FACTORS ASSOCIATED WITH THE ACHIEVEMENT OF FIFTH GRADE PUPILS IN CRAIG COUNTY

by<br>Ethel Ruth DeLay<br>Bachelor of Science<br>Northeastern State Teachers' College<br>Tahlequah, Oklahoma

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## CHAPTER I.

INTRODUCTION.

This investigation has been a study of the results obtained from tests given by Mr. J. W. Hall, the county superintendent of Craig County. The test was given to all the fifth grade pupils of the dependent schools the second semester of the year 1935-1936.

The author has endeavored to make a comparison of the types of schools as to the quality of educational attainment as conditioned by the factors of (1) number of teachers, (2) accreditation of schools, (3) qualification of teachers, (4) experience of teachers, (5) tenure of teachers, (6) salary of teachers.

Comparisons of the achievement of the pupils were made using the various factors involved in all the possible combinations.

There are two hundred seventeen pupils and sixty-five schools involved in this study. This is the total of all fifth grade pupils in the dependent schools of Craig County. There are fifty-six one-teacher schools, five two-teacher schools, one six-teacher school, and three seven-teacher schools.

The materials used were results of tests and information from the records of the county superintendent.

The county superintendent of Craig County, Mr. J. W. Hall, keeps on file in his office, scores on tests given by him. From the records on file scores on the State Fifth Grade Test, second semester of 1935-1936 were taken for each dependent school in the county.

The test was compiled by the state department covering subjects outlined in the course of study for the second semester based on the adopted texts for the fifth grade.

All the tests were given by Mr. Hall. Full directions were given by him to all pupils participsting. Thirty minutes were allowed for the test. The test was objective containing eighty multiple-choice questions and twenty arithmetic problems. The answers to the problems and the number of the multiple-choice questions were to be placed in the parenthesis provided for them.

Each question was given the value of one. The perfect score was 100 points. The state nom had been found to be 37 points.

The following information was also taken for each school for the school years of 1933-1934, 1934-1935, 1935-1936: accreditization of school, the kind of certificate held by the teacher, the number of years of teaching experience of the teacher, the annual salary of the teacher, and the name of the teacher for the three years for each district. The names of the teachers are not reported but were needed to determine tenure.

A table was worked out weighing the following factors for the three years: accreditation of schools, qualification, experience, tenure, and salary of teachers.

The schooIs were rated as to whether they were accredited or nonaccredited schools.

Any school given accredited elementary rating must meet all the minimum requirements for model school rating. ${ }^{1}$

All grade tachers must have Oklahoma State Certificates or First Grade County Certificates. The school must maintain classroom work for a minimum of thirty-two weeks and an average daily attendance of 90 percent or above is required. OnIy schools that rank well in the efficiency of instruction, the acquired habits of thought and study, the general intellectual and moral tone of a school and the cooperative attitude of the community as evidenced by rigid thorough-going inspection, shall be considered eligible for accrediting. One of the requirements of a school is to make the state norm in order to become an accredited school.

The table used for arriving at the score for accrediting of schools is as follows:

| 1933-1934 | 1934-1935 | 1935-1936 |
| :--- | ---: | ---: |
| I point | 2 points | 3 points |

If the school had not bean accreditad it was given zero points for that year. By using this table it was possible to have schools in groups with scores ranging from zero to si. Therefore, if accredited all three years, the score worid be six. It has been assumed that the year the test was given would have more influence on the pupils' scores; therefore, it was given more points in 1935-1936. The farther away from the time the test was given it would have less influence on the scores of the pupil. Therefore,

1 Department of Education, State of Oklahoma, Model and Accredited Elementary School Bulletin, July 1936, p. 15.
the points were less in 1934-1935 and in 1933-1934.
It was necessary to combine scores due to the fact that there were such a few schools. The schools with 0,1 , and 2 points were placed together and will be designated as schools having 0-2 accreditation. The schools with 3 and 4 points were placed together and will be hereafter designated as schools having 3-4 accreditation. The schools with 5 and 6 points were placed together and will be designated as schools having 5-6 acereditation.

## THE FACTOR OF QUALIFICATION OF TEACHER

Dennis H. Cooke says by increasing the minimum qualification for certification would effect a general improvement in the quality of teaching. By House Bill 212 the teachers with the higher qualification justify higher salaries. Therefore, it is assumed the teachers with the higher qualifications would get better results than the teachers with the lower qualifications.

The more and better the academic and profeseional preparation that a teacher has, other factors being equal, the more salary he should receive. A year's training may not always mean exactly the same, but it is a more constant and better measure than many other elements affecting the salary of teachers. ${ }^{2}$

The table used for arriving at the qualific tion of the teacher for each school is as follows:

| Certificates | 1935-1936 <br> points | 1934-1935 <br> points | 1933-1934 <br> points |
| :--- | :---: | :---: | :---: |
| Degrea | 5 | 4 | 3 |
| 5 Year State or Life | 4 | 3 | 2 |
| 1 and 2 Year State | 3 | 2 | 1 |
| County | 0 | 0 | 0 |

[^0]By using this table it was possible to arrive at a score for each school over the three year period. It was possible to have scores ranging from 0 point to 12 points. It has been assumed that the teacher's qualification the year the test was given would have more influence on the pupils' scores, therefore, the points were given accordingly.

