A SURVEY OF THE NASHVILLE, (KANSAS) PUBLIC SCHOOL SYSTEM, 1932-'33

A THESIS

SUBMITTED TO THE DEPARTMENT OF

EDUCATION AND THE GRADUATE COUNCIL OF THE KANSAS STATE TEACHERS COLLEGE OF EMPORIA IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

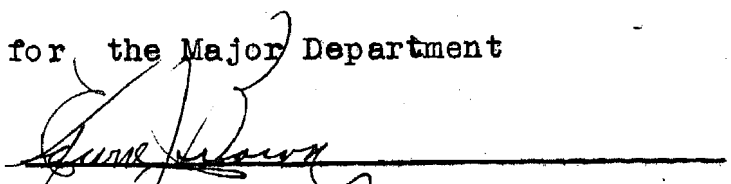
MASTER OF SCIENCE

BY

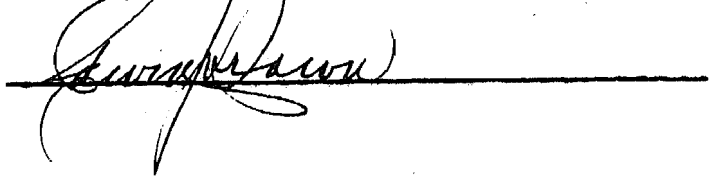
OTTO O. KAUFMAN

MAY, 1933

Approved for the Major Department



Approved for the Graduate Council



TO MY BROTHER, HERB H. KAUFMAN

THIS STUDY IS GRATEFULLY DEDICATED

OUT OF HIGH REGARD AND DEEP APPRECIATION

-o-

ACKNOWLEDGMENTS

A study of this kind is impossible without the assistance of many school officials and other educators. In the preparation of the material, constant use has been made of reports of surveys conducted by groups of experts in different cities.

The author wishes to acknowledge his debt of gratitude to all who have so courteously co-operated in securing the data for the study. Special acknowledgments are due to the Nashville school officials for their co-operation, to County Superintendent Edward Naanes for the use of County records, and to Dr. H. E. Schrammel and his Bureau of Measurements of the Kansas State Teachers College for help and assistance.

The author also acknowledges special obligations to Dr. Edwin J. Brown, Director of the Graduate School of the Teachers College. Whatever measure of success has been achieved in this study is largely due to his personal influence, inspiration, and help.

Otto O. Kaufman

TABLE OF CONTENTS

Chapter		Page
	INTRODUCTION	1
I.	THE PURPOSE AND PROCEDURE	7
II.	THE SETTING	11
	Character of Population The Town of Nashville Churches and Organization	
III.	ORGANIZATION AND ADMINISTRATION	17
	The Boards of Education Board Responsibility Board of Education Weaknesses The Board's Functions The Dual Principalship System The 8-4 Plan of School Organization Summary of Needs	
IV.	SCHOOL BUILDINGS AND EQUIPMENT	36
	The Elementary School General Status of Building Evaluation of School Buildings Ratings of Nashville's School Buildings Class rooms and Equipment Fire Protection Heating and Ventilation Toilet Facilities	

Chapter Page

Janitor Service
The High School
The School Site
The Building
Building Equipment
Gymnasium
Conclusions

V. THE QUALITY OF INSTRUCTION AND ACHIEVEMENT OF PUPILS 61

Courses of Study
The Teaching Corps
Supervision of Instruction
The Characteristics of the Pupils
The Progress of Pupils
Methods of Promotion
The Intelligence of Pupils
Achievement of Pupils
Pupil Achievement in High School
Conclusions

VI. EDUCATIONAL EXPENDITURES 85

Nashville's Educational Needs
Expenditure of the Tax Dollar
Financial Administration
Conclusions

VII. SUMMARY AND CONCLUSIONS 102

BIBLIOGRAPHY 104

LIST OF TABLES

Table		Page
I.	Population of Kingman and Liberty Townships, Kingman County: 1930, 1920, 1910	12
II.	Scores of Nashville School Buildings	42
III.	Age-Grade Distribution of Enrollment	68
IV.	Distribution of Intelligence Quotients of Pupils according to Grades	73
V.	Class Medians of Intelligence Quotients	74
VI.	Median Class Scores and Range of Scores on Primary Achievement Test	76
VVII.	Comparision of Scores in Reading	77
VIII.	Comparison of Scores in Spelling	78
IX.	Comparision of Scores in History	78
X.	Comparison of Scores in Geography	78
XI.	Comparison of Scores in Arithmetic	79
XII.	Comparison of Scores in English	79

Table		Page
XIII.	Number of Tests Taken in Different Grades and Number of Scores Below State Medians	81
XIV.	Comparison of Median Scores and Range of Scores in High School Subjects	82
XV.	Public-School Enrollment by Schools, 1920 to 1933, with per cent of Increase and Decrease over Each Preceding Year	89
XVI.	Population of Townships in Kingman County	87
XVII.	Ratio of Total Tax Rate for Educational Purposes in Kingman County Cities	92
XVIII.	Current Expenses of Rural High Schools in Kingman County and Cost of Tuition per Month on A. D. A. and Enrollment	93
XIX.	Summary of Elementary Schools of Cities used for Comparison, 1932	94
XX.	Summary of High Schools of Cities used for Comparison, 1932	95
XXI.	Property Valuation Per Pupil Enrollment	96
XXII.	Property Valuation per Pupil in High School, Based on Valuation of District, 1932	96

LIST OF MAPS

I. Map of Kingman County, Kansas 14

II. Map of School Districts 19

LIST OF DIAGRAMS

I. The Expenditure of the 1932 Tax Dollar in Kingman County, Kansas 91

INTRODUCTION

The School Survey

Efficiency in every line of human endeavor depends upon our ability to observe and evaluate the results which are secured. It is evident that a large per cent of failures in the business world can be charged directly to a lack of knowledge of facts and the ability to evaluate and analyze facts after they are collected and made available. A like situation is to be found in our educational system. Constant changes occur in education as in every other line of human action. The methods of yesterday do not exist today. Insistent demands for increased efficiency prevent the schools from resting complacently on their laurels. It must be admitted that real progress has been made in our current educational practice by the process of trial and error, but it is self-evident that a scientific study of an educational system will furnish a basis for more rapid elimination of mistakes, and will point the way to improved school organization.

"The school survey is a passing fad",[1] said some of the school men of the country ten years ago, but judging from

---

1 Walter S. Deffenbaugh, "City School Surveys" Educational Surveys, Bureau of Education (Bulletin) 1928, No. 11 p. 19

the number of city school surveys that have been made within the past decade, and especially from the number that have been made since 1925, the movement is gaining momentum. The school survey, made by a trained individual, or group of individuals, promises a radical improvement in school practice and attainment. If the schools be given a definite standard, and frankly be told in what particulars and to what extent they fall below this standard, it is possible to outline a program for the modification and improvement of the school. Desirable changes can then be made.

The general or comprehensive school survey has for its aim, the appraisal of the entire school system. Not only is the efficiency of the school system determined as scientifically as possible with the means at hand, but recommendations based upon these facts as found, are made to show how the school system may be improved. Usually, in the program outlined, only a part of the recommendations can immediately be put into operation. In fact, if any school board should attempt to adopt and to put into operation at once all the recommendations made in most city school survey reports, the school system would suffer. The recommendations are made with the expectations that they will be gradually adopted over a period of years.

One of the distinguishing features of a good school survey is the fact that its aim is wholly constructive. This

does not mean that the weak points of a school system are not brought out, but such points are followed by constructive recommendations. The survey that does nothing, but point out the weaknesses of a school system is worthless. It is also necessary to give attention to the good points in the school system surveyed, or what the school has accomplished over a period of years.

Experience proves that if the faults of a school system are revealed, and recommendations are based upon these disclosures, those on whom rests the initiative to make the necessary changes will not delay effective action as far as conditions permit. But no school board, or school superintendent can afford to attempt the task of making major changes in a school system, unless information is collected which justifies the changes. Lacking the necessary data, they are like a rudderless ship drifting according to the whim of any temporary public sentiment. Convincing evidence of the error of the popular judgment is impossible, if a detailed study of the situation has not been made. In numberless instances, public money has been wasted, because of the lack of definite knowledge relating to existing facts.

School authorities are beginning to recognize the value of the school survey. For example, no progressive board of education thinks of erecting school buildings without first studying the school building needs of the city--the number of

buildings necessary, the number of old buildings that should be continued in use, remodeled, or abandoned, and the number of new buildings that should be erected, where the new buildings should be erected, and the kinds of buildings needed. Such a study is based upon many factors. The census reports give the percentage of growth for the city for a series of years, and bases its estimate of the growth of the future upon this data. Next, the relation between the school population and the total population is determined. These figures are determined by the percentage of the school population actually in school attendance as given in the school records over a series of years. Unless the character of the city changes entirely, this ratio may be expected to remain constant. Corroborated by the actual percentage of growth in school attendance, a basis for future plans is reasonably well established. While such a procedure may seem complicated to layman, it is a scientific way in which tens of thousands of dollars of the taxpayer's money may be saved, and official blundering may be avoided.

