. This shows an increase in the coefficients of correlation that is parallel with the advance of school grades. Since the higher the school grade, the more tests are given, it would seem logical to assume that with an increase in the amount of testing, there would be a tendency for teachers to grade more accurately. However, even with an objective subject such as Arithmetic, we find that during the time of the traditional report card, there was a correlation of .34 as an average for all three grades and that during the next three years, after the change in report cards, there was, as

an average for the three grades, as correlation of .72. This was an increase of .38.

Spelling.--During the use of the traditional report cards, the lowest correlation was found in Spelling. For the third grade there was a correlation of .14, for the fifth, a correlation of .35 and a correlation of .21 for grade seven. The higher correlation in the fifth grade is due to the fact that in this grade in South Park Elementary School, there has always been a special emphasis placed upon spelling, in connection with dictionary and reference work of the library program. As no formal spelling is taught in the seventh grade, this lower correlation is in no doubt due to that fact. The fact, however, that there is a .44 average increase in the correlation for the three grades with the change in report cards show that the spelling instructors, as well as other teachers, were made more conscious of the abilities of their pupils.

Increase in coefficients of correlation for all subjects.--

In considering the average increase in the coefficients of correlation for the different subjects, there is found a gain as follows:

| | |
|--------------------------------|-----|
| Reading (Third only) | .54 |
| Language | .51 |
| Spelling | .44 |
| Arithmetic | .38 |
| Geography | .34 |
| History | .21 |

As all conditions except the change in reports remained constant, it would appear that the change in reports alone is responsible for the higher correlation during the period of the New type card. The fact that the greatest increase was found in Reading is most explainable by the fact that it is the most subjective subject as far as grading is concerned. Therefore it is most responsive to the increased efforts to grade accurately. There was less change in Geography and History because, since formal recitations have been abolished in these two subjects and the project and unit methods used, accurate grading is hard to do.

In considering the coefficients of correlation from the standpoint of school grades, it is found that there was an increase in the average correlations for all subjects as follows:

| | |
|-------------------------|-----|
| Third grade | .53 |
| Fifth grade | .54 |
| Seventh grade | .38 |

The third grade in the South Park Schools is considered a part of the primary department, and few formal tests have ever been used. Therefore it was an easy matter for the teachers to be lax in their grading until a greater incentive toward careful child consideration was added.

CHAPTER III

CONCLUSIONS AND RECOMMENDATIONS

The fact that the parents saw their children's grades no doubt exerted an influence upon the teacher's grades and is possibly a minor cause for the increase in the correlations between the teachers' grades and the subject-axes. The real cause of the increased correlation lies in the fact that it is impossible for a teacher to write the parents concerning the child's work, his good and bad qualities and reasons for these, without first carefully analysing and considering the child in question.

Conclusion.--This necessary thought and analysis of each pupil has resulted in much more accurate grades. This is proved by the fact that the average of the coefficients of correlation between the teachers' grades and the subject-axes, for all subjects considered in the three grades was .29 for the years 1930, 1931, and 1932, during the use of the traditional report card, and a correlation of .69 for the years 1933, 1934, and 1935, during which time the New Report was used. This is a .4 closer correlation. Based upon the results of this study, therefore it would be safe and logical to conclude that the type of Report card now in use in the South Park Schools is a worthwhile factor in a step toward more accurate grading.

Recommendations.--Since with the personal type of

Report card the grading has become more accurate, it would be logical to assume that even more personal cards would bring about better grading. However in recommending their use, the time element must be considered. Schools where teachers are more over-worked than in the system considered will be forced to make their reports more formal, while teachers in other schools who may have more time can make their reports more personal than South Park Elementary School has. Whatever the case, it is recommended that the traditional report card be abolished, and letter reports, as personal as the school set-up permits, be tried.

APPENDIX

The following forms of tables were used in this study.

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1930, 1931, and 1932. (Arithmetic)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1933, 1934, and 1935. (Arithmetic)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1930, 1931, and 1932. (Reading)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1933, 1934, and 1935. (Reading)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1930, 1931, and 1932. (Spelling)

Scatter-gram Showing the Coefficient of Correlation Between the Teacher's Grades and the Subject-ages For Grade Three of 1933, 1934, and 1935. (Spelling)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1930, 1931, and 1932. (Language)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Three of 1933, 1934, and 1935. (Language)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1930, 1931, and 1932. (Arithmetic)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1933, 1934, and 1935. (Arithmetic)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1930, 1931, and 1932. (Geography)

APPENDIX (continued)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the subject-ages For Grade Five of 1933, 1934, and 1935. (Geography)

Scatter-gram Showing the Coefficient of correlation Between the Teachers' Grades and the Subject-ages for Grade Five of 1930, 1931 and 1932. (Spelling)

Scatter-gram Showing The Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1933, 1934, and 1935. (Spelling)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1930, 1931, and 1932. (Language)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1933, 1934, and 1935. (Language)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1930, 1931, and 1932. (History)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Five of 1933, 1934, and 1935. (History)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1930, 1931, and 1932. (Arithmetic)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1933, 1934, and 1935. (Arithmetic)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1930, 1931, and 1932. (Geography)

Scatter-gram Showing the Coefficient of Correlation Between the Teacher's Grades and the Subject-ages For Grade Seven of 1933, 1934, and 1935. (Geography)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1930, 1931 and 1932. (Spelling)

APPENDIX (continued)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1933, 1934, and 1935. (Spelling)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1930, 1931, and 1932. (Language)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1933, 1934, and 1935. (Language)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1930, 1931, and 1932. (History)

Scatter-gram Showing the Coefficient of Correlation Between the Teachers' Grades and the Subject-ages For Grade Seven of 1933, 1934, and 1935. (History)

Complete Tabulation of All Coefficients of Correlation Between the Teachers' Grades and the Subject-ages For Grades Three, Five, and Seven, for the Years 1930-1935, inclusive.

