THE RELATION BETWEEN THE SIZE OF THE HIGH SCHOOL AND SCHOLASTIC ACHIEVLHBIT OF COLLECE FRTESHIEN

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## AND SCHOLASTIC ACHIEVRAMN OF COLLEGE FRESHMEN

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There has been much discussion as to the relative standing in college of students graduating from high schools of different sizes. Parents have often made the statement that they would like to be able to send their children to a larger high school so as to give them better preparation for college. Others think the closer personal contacts in the smaller high schools advantageous. It is important for the colleges to know from what size high schools their best students are coming. Is it necessary for the student to attend a large high school in order to be better prepared for college? Is the size of the high school a factor in college success? From what size high school does the college get its best students? With these questions in mind, the writer has chosen this study, to determine, if possible, the relation between the size of the high school which students attend and the scholastic achievement of their college freshmen.

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## CHAPTER I

## INTRODUCTION

## PURPOSE OF INVESTIGATION

The purpose of this study is to attempt to determine the relative efficiency of the different size high schools in preparing their graduates for success in college, as determined by the scholastic achievement of their college freshmen.

THE PROBLEM
To determine the relative efficiency of the different size high schools of the Northeast State College District of Oklahoma, the writer has studied the school records of four hundred nine students who were graduated from public high schools of different classifications, who were enrolled as freshmen in Northeast State College, Tahlequah, Oklahoma during the school years 1936-1937, 1937-1938, and 1938-39.

The records which were studied included two hundred eighteen students who were graduated from classification $A$ schools; one hundred thirteen students who were graduated from classification B schools; and seventy-eight students who were graduated from classification $C$ schools.

A number of records was not considered in this investigation.

1. This study does not include students who did less than three years of work in the high school from which they were graduated.
2. The study does not deal with students from parochial schools.
3. The study does not include records of freshmen who were graduated from schools of states or districts other than the Northeast State College District.

In this investigation, the factors considered by the writer are:

1. Age of students at enrollment in college.
2. A comparison of grade achievement of both boys and girls after entering college.
3. The percentage of students having a membership in the Oklahoma High School Honor Society from each classification of high schools.
4. A comparison of grades made by different groups by semesters.

NECESSITY OF INVESTIGATION
Parents often make sacrifices in order to send their children to larger high schools so as to give them better advantages, while many still stick to the idea that small schools offer closer personal contacts therefore, offering great efficiency.

The writer believes it is necessary to determine whether the schools in Northeastern district classified as A schools are more efficient than those high schools classified as $B$ and $C$ schcols in preparing students to achieve a higher scholastic rating in college, than those schools classified as $B$ and $C$ high schools.

Evidently the schools of today are not fulfilling the expectations of the public, since educators and the public in general are making attempts to reorganize our state
school system into a more efficient, effective, and economic organization.

Caswell and Campbell say:
Reconstruction of the general educational program of society is essential. Such reconstruction must be based on consideration of the present need for education if significant results are to be achieved. 1

Seyfert says:
Practically all American secondary schools are confronted by certain problems associated more or less directly with their size. This is particularly true of smaller schools. In spite of the general recognition of the presence and importance of these problems, few attempts have been made to define them accurately on the basis of a thorough examination of secondary school organization as a whole. 2

The first thing to be considered in our school organization is student welfare; adjusting the school set up to the needs of the students. ${ }^{3}$ This study is an attempt to meet a need in this field.

I Caswell and Campbell, Curriculum Development. pp. 2-3.
2 Warren Seyfert, The Effect of School Size. Doctorate study. p. 16.

3 William H. Burton, Introduction To Education. pp. 21-29.

## PREVIOUS INVESTIGATIONS

Many similar studies have been made relative to the efficiency of various size high schools. These investigators concurred in their findings.