It was again necessary to combine schools as to qualification of teachers due to the fact that there were such few schools. The schools having teachers with $0,1,2$, and 3 points for qualification were placed together and will be designated as schools having "D" qualifications, hereafter. The schools having 4, 5, and 6 points were placed together and will be designated as schools having "C" qualifications, heraafter. The schools having teachers with 7,8 , and 9 points were placed together and will be designated as schools having "B" qualifications. The schools having teachers with 10, 11, and 12 points were placed together and will be designated as schools with "A" qualifications.

## THE PACTOR OF EXPERIENGE OF TEACHER

It is assumed that the experience of the teacher is of value up to three to five years since House Bill 6 has a minimum salary schedule that increases up to three years for teachers without a Bachelor's Degree, up to four years with a Bachelor's Degree and up to five years for teachers with a Master's Degree.

The table used for arriving at the experience of the techer for each school is as follows:

| Tenure | I935-1936 <br> points | $1934-1935$ <br> points | 1933-1934 <br> points |
| :--- | :---: | :---: | :---: |
| 3 years or more | 4 | 3 | 2 |


| Tenure | $1935-1936$ <br> points | $1934-1935$ <br> points | $1933-1934$ <br> points |
| :--- | :---: | :---: | :---: |
| 2 years | 3 | 2 | 1 |
| 1 year | 2 | 1 | 0 |

By using this table it was possible to arrive at a score for each school over the three year period. It was possible to have scores ranging from 0 point to 9 points. It has been assumed that the year the test was given would have more influence on the pupils scores than the previous years, therefore, the points for each year were given accordingly, By adding the points for each year you would have the points for the teacher's experience in that school. Therefore, it was possible to get the experience of the teacher for the three years for each district.

It was necessary to combine schools as to experience due to the fact that there were such few schools. The schools having teachers with 8 and 9 points for experience were placed together and will be designated as schools having "a" te chers for experience. The schools having teachers with 6 and 7 points for experience were placed together and will be designated as schools having $\mathrm{m}_{\mathrm{b}}$ " teachers for experience. The schools having teachers with 4 and 5 points for sxperience were placed together and will be designated as schools having " $c$ " teachers for experience. The schools having te chers with $0,1,2$, and 3 points for experience were placed together and wili be designated as schools having "d" teachers for experience.

## THE FACTOR OF TENURE

It is generally believed that short tenure results in lower standards. 'ew people will question the fact that good teachers and good teaching materials are the two absolute essentiale for
good instruction. There are laws against too frequent change of textbooks. If teachers are more important than books, and there is every reason to believe that they are, perhaps we should have some laws against the too frequent change of teachers. ${ }^{3}$

European practices seem to show a decided advantage for long tenure." Compared with employees in other lines of work, the school teacher, under the annual-election plan, is not accorded the tenure of position given to street or team-railway employees, general business employees, policemen, firemen, or government clerks. ${ }^{4}$

The table used for arriving at scores for tenure is as follows:

| Changed teachers every year | 1 |
| :--- | :---: |
| Same teacher $1933-1934$ and 1934-1935 | 2 |
| Same teacher 1934-1935 and 1935-1936 | 3 |
| Same teacher all three years | 4 |

It has been assumed if a teacher had the pupils in 1934-1935 and 1935-1936, this two-year tenure would have more influence on the pupils: scores than the teacher with a two-year tenure that had the pupils in 1933-1934 and 1934-1935.

How many will be of the class known as superior will depend greatly on the incentives to become superior teachers which the salary schedule and the administration of the system provide. To stimulate industry on the part of teachers, to encourage individual improvement, and to reward exceptional merit, should be characteristics of a good salary schedule as well as of a good system of school supervision. Take away incentives to growth and rewards for efficient service, and a teaching force tends to decline rapidly in efficiency. ${ }^{5}$

3 Dennis H. Cook, Probzems of the Teaching Personnel, p. 90
4 Ibid.
5 Ellwood P. Cubberley, Public School Administration, p. 212

The table used for arriving at the scores for salary is as follows: Average for 1933-1934, 1934-1935, and 1935-1936

| Below $\$ 480$ | Low |
| :--- | :--- |
| $\$ 480$ to $\$ 559$ | Merium |
| $\$ 560$ and up | High |

The schools will be designated as schools having teachers with low salary, medium salary, and high salary, hereafter.

Among the first to consider the question of size of school as an important factor in achievement was Smiley, 1910. His investigation compared the achievement of graded and ungraded schools. Although Smiley did not use standardized tests, he found that when viewed from the side of imparting knowledge contained in textbooks to pupils in elementary grades, there are no ${ }_{6}$ advantages derived from the graded system as now organized. ${ }^{6}$

Wilson in his study of 'Achievement in Some Fundamental Subjects in Some Rural Schools of Connecticut 1923', reached a similar conclusion. Educational Achievement Tests were used in this study to measure the attainment. ${ }^{7}$

The first extensive scientific investigetion comparing the achievement of graded and ungraded schools was made by the Foote Committee in 1923. This study included 5000 pupils in the ungraded or one-teacher schools and more than twice that number in the consolidated schools in several of the elementary subjects. The cominittee stated:

There is a significant difference in the results of instructions in each grade tested in favor of the consolidated school.

[^1]Carpenter, 1924, in his investigation of the attainment of 200 rural and consolidated school children in Massachusetts discovered that pupils in consolidated schools surpassed those in the one-room school in every subject. ${ }^{9}$

One reason set Porth for the difference in achievement is the better qualified teachers.