TABLE 1

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THIRD GRADE
OF 1930, 1931, and 1932 (Arithmetic)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|-----|----|----|-----|----|----|----|----|---|-------|
| 15- | | | | | | | | | | | | | | |
| 14-14.11 | | | | | | | | | | | | | | |
| 13-13.11 | | | | | | | | | | | | | | |
| 12-12.11 | | | | | | | | | | | | | | |
| 11-11.11 | | 10 | | | 6 | | 2 | 9 | 1 | | 1 | | | 29 |
| 10-10.11 | 4 | 18 | 7 | 7 | 18 | 1 | 8 | 20 | 1 | | 6 | | 2 | 92 |
| 9-9.11 | | 11 | 1 | | 11 | | 1 | 10 | | 1 | 3 | | | 38 |
| 8-8.11 | 1 | 30 | 8 | 7 | 41 | 2 | 10 | 35 | 2 | | 11 | | | 147 |
| 7-7.11 | | 8 | | 1 | 20 | 3 | 3 | 20 | 1 | 1 | 5 | | 2 | 63 |
| 6-6.11 | | 2 | | | 13 | 4 | 6 | 21 | | | 10 | | 1 | 57 |
| 5-5.11 | | 1 | 1 | | 2 | | | 2 | | | 1 | | 1 | 8 |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 5 | 79 | 17 | 15 | 111 | 10 | 30 | 117 | 5 | 2 | 37 | | 6 | 434 |

Coefficient of Correlation is .21

TABLE 2

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE THIRD GRADE
OF 1933, 1934, and 1935 (Arithmetic)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15- | | | | | | | | | | | | | | |
| 14-14.11 | | | | | | | | | | | | | | |
| 13-13.11 | | | | | | | | | | | | | | |
| 12-12.11 | | | | | | | | | | | | | | |
| 11-11.11 | | 21 | 1 | | 2 | | | | | | | | | 24 |
| 10-10.11 | | 10 | 2 | 9 | 5 | 1 | | 2 | | | 1 | | | 30 |
| 9-9.11 | | 5 | 2 | 12 | 36 | 3 | 2 | 6 | | 3 | | | 1 | 70 |
| 8-8.11 | | 5 | | 3 | 20 | 1 | 34 | 55 | 21 | 2 | 11 | | 1 | 153 |
| 7-7.11 | | 3 | | | 5 | | 6 | 17 | 6 | 6 | 19 | 2 | 3 | 67 |
| 6-6.11 | | | | | | | | | 2 | 4 | 20 | 3 | 12 | 41 |
| 5-5.11 | | | | | | | | 1 | | | 9 | 2 | 9 | 21 |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | | 44 | 5 | 24 | 68 | 5 | 42 | 81 | 29 | 15 | 60 | 7 | 26 | 406 |

Coefficient of Correlation is .78

TABLE 3

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE THIRD GRADE
OF 1930, 1931, and 1932 (Reading)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|---|-------|
| 15- | | | | | | | | | | | | | | |
| 14-14.11 | | | | | | | | | | | | | | |
| 13-13.11 | | | | | | | | | | | | | | |
| 12-12.11 | | | | | | | | | | | | | | |
| 11-11.11 | | 6 | 2 | | 6 | | | 6 | | | | | | 20 |
| 10-10.11 | 1 | 12 | 4 | 2 | 12 | | 3 | 14 | 4 | | 7 | | 1 | 60 |
| 9-9.11 | 1 | 16 | 4 | | 13 | | 2 | 10 | 1 | | 5 | | 1 | 53 |
| 8-8.11 | | 25 | 8 | 9 | 34 | 13 | 17 | 42 | 7 | 3 | 25 | 1 | 2 | 186 |
| 7-7.11 | | 10 | 2 | | 16 | 4 | 16 | 11 | 3 | | 10 | | | 72 |
| 6-6.11 | | 3 | | | 6 | | 7 | 9 | | | 8 | | 2 | 35 |
| 5-5.11 | | | 1 | 1 | 5 | 1 | 4 | 5 | 1 | | 1 | | 2 | 21 |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 2 | 72 | 21 | 12 | 92 | 18 | 49 | 97 | 16 | 3 | 56 | 1 | 8 | 447 |

Coefficient of Correlation is .19

TABLE 4

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE THIRD GRADE
OF 1933, 1934, and 1935 (Reading)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|-----|----|----|----|----|----|-------|
| 15- | | | | | | | | | | | | | | |
| 14-14.11 | | | | | | | | | | | | | | |
| 13-13.11 | | | | | | | | | | | | | | |
| 12-12.11 | | | | | | | | | | | | | | |
| 11-11.11 | 1 | 23 | | | 8 | | | | | | | | | 32 |
| 10-10.11 | | 14 | 7 | 2 | 25 | | 2 | 15 | 1 | | 1 | | | 67 |
| 9-9.11 | | 4 | 2 | 3 | 16 | 12 | 19 | 41 | 5 | | 7 | | | 109 |
| 8-8.11 | | 2 | | 1 | 4 | 1 | 6 | 47 | 10 | | 23 | | 9 | 103 |
| 7-7.11 | | 2 | | | 2 | | 1 | 19 | 8 | 4 | 14 | 1 | 1 | 52 |
| 6-6.11 | | | | | | 1 | | | | 1 | 15 | 3 | 8 | 28 |
| 5-5.11 | | | | | | | | 1 | | | 1 | 2 | 9 | 13 |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 1 | 45 | 9 | 6 | 55 | 14 | 28 | 123 | 24 | 5 | 61 | 6 | 27 | 404 |