The American citizen does not have the spirit of questioning the requests that come before the taxpayers, he is, despite his willingness to criticise, proud of his schools, and will afford them generous financial support if the situation is fairly presented and based upon facts. It is only fair to the taxpayer that the data presented for his approval are based upon facts that were carefully analyzed and studied.

One question continually asked by the public is, "Are our schools efficient?". It is not enough to answer this natural inquiry by mere assertion, or by pointing to facts, the validity of which depends upon opinions. There are facts indicating efficiency which can not be questioned. Such facts as the percentage of 'over-age', 'under-age', and 'normal-age' children; the percentage of children making slow, rapid, and normal progress; or the 'holding-power' of the high school, are facts that indicate the efficiency of the school that cannot be questioned. Such indices as these are not dependent upon opinion, but are based upon scientific facts, if they are carefully collected and interpreted. While they are not conclusive if considered singly, the combined weight of evidence of this nature cannot be questioned, no fair-minded man can justly question the proper deductions.

No two school survey reports are organized exactly alike. The characteristics of the school system surveyed determines to a certain extent the method of organizing the report. All the general surveys, however, treat about the same topics, such as administration, school buildings, school population, school finances, school achievement, and the teaching staff. Local conditions determine the investigations which will be most serviceable. A knowledge of facts, for the sake of improving local conditions is the essential element.

Some surveys overemphasize the collection of facts, and attempt and accomplish little else. What is needed, however, is frequently not the collection of a vast amount of data, as much as a thorough consideration of data already available. In the preparation of several studies that have been conspicuously useful, much less time and effort were expended in collecting material, than in the exhaustive consideration and complete testing of the conclusions.[2] Also, the descriptive accounts common a few years ago, are today replaced by analytical studies in which facts and conclusions are reached by scientific methods.

No subject touches life on more sides than education, and every educational question of state or city is related to economic, political, and social conditions that must be taken actively into consideration in arriving at an accurate judgment of educational value. An honest survey is a powerful agent for reform, where reform, as is still sometimes the case, is needed. In clearing the way of obstructions and opening the way for good school practices, few implements have proved themselves more useful than the educational survey.

---

2 William H. Carpenter, "Recent Educational Surveys", EDUCATIONAL REVIEW, September, 1919. pp 130-142

CHAPTER I

THE PURPOSE AND PROCEDURE OF THE NASHVILLE (KANSAS) SCHOOL SURVEY

This investigation has been made for the specific purpose of studying and attempting to evaluate existing conditions in the Nashville (Kansas) Public School System. The motives that caused the author to make this study, were not to flatter nor to discredit the community, but a sincere desire to discover conditions as a basis for helpful and constructive assistance to the school authorities. In every instance, an attempt has been made to assertain and set forth the degree to which existing conditions appear to meet the demands of the educational needs of the community. It is hoped that the analysis of these facts, which form the basis for certain recommendations, will stimulate and assist in the future development of the school system.

Since the purpose of the study is the presentation of information in accordance with its relative importance, an attempt was made to handle all data impersonally and objectively. Weaknesses are presented painstakingly in their true light, and all adverse criticisms carry recommendations calculated to eliminate undesirable conditions as speedily as possible.

The plan of the study is simple. It is limited to those divisions, which in the opinion of the author, are considered essential for improvement in school organization. In order to get clearly in mind the facts needed, the situation was studied from the social, economic, and educational viewpoints.

Several methods of collecting data for making the study were used. In the first place, the author had a first hand acquaintance with every plase of the school system through his connection with the school from 1927 to 1932. During these five years, he learned to know the educational situation in the community better than even the most conscientious experts could learn it in the brief time at their disposal. No cursory examination reveals the general educational sentiment of the community. School activities are so various, that many items of supreme importance in local conditions necessarily escape the observation of the person unfamiliar with the situation. During his five years of work in the Nashville school, the author had the opportunity of thoroughly familiarizing himself with every phase of community life. While this knowledge was of great help in making the study, it should be stated that it aided more in making the observations than it did in the analysis of the data.

The observations of the author were supplemented by a careful study of the school records, both pupil and financial.

Here, the school officials gave the author unlimited assistance, by making these records available, both in the office of the school, and in the office of the county superintendent of instruction.

The third source of obtaining data was through the use of standardized tests, which were used for measuring general intelligence and school achievement. The administration of these tests was carefully supervised by the author, and through the courtesy of Dr. H. E. Schrammel, the scoring of the tests was done in the offices of the Bureau of Measurements of the Kansas State Teachers College of Emporia. This was done to insure the validity of the results of the testing program. The analysis and interpretation of the facts collected was done by the author under the careful supervision and direction of Dr. Edwin J. Brown, Director of the Graduate School of the Teachers College. His suggestions and criticisms were of great assistance in drawing conclusions and making recommendations.

It is hoped that the thoroughness of the study and the soundness of the recommendations will make this study of service to the Nashville Community. In every case, an effort was made to present the facts and observations with sufficient clearness that correct conclusions can easily and naturally be formed, and only those recommendations are proposed which seemed to be practical for the future devlopment and betterment of the school system.

Frankly stated, not all school surveys have been successful. In most cases however, the fault has not been entirely with the study, but rather with the local arrangements for adequate consideration of the report and the findings. Although the author is much interested in the results of the study he can do nothing to guarantee that there will be desirable results. However, if this study meets with no other response than that of stirring up thinking in the community on the problem of school improvement, the purpose of the study will be realized.

The author is grateful for the helpful and courteous assistance he received from the teachers, principals, and the board of education. They gave a great deal of time and attention to the investigation, and at no time was there observed a reluctance to give their full co-operation. The spirit of friendliness and helpful interest on the part of the community made the work thoroughly enjoyable and pleasant.

CHAPTER II

THE SETTING

Nashville is a typical rural community town, situated in the extreme southwestern part of Kingman County, Kansas. It is located on State Highway, number 42, which is kept in good repair and gives ready access to neighboring towns under all weather conditions. The distance to Kingman, the county seat of Kingman County is thirty-two miles; it is also thirty-two miles to Pratt, the county seat of Pratt County, and twenty-one miles to Medicine Lodge, the county seat of Barber County.

The town of Nashville has a population of 234, according to the 1930 United States Census. The population for the city of Nashville was not returned separately in 1920 and 1910, so no comparison can be made. A study of the population of Kingman and Liberty Townships, in which the town of Nashville and the Nashville School District are located, shows that there has been no material increase in population from 1910 to 1930. The following table shows the population at different dates as taken from the Fifteenth Census of the United States:*

---

* Fifteenth Census of the United States: 1930 Population, Volume III, Part I. Table 21, p 877

TABLE I

POPULATION OF KINGMAN AND LIBERTY TOWNSHIPS, KINGMAN COUNTY KANSAS: 1930, 1920, 1910

Township	1930	1920	1910
Liberty	403	395	376
Kingman	489	461	493

On the basis of these figures, we have reasons to believe that no material increases in population for the city of Nashville can be anticipated, with the exception of the fact that there has been a tendency for the farmers to move to town. With the advent of power machinery, and the automobiles, it is possible for the farmer to live in town and still take care of his crops. This tendency towards city-farming will not have a marked effect upon school enrollment, because during the past, the children attended the Nashville School, especially the high school, even though their parents lived on the farm out of town.