THE FACTOR OF NUMBER OF TEACHERS

The schools were divided into groups according the the number of teschers. This divided the sixty-five sehools into four groups. There nere fifty-six one-teacher schools, five two-teacher schools, one sixteacher school, and three seven-teacher schools. The six-teacher school was placed with the seven-teacher schools and will be designated as the six-and seven-teacher schools.

The arithmetic mean of the scores of each group was found. The mean of the scores of the schools heving $0-2,3-4$, and $5-6$ accreditation was found for the one-teacher, two-teacher, and six-and seven-teacher schools. There were no schools having $3-4$ accreditation in the six- and seven-teacher schools.

The schools having 0-2 accreditation of the one-teacher schools were divided into groups according to qualification of the teachers. The mean of each group was found. The schools having teaching with "A" qualification were divided into groups according to axperience which were, $\mathrm{s}, \mathrm{b}, \mathrm{c}$, and $d$. The mean of each of these was found. The other grouns according to qualification were divided into groups according to experience and the mean of each was found. The schools having teschers with " ${ }_{\mathrm{a}}$ " experience in each of the grouns of qualification were divided into groups according

9 E. E. Emerson, Comparative Educational Achievementof Pupilse p. 4
to tenure, which were 1, 2, 3, and 4 and the mean of each was found. The other groups of experience were done in like manner.

The schools heving 3-4 and 5-6 accreditation of the one-teacher schools, and the accreditment of the two-teacher and six- and seven-teacher schools Were worked out by the same process.

There were 28 schools having 0-2 accreditation, 9 schools having 3-4 accreditation, and $I 9$ schools having 5-6 accreditation in the one-teacher schools. There mere 2 schools having 0-2 accreditation, one school having 3-4 accreditation, and 2 schools having 5-6 accredit ion in the two-teacher schools. There was one school having 0-2 accreditation and three schools having 5-6 accreditation in the six- and seven-teacher schools.

Knight concluded, as a result of his study of the qualities that make for success in teaching, that the general factor of interest in one"s work becomes the dominant factor on onels success in teaching. ${ }^{10}$

By using the foregoing method there were so many instances where there were no scores and such a few in so many that it was impossible to drav conclusions.

Comparisons were made of the mean of the puplis' test scores (I) with the number of teachers, (2) with the number of teachers and the accreditstion of schools, (3) with the number of teachers and the qualification of the teacher, (4) with the number of teachers and the experience of the teecher, (5) with the number of teachers and the tenure of the teacher, and (6) with the number of teachers and the salary of teachers.

Comparisons were made of the means of the pupils' test scores (I) with accreditization of schools, (2) with accreditization of schools and qualification of teachers, (3) with accreditiration of schools and

10 C. L. Jacobs, Relation of the Teacher's Education to Her Effectiveness, p. 91.
experience of teachers, (4) with accreditization of schools and tenure of teachers, and (5) accreditization of schools and salary of teachers.

Comparisons were made of the means of the pupilst test scores (I) With qualification of teachers, (2) with qualification of teachers and experience of teachers, (5) with qualification of teachers and tenure of teachers, and (4) with quelification of teachers and salary of teachers.

Comparisons were made of the means of the pupils tast soores (1) with experience of teachers, (2) with experisnce of teachers and tenure. of teachers, and (3) experience of teachers and salary of teachers.

Comparisons were made of the means of the pupils tost scores with (1) tonure of teachers, and (2) tenure of teachers and salery of teachers.

Comparisons were made of the means of the pupils' test scores with salary of teachers.

Tables for the one-teacher, two-tescher, and six- and seven-teacher schools were made with Tables VII to $X X$ inclusive, but as they showed no significance they were omitted.

The first tables were used in compiling the latter groups of tables which accounts for the accumulative error.

## CHAPTER III

## ORGANIZATION AND ASSIMILATION OF DATA

The results of the State Fifth Grade Tests that were.given the second semester of the school year of 1935-1936 in Craig County were used to formulate the following tables.

SIGNIFICANCE OF NUMBER OF TEACHERS TO PUPIL ACHIEVEMENT

Tables I to VI show the significance of number of teachers to puoil achievement. The problem is further analyzed by separating the schools with various numbers of teachers according to accreditation of the schools and the teachers qualifications, experience, tenure, and salary.

## TABLE I

COMPARISON OF THE MEANS OF THE PUPILS' SCORES OF THE ONETEACHER, TWO-TEACHER, AND SIX- AND SEVEN-TEACHER SCHOOLS

| Number of <br> Teachers | Number of <br> Schools | Mumber of <br> Pupils | Mean of <br> Pupils' Scores |
| :---: | :---: | :---: | :---: |
| 1 | 56 | 149 | 39.11 |
| 2 | 5 | 28 | 39.28 |
| $6 \& 7$ | 4 | 40 | 49.25 |
| Total | 65 | 217 | 41.14 |

# COMPARISON OF THE MEANS OF THE PUPILS' SCORES $\mathrm{a}_{\mathrm{ADE}}$ BY PUPILS FROM THE SCHOOLS ACCORDING TO THE ACCREDITATION OF THE ONE-TEACHER, THO-TRACHER, AND THE SIX- AND SEVEN-TEACHER SCHOOLS 

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| Number of | Number of | Number of | Mean of |
| Teachers | Schools | Pupils | Pupils' Scores |

## O-2 ACGREDITATION

| 1 | 28 | 71 | 32.78 |
| :--- | ---: | :--- | :--- |
| 2 | 2 | 13 | 34.81 |
| $6 \& 7$ | 1 | 11 | 31.59 |
| Total | 31 | 95 | 35.23 |