Coefficient of Correlation is .73

TABLE 5

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE THIRD GRADE
OF 1930, 1931, and 1932 (Spelling)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|---|-------|
| 15- | | | | | | | | | | | | | | |
| 14-14.11 | | | | | | | | | | | | | | |
| 13-13.11 | | | | | | | | | | | | | | |
| 12-12.11 | | | | | | | | | | | | | | |
| 11-11.11 | | 3 | | | 8 | | | 1 | | | | | | 12 |
| 10-10.11 | 2 | 24 | 6 | 2 | 20 | 3 | 3 | 12 | 2 | | 6 | | | 80 |
| 9-9.11 | 1 | 30 | 9 | 6 | 29 | 7 | 14 | 33 | 11 | | 8 | 3 | 2 | 153 |
| 8-8.11 | 3 | 5 | 9 | 5 | 18 | 3 | 19 | 21 | 6 | 1 | 15 | 1 | 1 | 107 |
| 7-7.11 | 5 | 5 | 1 | 2 | 4 | 4 | 4 | 6 | 1 | 1 | 5 | | | 38 |
| 6-6.11 | 4 | 4 | 2 | 1 | 7 | 1 | 3 | 6 | 1 | | 3 | | 1 | 33 |
| 5-5.11 | | | | | | 1 | 3 | 1 | | | | | 1 | 6 |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 15 | 71 | 27 | 16 | 86 | 19 | 46 | 80 | 21 | 2 | 34 | 4 | 5 | 429 |

Coefficient of Correlation is .14

TABLE 6

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE THIRD GRADE
OF 1933, 1934, and 1935 (Spelling)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|-----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15- | | | | | | | | | | | | | | |
| 14-14.11 | | | | | | | | | | | | | | |
| 13-13.11 | | | | | | | | | | | | | | |
| 12-12.11 | | | | | | | | | | | | | | |
| 11-11.11 | | 13 | 1 | 2 | 1 | | | 2 | | | | | | 19 |
| 10-10.11 | 13 | 38 | 19 | 12 | 8 | 3 | | 2 | | | | | | 95 |
| 9-9.11 | 6 | 30 | 3 | 3 | 10 | 5 | 11 | 42 | 7 | | 3 | | 1 | 121 |
| 8-8.11 | 1 | 22 | 10 | 5 | 5 | | 1 | 8 | 12 | 2 | 23 | 1 | 2 | 92 |
| 7-7.11 | | | 1 | | 6 | 1 | | 11 | | | 16 | 1 | 8 | 44 |
| 6-6.11 | 3 | 3 | | 1 | 1 | | 1 | | | | 7 | | 9 | 25 |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 23 | 106 | 34 | 23 | 31 | 9 | 13 | 65 | 19 | 2 | 49 | 2 | 20 | 396 |

Coefficient of Correlation is .57

TABLE 7

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE THIRD GRADE
OF 1930, 1931, and 1932 (Language)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|-----|----|----|-----|----|----|----|----|---|-------|
| 15- | | | | | | | | | | | | | | |
| 14-14.11 | | | | | | | | | | | | | | |
| 13-13.11 | | | | | | | | | | | | | | |
| 12-12.11 | | | | | | | | | | | | | | |
| 11-11.11 | | 10 | | | 19 | 1 | 2 | 13 | | | 2 | | | 47 |
| 10-10.11 | | 9 | 2 | 1 | 2 | | | 4 | | | 3 | | | 21 |
| 9-9.11 | | 17 | 1 | 5 | 17 | | 2 | 17 | 1 | | 9 | | 1 | 70 |
| 8-8.11 | | 29 | 5 | 6 | 45 | 1 | 13 | 50 | 20 | | 31 | | 1 | 201 |
| 7-7.11 | | 6 | 2 | 1 | 5 | 5 | 14 | 13 | 6 | | 6 | | 1 | 59 |
| 6-6.11 | | 2 | | | 7 | | 1 | 2 | 1 | | 3 | | | 16 |
| 5-5.11 | | 2 | | 1 | 7 | | | 5 | | | 5 | | 1 | 21 |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | | 75 | 10 | 14 | 102 | 7 | 32 | 104 | 28 | | 59 | | 4 | 435 |

Coefficient of Correlation is .17

TABLE 8

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE THIRD GRADE
OF 1933, 1934, and 1935 (Language)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15- | | | | | | | | | | | | | | |
| 14-14.11 | | | | | | | | | | | | | | |
| 13-13.11 | | | | | | | | | | | | | | |
| 12-12.11 | | | | | | | | | | | | | | |
| 11-11.11 | 1 | 19 | | 1 | 3 | | | | | | 1 | | | 25 |
| 10-10.11 | 1 | 14 | 10 | 8 | 15 | 3 | | 2 | | | | | | 53 |
| 9-9.11 | | 2 | 2 | 8 | 8 | 1 | | 1 | | | | | | 22 |
| 8-8.11 | | 8 | | 5 | 20 | 2 | 40 | 44 | 56 | | 22 | | 4 | 201 |
| 7-7.11 | | | | | | | | 13 | 1 | 1 | 35 | 20 | 14 | 84 |
| 6-6.11 | | 1 | | | 1 | | | 1 | | | 9 | 2 | 7 | 21 |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 2 | 44 | 12 | 22 | 47 | 6 | 40 | 61 | 57 | 1 | 67 | 22 | 25 | 406 |