Character of the Population

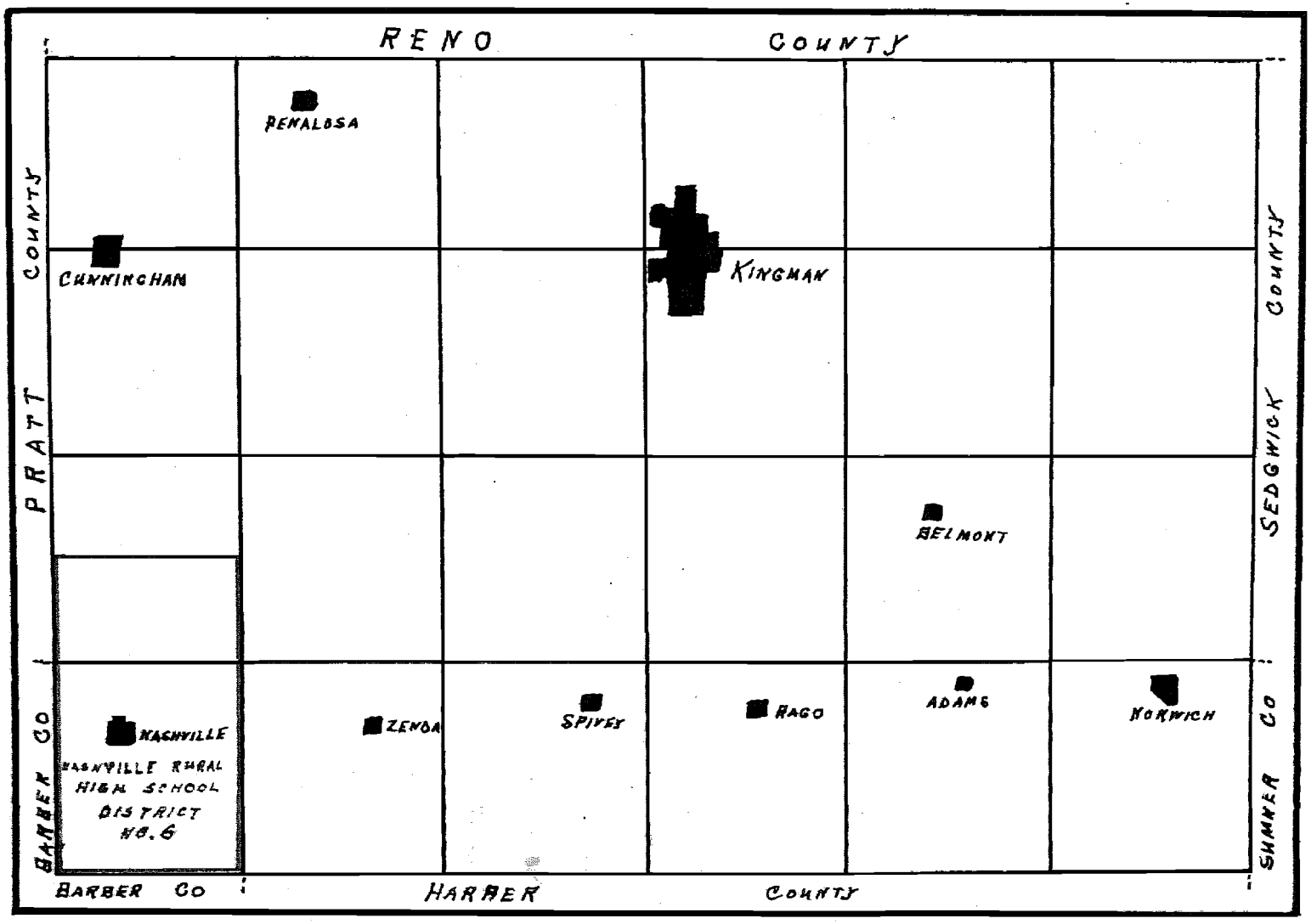
The population of the town and the community is much the same as that of other communities, with the exception that a

large portion of the people have sprung from German parentage. The people are thrifty, and it is noticeable that there are but few very poor people. On the other hand, there is no great wealth. The well improved farms, and the splendid conditions in which the homes are kept, give evidence of a prosperous community. Of course, during these times of economic re-adjustment, an additional burden is placed upon the people, due to low prices of farm products, but it seems that adjustments for them are easily made. It is a democratic community, and there is a marked public spirit, which is noticable in the public improvements of the town and the community. The people are happy, neighborly, peaceful, and anxious to keep the environment of their community such that it will be a wholesome place for the rearing of their children.

The Town of Nashville

The town is in the midst of a rich farming area. The soil is a sandy loam, well adapted to grain. The principal source of revenue is wheat and corn, and a few farmers carry on a business in dairying and stock-raising. There is a strong trend to diversified farming during recent years.

The town is well patronized by the people of the community. The two grocery stores, two restaurants, one hardware store, and the drug store meet the trade demands of the farming



KINGMAN COUNTY, KANSAS

community. The other business enterprises include one lumber yard, two garages, two filling stations, several creameries and produce houses, shoe shop, and a barber shop, which are typical of all small towns. The three grain elevators near the one railroad, the Atchison and Topeka, branch of the Sante Fe, give the farmers a good market for their grain. The cattle and hogs are trucked and shipped to Wichita and Kansas City.

Nashville is associated in the minds of many people with the fine small hospital which serves the community, and the people within a radius of more than fifty miles. The two surgeons have established for themselves a reputation, which brings patients to their hospital from many miles away, and it is not unusual for them to perform five and six major operations during the week. This brings many visitors to town, and gives Nashville the appearance of an unusually busy small town.

Churches and Organizations

Nashville's spiritual needs are supplied by two resident pastors, and a minister from Medicine Lodge serves the church that does not have a resident minister. The Methodist and Christian churches do not have a large membership, but the Lutheran church is an active organization with a large

membership. Many people from Nashville attend the Catholic Church which is located in Saint Leo, a small village five miles north of Nashville.

The organizations of the community which have regular meetings are the W. C. T. U., The Womens' Missionary Society, The Ladies Aid Organizations of the churches, the Walther League, Epworth League, and Christain Endeavor. A number of the boys and girls of the community are interested and take part in the county 4-H Club organization.

The nature of the population and the native conservatism of the people have led to a demand for parochial schools. The Lutheran Day School in Nashville, and the Saint Leo's School in Saint Leo are schools under church control, and consequently, the public school is not as large as it otherwise would be. But the public school is the one institution in the community which interests all, and of which all the people are proud. The support for both the elementary and the high school has been very generous. The grade building was constructed in 1916, and the fine new high school building, which was completed in 1929, are evidences of a truly progressive community.

CHAPTER III

ORGANIZATION AND ADMINISTRATION

The Nashville Public Schools are organized under the 8-4 plan, with the elementary and the high school in separate buildings and supported by their own districts. The high school district was organized under the Barnes High School law in 1919. The area of the school district is fifty-four square miles. The elementary school district was organized as a Graded School with a district containing only eight and one-half square miles. As matters now stand the schools are supported by separate taxing districts, and controlled by their own school boards, each consisting of three members, a president, a clerk, and the treasurer. There is no official connection between the administration and organization of the two schools, but there has always existed a spirit of friendliness and co-operation. Each school has its principal, there is no superintendent of schools who has charge of the entire system.

The Boards of Education

The administration of the schools is under the direction of two boards of education consisting of three members each,

CHAPTER III

ORGANIZATION AND ADMINISTRATION

The Nashville Public Schools are organized under the 8-4 plan, with the elementary and the high school in separate buildings and supported by their own districts. The high school district was organized under the Barnes High School law in 1919. The area of the school district is fifty-four square miles. The elementary school district was organized as a Graded School with a district containing only eight and one-half square miles. As matters now stand the schools are supported by separate taxing districts, and controlled by their own school boards, each consisting of three members, a president, a clerk, and the treasurer. There is no official connection between the administration and organization of the two schools, but there has always existed a spirit of friendliness and co-operation. Each school has its principal, there is no superintendent of schools who has charge of the entire system.