The Seventeenth Yearbook of American Association of School Administration says:

It is impossible to have a high school in every hamlet, and there are undoubtedly too many small inefficient high schools, but it may be better to have smaller schools within limits of minimum efficiency and practicable cost, even though the cost is higher and they are not so efficient as larger schools, so as to keep them related to the community iife. This statement does not mean that all communities now attempting to support small high schools should do so. In many very small communities wili people associate naturally in the social and economic life of every day.l

In a study made by Spaulding, relative to the efficiency of small and large high schools, it was found that the larger schools were much more efficient than the smaller ones. Conversely, schools employing fewer than ten to twelve teachers would seem from the standpoint of current practice to be too small to be efficient. ${ }^{2}$

He investigated four hundred ninety-five high schools in Texas according to:

1. Size of teaching staff and enrollment.

1 The Seventeenth Yearbook, American Association of School Administrators, 1939. pp. 27-28.

2 Francis T. Spaulding, The School Review, October 1933. Volume 41. pp. 585-594.
2. Percentages of teachers teaching various numbers of subjects.
3. Percentages of teachers teaching subjects without proper preparation.

The range in enrollment was between ten and one hundred fifty and the number of teachers from three to fourteen to a school.

Brammell made a study relative to the advantages offered by the larger high schools. He found that the pupils maintained a higher attendance and remained in school for longer periods, enabling them to get a finer comprehension of their subjects. In the larger schools the physical equipment was more adequate. The principals and teachers were better trained and more experienced. The tenure of the faculty members was longer, their teaching load more reasonable, and their salaries were higher. ${ }^{3}$

According to a report from the United States Bureau of Bulletins, 1919, a survey of the schools of Alabama finds that students from larger schools have an advantage over urban or rural pupils:

Experience in all states shows that cities and towns with their more concentrated resources and cosmopolitan populations are better able and more disposed to provide ample school facilities for their children. Yet the prosperity, progress, and growth of the state are dependent upon the intelligence of the people of the farms and small communities in a greater degree, in so far as they outnumber those in the cities. In these days of

3 P. Roy Brammell, The School Review, June 1933, Volume 41. pp. 401-404.
easy migration it is of very little value even to the cities themselves to educate city children and neglect those in the surrounding communities upon which they depend for the enlargement and replacement of their population. 4

Hadley, who made a study of Size of Administration Unit and School Efficiency in Colorado, found that the larger schools were more efficient than the smaller ones. He considered ten factors:

1. Social Status.
2. Distance of home from school.
3. Permanence of residence.
4. Intelligence.
5. Mental age.
6. Life age.
7. Age-grade-progress.
8. School achievement.
9. Educational age.
10. Accomplishment Ratio.

He says:
It is significant that for every grade the accomplishment ratios for the pupils of the larger schools are superior to those of the pupils in the smaller schools. The pupils in each of the four grades (in high school) in the larger size schools are superior to the pupils of the smaller schools in terms of scores.

In terms of average accomplishment ratio, pupils of first class districts score 3.4 points above the pupils of the third class districts.

One logical recommendation might be to group the schools into larger administrative units where

4 The Rural Schools of Alabama, United States Educational Bureau of Bulletins, 1919, Chapter VIII. p. 100.
enough pupils could be brought together to make a school possible and where a type of supervision could be used that would guarantee all pupils the opportunity of developing to their fullest extent. 5

A study conducted by Van Wagenen, 1928, in the State of Minnesota, involving one hundred and fifty town and city schools and more than one thousand rural schools points out:

The form of school or class organization seems also to play a significant part in the achievement of any school. In reading for comprehension the pupils of the graded (or high schools) are more than a half year in advance of pupils in the nine months rural schools; in reading for interpretation they are slightly in advance. In American History, geography, and arithmetic, the students were also found to be somewhat superior. Quite as marked is the same tendency in spelling ability. And decidedly marked is it in ability to write English composition. ${ }^{6}$

Seyfert, conducted a study of the effects of enrollment upon the reorganized secondary schools. He analyzes data on approximately five hundred schools, representative as to geographical location, size of comunity, and size and type of school. His presentation shows that schools of fewer than forty to sixty pupils per grade tend to have particularly unsatisfactory organizations and that schools enrolling from one hundred ifify to two hundred students per grade tend to have most of the things that substantially larger schools do at present. ${ }^{7}$

[^0]6 M. J. Van Wagenen, Comparative Pupil Achievement in Rural, Town, and City Schools. p. 71.

7 青arren C. Seyfert, The Gffects of School Size, Doctors 1936, Harvart. pp. 478-481.

Cragun, who made a study of the size of high school as a factor in college success, classified high schools in Kansas according to enrollment. He found that students from the larger high schools made better grades than those from small high schools.