Coefficient of Correlation is .76

TABLE 9
 SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
 THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE FIFTH GRADE
 OF 1930, 1931, and 1932 (Arithmetic)

| S.A. | A+ | A | A- | E+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15- | | | | | | | | | | | | | | |
| 14-14.11 | | 1 | | | 2 | | | | | | | | | 3 |
| 13-13.11 | | 8 | 16 | 4 | 11 | | 2 | 9 | 2 | | | | | 52 |
| 12-12.11 | 6 | 7 | 11 | 5 | 13 | 2 | 1 | 5 | 2 | | 3 | | | 55 |
| 11-11.11 | 3 | 12 | 8 | 8 | 22 | 2 | 6 | 11 | 3 | | 3 | | 2 | 80 |
| 10-10.11 | | 2 | 2 | 4 | 12 | 6 | 3 | 10 | 1 | 2 | 6 | | | 48 |
| 9-9.11 | | | 4 | 4 | 11 | 3 | 5 | 8 | 3 | | 6 | | | 44 |
| 8-8.11 | | 1 | 8 | 12 | 24 | 7 | 11 | 20 | 3 | | 6 | | 13 | 105 |
| 7-7.11 | | | | | | | | | | | | | | |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 9 | 31 | 49 | 37 | 95 | 20 | 28 | 63 | 14 | 2 | 24 | | 15 | 387 |

Coefficient of Correlation is .35

TABLE 10

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE FIFTH GRADE
OF 1933, 1934, and 1935 (Arithmetic)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15- | | 2 | | | 1 | | | 1 | | | | | | 4 |
| 14-14.11 | | 6 | 4 | 2 | 2 | | | 1 | 1 | | | | | 16 |
| 13-15.11 | | 8 | 7 | 16 | 31 | 8 | 4 | 4 | 1 | 2 | 1 | | | 82 |
| 12-12.11 | | 1 | 3 | 11 | 21 | 5 | 11 | 14 | 10 | 3 | 5 | 1 | 1 | 86 |
| 11-11.11 | | 2 | | | 6 | 2 | 1 | 18 | 3 | 2 | 7 | 4 | 3 | 48 |
| 10-10.11 | | | 1 | | 1 | 1 | 2 | 6 | 6 | 2 | 2 | 5 | 2 | 28 |
| 9-9.11 | | | | | | 1 | | 2 | 3 | 2 | 10 | 5 | 5 | 28 |
| 8-8.11 | | | | | | | 2 | 1 | | 2 | 1 | | 2 | 8 |
| 7-7.11 | | | | | | | 1 | | | | 1 | 1 | 4 | 7 |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | | 19 | 15 | 29 | 62 | 17 | 21 | 47 | 24 | 13 | 27 | 16 | 17 | 307 |

Coefficient of Correlation is .69

TABLE 11

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE FIFTH GRADE
OF 1930, 1931, and 1932 (Geography)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|-----|----|----|----|----|----|----|----|----|-------|
| 15- | | 6 | | | | 3 | | | | | | | | 9 |
| 14-14.11 | | 3 | 6 | 24 | 21 | 12 | 3 | | | | | | | 69 |
| 13-13.11 | | | 6 | | 6 | | | | | | | | | 12 |
| 12-12.11 | | 6 | 21 | 3 | 6 | | | 3 | | | | | | 39 |
| 11-11.11 | 18 | 3 | 18 | 9 | 27 | 3 | 6 | 30 | 9 | | 15 | 3 | 9 | 150 |
| 10-10.11 | | | 9 | | 6 | 3 | 3 | 6 | | | 3 | | 6 | 36 |
| 9-9.11 | 9 | | | | 15 | | 6 | 10 | 6 | | 3 | | | 49 |
| 8-8.11 | 9 | | 3 | | 12 | | | 6 | | | | | 6 | 36 |
| 7-7.11 | | | 9 | | 9 | | | | 6 | | 3 | 3 | 3 | 33 |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 36 | 18 | 72 | 36 | 102 | 21 | 18 | 55 | 21 | | 24 | 6 | 24 | 433 |

Coefficient of Correlation is .24

TABLE 12
SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE FIFTH GRADE
OF 1933, 1934, and 1935 (Geography)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15- | | 7 | 3 | 2 | 4 | 1 | | | | | | | | 17 |
| 14-14.11 | 2 | 7 | 5 | 13 | 20 | 1 | 2 | 1 | | 1 | | 1 | | 53 |
| 13-13.11 | | 1 | 7 | 5 | 11 | 2 | 11 | 13 | 1 | 1 | 2 | 1 | | 55 |
| 12-12.11 | | 1 | 1 | 3 | 7 | 3 | 4 | 12 | | | 1 | 1 | | 33 |
| 11-11.11 | | | 1 | 3 | 15 | 4 | 8 | 12 | 6 | 7 | 4 | 4 | 2 | 66 |
| 10-10.11 | | | 1 | 1 | 6 | 1 | 4 | 3 | 4 | 3 | 7 | 5 | 1 | 36 |
| 9-9.11 | | | 2 | 1 | | | | | 1 | 1 | 2 | 1 | 3 | 11 |
| 8-8.11 | | | 1 | | 1 | 2 | 1 | 1 | 4 | | 4 | 3 | 2 | 19 |
| 7-7.11 | | | | 1 | | | | 2 | | 1 | 2 | | 8 | 14 |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 2 | 16 | 21 | 29 | 64 | 14 | 30 | 44 | 16 | 14 | 22 | 16 | 16 | 304 |