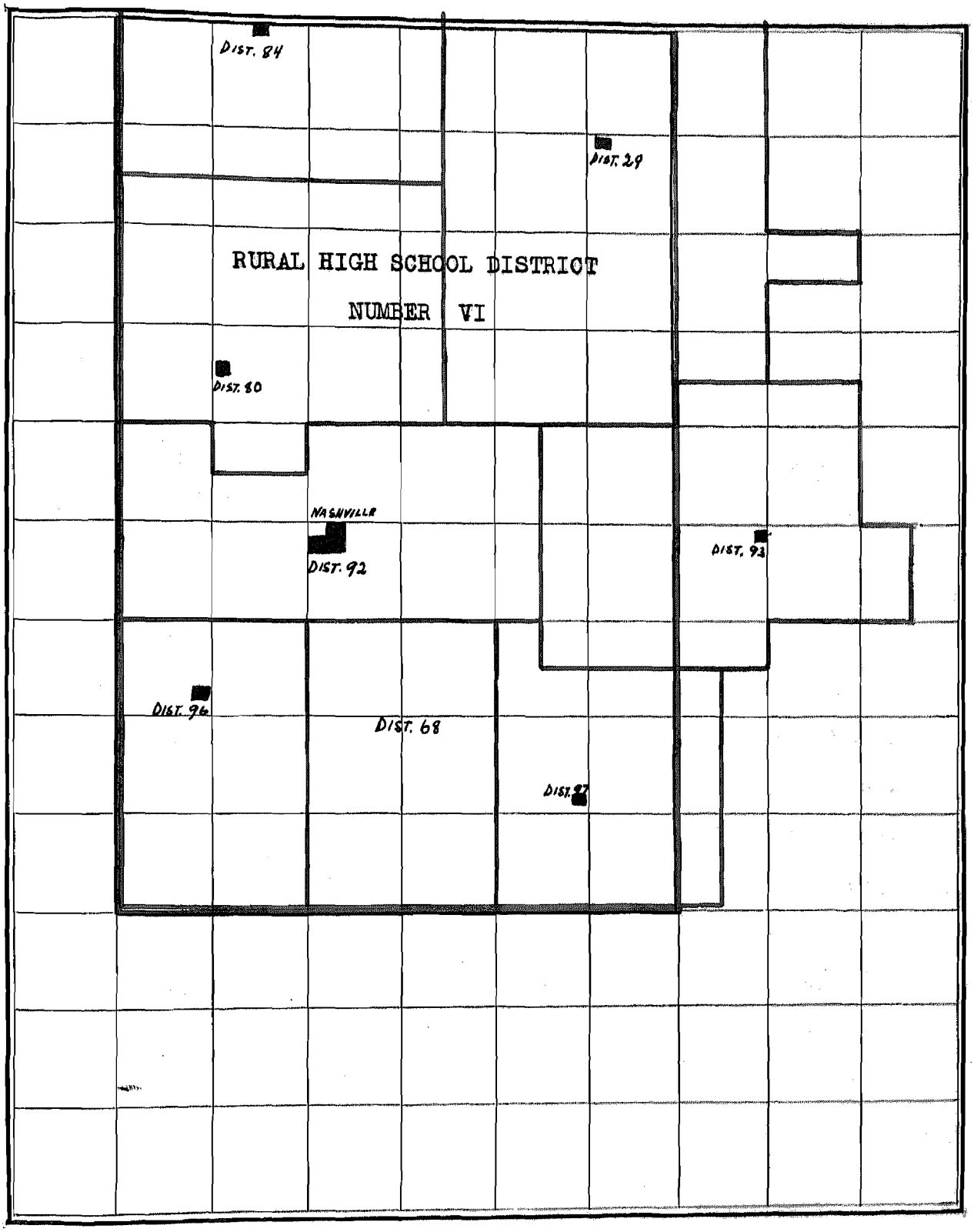
The Boards of Education

The administration of the schools is under the direction of two boards of education consisting of three members each,

and a principal directly in charge of each school. The people of the community have acquired the habit of selecting high-minded men and women for their school boards. The position of being a member of the board of education, although it carries with it no renumeration or privileges, is considered in Nashville as one of the most honorable positions within the gift of the people, since it has to do with the welfare and education of the children of the community. There have been instances, to be sure, where persons desired to be on the board, to gratify their ambitions to wield authority and power, or who regarded a school board membership as a stepping stone to social prestige. But, on the whole, the men and women who have served on the Nashville school boards, expected no compensation, other than the consciousness of contributing something to the welfare of the community.

Board Responsibility

Past experience proves that when the board is elected by the people and thus becomes directly responsible to the people, it is not likely to undertake policies which do not command general popular approval. During the past, the community has been much interested in public school matters and active co-operation and moral support have not been lacking. It can easily be seen that this has in a large measure influenced the election of school officials during the past.



MAP OF SCHOOL DISTRICTS

Board of Education Weaknesses

While the individual members of the boards have given much time and thought to the problem of providing good schools for the community, they have committed errors that in the future should be avoided. In criticising some of the methods and actions of the boards, the errors to be pointed out are errors of judgment and organization and not of character and effort. The writer wishes it to be understood that every criticism that is made applies to methods and not to individuals.

To state the situation briefly, and perhaps rather bluntly, the fundamental weakness in the Nashville school organization has been the executive management of the schools by the board of education. During past years, the author has observed that the school boards wished to have their principal administer the educational side of the school system, while they managed the business side. As a result of this point of view, the board is concerned and takes charge of many of the activities in the administration of the schools that should come under the powers of the school principals. This has been much more noticable in the administration of the elementary school than it has been in the high school. For example, it is the height of absurdity for the board to consider formally such business as the advisability of purchasing small supplies that are necessary for the daily

operation of the school. It seems very unnecessary to have a board of education to be legislating on the advisability of purchasing such things as a door mat, or twenty-five feet of rubber hose, or this, that or the other thing, according to the various needs of the school. This could much more efficiently be cared for if a regular system of requisitions would be introduced, and purchases be made by a member of the board or by the principal of the school. Of course, expenditures should not be made beyond a specific amount, and requisitions should be passed upon by the board at the regular meetings. The school board, entrusted with the control of the public schools in a community is confronted with problems that are more important than having charge of the petty business affairs which should come under the direction of the educational executive.

It is true, of course, that all cases of over-activity on the part of the board of education arise from a wrong conception of what the members were elected to do. A school board is elected primarily as a board of school control, to determine school policies, yet they often times transform it into a board of administration and school supervision for detailed oversight of the work of the school. This, no board of laymen should undertake to do. What is needed is the adoption of a plan by which the board will get things done in a responsible way and enforce responsibility without doing things themselves.

Another outstanding weakness of the grade board that should be criticized is their method of electing teachers. Nothing more clearly shows the primitive character of the board than the fact that they assume the responsibility of appointing teachers without consulting the principal of the school. Without professional training and extended experience, it is not possible for a board to judge efficiently the relative merits of candidates for teaching positions. In actual practice, this scheme of electing elementary teachers has worked badly. Provisions for rating the efficiency of teachers and means for eliminating the inefficient teachers should not be reserved as a duty of the board. The methods actually used in the past for judging the efficiency of the teacher has been through pupils' tales and through the opinions of parents. If the board could receive the full measure of opinions of pupils and parents, these sources would probably be somewhat reliable. But this is not the case. A far more reliable method of judging the efficiency of the teachers would be to consider the judgment of their professional executive. If they do not have confidence in his judgement, he should be replaced by someone in whose ability and good judgment they have confidence. The principal of the school should recommend teachers for appointment or dismissal, and the board should carefully consider his recommendations before they make a decision. This would relieve the board of much guess-work and place the responsibility where it belongs.

It would also give the principal authority over his teachers, which he cannot have as long as they owe their position to others.

Another weakness of the work of the board of education is the lack of a systematic method of keeping records. Since the board of education is a corporate body, it must have a recording officer who records all the proceedings of the board; acts as custodian of the official records, such as contracts, deeds, securities, books of record, canceled warrents, bonds, and coupons; executes official documents; makes reports as required by law; handles board correspondence--proceeds in short, as the secretary of any corporation.[1]

Dr. Hans C. Olsen[2] in his study on The Work of Boards of Education points out the importance of the fact that the boards must have an official record of all its proceedings. This is imperative since a board is a corporate body and its official records constitutes the evidence of its proceedings. Legally, such a record is necessary in the event that litigation arises.

The record should consist of a series of carefully worded resolutions with each vote recorded, particularly if the

---

1 Harry P. Smith, Business Administration of Public Schools, p 56

2 Hans C. Olsen, The Work of Boards of Education, p 156 Teachers College, Columbia University (Contributions to Education, No. 213) N. Y. 1926 170 pp

transaction involves the appropriation or expenditure of money. The data on the proceedings should be kept in some form of binder or recording book where they can be properly indexed and in which they can be preserved for a long period of time.

The school board of Nashville has, as it should have, complete control of the expenditure of the school funds, once they are apportioned from the state and the county school funds. At the beginning of the year, the board knows substantially what amount of money is to be available for school purposes, but as expenditures are made they should have a complete record of every transaction in order to check every economic as well as educational waste. Where school expenditures rise a little each year, as they should in a community where the schools are popular and are increasing in enrollment, the board should be able to show definitely that while the cost of the schools have gone up, yet the pupil cost is lower, and at the same time new educational services which are demanded are being rendered, and better service in the old lines is being given. A board of education, interested in good schools should be able to give the public facts at all times. If certain retrenchments are necessary, and if certain expenditures are also necessary and advisable, they should have the information at hand to justify their action. This can only be done if the board adopts a systematic and complete

system of recording their activities.

Finally, it should be pointed out, that the grade board is not well organized at the present time. There are no regular meetings of the board, meetings being called usually when the clerk has a number of bills which should be paid. This passive method of calling meetings indicates a lack of aggressiveness on the part of the board. The board should meet regularly, once a month, to hear reports and recommendations from their principal and pass upon the same. The board should certainly be alive to the conditions of the school system, if they wish to be competent to insure the continued progress of the school.

As a whole, the organization of the high school Board is much better. This Board meets regularly on the last Wednesday of each school month. The board members are informed as to the business under consideration the day before the meeting is called. The conditions and needs of the school are made known by the principal, so that the board members can come to the meeting ready to discuss the recommendations and make decisions. In this manner, the board has always a good knowledge of the condition and progress of the school, and their work is greatly facilitated.