The large high schools have the advantage over the smaller schools in that the system of the large schools are more like those of the college, and the students entering know better how to adjust themselves.

The writer has found that the larger high schools with the larger classes have the best average in marks. This bears out the findings of D. A. Bates in his thesis found in Bulletin 24, Department of Secondary School Prineipals of the National Educational Association. He finds that the large classes have a decided advantage:

1. More attentive.
2. More alert.
3. Marked superiority.
4. More effective methods used. 8

A study was made to determine the efficiency of college students as conditioned by the size of the high school from which they had graduated before entering college. The study was made under the direction and supervision of A. A. Douglas, member of the faculty of Washington State College.

The results of the study shows that the students from the smallest high schools had an average of 4.92 hours of A grade, while those students from the largest high schools had an average of 9.95 hours of A grades. There was not a

8 Orvelle Robinson Cragun, The Size of High School as a Factor in College Success, Thesis, 1931. Kansas state College. p. 38.
marked diffierence in the average hours of B grade, but the students from the largest high schools had the higher average by more than four hours for each student. A comparison of the grade points made by each group shows a difference of 24.17 points between the largest and smallest high schools. There was a general rise in the average number of grade points throughout the various groups. As the high school increased in enrollment the students showed an increase in the number of $A$ and $B$ grades. According to the results of this investigation Mr . Douglas concluded:

Students from large high schools are superior in scholarship in college to those coming from small high schools. In general, scholarship increases with the size of the high school, although the increments are not regular. ${ }^{9}$

A study was made by MoKinnis in 1937 to determine the relationship of the size of the high school from which a student graduated to the college success of the student. The students studied were the freshmen of Southeastern State College, Durant, Oklahoma.

The results of this study were:

1. The larger and better equipped the high schools were in Southeastern Okiahoma, the younger the students were when they graduated.
2. The students from the larger high schools did a better grade of work in college than the students from

[^1]the smaller high schools.
3. The chances of success for students enrolled in Southeastern State College, Durant, Oklahoma, varied according to the size of the high school from which students graduated. 10

Rogers made a recent study relative to the size of the school from which a student came to the grades made by the student in a higher institution of learning. In this study the subjects used were from rural and town schools in Sequoyah County, Oklahoma. Mr. Rogers concluded that the larger schools were better equipped, offered a broader curriculum, and had better teachers. From the standpoint of grade achievement the students made higher grades in proportion to the size of the school from which they were graduated. The greatest number of A grades were made by the students from the largest schools, and, conversely the students from the smallest schools received the greatest number of $C$ grades, in proportion to the size of the school from which they were graduated. ${ }^{1 l}$

The most recent study the writer found was compiled by Davis who made an investigation, in 1939, of the scholastic attainment of freshmen who entered Oklahoma Agricultural and Mechanical College during the school year 1938-39. The study was made to determine, if possible, the

10 Joe McKinnis, Thesis, The Size of the High Schools from Which Students Come as a Factor in College Success. A. and M. College, Stillwater, Oklahoma. (1937) pp. 27-28.

11 Denver Rogers, Thesis, A Comparative Study, as Shown by Teacher's Marks. A. and M. College, Stillwater, Oklahoma. (1934) pp. 12-14.
relative efficiency of the high schools of Oklahoma. The high schools from which the one thousand fifteen students graduated, and entered the Agricultural and Mechanical College as freshmen, were classified according to the number of units of work offered annually. The high schools which were members of the North Central Association were classified as X schools. The high schools which offered sixteen or more units of work annually but not members of the North Central Association were classified as $Y$ schools. And, the schools which offered less than sixteen units of work annually were classified as $Z$ schools.

From the $X$ group of schools there were six hundred fifty one students who enrolled as freshmen in 1938-1939, there were three hundred twenty four students from the $Y$ group of schools, and forty freshmen from the $Z$ group of schools.

The conclusions of Mr. Davis were similar to those of former studies and investigations. It was found that the best grades were obtai ned by those students who have graduated from the $X$ group of high schools, and the lower grades were obtained by the students who had graduated from the $Z$ group of high schools.