Coefficient of Correlation is .62

TABLE 13

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE FIFTH GRADE
OF 1930, 1931, and 1932 (Spelling)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|-----|----|----|----|----|----|----|----|----|-------|
| 15- | | 12 | 2 | | 6 | | | | | | | | | 20 |
| 14-14.11 | | 10 | 6 | 2 | 19 | 1 | 1 | 7 | | | 4 | | | 50 |
| 13-13.11 | 4 | 6 | 21 | 5 | 11 | 2 | 1 | 8 | 2 | | 5 | | | 65 |
| 12-12.11 | | 7 | 17 | 12 | 51 | 9 | 9 | 20 | 6 | | 6 | | 4 | 141 |
| 11-11.11 | | 1 | 4 | 4 | 14 | 9 | 14 | 15 | 7 | 1 | 14 | | 4 | 85 |
| 10-10.11 | | | | 2 | 3 | | | 5 | | | 2 | | 2 | 14 |
| 9-9.11 | | | 2 | | 5 | 2 | | 4 | | | | | | 13 |
| 8-8.11 | | 2 | | 2 | | 3 | | 4 | | | 4 | | 2 | 17 |
| 7-7.11 | | | | | | | | | | | | | | |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 4 | 38 | 52 | 27 | 109 | 26 | 25 | 61 | 15 | 1 | 35 | | 12 | 405 |

Coefficient of Correlation is .35

TABLE 14

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE FIFTH GRADE
OF 1933, 1934, and 1935 (Spelling)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15- | 1 | 11 | 16 | 15 | 15 | 6 | 1 | 7 | 1 | | 1 | | | 74 |
| 14-14.11 | | 2 | 3 | 8 | 26 | 15 | 17 | 8 | 7 | | | | | 86 |
| 13-13.11 | | 2 | 4 | 2 | 6 | 3 | 17 | 37 | 28 | | | | 1 | 100 |
| 12-12.11 | | 3 | 2 | | 4 | 1 | 2 | 15 | 6 | 4 | 3 | 1 | | 41 |
| 11-11.11 | | 1 | 2 | | | 1 | 1 | 7 | 3 | | 6 | 4 | 1 | 26 |
| 10-10.11 | | | | | | 2 | | 1 | | 2 | 16 | 4 | 4 | 29 |
| 9-9.11 | | | 1 | | 1 | | | 2 | | 4 | 7 | | 8 | 23 |
| 8-8.11 | | | | | 1 | | | 1 | | | 5 | | 15 | 22 |
| 7-7.11 | | | | | | | | | | | | | | |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 1 | 19 | 28 | 25 | 53 | 28 | 38 | 78 | 45 | 10 | 38 | 9 | 29 | 401 |

Coefficient of Correlation is .74

TABLE 15

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE FIFTH GRADE
OF 1930, 1931, and 1932 (Language)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|-----|----|----|----|----|----|----|----|----|-------|
| 15- | | | | | | | | | | | | | | |
| 14-14.11 | | 1 | 1 | 2 | 6 | | | | | | | | | 10 |
| 13-13.11 | | 10 | 2 | 3 | 9 | 2 | 4 | 3 | 2 | | 3 | | 1 | 39 |
| 12-12.11 | | 13 | 6 | 1 | 13 | | 10 | 8 | | | 5 | | 1 | 57 |
| 11-11.11 | | 15 | 9 | 6 | 32 | 5 | 9 | 23 | 4 | | 3 | | 3 | 109 |
| 10-10.11 | | 9 | | 8 | 22 | | 5 | 15 | 1 | | 8 | | 2 | 70 |
| 9-9.11 | | 5 | 3 | | 11 | | 2 | 11 | | | 6 | | 1 | 40 |
| 8-8.11 | | 1 | 3 | | 14 | 4 | 4 | 13 | | | 2 | | 2 | 43 |
| 7-7.11 | | | 1 | | 2 | | | | | | 1 | | 1 | 5 |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | | 54 | 25 | 20 | 109 | 11 | 34 | 73 | 7 | | 28 | | 12 | 373 |

Coefficient of Correlation is .18

TABLE 16

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES OF THE FIFTH GRADE
OF 1933, 1934, and 1935 (Language)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|---|-------|
| 15- | | 2 | 6 | 3 | 1 | 3 | | 2 | 2 | | | | | 19 |
| 14-14.11 | | 1 | 11 | 9 | 12 | | 1 | 2 | | | 1 | | | 37 |
| 13-13.11 | | 5 | 10 | 6 | 11 | 6 | 5 | 2 | 2 | | | | | 47 |
| 12-12.11 | | 1 | 4 | 4 | 10 | 2 | 6 | 5 | 2 | 1 | 1 | | | 36 |
| 11-11.11 | | 4 | 3 | 10 | 17 | 2 | 5 | 23 | 8 | 1 | 1 | | | 75 |
| 10-10.11 | | | 3 | 3 | 1 | 2 | 2 | 10 | 2 | 2 | 2 | 1 | | 28 |
| 9-9.11 | | | 1 | 1 | 3 | | 1 | 8 | 7 | 4 | 11 | 1 | | 37 |
| 8-8.11 | | | | | | 2 | | 3 | 2 | 1 | 2 | 1 | 1 | 12 |
| 7-7.11 | | | | | 2 | | | | 2 | 3 | 3 | 2 | 5 | 17 |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | | 13 | 38 | 36 | 57 | 17 | 20 | 56 | 27 | 12 | 21 | 5 | 6 | 308 |