The Board's Functions

It is not the purpose of this study to give a detailed discussion of the function of the school board and their

relation to the chief professional executive. But there are certain principles in regards to the proper function of the board of education which are commonly accepted among careful students of school administration, and with the view of offering them as a guide for the Nashville Board of Education in their future official actions, these will be mentioned.*

Since the community pays for professional leadership in the person of the principal, it has a right to expect that he be given opportunity to assume that leadership. It is a waste of public funds to pay high salaries for an educational expert, and then disregard his advice and judgment. Every one will naturally make mistakes, including the school principal, but he will likely make a much smaller number in professional matters than will the members of the board. School boards should not make the all to common mistake of attempting to assume authority in educational matters themselves, concerning which they cannot be expected to act intelligently.

The present tendency of organization for the modern board of education is clearly in the direction of the application of the principles of good industrial organization, where a board of directors representing the stockholders as a whole,

---

* For an excellent book on this subject, the author refers the reader to the book, The School Board Member, by John C. Almack, published by The Macmillan Company, New York, 1927

designate a chief executive who is held responsible for results.[3] The board of directors confines its activities to a determination of policies and to checking results. They do not mix into the details of the actual work. They outline their policies to their executive, make clear to him the results to be secured, gives him control over the means to be employed, and then demands that he gets results.

In the Nashville schools, however, the executive work of the Board is performed to a large extent by the Board or even by individual members of the Board. They buy and sell, employ and discharge, and attend to countless details that are usually left to the executive in a business organization. In the sense in which this term is used in the business world, the Board has no chief executive, there is little evidence in the way the Board functions to show any realization of the need of one. What is needed is the adoption of an organization chart, showing clearly its administrative relationships, with the lines of authority clearly defined. In this manner, the board will make it possible for their principal to do things, without attempting to do the things themselves.

This does not mean that the board of education has nothing left to do, though its labors will naturally be materially

---

3 Ward G. Reeder, The Business Administration of a School System, pp 11-31. Ginn and Company, Boston, 1929. 454 pp

reduced. Freed from the details of school administration and supervision, the board is now free to devote its energies to the problems of its work as a board of school control. Among these functions, Ellwood P. Cubberley, an eminent authority on school administration, states the following functions:[4] the approval of the courses of study, the appointment of teachers, (only on the recommendation of its chief executive officer), order bills paid and contracts approved, and serve as a court of appeals in cases only where the executive has not been able to effect a satisfactory settlement.

Dr. Leonard P. Ayres, a nationally known educator, states the function of the board of education in an admirable manner by saying:[5] "Boards of education exist for the purpose of getting public schools managed; not for the purpose of managing the schools themselves. Their work is to get things done rather than to do them." Again, in the same study he reiterates this principal by saying:[6] "The board should decide what it wants to have done, select people to do these things, study results to know that they are being done, and keep the public

---

4 Ellwood P. Cubberley, State School Administration, p 205 Houghton Mifflin Company, Boston. 1927 773 pp

5 Leonard P. Ayres, School Organization and Administration p 150 The Survey Committee of the Cleveland Foundation, Philadelphia, 1916 135 pp

6 Leonard P. Ayres, Ibid p 122

informed about the problems faced and the progress made."

It is these larger problems of control which are most important, but which are almost sure to be neglected when a school board undertakes to transform itself into a board of administration and supervision to handle the details of the school.

A clear statement of generally recognized functions of the modern board of education in a school system is given by Dr. William W. Theisen, who made a careful study and analysis of the rules of boards of education of one hundred cities.[7] From these he generalized nineteen duties which he asked several hundred judges to rank in order of importance. These judges were business men, educators, and members of professions. As a result of this analysis we have the following duties appearing in the order of their importance according to the composite ranking of the judges:

1. Select the chief executive officer and support him in the discharge of his duties.

2. Pass upon the annual budget for maintenance prepared by the chief executive and his assistants.

3. Debate and pass upon recommendations of the chief executive for additional outlays--buildings, sites, and imporvements--and determine the means of financing such outlays, as by bonds or loans.

4. Advise with the chief executive, affording a group judgment, on his recommendations for extensions or readjustments of the scope of educational activities.

---

7 William W. Theisen, The City Superintendent and The Board of Education, pp 1-32 Teachers College, Columbia University, New York. (Contributions to Education, No. 84) 1917, 137 pp

5. Appoint, upon nomination and recommendation of the chief executive, teachers, principals, and supervisors.

6. Determine, after consultation and discussion with the chief executive, the schedule of salaries.

7. Require and consider reports of the business transacted or pending, and of the financial status of the system.

8. Require and discuss report of the chief executive concerning progress of the schools--in terms of achievements of pupils, teachers, and supervisors.

9. Adopt, upon consultation with the chief executive, a set of by-laws or rules for the government of the school system; that is, designate authority of executive and administrative officers, and duties to be performed by the board and its committees.

10. Pass upon architect's plans, approved by the chief executive and his assistants, for buildings that have been authorized.

11. Represent needs of the schools before city authorities and the legislature.

12. Approve the list of bills for expenditure previously authorized and approved by executive officers.

13. Consider recommendations of executive officers on legal matters, decide steps to be taken in such matters as suits to quiet title and condemnation proceedings.

14. Approve textbooks selected by the chief executive and approve courses of study recommended by him.

15. Represent needs of the schools before the public through such media as the press and platform.

16. Serve as laymen, ready--even after retiring from the board--to champion school needs and to further public support of the schools as others champion good streets and parks.

17. Act as a court of final appeal for teachers, supervisors, and patrons in cases that the superintendent has not been able to dispose of or that may be appealed from his decision.

18. Hear communications, written or oral, from citizens or organizations on matters of administration or policy.

19. Visit the schools to observe and investigate the efficiency of instruction.

The author wishes to emphasize the facts that Dr. Theisen so effectively points out, that the most important function of the board of education is to "select the chief executive officer and support him in the discharge of his duties." He also points out that "a board of education should endeavor to discover its own proper duties and those that should be delegated to professional executive officers." He makes it clear that a school board should determine policies and that it is the function of the school executive to execute the policies of the board. He also emphasizes the fact that the appointment of teachers should be on the recommendation of the chief executive. Throughout the study, he clearly sets forth the principle that the board should always confine its work to seeing that the schools are properly administered, never should the board itself administer the schools.

By way of summary, it may be stated that the chief function of the board of education is to govern, rather than minutely supervise and direct; to watch the larger problems of its work and to trust the smaller ones to the principal of the school it employs; and to keep them free from the personal influences and personal pulls which constantly

surrounds them by placing all personal matters in the hands of their chief executive, the principal of the school who generally knows what ought to be done and who has the courage to stand for fundamental educational principles and policies.

It is these larger problems of control which are more important, but which are sure to be neglected when a school board undertakes to transform itself into a board of administration and supervision to handle the details of school control.

In conclusion, it is to a large extent the human qualities posessed by the individual members of a board that makes or mars its work. It is in point then, to suggest the type of individual needed for this important office. Dr. John K. Norton has aptly stated the qualifications to be desired. He states:[8]

> A school board member should be both honest and intelligent. He should have an active interest in the public schools and a desire to improve their effectiveness. He should have sufficient vision so that he may offer real help in the formulation of the cities educational policies. He should have sufficient common sense, however, to recognize that it is not his duty actually to put these policies into execution. The policies which the school board member determines should be turned over for execution to technically trained educational experts working full time and having complete training for this type of work.

A board consisting of men and women with these qualifications will be a sane, and evenly balanced board, who will

---

8 John K. Norton, A Handbook of Major Educational Issues, p 219

leave the details of school administration to those who can handle them best.

The Dual Principalship System

The Nashville School System operates under the dual principalship system. The community is fortunate in having men at the head of their schools that are well trained from the educational standpoint. In both cases, the writer believes, the men are capable and efficient. Experience has shown that they are skilled diplomats, ready at all times to cope with the problems which arise in every school system, and what is of equal importance, they are practical business men. They are sufficiently experienced in matters of finance, not only to aid, but to guide the Boards of Education if they be given the opportunity, in the proper and efficient expenditures of the funds available for educational purposes.

The 8-4 Plan of School Organization

During recent years a change in school organization has been going on. Today, there is a common belief among educators that the so-called 8-4 plan of school organization, meaning eight years of elementary school and four years of high school training, is not an efficient school organization. The progressive schools are re-organizing their system on the basis of a six year elementary school, a three year junior

high school, and a three year senior high school. It is not the purpose of the writer to go into a discussion of the advantages and disadvantages of this plan. He is convinced, however, that if the Nashville Schools would re-organize under this plan, and be put in charge of a superintendent of schools, that decided progress would be made in the efficiency of the school. It is his purpose to raise the question if this change would not be wise for Nashville. The consideration of such a plan should not be postponed very long, and should certainly be considered at the time a new school building is built.