## 3-4 ACCREDITATION

| 1 | 9 | 25 | 44.9 |
| :--- | ---: | ---: | :--- |
| 2 | 1 | 2 | 47.5 |
| $6 \& 7$ | 0 | 0 | 00.0 |
| Total | 10 | 27 | 45.09 |

5-6 ACCREDITATION

| 1 | 19 | 53 | 44.9 |
| :--- | ---: | :--- | :--- |
| 2 | 2 | 13 | 42.5 |
| $6 \& 7$ | 3 | 29 | 48.36 |
| Total | 24 | 95 | 45.62 |

COMPARISON OF THE MEANS OF THE PUPILS ACCORDING TO THE TEACHERS QUALIFICATIONS AND THE NUMBER OF TEACHERS

| Number of <br> Teachers | Number of Schools | Number of Pupils | Mean of <br> Pupils: Scores |
| :---: | :---: | :---: | :---: |
| D QUALIFICATIONS |  |  |  |
| 1 | 10 | 26 | 41.54 |
| 2 | 0 | 0 | 00.00 |
| $6 \& 7$ | 0 | 0 | 00.00 |
| Total | 10 | 26 | 41.54 |
| C QUALIPICATIONS |  |  |  |
| 1 | 7 | 22 | 37.04 |
| 2 | 1 | 10 | 30.5 |
| 6 \& 7 | 0 | 0 | 00.00 |
| Totgl | 8 | 32 | 34.99 |
| B QUALIPICATIONS |  |  |  |
| 1 | 37 | 94 | 38.08 |
| 2 | 3 | 16 | 45.75 |
| $5 \& 7$ | 4 | 40 | 49.25 |
| Totel | 44 | 150 | 41.66 |
| A QUALIFICATIONS |  |  |  |
| 1 | 2 | - 7 | 50.36 |
| 2 | 1 | 2 | 47.5 |
| $6 \& 7$ | 0 | 0 | 00.0 |
| Total | 3 | 9 | 49.72 |

A COMPARISON OF THE MEANS OF THE PUPILS' SCORES ACCORDING TO THE NUMBER OF TEACHERS AND EXPERIENCE OF TEACHERS

| Number of Teachers | Number of Schools | Number of Puplls | Wean of Pupil.s' Scores |
| :---: | :---: | :---: | :---: |
| d EXPERI ANCE |  |  |  |
| 1 | 8 | 17 | 34.41 |
| 2 | - | - | - |
| 637 | - | - | - |
| Total | 8 | 17 | 34.41 |
| c EXPERIENCE |  |  |  |
| 1 | 9 | 26 | 39.59 |
| 2 | 3 | 17 | 42.50 |
| 6 \& 7 | 1 | 7 | 45.36 |
| Total | 13 | 50 | 41.11 |
| b EXPERIENCE |  |  |  |
| 1 | 8 | 17 | 42.50 |
| 2 | - | - | - |
| $6 \& 7$ | 1 | 11 | 51.59 |
| Total | 9 | 28 | 46.39 |
| a ESPERTENCE |  |  |  |
| $I$ | 31 | 89 | 39.40 |
| 2 | 2 | 11 | 34.45 |
| 6 \& 7 | 2 | 22 | 49.32 |
| Totel | 35 | 122 | 40.74 |

A COMPARISON OF THE MEANS OF THE PUPILS' SCORES ACCORDING TO THE NUMBRR OF TEACHERS AND TENURQ OF TEACHERS

| Number of | Nomber of | Number of | Meen of |
| :--- | :--- | :--- | :--- |
| Teachers | Schools | Pupils | Pupils |

1 TENURE


## TABLE VI

A COMPARISON OF THE MEANS OF THE PUPILS' SCORES ACCORDING TO THE NUMBER OF TEAGHERS AND THE SALARY OF TEACHERS

| Number of | Numbsr of | Mumber of | Mean of |
| :--- | :--- | :--- | :--- |
| Teachers | Schools | PuptIs | Pupils' Scores |

2
3
17
42.50
$6 \& 7$
1

20
63
45.36

Total
38.00

MEDIUM SALARY

1
23
62
36.95

2
2
11
34.45
$6 \& 7$
1
Total
26
82
37.22

HIGH SALARY

| 1 | 17 | 48 | 45.60 |
| :--- | :---: | :---: | :---: |
| 2 | - | - | - |
| $6 \& 7$ | 2 | 24 | 52.94 |
| Total | 19 | 72 | 48.04 |

Table I shows that the mean of the pupils' test scores increases as the number of teachers increase.

Table II shows that the mean of the pupils' test scores increases as the secreditation of the school increases for the one-teacher schools and when the schools are grouped together, but the increase is not consistent for the two-teacher and the six- and seven-tescher schools. This may have been because of only four and five cases in comparison With fifty-six cases in the one-teacher schools.

Table III shows that the nean of the pupils' test scores of the "A" teacher according to qualification rank first in all caces. The mean of the pupils' test scores increased as the qualification of tenchers increased for the two-teacher schools, but this did not hold true for the one-teacher schools. All the teachers in the six- and seven-teacher schools are "B" toachers according to qualification.

Table IV shows that there is no significance found in the experience of the teachers and the mean of the pupilst scores in any grouping.

Table $V$ shows there is no significance found in the tenure of the teachers and the mean of the pupils' test scores in any grouping.

Teble VI shows that the mean of the pupils test scores increased as the salary of the teachers increased for the one-teacher schools, but this did not hold true in any other grouping.