Coefficient of correlation is .62

TABLE 17

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE FIFTH GRADE
OF 1930, 1931, and 1932 (History)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|-----|----|----|----|----|----|----|----|----|-------|
| 15- | | 3 | | | 1 | | | | | | | | | 4 |
| 14-14.11 | | 5 | 2 | | 5 | | | | | | | | | 12 |
| 13-13.11 | 2 | 10 | 15 | 5 | 18 | 2 | 2 | 6 | | | 3 | | 1 | 64 |
| 12-12.11 | 3 | 6 | 17 | 4 | 20 | 1 | 1 | 7 | 2 | | 4 | | | 65 |
| 11-11.11 | 1 | 7 | 4 | 6 | 31 | 1 | 6 | 11 | | | 2 | | 2 | 71 |
| 10-10.11 | | 2 | 2 | 4 | 9 | 5 | 2 | 13 | 1 | 1 | 5 | | | 44 |
| 9-9.11 | | 1 | 3 | 3 | 16 | 5 | 10 | 10 | 6 | | 7 | | 3 | 64 |
| 8-8.11 | | | 4 | 7 | 13 | 4 | 8 | 11 | 2 | | 4 | | 4 | 57 |
| 7-7.11 | | 1 | | 1 | 2 | 1 | | 4 | | | 2 | | 1 | 12 |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 6 | 35 | 47 | 30 | 115 | 19 | 29 | 62 | 11 | 1 | 27 | | 11 | 393 |

Coefficient of Correlation is .38

TABLE 18

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE FIFTH GRADE
OF 1933, 1934, and 1935 (History)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|---|-------|
| 15- | | 2 | 3 | | 1 | 1 | 1 | | | | | | | 8 |
| 14-14.11 | | 5 | 11 | 5 | 10 | 4 | 5 | 3 | | | | | | 43 |
| 13-13.11 | | 4 | 6 | 9 | 21 | 3 | 9 | 4 | 3 | | 5 | | | 64 |
| 12-12.11 | | 2 | 4 | 2 | 10 | 8 | 1 | 13 | 4 | | 2 | 1 | 1 | 48 |
| 11-11.11 | | 5 | 3 | 3 | 8 | 4 | 3 | 20 | 4 | 1 | 8 | 5 | 1 | 65 |
| 10-10.11 | | | 2 | 1 | 4 | 3 | 3 | 5 | 2 | 3 | 6 | 1 | 1 | 31 |
| 9-9.11 | | | | | 2 | 1 | 3 | 4 | 2 | 3 | 10 | | 1 | 26 |
| 8-8.11 | | 1 | | | | | 3 | 2 | 3 | 1 | 2 | 7 | 2 | 21 |
| 7-7.11 | | | | | | | 1 | | | 1 | 1 | | 1 | 4 |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | | 19 | 29 | 20 | 56 | 24 | 29 | 51 | 18 | 9 | 34 | 14 | 7 | 310 |

Coefficient of Correlation is .55

TABLE 19

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR GRADE SEVEN
OF 1930, 1931, and 1932 (Arithmetic)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|---|-------|
| 15- | | 3 | 5 | | 8 | 1 | 2 | 3 | | | 1 | | | 23 |
| 14-14.11 | 1 | 5 | 12 | 3 | 15 | 1 | 7 | 12 | 10 | | 1 | | | 67 |
| 13-13.11 | | 7 | 8 | 6 | 22 | 8 | 8 | 13 | 4 | | 11 | 1 | | 88 |
| 12-12.11 | | 2 | 5 | 3 | 9 | 6 | 7 | 17 | 12 | | 11 | 10 | 2 | 84 |
| 11-11.11 | | 2 | 1 | 1 | 2 | 1 | 7 | 6 | | 1 | 8 | 5 | 2 | 34 |
| 10-10.11 | | | | | | 1 | 4 | 7 | 2 | | 4 | | 1 | 19 |
| 9-9.11 | | | | | | | 1 | 3 | 3 | | 3 | | | 10 |
| 8-8.11 | | | | | 1 | | | 3 | | | 3 | | 2 | 9 |
| 7-7.11 | | | | | | | | | | | | | | |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 1 | 19 | 31 | 13 | 57 | 18 | 36 | 64 | 31 | 1 | 42 | 14 | 7 | 334 |

Coefficient of Correlation is .43

TABLE 20

SCATTER-GRAM SHOWING THE COEFFICIENTS OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR THE SEVENTH GRADE
OF 1933, 1934, and 1935 (Arithmetic)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15- | 2 | 12 | 25 | 10 | 23 | 9 | | 6 | | | | | | 87 |
| 14-14.11 | | 7 | 3 | 5 | 12 | 5 | 3 | 24 | 13 | | 8 | | | 76 |
| 13-13.11 | | 6 | | | 5 | | 7 | 22 | 10 | | 2 | | | 52 |
| 12-12.11 | | 1 | 3 | | 2 | 1 | 2 | 3 | 6 | | 7 | 5 | | 30 |
| 11-11.11 | | | 2 | | 1 | | 1 | 12 | 3 | 6 | 10 | 2 | 2 | 39 |
| 10-10.11 | | 1 | 2 | | | | | 1 | | 3 | 12 | 4 | 6 | 29 |
| 9-9.11 | | | 1 | | 1 | | | | | 3 | 4 | | 6 | 15 |
| 8-8.11 | | | | | | | | | | | 2 | | 6 | 8 |
| 7-7.11 | | | | | | | | | | | | | | |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 2 | 27 | 36 | 15 | 44 | 15 | 13 | 68 | 32 | 12 | 41 | 11 | 20 | 336 |