Summary of Needs

1. The community should continue to provide a board of men and women who will be beyond the reach of local, petty, personal, and political influences.

2. The board should delegate responsibility and authority to its chief executive, provide the necessary means, demand results, and then stand aside and let the principal and his organization get results.

3. The board should adopt impersonal ways of checking results, efficiency, and economy. This can only be done by arranging for a complete and systematic method of keeping records. Records of official acts are of paramount importance and should be carefully preserved.

4. The board should take the community into its confidence fully and at all times, and keep the public informed as to policies, needs, and results.

5. It is not considered the best practice to have the school organized under the 8-4 plan of organization. While conditions in Nashville at present prevent the adoption of the 6-3-3 plan of school organization, it should be carefully considered as soon as possible and then put the school under the control of a superintendent of schools.

CHAPTER IV

SCHOOL BUILDINGS AND EQUIPMENT

Nashville has three school buildings, the high school building, the grade building, and the gymnasium. The oldest of the three buildings is the grade building, which was built in 1916. The gymnasium was built in 1925, and the high school in 1929. The grade building housed both the high school and the elementary school from the time that the high school district was organized in 1919, until the construction of the new building.

The Elementary School

The elementary school is located in a well kept part of town, and the school ground contains two and one-half acres. The building is rightly placed with reference to the size of the building and site, the one outstanding building defect being that the room arrangement is such that half of the class rooms receive an over-abundance of sunshine, and the other half never receives sunshine. Apparently, the only excuse for this situation is an oversight, or a failure to recognize the necessity for sunshine in a schoolroom. It is unfortunate that the school authorities

have done very little to improve the school ground and make it more attractive. Growing trees improve the beauty of the site, but these have not been carefully selected nor located. No attention has been paid to developing a lawn, shrubbery, or flower beds.

The soil on the play ground is of the sandy loam type found in Nashville. While the drainage from the building is fair, many low places are noticable which should be filled in. As it is now, certain parts of the ground are unfit for play during rainy weather. Certain parts of the ground also contain ashes, cinders, broken glass, and other material which, although they do not cover the entire ground, are present in such quanities as to be undesirable.

While the playground is sufficiently large for play purposes, there is a decided lack of play ground equipment. The only equipment consists of a pair of basket-ball goals, three swings, and three teeter boards. It would be a simple matter and a wise investment of time and money to arrange for two tennis courts for the older boys and girls, and slides or giant strides for the younger children. It must be recognized that the play activities of the child while in school, are a fundamental part in the physical, intellectual, and social development of the child. There can be no doubt that the truest and most valuable training in democratic behavior may be had on the school playground. It is sound educational

doctrine which calls for ample opportunity for our children to play, and it is sane, economical educational practice to give them play equipment.[1] Good school buildings are important, but ample playgrounds and play equipment must be considered as a fundamental essential for children.

General Status of Building

In judging the general characteristics of the building, it must be remembered that our present standards, especially for the elementary school buildings, are products of the last few years. Thus the shortcomings of the building to be mentioned are due in part to the date of its construction. It is obvious that the building does not entirely meet our present standards, but it probably does not tend to place any great limitation upon the efficiency of the work of the school. This is due to the fact that the building is much larger and contains more room than is necessary for the present enrollment. It should be mentioned that an architect, who claimed a knowledge of school-house construction was employed and his advice followed in the construction of the building. It is evident that the building was built without enough thought about school architecture, and that little importance was attached to such matters as utilization

---

1. J. Crosby Chapman and George S. Counts, Principles of Education, pp 324-325. Houghton Mifflin Company, Boston 1924, 645 pp

of space, heating, lighting, seating, and fire-proof construction.

The building may best be described as a two-story brick building with a basement. Each floor contains two large rooms with a cloakroom, and a small room that could well be used for an office or lunch room. The basement contains the necessary toilets, store room, fuel room, and an extra classroom. The outstanding weakness of the building is the lack of special rooms. It is noticable that only three of the five classrooms are used at the present time. With a very small investment of time and money, the other two rooms could be equipped for an assembly room and play room.

The building is distinctly non-fireproof, as both the joists supporting the floors and the stairs are of wood construction. While the materials used in its construction are of high grade and good quality, it was carelessly constructed, and there is evidence of settling of part of the building. This has caused a few of the classroom doors to sag and fit improperly.

It is evident that the corridors and stairways were not constructed according to modern school building standards. The waste of space due to improper arrangement and size bears definite evidence that the building was not wisely

planned, and it is necessarily an expensive proposition to include so much useless space in a school building.

Evaluation of School Buildings

The authors of the Strayer-Engelhardt Score Card for measuring and evaluating school buildings have had an unusual opportunity for studying school buildings, and have formulated standards for judging them. The card is an answer to the need for objective standards by which the different physical features of a building may be analyzed and classified. The score care embodies a large number of standards, in terms of which judgment is to be rendered. It is accompanied by detailed instructions for the evaluation of a school building, with reference to its functioning for school purposes. In most cases, evaluation is satisfactorily objective.

This score card considers the building and site under five general divisions. The five major points considered in judging a building are: (a) site, (b) the building itself, (c) service system, (d) class rooms, and (e) special rooms. Under each of these major heads there are a number of subitems, so that the analysis of a building includes a total of 114 separate items. In using the card a single item at a time is concentrated upon and a judgment formed with reference to it, independently of all other items.

The items on the score card are scored independently by two or three competent judges for each building. The school building score secured in this way serves as a basis for comparison with other buildings, and with the score that represents acceptable standards of school building efficiency.

Ratings of Nashvilles School Buildings

The ratings for both the grade school and high school building on the Strayer-Engelhardt Score Card are given in detail in Table II. The maximum score for each item and also for the totals is placed in the first column. The Buildings were scored by two competent school men, and the author, and the average of the three rankings are given in the table. The author found that his evaluations were very nearly the same as that of the other two for the high school building, but were considerable lower for the grade building. This may be due in part, to the fact that his scores were based in part upon the efficiency with which the school functions are being met, and not entirely upon what was seen.

In interpreting the table, the score for the building in each case should be compared with the maximum score. For example, the grade building has a score of 50 of the possible 55 points on location. This when compared with the perfect score, means that the building is well located. The high school building scored only 45 points on this item, which

TABLE II

SCORES OF NASHVILLE SCHOOL BUILDINGS

ITEMS RATED	MAXIMUM SCORE	Assigned Scores	
		HIGH SCHOOL	GRADE SCHOOL
I. Site			
A. Location	55	45	50
B. Drainage	30	30	20
C. Size and Form	40	35	40
Total	125	110	110
II. Building			
A. Placement	25	25	20
B. Gross Structure	60	60	25
C. Internal Structure	80	75	50
Total	165	160	115
III. Service System			
A. Heating and Ventilation	80	75	40
B. Fire Protection System	65	65	30
C. Cleaning System	20	20	15
D. Artificial Lighting System	20	20	20
E. Electric Service System	15	15	15
F. Water Supply System	30	30	15
G. Toilet System	50	50	40
Total	280	275	175
IV. Class Rooms			
A. Location and Connection	35	35	32
B. Construction and Finish	95	90	80
C. Illumination	85	85	72
D. Cloakrooms and Wardrobes	25	25	20
E. Equipment	50	45	43
Total	290	280	247

TABLE II, (Continued)

ITEMS RATED	MAXIMUM SCORE	Assigned Scores	
		HIGH SCHOOL	GRADE SCHOOL
V. Special Rooms			
A. Large Rooms for General Use -	65	60	60
B. Rooms for School Officials --	35	30	25
C. Other Special Service Rooms -	40	35	32
Total ----------	140	125	117
Grand Total -------	1000	940	744

indicates that the location of the grade building is superior to that of the high school building. The total maximum score on site is 125. The grand total of the scores received on all items is given on the lowest line in the table and is an index of the general status of the two buildings.

In determining the meaning of these scores it is generally accepted that a building which scores between 900 and 1000 points is a highly satisfactory building for school purposes. A building scoring between 700 and 900 is regarded as a good building and as generally satisfactory for school

purposes. A building which scores between 500 and 700 points is deficient in many essential features, but could be made acceptable for school purposes by additions or alterations. If a building scores below 500 points it is generally understood that it is highly unsatisfactory for school purposes, and cannot be economically be remodeled to the point of making it efficient.

A study of Table II reveals the shortcomings of the Grade School building as indicated by the score card. The grand total scores for both buildings point out the fact though, that the buildings in Nashville, particularly the high school building, are well meeting the present day standards for school buildings.