IMPORTANCE OF ACCREDITATION OF SCHOOLS TO PUPIL, ACHIEVEMENT

In Tables VII to XI the importance of accreditation of schools to pupil achievement is found. This is further illustrated by separating the schools with various accreditation according to the teachers' qualification, experience, temure, and salary.

## TABLE VII

A COMPARISON OF THE MEANS OF THE PUPILS' SCORES ACCORDING TO ACCREDITATION OF SCHOOLS

| Accreditment | Number of <br> Schools | Number of <br> Pupils | Mean of <br> Pupils' Scores |
| :---: | :---: | :---: | :---: |
| $0-2$ | 31 | 95 | 35.23 |
| $3-4$ | 10 | 27 | 45.09 |
| $5-6$ | 24 | 95 | 45.62 |

A COMPARISON OF THE MEANS OF THE PUPILS' SCORES ACCORDING TO THE ACCREDITATION OF THE SCHOOLS AND TEACHER QUALIFICATTONS

| Accreditation Number of Number of | Mean of |  |  |
| :--- | :--- | :--- | :--- |
| of Schools | Schools | Pupils | Punils |

D QUALIFICATIONS

| $0-2$ | 6 | 16 | 35.63 |
| :--- | ---: | ---: | :--- |
| $3-4$ | 3 | 7 | 55.35 |
| $5-6$ | 1 | 3 | 40.83 |
| Totoi | 10 | 26 | 41.54 |

C QUALIFICATIONS

| $0-2$ | 6 | 20 | 30.5 |
| :--- | :--- | :--- | :--- |
| $3-4$ | 1 | 7 | 44.64 |
| $5-6$ | 1 | 5 | 39.5 |
| Total | 8 | 32 | 34.99 |

B QUALIFICATIONS

| $0-2$ | 19 | 59 | 36.73 |
| :--- | ---: | :--- | :--- |
| $3-4$ | 5 | $I I$ | 38.4 |
| $5-6$ | 20 | 80 | 45.74 |
| ToteI | 44 | I50 | 41.66 |

A GUALIFICATIONS

| $0-2$ | 0 | 0 | 00.00 |
| :--- | :--- | :--- | :--- |
| $3-4$ | 1 | 2 | 47.5 |
| $5-6$ | 2 | 7 | 50.36 |
| Total | 3 | 9 | 49.72 |

A COMPARISON OF THE MEANS OF THE PUPILS SCORES ACCORDIHG TO ACGREDITATION OF SCHOOLS AND THE EXPERIENCE OF TEACHERS

| Accreditation | Number of | Number of | Mesn of |
| :--- | :--- | :--- | :--- |
| of Schools | Schools | Pupils | Pupils ${ }^{*}$ Scores |


| d EXPERIENCE |  |  |
| :---: | :---: | :---: |
| $0-2$ | 7 | 32.28 |
| 3-4 | I | 44.17 |
| 5-6 | - | - |
| Total | 8 | 34.38 |
| c EXPRRIENCE |  |  |
| 0-2 | 6 | 39.83 |
| 3-4 | 2 | 43.21 |
| 5-6 | 5 | 41.05 |
| Total | 13 | 40.99 |
| b EXPERIENCE |  |  |
| 0-2 | 5 | 44.85 |
| 3-4 | 2 | 51.60 |
| 5-6 | 2 | 45.94 |
| Total | 9 | 46.29 |
| a EXPERIENCE |  |  |
| 0-2 | 13 | 32.58 |
| 3-4 | 5 | 43.75 |
| 5-6 | 17 | 47.69 |
| Total | 35 | 41.23 |

TABLS $\times$

A COMPARISON OF THE MEANS OF THE PUPILS SCORES ACCORDING TO THE ACCREDITATION OF SCHOOLS AND TRNURE OF TBACHERS

| Acereditetion of School | Number of Schoolis | $\begin{aligned} & \text { Number of } \\ & \text { Pupits } \end{aligned}$ | Mean of <br> Pupils' Scores |
| :---: | :---: | :---: | :---: |
| 1 TENURS |  |  |  |
| $0-2$ | 5 | 13 | 30.23 |
| $3-4$ | 3 | 4 | 35.00 |
| 5-6 | 2 | 6 | 38.25 |
| Total | 11 | 23 | 33.15 |
| 2 TENURE |  |  |  |
| 0-2 | 9 | 31 | 26.23 |
| 3-4 | $I$ | 3 | 44.17 |
| 5-6 | 2 | 4 | 52.50 |
| Total | 12 | 38 | 30.41 |
| 3 TENUPE |  |  |  |
| 0-2 | 9 | 25 | 47.36 |
| $3-4$ | 2 | 5 | 51.60 |
| 5-6 | 12 | 59 | 47.66 |
| Totol | 23 | 89 | 67.81 |
| 4. TENURE |  |  |  |
| 0-2 | 7 | 26 | 37.38 |
| 3-4 | $\leq$ | 15 | 45.16 |
| 5-8 | 8 | 26 | 41.62 |
| Total | 19 | 67 | 40.76 |

A COMPARISON OF THE MEANS OF THE PUPILS' SCORES ACCORDING TO THE ACCREDITATION OF THE SCHOOLS AND THE SALARY OF TEACHERS

| Accreditation of Schools | Number of Schools | Number of Pupils | Mean of <br> Pupils' Scores |
| :---: | :---: | :---: | :---: |
| LOW SALARY |  |  |  |
| 0-2 | 12 | 32 | 35.88 |
| 3-4 | 4 | 9 | 38.61 |
| 5-6 | 4 | 22 | 40.75 |
| Total | 20 | 63 | 38.00 |
| MEDIUM SALAPY |  |  |  |
| 0-2 | 16 | 48 | 30.44 |
| 3-4 | 2 | 7 | 50.36 |
| 5-6 | 8 | 27 | 45.89 |
| Total | 26 | 82 | 37.23 |
| HIGH SALAPY |  |  |  |
| 0-2 | 3 | 15 | 49.27 |
| 3-4 | 4 | 11 | 47.09 |
| 5-6 | 12 | 46 | 47.91 |
| Total | 19 | 72 | 48.04 |

Table VII shows that the mean of the pupils test scores increases as the accreditation of the school increases.