Further conclusions or assumptions were to the effect that the larger high schools were better equipped to meet the needs of their individual students, and, conversely the smaller high schools were more poorly equipped, had a more narrow curriculum, and were taught by less

efficient teachers. ${ }^{12}$

WHAT PREVIOUS INVESTIGATIONS SHOW
The study made by Spalding shows the lack of efficiency of the smaller high schools.

Brammell, found that the larger high schools offered more comprehensive courses which tended to appeal to the student, thereby increasing daily attendance.

The survey made of the schools of Alabama, points out that the smaller schools are lacking in efficiency.

Van Wagenen, in reporting his study of a number of rural and city schools in Minnesota, indicates the city schools are superior to the rural schools in educational achievement.

Seyfert, presented evidences which tended to prove inadequacy of schools which had class enrollments of fewer than forty to sixty pupils per grade or class.

Hadley concluded from his study, Size of Administrative Unit and School Efficiency in Colorado, that the larger schools were more efficient than the smaller ones.

Douglas, was emphatic in his conclusions that the smaller high schools were undoubtedly less efficient than the larger high schools.

Cragun, concluded from his study, that the students from the larger high schools adjust themselves more easily,

[^2]and make better grades than students from the smaller schools.

McKinnis, concluded from his study, that students from the larger high schools did a better grade of work in college than the students from the smaller high schools. The study made by Rogers reveals that the larger schools were better equipped, offered a broader curriculum, and had better teachers.

From the standpoint of grade achievement the students made higher grades in proportion to the size of the school from which they were graduated.

Davis concludes that students from the larger high schools make better grades than those from the smaller high schools.

SCOPE OF PRESENT INVESTIGATION
Although this study includes twice as many students from class A schools as students included from class B schools, and almost twice as many students in class $B$ schools as those included from class C schools, a much better sampling prevails in this study, than some of the recent investigations, and the conclusions reached should be comparable.

## CHAPTER III

SOURCES OF DATA
To earry on this investigation, it was necessary to secure information concerning the three groups of schools, classified by the writer as schools $A, B$, and $C$, and information concerning the achievement of students who were graduated from schools $A, B$, and $C$, who were enrolled as freshmen at Northeast State College, Tahlequah, Oklahoma.

Sources used to compile the information were:

1. From the Oklahoma High School Directory, published by the State Department of Education, the writer secured a list of the schools which are located in the fifteen counties comprising the northeast district.
2. From the accrediting files in the State Department of Education, the enrollment of each school, and the number of teachers in high school, including the school years 1936-37, 1937-38, and 1938-39, were determined.
3. From the files of the high school inspection department, of the State Department, a list of honor students who were graduated from schools located in the northeast district was secured.
4. From the student enrollment cards in the office of the registrar of Northeast State College, Tahlequah, Oklahoma, a complete record of all freshmen was secured. The enrollment card gave the name, age, sex, occupation of parents, and the high school from which each was graduated.
5. From the permanent records in the office of the registrar, the grades earned by each student for each semester were determined. It has been pointed out in a previous chapter that the records of freshmen who had not attended the same high school for a period of three years or more were not considered in this study. The roming student, or student who had moved from one school to another could not be classified as a representative from any one school.

Access to the accrediting files, and high school inspection files, was secured with permission from A. L. Crable, State Superintendent of Public Instruction, Capitol Building, Oklahoma City.

Access to the files of Northeast State College, Tahlequah, Oklahoma, was obtained with permission from the dean and the registrar of the college.

The northeast district has one hundred and thirty one high schools, however, only seventy five schools were included in this investigation. The students who were graduated from the other fifty six high schools, did not have records at the Northeast College.

The high schools and counties represented in this study are:

1. Adair County--Stillwell, Watts, Union.
2. Cherokee County--Tahlequah, Hulbert.
3. Craig County--Vinita, White Oak, Centralia.
4. Delaware County--Grove, Jay, Cleora, Colcord, Kansas.
5. Haskell County--Stigler, Keota, Kinta, MeGurtain.
6. Mayes County--Pryor, Adair, Cheoteau, Locust Grove, Salina, Strang, Oakes, Mazie.
7. Muskogee County--Muskogee, Haskell, Porter, Porum, Webbers Falls, Okay, Fort Gibson, Council Hill, Braggs, Boynton.
8. Nowata County--Nowata, Alluwe, Delaware, Lenapah, Wann:
9. Osage County--Pawhuska, Nelagoney.
10. Ottawa County--Miami, Picher, Fairland.
11. Rogers County--Chelsea, Claremore, Inola, Tiawah, Talala, Oologah, Sequoyah, Catoosa, Bushyhead.
12. Sequoyah County--Sallisaw, Muldrow, Vian, Westville, Union.
13. Tulsa County--Broken Arrow, Sand Springs, Clinton, Tulsa Central, Bixby, Collinsville, Jenks, Turley, East Central, Union.
14. Wagoner County--Wagoner, Coweta.
15. Washington County--Dewey, Vera, Copan.