Coefficient of Correlation is .70

TABLE 21

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR GRADE SEVEN
OF 1930, 1931, and 1932 (Geography)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|---|-------|
| 15- | | 16 | 5 | 2 | 26 | 4 | 6 | 15 | 5 | | 3 | | | 82 |
| 14-14.11 | 1 | 11 | 7 | 4 | 22 | 7 | 12 | 12 | 9 | | 2 | | | 87 |
| 13-13.11 | | 10 | 6 | 6 | 19 | 9 | 7 | 23 | 4 | | 14 | 2 | | 100 |
| 12-12.11 | | | | | 5 | | 5 | 8 | 2 | | 3 | | 1 | 24 |
| 11-11.11 | | 1 | | 1 | 1 | 1 | 4 | 4 | 1 | | 3 | | 2 | 18 |
| 10-10.11 | | 2 | 1 | | 2 | | 4 | 3 | 3 | | 4 | | | 19 |
| 9-9.11 | | | | | | 1 | 3 | 2 | | | 1 | | 1 | 8 |
| 8-8.11 | | | | | 1 | 1 | | 4 | 3 | | 2 | | 3 | 14 |
| 7-7.11 | | | | | | | | | | | | | | |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 1 | 40 | 19 | 13 | 76 | 23 | 41 | 71 | 27 | | 32 | 2 | 7 | 352 |

Coefficient of Correlation is .38

TABLE 22

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR GRADE SEVEN
OF 1933, 1934, and 1935 (Geography)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15- | 1 | 17 | 18 | 15 | 29 | 5 | | 8 | 2 | | 2 | | | 92 |
| 14-14.11 | | 10 | 1 | 3 | 23 | 4 | 5 | 36 | 16 | | 4 | | | 102 |
| 13-13.11 | | 4 | 3 | 1 | 4 | 7 | 16 | 31 | 18 | 2 | 12 | 5 | 1 | 100 |
| 12-12.11 | | 2 | 1 | | 1 | 2 | | 4 | | 2 | 17 | 5 | 3 | 35 |
| 11-11.11 | | | | | | 1 | | | | 4 | 6 | 1 | 4 | 16 |
| 10-10.11 | | 1 | | | 1 | | | 1 | | | 7 | 1 | 5 | 16 |
| 9-9.11 | | | | | 1 | | | | | | 1 | | 7 | 9 |
| 8-8.11 | | | | | | | | | | | | | 2 | 2 |
| 7-7.11 | | | | | | | | | | | | | | |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 1 | 34 | 23 | 14 | 59 | 19 | 21 | 80 | 36 | 8 | 49 | 10 | 22 | 376 |

Coefficient of Correlation is .63

TABLE 23

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR GRADE SEVEN
OF 1930, 1931, and 1932 (Spelling)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|---|-------|
| 15- | 1 | 27 | 21 | 4 | 17 | 3 | 7 | 16 | 9 | | | | | 105 |
| 14-14.11 | | 18 | 23 | 4 | 14 | 3 | 7 | 18 | 9 | | 13 | | | 109 |
| 13-13.11 | | 8 | 4 | | 33 | 1 | | 12 | | | 10 | | | 68 |
| 12-12.11 | | 2 | 1 | 2 | 16 | 2 | 2 | 6 | | | | | 2 | 33 |
| 11-11.11 | 2 | | 2 | 4 | 5 | 2 | | 6 | | | 2 | | | 21 |
| 10-10.11 | | | | | 2 | | | 2 | | | | | | 4 |
| 9-9.11 | | | | | 3 | | | 1 | 1 | | 2 | | | 7 |
| 8-8.11 | 2 | | 1 | | 5 | | | 1 | | | | | | 9 |
| 7-7.11 | 2 | | | | 3 | | | 6 | | 1 | 6 | 1 | | 19 |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 3-3.11 | | | | | | | | | | | | | | |
| Total | 7 | 55 | 52 | 14 | 96 | 11 | 16 | 68 | 19 | 1 | 33 | 1 | 2 | 375 |

Coefficient of Correlation is .21

TABLE 24

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR GRADE SEVEN
OF 1933, 1934, and 1935 (Spelling)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15- | | 14 | 21 | 10 | 30 | 20 | 4 | 10 | 7 | | 1 | | | 117 |
| 14-14.11 | | 4 | 3 | 5 | 6 | 12 | 21 | 15 | | 2 | | | | 68 |
| 13-13.11 | | | 7 | 2 | 1 | 6 | 9 | 23 | 18 | | 3 | 4 | 1 | 74 |
| 12-12.11 | | 1 | 2 | | 3 | 3 | 3 | 4 | 2 | 6 | 14 | 2 | 1 | 41 |
| 11-11.11 | | | 2 | | | | 4 | 8 | 2 | 4 | 10 | 3 | 8 | 41 |
| 10-10.11 | | | 2 | | 1 | | | 1 | | | 4 | 1 | 5 | 14 |
| 9-9.11 | | | | | | | | | 1 | | 3 | | 7 | 11 |
| 8-8.11 | | | | | | | | | | | 1 | | 5 | 6 |
| 7-7.11 | | | | | | | | | | | | | | |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | | 19 | 37 | 17 | 41 | 41 | 41 | 61 | 30 | 12 | 36 | 10 | 27 | 372 |