Table VIII shows there was no importance of accreditation of schools when the teacher's qualification is held constant. The trble further shows no importance of teacher's qualification when the accreditation of schools is held constant.

Table IX shows there is no value of accreditation of school when experience of teacher is held constent. The table further shows there is no importance of the experience of the teacher when the accreditation of the school is held constant.

Table $X$ shows there was an increas in the mean of the pupils' test scores for the 0-2 and 3-4 accreditation as the tenure of teachers increases but was not consistent for the 5-6 accreditation. The table shows there is no importence of tenure of teachers when the accreditation of schools is held constant.

Table XI shows there is no significance of accreditation of schools when teacher's salary is held constant. The table also shows there is no significance of salary of teachers when accreditation of schools is held constant.

The comparison of the mean of the pupils' test scores according to accreditation of schools and the number of teachers was made with Table II.

THE VALUE OF TEACHER'S GUALIFICATION TO PUPIL ACHIEVEMENT

Tables XII to XV divulge the value of qualification of teachers to the pupils' achievement. This is furthsr illustreted by separating the echools rith various teacher's qualifications according to the teacher's experience, tenure, and salary.

TABLE XII

A COMPARISON OF THE MEANS OF THE PUPILS' SCORES ACCORDING TO QUALIFICATION OF THE TEACHERS

| Qualification <br> of Teachers | Number of <br> Schools | Number of <br> Pupils | Mean of <br> Pupils* Scores |
| :--- | :---: | :---: | :---: |
| A | 3 | 9 | 49.72 |
| B | 44 | 150 | 41.66 |
| C | 8 | 32 | 34.99 |
| D | 10 | 26 | 41.54 |

A COMPARISON OF THE MEANS OF THE PUPILS' SCORES ACCORDING TO QUALIFICRTION OF TGACHERS AND EXPERIRNCE OF TEACHERS

| Experience of | Number of | Number of | Mean of |
| :--- | :--- | :--- | :--- |
| Teacher | Schools | Pupils | Pupils' Scores |


| d | 1 | 2 | 38.50 |
| :---: | :---: | :---: | :---: |
| c | 2 | 7 | 43.21 |
| b | 3 | 8 | 42.50 |
| a | 4 | 9 | 40.27 |
| Totel | 10 | 26 | 41.61 |
| C QUALIFICATIONS |  |  |  |
| d | 1 | 2 | 25.00 |
| c | 4 | 11 | 37.05 |
| b | 0 | 0 | 0 |
| a | 3 | 19 | 34.81 |
| Total | 8 | 32 | 34.97 |
| B QUALIFICATIONS |  |  |  |
| d | 6 | 13 | 35.19 |
| c | 8 | 30 | 41.42 |
| b | 5 | 17 | 47.53 |
| a | 27 | 90 | 41.57 |
| Totel | 44 | 150 | 41.66 |

A UUALIFICATIONS

| d | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: |
| c | 1 | 2 | 47.50 |
| b | 1 | 3 | 49.37 |
| a | 1 | 4 | 51.25 |
| Total | 3 | 9 | 49.79 |

A COMPARISON OF THE MEANS OF THE PUPILS SCORES ACCORDING TO QUALIFICATION OF TEACHERS AND TENURE OF TEACHERS

| Tenure | Number of <br> Schools | Mumber of <br> Pupils | Mean of |
| :--- | :--- | :--- | :--- |


| D QUALIFICATION |  |  |  |
| :---: | :---: | :---: | :---: |
| 1 | 1 | 4 | 45.00 |
| 2 | 2 | 5 | 32.90 |
| 3 | 1 | 4 | 55.00 |
| 4 | 6 | 13 | 39.92 |
| Total | 10 | 26 | 41.67 |
| C QUALIPICATION |  |  |  |
| 1 | 2 | 6 | 39.25 |
| 2 | 2 | 4 | 22.25 |
| 3 | 1 | 2 | 25.00 |
| 4 | 3 | 20 | 37.25 |
| Total | 8 | 32 | 34.98 |
| B QUALIFICATION |  |  |  |
| 1 | 7 | 11 | 22.91 |
| 2 | 8 | 29 | 31.11 |
| 3 | 20 | 79 | 47.33 |
| 4 | 9 | 31 | 43.84 |
| Total | 44. | 150 | 41.68 |
| A QUALIFICATION |  |  |  |
| 1 | 1 | 2 | 47.50 |
| 2 | 0 | 0 | $?$ |
| 3 | 1 | 4 | 51.25 |
| 4. | 1 | 3 | 49.79 |
| Total | 3 | 9 | 49.79 |