INTERPRETATION OF DATA
The seventy five high schools considered in this study were classified according to the average number enrolled in each high school for the school years 1936-37, 1937-38, and 1938-39. The Oklahoma High School Directories gave this information. High schools having an enrollment of one to ninety nine students were classified in group C. High schools having an enrollment of one hundred to two hundred twenty four students were classified in group B. And the high schools having an enrollment of two hundred twenty five students and over were classified in group A.

## TABLE I

CLASSIFICATION OF SEVENTY FIVE OKLAHONA HIGH SCHOOLS ACCORDING TO ENROLINENT

| CLASSIFICATION | : | ENROLLMENT | : | EXAMPLES |
| :---: | :---: | :---: | :---: | :---: |
| Class A | : | 225 or more | : | Stigler-Muskogee |
| Class B | : | 100-224 | : | Muldrow-Westville |
| Class C | : | 1-99 | : | Catoosa-Hulbert |

Table II shows that there were 21 schools in the A classification having an average enrollment of 597. There were 218 students enrolled in Northeast State College from this group. The average number of teachers and pupils per teacher was 20.2 and 29.5 , respectively.

In the $B$ classification there were 27 schools with an average enrollment of 153. From this group 113 students were considered. The average number of teachers and pupils per teacher was 5.7 and 26.9 , respectively.

The class C group also consisted of 27 schools having an average enrollment of only 69. There were 78 students in this classification. The average number of teachers was 3.5 while the number of pupils per teacher was only 19.7.

It will be noted that the number of pupils per teacher in the small schools was considerably smaller than in the larger schools. However, the writer believes this seeming advantage was largely offset by the greater number of classes taught and class preparations made by the teachers in the smaller schools, while in the larger school systems, a teacher frequently has several divisions of classes in the same subject and one preparation will suffice for all. This is not possible in the schools enrolling less than 100 pupils in high school.

TABLE II
DATA ON HIGH SCHOOLS AS CLASSIFIED


Table III shows the distribution of the 409 freshmen according to ages, to their nearest birth date, at the time of enrollment in Northeast State College. The greatest frequency of age entrance was the same for all three classes of schools, namely, eighteen years. However, the greatest spread in age limits was found in the smaller schools. These ages ranged from sixteen years to thirty years. In the class A schools the ages ranged from fifteen to twenty six.

As is shown by the table several students entered college, as freshmen, at a retarded age. This late entrance may be explained in part by some of these individuals staying out of school several years and working before entering college.

The average ages at College entrance for Class $A$, $B$, and $C$ schools was $18.8,18.8$, and 19.2 , respectively.

The Northeast State College used the following grading system:

A - Superior;
B - Good;
C - Average;
D - Passing;
I - Incomplete;
F - Failure. 1
The succeeding tables and graphs reveal to the reader a picture of the records studied for this thesis.

1 Official Transcript of Student's Work. Northeast State College, Tahlequah, OKlahoma.

DISTRIBUTION OF FRESHMEN ACCORDING TO AGE AT TIME OF ENROLLMENT IN NORTHEAST STATE COLLEGE


Tables numbered IV, $V$, and VI show the total number of grades made, grade points made, average grade points made by each student, from each high school as classified, and the percent of different grades made by each of the three classes.

To obtain the average grade points made by each student each grade was assigned the following value:

$$
\begin{aligned}
& \text { A - } 4 \text { grade points } \\
& \text { B - } 3 \text { grade points } \\
& \text { C - } 2 \text { grade points } \\
& \text { F - } 1 \text { grade point } \\
& \text { I - } 0 \text { grade point } \\
& \text { grade point. }
\end{aligned}
$$

The total number of $A^{\prime} s$ made by each group was multiplied by four. This product was then divided by the total number of students from class A schools which was 218. The quotient obtained was the average grade points of A grade made by each student from class A schools.