Classrooms

The number of classrooms is adequate. The size of the rooms is satisfactory, and the shape of the room is adapted to the use to which they are put. The floors are of wood and are in good condition. The walls are of plaster finish, cracked in places, and are much in need of cleaning and painting. The glass area for lighting is sufficient and comes up to the standards of the proper ratio of glass area to floor space, that is to approximately twenty-five per cent of the floor space.[2]

---

2 Frank Irving Cooper, Report of Committee on School House Planning, pp 90-121, N. E. A. Bulletin, Washington. 1925, 164 pp

The rooms are supplied with good slate blackboards, but in most cases are too high. They should be set at a height to meet the needs of the children through the various grades. The accepted standard for the first and second grade is 26 inches above the floor; for the third and fourth grades, 28 inches above the floor; for the fifth and sixth grades, 32 inches above the floor; and for the seventh and eight grades, they should be set 36 inches above the floor.[3] The amount of blackboard space provided is sufficient in every room.

The rooms are not provided with bulletin boards. Much poster and art work was on display, attached to a wire along the top of the blackboards. It is recommended that a narrow bulletin board be placed above the blackboard, and in addition, a general bulletin board be placed in the hall on each floor.

The cloakrooms in every room provide sufficient space for the children's wraps and other articles of clothing. They are well lighted.

There are two small rooms that could be equipped for a lunch-room, and the other for the principal's office. It is recommended that the room on the first floor be furnished with office furniture and filing equipment for the office. The large classroom that is not in use should be equipped with proper seating so that it could be used for an assembly

---

3 H. W. Schmidt, "Blackboards; Their Height and Width", AMERICAN SCHOOL BOARD JOURNAL, Vol. 81, Sept. 1930 p 43

room, and the basement room should be fitted up to be used as a play-room in bad weather. Accommodations could not be provided for all the pupils at the same time, but at least those in the primary grades could be taken care of. The expense involved for this work would not be great.

Classroom Equipment

The classrooms are equipped with old-fashioned, non-adjustable single desks. The desks are in good condition, but the chief criticism is that they are not adjustable. The desks are fastened to the floor, and it was observed that some of the desks are spaced improperly. It has been conclusively proved that improper seating in a school room produces many serious faults of posture and health. The school child can do efficient work only if he sits in a seat that is of the proper size, and designed according to scientific principles, in regards to posture, comfort, and school room hygiene. This fact cannot be over-emphasized.

Modern school subjects cannot be well taught with antiquated equipment. Regardless of the design of the building, a school is never more efficient than its equipment. Too long has classroom seating been regarded as furniture rather than as teaching equipment. The traditional school does not have to be pictured, the details are too well known to require

particulars. Today, we do not think that it is necessary for the child to sit in a stiff seat in order to learn. Modern school room equipment suggests a workroom rather than a place where children are confined so that they may learn the wisdom of their elders.

The writer does not suggest that the entire school be equipped with new seating equipment at one time, but a systematic replacement can be undertaken without incurring a cost that will burden the consciousness or the resources of the community. The author recommends, therefore, that the school authorities include in the annual budget an amount sufficient to replace the furniture in one room anually, until the building is equipped with efficient seating.

Fire Protection

The fact that the building is not fireproof has been mentioned. A fire escape has been added, but the door is not provided with panic proof bolts. No inquiry was made concerning the present practice but through experience, the author knows that the construction of the fire escape is such that the steps are dangerous when iced, and that no one was held responsible for keeping them free from ice during the winter. The building does not have an adequate supply of fire extinguishers, nor are these carefully checked at frequent intervals.

The stairways are of the open, non-isolated type and are constructed of wood. The ceiling of the basement is of the exposed wooden type. It was noted that there are electric wires running along the ceiling that are not well insulated. The condition of the basement is emphasized elsewhere in this study under the heading of "Janitor Service". With no intention of being an alarmist, it is necessary to point out clearly that a fire might have an easy and rapid start in the basement and gain rapid headway because of the fact that it could be neither isolated nor controlled.

The children are well trained in fire drills and this condition minimizes somewhat the danger of fire. Should a fire be discovered early enough, the children could easily be gotten out of danger. But the fact remains that conditions as they exist now, provide a grave fire hazard and steps should be taken immediately for reasonable protection for the safety of the children housed in the building.

The author wishes to make only a few general recommendations. The basement should by all means be kept free from debris. Greasy mops or rags, and other inflammable material should not be allowed to accummulate. Electric wiring should be enclosed in steel conduits, and otherwise be properly protected. The doors to the main intrance and also to the fire escape should be equipped with panic proof bolts, and all children should be instructed in how to open them. The fire escape should be kept free from ice during the winter.

months. The building should be provided with an adequate number of fire extinguishers, and inspected at frequent intervals. The janitor should be constantly on guard to see that all precautions are taken to prevent hazardous conditions.

Heating and Ventilation

The present practice of heating the building with individual stoves for each classroom does not represent the best practice, nor is it economical. In spite of all precautions to keep the various rooms evenly and properly heated, it is impossible to keep the temperature from varying between 68 and 80 degrees. The working efficiency of the pupils and the teacher is interfered with under these conditions. It was also observed that the hallways and corridors are not heated. It would be an improvement if heat were provided so that the children passing from room to room, or to the basement would not experience too sudden changes in temperature.

There is no provision made for ventilating the building except through window ventilation. The author recommends that a low-pressure steam heating plant be installed, with ample radiation in each room and the hallways, controlled by thermostats. The teachers should be required to regulate the ventilation through the proper use of the windows. The writer believes that the saving in coal will make the

installation of a steam heating plant a wise investment, besides the added efficiency of the pupils would prove that it is not an unnecessary luxury.

Toilet Facilities

The toilets are located in well lighted basement rooms, and as a whole are satisfactory. The rooms can be thoroughly ventilated and have abundant sunlight during a portion of the day. The toilets are of the chemical type, and are only satisfactory if disinfectants and chemicals are used frequently. It appeared that this was the case in this building. The rooms were kept clean during the time the writer visited the school. While the partitions between the toilets stalls are of wood, which seems to be in splendid condition, it is questioned if this represents the best practice. Adequate seclusion and privacy requires that doors be provided on toilet booths. This requirement has been disregarded in this building. No writing was observed on the walls of the toilet rooms, which tends to show that the toilets are properly supervised.

Janitor Service

The janitor service in the elementary school is inferior and the prime cause for this in-efficiency is due mainly to the fact that the janitor is not placed directly and specifically under the direction and control of the principal. The building is not swept completely every day.

The writer observed the janitor while cleaning the building, and it was noticed that the work was carelessly done, and that the janitor was indifferent towards his duties. The condition of the basement and store rooms is very unsatisfactory. It can not be over-emphasized that the basement must be kept clean, and free from rubbish, waste paper, oil-soaked rags, and any accummulation of paint cans, decorations, etc. As it is kept at the present time, it is a serious fire hazard, and should be recognized as a menace without fail by those in authority.

It is recommended that the janitor be placed unconditionally under the direction and control of the school principal. There should be no divided responsibility here. The principal should be held responsible for the hygenic conditions and safety of the building, and this responsibility necessarily carries with it authority over the services of the janitor.[4]

The janitor should be well paid for his services, and be elected and retained by reasons of his efficiency and ability to perform his very important duties. Outside of the principal, no one has greater duties and opportunities in regards to the physical well-being of the children in the school than has the janitor.

---

4 Ellwood P. Cubberley, The Principal and His School, pp 209-222. Houghton Mifflin Company, Boston. 1923 571 pp

The High School

Only a brief space will be devoted in this study to a discussion of the high school building and grounds. This is due to the fact that the building and conditions of the school for the most part are satisfactory. It will be noted that the building scored a total of 940 points on the Strayer-Engelhardt Score Card. (See page 42) While the building is small, it adequately serves the needs of the community, and the people of the community have every reason to be proud of their high school.

The School Site

The building site is not so well chosen due to the fact that it is near the railroad tracks. Yet, due to the fact that very few trains are on the track during school hours, the noise is not noticable. The school site consists of six lots. This area of course is not sufficient, and there is abundant evidence that no high school site should be less than five acres.[5] It would be wise and economical to acquire the needed ground now, so that the school ground would be large enough to be consistent with the larger

---

5 Jessie B. Davis, High School Buildings and Grounds, p 9 Government Bulletin, No. 23 (1929) Department of Interior, Bureau of Education.

educational demands and developments of the school in the future.

Experience has shown that outdoor quarters for physical education are most successful when located toward the rear of the building. The school authorities should not hesitate to ask that the city officials close the alley in the back of the present school site. It would then be possible for them to acquire as much ground as is necessary. It would be foresight and a good investment to purchase this ground at the present time, well in advance of the actual need or city improvement.

To meet standard requirements as to space, the school site should have at least two acres for outdoor physical education.[6] This space should include space enough for baseball, which could also be used for a football field. Space for two additional tennis courts and for two volley ball courts is recommended. This would accommodate approximately seventy-five students at one time, which would be sufficient for the present needs.