Coefficient of Correlation is .70

TABLE 25

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR GRADE SEVEN
OF 1930, 1931, and 1932 (Language)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15- | 1 | 9 | 4 | | 17 | 3 | 3 | 14 | 2 | | | | | 63 |
| 14-14.11 | 2 | 12 | 6 | 4 | 20 | 5 | 9 | 7 | 11 | | 5 | | 1 | 82 |
| 13-13.11 | 4 | 8 | 8 | 4 | 17 | 6 | 3 | 27 | 9 | 1 | 9 | | 2 | 98 |
| 12-12.11 | | 3 | 2 | | 11 | 4 | 5 | 13 | 8 | | 6 | 1 | 1 | 54 |
| 11-11.11 | | 3 | 1 | | 6 | 2 | 2 | 8 | 5 | | 7 | 1 | | 35 |
| 10-10.11 | | 2 | | | 1 | | 1 | 1 | 5 | | 4 | | 3 | 17 |
| 9-9.11 | | | | | | | | 3 | | | 2 | 1 | | 6 |
| 8-8.11 | | | 1 | | 1 | | | 2 | 2 | | 1 | | 2 | 9 |
| 7-7.11 | | | | | | | | | | | | | 1 | 1 |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | 7 | 37 | 22 | 8 | 73 | 20 | 23 | 75 | 42 | 1 | 34 | 3 | 10 | 355 |

Coefficient of Correlation is .37

TABLE 26

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR GRADE SEVEN
OF 1933, 1934, and 1935 (Language)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15- | | 20 | 9 | 24 | 9 | 9 | | | | | | | | 71 |
| 14-14.11 | | | | | 15 | 27 | 30 | 9 | | | | | | 81 |
| 13-13.11 | | | | 6 | | 9 | 3 | 23 | 21 | 15 | 3 | | | 80 |
| 12-12.11 | | | | | | | | | 3 | 3 | 6 | | 3 | 15 |
| 11-11.11 | | | | | | | | | | | 9 | | 12 | 21 |
| 10-10.11 | | | | | | | | | | | 3 | | 6 | 9 |
| 9-9.11 | | | | | | | | | | | | | 4 | 4 |
| 8-8.11 | | | | | | | | | | | | | 3 | 3 |
| 7-7.11 | | | | | | | | | | | | | | |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | | 20 | 9 | 30 | 24 | 45 | 33 | 32 | 24 | 18 | 21 | | 28 | 384 |

Coefficient of Correlation is .89

TABLE 27

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR GRADE SEVEN
OF 1930, 1931, and 1932 (History)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | E | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|---|-------|
| 15- | | 12 | 3 | 2 | 14 | 1 | 2 | 12 | 2 | | | | | 48 |
| 14-14.11 | | 18 | 5 | 5 | 21 | 9 | 5 | 16 | 4 | | 4 | | | 87 |
| 13-13.11 | | 3 | 4 | 2 | 24 | 8 | 9 | 7 | 5 | | 4 | | | 65 |
| 12-12.11 | | 6 | 2 | 1 | 16 | 3 | 5 | 13 | 4 | | 4 | | | 54 |
| 11-11.11 | | 1 | 1 | | 5 | | 4 | 3 | 3 | | 4 | | 1 | 22 |
| 10-10.11 | | 2 | | | 7 | | 3 | 5 | 1 | | 2 | 3 | 2 | 25 |
| 9-9.11 | | 2 | 1 | | 8 | 1 | 2 | 11 | 1 | | 7 | 2 | 2 | 37 |
| 8-8.11 | | | 1 | | 3 | | 3 | 4 | 1 | | 2 | | 2 | 16 |
| 7-7.11 | | | | | | | | | | | | | | |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-3.11 | | | | | | | | | | | | | | |
| Total | | 44 | 17 | 10 | 98 | 21 | 33 | 71 | 21 | | 27 | 5 | 7 | 354 |

Coefficient of Correlation is .37

TABLE 28

SCATTER-GRAM SHOWING THE COEFFICIENT OF CORRELATION BETWEEN
THE TEACHERS' GRADES AND THE SUBJECT-AGES FOR GRADE SEVEN
OF 1933, 1934, and 1935 (History)

| S.A. | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | F | Total |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 15. | 1 | 12 | 14 | 7 | 17 | 4 | 1 | 4 | 1 | | | | | 61 |
| 14-14.11 | | 7 | 12 | 5 | 33 | 15 | 10 | 22 | 14 | | 3 | | | 121 |
| 13-13.11 | 1 | 3 | 4 | 2 | 3 | 1 | 11 | 16 | 13 | | 11 | | 1 | 66 |
| 12-12.11 | | 2 | 3 | | 8 | | 4 | 20 | 9 | 4 | 7 | 2 | 2 | 61 |
| 11-11.11 | | 1 | 4 | | 1 | | 2 | 4 | | | 14 | | 1 | 27 |
| 10-10.11 | | | | | | | 1 | | 1 | 1 | | 3 | 6 | 12 |
| 9-9.11 | | | | | 1 | | | 2 | 1 | | 3 | | 4 | 11 |
| 8-8.11 | | | | | | | | | 1 | | | 1 | 5 | 7 |
| 7-7.11 | | | | | | | | | | | | | | |
| 6-6.11 | | | | | | | | | | | | | | |
| 5-5.11 | | | | | | | | | | | | | | |
| 4-4.11 | | | | | | | | | | | | | | |
| 0-5.11 | | | | | | | | | | | | | | |
| Total | 2 | 25 | 37 | 14 | 63 | 20 | 29 | 68 | 40 | 5 | 38 | 6 | 19 | 366 |

Coefficient of Correlation is .63