The procedure for determining the average grade points of grade $B, C$, and $D$, was similar to the method used for calculating the average grade points of grade A, except the multipliers were 3, 2, and 1, respectively.

For calculating the average grade points for the class B and class $C$ schools the same procedure for determining the average grade points for class A schools was used, except the divisors were 113 for class $B$ schools, and 78 for class C schools.

In the group A high schools, there were 218 students, who made $385 \mathrm{~A}^{\prime} \mathrm{s}$. This was 18 per cent of the total number of grades made by this group; seven hundred live
$B^{\prime} s$ or thirty two and nine tenths per cent $B^{\prime \prime} s$; seven hundred forty five C's, or, thirty four and eight tenths per cent C's; one hundred eighty two D's, or eight and five tenths per cent $D^{\prime} s$; one hundred ten $F^{\prime} s$, or five and one tenth percent $\mathrm{F}^{\mathbf{\prime}} \mathrm{s}$; fifteen $I^{\prime} \mathrm{s}$, or seven tenths per cent I's.

In the group of class B schools, there were one hundred thirteen students who received one hundred eighty seven $A$ 's, or fifteen and eights tenths per cent $A^{\prime} s$; three hundred eighty seven $B^{\prime}$ s or thirty two and seven tenths per cent $B^{\prime} s$; four hundred eight $C^{\prime} s$, or thirty four and five tenths per cent $C^{\prime} s$; one hundred thirty two $D^{\prime} s$, or eleven and two tenths per cent $D^{\prime \prime}$; sixty six $P^{\prime \prime}$ s or five and six tenths per cent $\mathrm{F}^{\prime} \mathrm{s}$; two $\mathrm{I}^{\prime} \mathrm{s}$, or two tenths per cent I's.

In the group of class $C$ schools, there were seventy eight students, who made ninety one $A^{\prime}$ 's, or twelve and three tenths per cent $A^{\prime} s$; two hundred thirty six $B^{\prime} s$, or forty two and five tenths per cent $B^{\prime} s$; three hundred Iourteen C's, or forty two and five tenths per cent C's; seventy two $D^{\prime} s$, or nine and eight tenths per cent $D^{\prime} s$; twenty four $\mathrm{F}^{\prime} \mathrm{s}$, or three and three tenths per cent $\mathrm{F}^{\prime} \mathrm{s}$; one I or one tenth per cent I's.

In the group of class A schools there were 218 students, who made a total of 1,540 points of grade A work with an average of 7.07 points per student, 2,115 points of grade $B$ work with an average of 9.70 points
per student, 1,490 points of grade $C$ work with an average of 6.86 points per student, and 182 points of grade $C$ work with an average of .84 points per student. The total number of grade points made by students from all class $A$ schools was 5,327.

In the group of class B schools there were 113 students who made a total of 748 points of grade A work with an average of 6.62 points per student, 1,161 points of grade $B$ work with an average of 10.27 points per student, 816 points of grade $C$ work with an average of 7.22 points per student, 132 points of grade $D$ work with an average of 1.17 points per student. The total number of grade points made by all students from class B schools was 2,857 points.

In the class $C$ schools there were 78 students who made a total of 364 points of grade $A$ work with an average of 4.66 points per student, 708 points of grade B work, with an average of 9.08 points per student, 628 points of grade $C$ work with an average of 8.05 points per student, and 72 points of class $D$ work with an average of .93 points per student. The total number of grade points made by all students from class $C$ schools was 1,772.

The average number of grade points per student from all class $A$ schools was 24.47 , from all class $B$ schools 25.28, and from all class $C$ schools this average was 22.72.