A COMPARISON OF THE HEANS OF THE PUPIES' SCORES ACCORDING TO THE QUALIFICATION AND SALARY OT TEACHERS

| Salary of | Number of | Number of | Mean of |
| :--- | :--- | :--- | :--- |
| Teachers | Schools | Pupils | Pupils' Scores |

D QUALIPICATION

| Low | 3 | 9 | 38.28 |
| :--- | ---: | ---: | ---: |
| Medium | 4 | 11 | 40.82 |
| High | 3 | 6 | 48.33 |
| Total | 10 | 26 | 41.67 |
|  |  | C QUALITICATION |  |
| Low | 1 | 2 | 2.50 |
| Medium | 5 | 18 | 31.36 |
| High | 2 | 12 | 42.50 |
| Totel | 8 | 32 | 34.98 |

B QUALIFICATION

| Low | 15 | 50 | 38.17 |
| :--- | :--- | :--- | :--- |
| Medium | 16 | 50 | 37.82 |
| High | 13 | 50 | 49.13 |
| Total | 44 | 150 | 41.70 |

A QUALIFICATION

| Low | 1 | 2 | 47.50 |
| :--- | :--- | :--- | :--- |
| Medium | 1 | 3 | 49.37 |
| High | 1 | 4 | 51.25 |
| Total | 3 | 9 | 49.79 |

## SUMMARY

Table XII shows that "A" qualification ranks first and "B" qualifieation ranks second but did not show this consistency for the "C" and "D" qualifications.

Table XIII signifies that there is no value 2 ? urlification of teachers when the experionce of the teacher is held constant. The table further shows that there is no value of experience of the teacher when the qualification of the teacher is held constant. The table also shows that the "A" qualification ranks first and there was an increase in the mean of the pupils' test scores of the "A" qualification teacher as the accreditation of the school increased.

Table XIV shows that there is no value of qualification of teachers when the tenure of teachers is held constant. It further shows that there is no value of tenure of teachers when qualification is held constant.

Table XV shows on increase in the mean of the pupils' test scores as the salary increased for the "A", "C", and "D" qualification. The table also shows that there is no value of qualification of teschers when the salary is held constant.

A further study of the means of the pupils' scores according to qualification was made with Table III and Table VIII with the number of teachers and the accreditation of schools respectively.

THE VALUE OF THE TEACHER'S EXPERIENCE TO PUPIL ACHIEVEMENT
Tables XVI to XVIII show the value of the teacher's experience to pupil achievement. This is further analyzed by separating the schools with various teacher's experience according to the teacher's tanure and salary.

TABLE XVI

A COMPARISON OF THE MEANS OF THE PUPILS' SCORES ACCORDIMG TO THE EXPERIENCE OF THE TEACHERS

| Experience of <br> Teacher | Number of <br> Schools | Number of <br> Pupils | Mean of Pupils" <br> Test Scores |
| :--- | :---: | :---: | :---: |
| "a" | 35 | 122 | 40.74 |
| "b" | 9 | 28 | 46.39 |
| "c" | 23 | 50 | 41.21 |
| "d" | 8 | 17 | 34.41 |

A COMPARISON OF THE MEANS OF THE PUPILS SCORES ACCORDING TO THE EXPERTEMCE OF THE TRACHERS AND THE TENURE OF THE TEACHERS

|  | Number of | Number of | Moan of |
| :--- | :--- | :--- | :--- |
| Tenure | Sehools | Pupils | Pupils Scores |


| d EXPGFIMMCE |  |  |  |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 4 | 20.00 |
| 2 | 2 | 5 | 41.90 |
| 3 | 4 | 8 | 36.90 |
| 4 | - | - | - |
| Total | 8 | 17 | 34.39 |
| c EXPERTENCE |  |  |  |
| 1 | 5 | 14 | 40.75 |
| 2 | 1 | 2 | 22.50 |
| 3 | 3 | 20 | 41.48 |
| 4 | 4 | 14 | 43.21 |
| Total | 13 | 50 | 41.00 |
| b EXPERIENCR |  |  |  |
| 1 | - | - | - |
| 2 | 2 | 4 | 28.63 |
| 3 | 5 | 20 | 50.10 |
| 4 | 2 | 4 | 45.53 |
| Total | 9 | 28 | 46.38 |
| a EXPERIENCE |  |  |  |
| 1 | 4 | 5 | 22.40 |
| 2 | 7 | 27 | 29.13 |
| 3 | 11 | 41 | 50.92 |
| 4 | 13 | 49 | 39.88 |
| Total | 35 | 122 | 40.49 |

A COMPARISON OF THE MEANS OF THE PUPILS' SCORES ACCORDING TO EXPERIENCE AND SALARY OF THE TEACHERS

| Salary of Teachers | Number of Schools | Number of Pupils | $\begin{aligned} & \text { Iean of Pupilst } \\ & \text { Scores } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| d EXPERIENCE |  |  |  |
| Low | 3 | 6 | 38.45 |
| Medium | 5 | 11 | 32.05 |
| High | - | - | - |
| Total | 8 | 17 | 34.15 |
| c EXPERIENCE |  |  |  |
| Low | 8 | 37 | 40.34 |
| Mediun | 4 | 8 | 40.00 |
| High | 1 | 5 | 39.50 |
| Total | 13 | 50 | 40.20 |
| b EXPERIENCE |  |  |  |
| Low | 2 | 4 | 28.63 |
| Medium | 3 | 8 | 50.39 |
| High | 4 | 16 | 48.87 |
| Total | 9 | 28 | 46.41 |
| a EXPERTENCE |  |  |  |
| Low | 7 | 16 | 32.13 |
| 道edium | 14 | 55 | 35.96 |
| High | 14 | 51 | 51.01 |
| Total | 35 | 122 | : 41:75 |

Table XVI signifies that there is no value of experience of the teacher to pupil achievement.