TABLE IV
THE TOTAL NUMBER OF GRADES, THE TOTAL GRADE POINTS, THE AVERAGE GRADE POINTS PER STUDENT, AND THE PER CENNT OF DIFFERENT GRADES MADE BY THE STUDENTS FROM THE CLASS A SCHOOLS

| CLASS A 8CHOOLS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GRADE | : NUMBER | $\begin{aligned} & \text { GRADE } \\ & : \text { POINTS } \end{aligned}$ | : | AVERAGE GRADE POINPS PER STUDENT | : | PER CENT |
| A | : 385 | $: 1540$ | : | 7.07 | : | 18.0 |
| B | ; 705 | $2115$ | : | 9.70 | : | 32.9 |
| C | :745 | $\begin{aligned} & 1490 \\ & \hline \end{aligned}$ | : | 6.86 | : | 34.8 |
| D | : 182 | $\vdots \quad 182$ | : | 0.84 | : | 8.5 |
| F | : 110 | $\vdots 0$ | : | 0 | : | 5.1 |
| I | : 15 | $\vdots 0$ | : | 0 | : | 0.7 |
| Total | : 2142 | : 5327 | : | 24.44 | : | 100.0 |

TABLE V
THE TOTAL NUMBER OF GRADES, THE TOTAL GRADE POINTS, THE AVERAGE GRADE POINTS PER STUDENT, AND THE PER CENT OF DIFFERENT GRADES MADE BY THE STUDENTS FROM THE CLASS B SCHOOLS

CLASS B SCHOOLS


## TABLE VI

THE TOTAL NUNBER OF GRADES, THE TOTAL GRADE POINTS, THE AVERAGE GRADE POINTS PER STUDENT, AND THE PER CENT OF DIFFERENT GRADES MADE BY THE STUDENTS FROM THE CLASS C SCHOOLS


Table VII shows, by semesters, the relative grade achievements of the 218 students, who enrolled as freshmen from the class A schools. The percentages of $A, B$, and $C$ grades are somewhat higher for the second semester's work than for the first, while the percentages of $D, F$, and $I$ grades are lower. The percentages of grades are as follows: First semester; 16.8 per cent A's, 32.1 per cent $\mathrm{B}^{\prime \prime} \mathrm{s}, 34.7$ per cent C's, 9.3 per cent $D^{\prime} \mathrm{s}, 6.2$ per cent $\mathrm{F}^{\prime} \mathrm{s}$, and 9 per cent I's. The second semester; 19.2 per cent A's, 33.7 per cent B's, 34.9 per cent $C$ 's, 7.6 per cent $D^{\prime} s, 4$ per cent F's, and . 6 per cent I's.

Table VIII shows, by semesters, the relative grade achievements of the 118 students enrolled from the class B schools. There was a slight increase in grade achievement the second semester for this group, but not as much as the A class. The percentages of grades are as follows: the first semester; 15.7 per cent $A^{\prime} s, 30.1$ per cent $\mathrm{B}^{\prime} \mathrm{s}, 37$ per cent C's, 9.7 per cent $D^{\prime} s, 7.5$ per cent $F$ 's, and no I's. The second semester; 15.9 per cent A's, 35.1 per cent B's, 32.3 per cent $C^{\prime} s, 12.5$ per cent $D^{\prime} s, 3.9$ per cent $F^{\prime} s$, and .3 per cent I's.

Table IX shows, by semesters, the relative grade achievement of the 78 students from the class $C$ schools. There was a significant improvement in marks made by this group the second semester. The percentage of grades are as follows: First semester; 11.7 per cent $A^{\prime} s, 29$ per cent $B^{\prime} \mathrm{s}, 42.2$ per cent C's, 70.7 per cent $D^{\prime} \mathrm{s}, 6.1$ per cent F 's, and .3 per cent I's. The second semester; 25 per cent $A^{\prime} \mathrm{s}, 32.5$ per cent $\mathrm{B}^{\prime} \mathrm{s}, 43.5$ per cent C 's, 9 per cent $\mathrm{D}^{\prime} \mathrm{s}$, and no F 's nor I's.