Table XVII signifies that there is no significance of the experionce of the teacher when the tenure of the teacher is held constant. The table further reveals that there is no significance of the tonure of the teacher when the experience of the teacher is held constant.

Table XVIII signifies that there is no importance of the experioncs of the teacher when the salary of the teacher is held constant. The table further signifies that there is no importance of the salary of the teacher when the experience of the teacher is held constont.

Tables IV, IX, and XIII further analysed the means of the pupils' scores according to the teachers' experience, with the number of teachers, with accreditation of schools, and with the qualification of teachere, respectively.

Tables $X I X$ and $X$. pupil achievement. This is further illustrated by seperailing the schools with various teacher-tenure according to salary.

## TABLE XIX

A COMPARISON OF THE MEANS OF THE PUPILS SCORES ACCORDING TO TENURE

| Tenure of <br> Teachers | Number of <br> Schools | Number of <br> Pupils | Mean of Pupils' <br> Test Scores |
| :---: | :---: | :---: | :---: |
| 1 | Il | 23 | 33.15 |
| 2 | 12 | 38 | 30.40 |
| 3 | 23 | 89 | 47.32 |
| 4 | 19 | 67 | 40.90 |

## TABLE XX

A COMPARTSON OF THE MEANS OF THE PUPILS SCORES ACCORDING TO SALARY OP TERCHERS AND THE TPNURE OF THE TEAGHERS

| Salary of | Number of | Number of | Mean of |
| :--- | :--- | :--- | :--- |
| Teachers | Sciwols | Pupils | Pupils Scores |

## 1 TENURE

| Low | 5 | 10 | 38.00 |
| :--- | ---: | :---: | :---: |
| Medium | 4 | 7 | 21.86 |
| High | 2 | 6 | 38.25 |
| TotaI | 11 | 23 | 33.15 |

2 TENURE

| Low | 6 | 18 | 32.03 |
| :--- | ---: | ---: | :--- |
| Medium | 4 | 16 | 24.94 |
| High | 2 | 4 | 52.50 |
| Total | 12 | 38 | 31.20 |

3 TENURE

| Low | 6 | 26 | 40.87 |
| :--- | :---: | :--- | :--- |
| Medium | 8 | 18 | 46.08 |
| High | 9 | 45 | 52.97 |
| Total | 23 | 89 | 47.36 |

## 4 TENURE

| Low | 3 | 9 | 42.17 |
| :--- | ---: | ---: | :--- |
| Medium | 10 | 41 | 40.76 |
| High | 6 | 17 | 32.20 |
| Total | 19 | 67 | 38.84 |

Table AI . A hows that there is no significance of tenure of teachers to puoil achievement.

Table $X X$ shows that there is no value of the tenure of teachers when the salary of techers is held constant. The table also shows that there is no value of teacher's salary when the tenure of the teacher's is held constant.

The study of teacher-tenure with achievement has been further analysed in Tables $V, X, X I V$, and XVII with the number of teschers, with the accreditation of schools, with the qualification of teachers, and with the experience of teachers, respectively.

THE IMPORTANCE OF TEACHER'S SALARY TO PUPIL ACHIEVEMENT

Table XXI shows the importance of teacher's salary to pupil achievement.

TABLE XXI

## A COMPARISON OF THE MEANS OF THE PUPILS' SCORES ACCORDING TO THE SALARY OP THE TEACHERS

| Salary of <br> Teschers | Number of <br> Schools | Number of <br> Pupils | Mean of Pupils <br> Test Scores |
| :--- | :---: | :---: | :---: |
| Low | 20 | 63 | 38,00 |
| Medium | 26 | 82 | 37.22 |
| High | 19 | 72 | 48.04 |

Table XXI shows that there is no significance to the salary of the te chers and pupil achievement.

The comparisons of the means of the pupils' scores according to the salary of the teachers, with the number of teachers, with accreditation of schools, with teacher qualifications, with taachers' experience, and with teacher-tenure were made with Tables VI, XI, XV, XVIII, and XX, respectively.

## CHAPTER IV

SUMMARY

An attempt has been made in this thesis to compare the mern of the scores of the fifth grade pupils of the dependent schools of Craig County from these viewpoints: (1) number of teachers; (2) accreditation of school; (3) qualification of teachers; ( 1 ) experience of teachers; (5) tenure of teachers; and (6) selary of teachers.

It was found as the number of teschers increased the mean of the pupils' scores increased. This does not hold true with the number of teachers and qualification, experience, tenure, and salary of teachers, although the mean of the nupils" scores of the "A" teacher and teachers with high salaries rank first.

There was no consistency found in the mean of the pupils' scores according to the accreditation of the school and qualification, exoerience, tenure, and salary of the teacher.

There was no consistency found in the mean of the punils' scores according to the quelification of the teacher and experience, tenure, and salary of the teacher, however, in the total the means of the pupils' scores increased as the teachers' salary increased for the "A", "C", and "D" teachers.

No consistency was found in the mean of the pupils scores according to the experience of the teacher and the tenure and salary of the teacher.

No consistency was found in the mean of the pupils' scores eccording to the tenure and salary of the teacher.

The results show that there are other fectors associated more closely with the achievement of the pupils in the various schools than the ones used in this study.

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