## TABLE VII <br> COMPARISON OF GRADES MADE BY STUDENTS FROM CLASS A SCHOOLS BY SEMESTYERS



TABLE VIII
COMPARISON OF GRADES MADE BY STUDENTS FRON CLASS B SCHOOIS BY SEMESTERS

| GRADES | FIRST SEMESTER |  | : | SECOND SEMESTER |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NUMBER | PER CENT | : | NUNBER | : | PER CENTI |
| A | 88 | $15.7$ | : | 99 | : | 15.9 |
| B | 168 | : 30.1 | : | 219 | : | 35.1 |
| C | 207 | : 37.0 | : | 201 | : | 32.3 |
| D | 54 | : 9.7 | : | 78 | : | 12.5 |
| F | 42 | : 7.5 | : | 24 | : | 3.9 |
| I | 0 | : 0.0 | : | 2 | : | 0.3 |
| Total | 559 | : 100.0 | : | 623 | : | 100.0 |

TABLE IX
COMPARISON OF GRADES MADE BY STUDENTS TROM CLASS C SCHOOLS BY SENESTERS

| GRADES | : | FIRST SEMESTER |  |  | : | SECOND | SEMESTER |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NUMBER | ! | PERR CESN | : | NUMBER |  | PER |  |
|  | : |  | : |  | : |  | : |  |  |
| A | : | 46 | : | 11.7 | : | 45 | : |  | 5.0 |
|  | : |  | : |  | : |  | : |  |  |
| B | : | 113 | : | 29.0 | : | 112 | : |  | . 5 |
|  | : |  | : |  | ! |  | : |  |  |
| C | : | 166 | : | 42.2 | : | 151 | : |  | 3.5 |
|  | : |  | : |  | : |  | : |  |  |
| D | : | 41 | : | 10.7 | : | 31 | : |  | . 0 |
|  | : |  | : |  | : |  | : |  |  |
| F | : | 24 | . | 6.1 | : | 0 | : |  | . 0 |
|  | : |  | : |  | : |  | : |  |  |
| I | : | 1 | : | . 3 | : | 0 | : |  | . 0 |
|  | - |  | : |  | : |  | : |  |  |
| Total | : | 393 | : | 100.0 | : | 345 | : | 100 | . 0 |

TABLE X
Table $X$ shows the number of High School Honor students, who enrolled in Northeast State College, from the seventy five high schools studied, and the percentage of honor students to the total enrolment from each class of high schools. It is significant to note that the greatest percentage of honor students, enrolled in Northeast State College, were from class $B$ and class $C$ schools. However, this does not give an accurate reflection of the honor students from the class A schools, as the Tulsa and Muskogee schools do not recognize student membership in the Oklahoma High School Honor Society.

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TABLE X
THE NUMBER AND PER CENT OF HONOR STUDENTS ENTERING NORTHEAST STATE CULLEGE FROM THE DIFFERENT CLASS HIGH SCHOOLS

| $\begin{aligned} & \text { CLASS } \\ & \text { OF } \\ & \text { SCHOOLS } \end{aligned}$ | ! | AVERAGE ENROLLMENT | : | NUMBER OF HONOR STUDENTS | : | $\begin{aligned} & \text { PER CENT } \\ & \text { OF } \\ & \text { ENROLLMENT } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | : | 218 | : | 14 | : | 6.4 |
| B | : | 113 | : | 18 | : | 15.9 |
| D | : | 78 | : | 12 | : | 15.9 |
| Total | : | 409 | : | 44 | : | 10.7 |




## CHAPTER IV

## SUMMARY AND CONCLUSIONS

The principal objective of this study was to determine whether the size of the high school was a contributing factor in the scholastic achievement of high school graduates who entered Northeast State College, located at Tahlequah, Oklahoma.

In compiling these data full consideration was given to all previous studies available in this field. The data examined, as well as the findings listed, have been checked scientifically, as shown in tables and graphs included in the body of this thesis. These have been found to agree substantially in the points under consideration.

Characteristics revealed by these data of particular significance in the present inquiry are:

1. The students who graduated from the class $A$ high schools made the greatest number and percent of $A^{\prime} \mathrm{s}$.
2. The percentage of B grades varied only nine tenths of one percent in the three classes of high schools.
3. The students who graduated from the C class schools made the greatest percent of C's. The students from the C group schools also made the lowest percent of Fis.
4. The students who entered college from class A and B high schools, entered at a slightly lower age level than those entering from class C high schools.
5. There was a sigmificant increase in scholastic achievement the second semester for all classes. Not unjustifiably one may conclude that the students who were graduated from the larger high schools in the Northeastern district have a somewhat greater opportunity for success in college, as manifested by their scholastic achievement during their freshmen year, than those who were graduated from the smaller high schools.

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