In this connection, the author wishes to emphasize the fact, that physical education is an important phase of general education. This assumption rests on the theory, that in the development of the child, physical activities form

---

6 Ibid, pp 9-10

one of the essential means of education.[7] The play activities of the boys and girls need to be just as much a part of the regular school program as the drill exercises in the commercial courses, or word drills in the youth's language training. A well developed body is fully as important as well-developed language ability. Until recently, we have looked upon play as a thing proper only for children and the wealthy leisure classes. They indulged not because they needed it, but because they liked it. But today, we are coming to see that relaxation and recreation through physical games and plays are not only desirable for pleasure, but are absolutely indispensible for physical and social normality.

The school authorities are to be commended on the fact that there is much evidence of careful thought with regards to the school lawn and planted foreground. The ground has been attractively landscaped by men who carefully supervised the number and kind of shrubs, trees, and hedges planted, and due to the sprinkling system, these have been successfully maintained. It is evident that much thought and care has been expended upon the building and ground, and that the people of the community take a pride in the beauty of their high school grounds.

---

7 Franklin Bobbitt, How To Make A Curriculum, pp 63-75 Houghton Mifflin Company, Boston (1924) 292 pp

The Building

The high school was built in 1929. It is a one-story building, modern in all details. It is of strictly fire resistive construction, and due to the type of building, there is absolute freedom from fire hazards. During fire drills, all of the pupils are out of the building in less than one minute. While the initial cost of fire resistive buildings is greater than the less substantial type, they cost less for maintenance and repairs, and their freedom from fire hazards gives added comfort due to the sense of security. This is certainly true of this building. The building is unusually well constructed, good materials have been used, and it is above the average in beauty and arrangement.

The building was designed after a careful study had been made of the educational needs of the community, not only with the immediate present, but also to the future in so far as the needs could be forseen. The community activities to be served by the school were considered. The building was designed in such a manner, that reasonable changes may readily be made in order to accommodate changes, and expansions in the educational program. At the present time, the building does not have an auditorium nor gymnasium. The plans call for these additions as soon as funds will permit their construction. As soon as the needs make it

necessary, a second floor can be added, without changing the arrangement of the present building. The foundations and walls were constructed strong and heavy enough for this purpose. In regards to the auditorium, the need is so obvious that a discussion of its function is unnessary. There is no question in the mind of the writer, but what this addition will be made as soon as the present economic conditions become adjusted, and funds become available.

The building was constructed according to modern scientific building principles, and rules for proper lighting, heating, and sanitation were carefully observed.

The home economic and manual training rooms were planned according to modern building ideas. The home economics rooms are equipped with the necessary sink accommodations, lockers, shelves, drawers, and "built-in" cupboards. The rooms are well lighted and piped for gas. At the present time, Skell Gas is used for fuel. In general, conditions of light, ventilation, and sanitation are condusive to good work, and exemplify good American standards of living.

While the class rooms are not large, they adequately serve the needs for the size of classes commonly found in small high schools. They are conveniently arranged, well equipped, and well lighted. The doors of all class rooms are of the heavy sound proof type, and swing outward to the

corridor. The study-hall is conveniently located to every part of the building, and is large enough for the future increase in enrollment.

In conclusion, it may be said that properly distributed lighting, and conditons for good ventilation were observed in the construction of the building. The arrangement of the boiler and fuel room, toilets, and drinking fountains makes it possible to keep the building sanitary at all times. In this connection, the writer wishes to recognize the excellent and efficient services of the janitor. It is only necessary to visit the building to recognize that the work is being thoroughly and conscientiously done. He takes a pride in doing his work, and the co-operation of the students and teachers make it possible for him to keep the building in excellent conditions at all times.

Equipment

During the last four years, approximately three thousand dollars have been spent for modern school equipment, for the building.[8] This equipment includes correct posture study hall desk-chairs, arm chairs for classrooms, lockers and equipment cases, laboratory tables, and furniture for the

---

8 Otto O. Kaufman, High School Principal's Organization Reports, State of Kansas, September 25, 1929; September 10, 1930; September 25, 1931; and September 22, 1932

commercial, home economics, and manual training rooms. The equipment and furniture was selected after much effort to buy equipment that was practical, and of good design, workmanship, and finish. In every case, the most modern equipment was purchased. Care was taken to have the furniture haromonize with the interior finish and trim of the building. In buying this equipment, the thought, "without modern equipment a school is not modern" was kept in mind. All of the furniture is of the movable, adjustable type.

The furniture and equipment has been carefully used by the students of the school. There are no evidences of markings, whittlings, or any other disfigurements after four years of service. This no doubt is due to the fact that every student is held responsible for the proper use of the furniture, and is required to replace any piece that is carelessly damaged by him.

The Gymnasium

The gymnasium is a separate building, devoted exclusively to the physical training activities. Its location is not good, in relation to the schools, but it well serves the principal requirements of the school building. The building is the property of the high school district, but a carefully arranged schedule makes it available to both the elementary and the high school.

The floor space, exclusive of the space for the spectators is 48 by 72 feet, and the ceiling height is 18 feet. The floor is of hard wood, and large enough for the usual gymnasium requirements. Space for spectators is taken care of by bleachers along the two sides, and a balcony arrangement. There is enough room for spectators to take care of the usual attendance of people that come to view exhibitions and basket ball games.

The chief objections to the gymnasium as such is its location, the dressing and equipment rooms are too small, and the lack of running water and toilets. No expensive repairs or improvements should be made on this building, and it should be abandoned as soon as the school authorities can command the means to do so.

Conclusions

The elementary school building has a number of shortcomings, several of which could easily be remedied. Chief of these is the absence of special rooms and lack of fireproofness and the presence of grave fire hazards. The two rooms not used at the present time should be equipped and used as special rooms. No community can keep children in a school, organized under the traditional type of school organization, keeping them in school seats all day, giving them no opportunity for play, no chance to express themselves

in wholesome activity, or to satisfy their natural urges to experiment with the world about them during all the early, most formative, period of their lives, and then reasonably expect them to be interested in their school work.

In regards to the fire hazard, the basement should be thoroughly cleaned of all rubbish and broken and discarded furniture. Wherever possible, there should be better and more thorough fire proffing of the building. The fire drills now used should be continued, and with every added improvement possible.

The building needs a general cleaning up, and should be kept in a more sanitary condition. The walls of the classrooms should be refinished. It is strongly urged that a low-pressure steam heating plant be installed as soon as possibly.

The high school building and grounds are satisfactory, but additional ground should be added to the school site.

The Nashville school buildings are probably above the average of the buildings in the smaller cities. But Nashville should not be satisfied with average buildings, because buildings below the present day standards constitute a distinct handicap upon the efficiency of teaching.

CHAPTER V

THE QUALITY OF INSTRUCTION AND ACHIEVEMENT OF PUPILS

The strength of any school system depends to a large extent upon the curricula offered and upon the quality of work done by individual teachers. The value of a curriculum is determined by how well it gives the learner a more definite knowledge and understanding of his immediate environment; the success of the teacher may be measured by the ability shown by the pupils to do independent work.

The Courses of Study

It is not within the scope of this study to give a full discussion of the philosophy which underlies the making of a school's curricula, but a comparatively brief statement of its main conceptions seems necessary in order to make clear the writers point of view in relation to teaching efficiency.

The State Board of Education prescribes the general course of study for the schools of Kansas. This course of study may be modified and adapted to the needs of the locality by the principals and teachers of the school, but its

fundamental principles and content cannot be changed without the consent of the State Board of Education. Wherever possible, an effort should be made to revise the course of study, useless subject matter should be eliminated, and new subject matter substituted in its place.

It is a commonly accepted principle in making a course of study, that the courses offered should reflect in some measure the local community, and should help the child to interpret his own environment. No course of instruction in the public schools is complete that does not give the child a closer and more definite knowledge of his immediate environment, about the community in which he lives. Knowledge is something more than information, something more than facts fixed in the memory by repetition. Knowledge may be assumed to be the product or result of real experience, occasioned by the necessity of solving some real problems of more or less vital concern to the child being educated.

Education should not be confined to the schools. Everything that touches life and that influences thought, feeling, and conduct, is a part of education. The school is an artifical environment whose function is to prepare the child to be effectively educated by the environment of real life. Hence the school must educate with reference to the out-of-door life of the child and the after-school life of the adult.

From the above, it follows that the highest test of school education is not the ability to pass examinations in school, but the degree to which it projects itself into the out-of-school life of the pupil. Nashville is a rural community; farming is the important industry. The school, therefore, if it meets the needs of the community, must connect more closely with farm and home life in the elementary grades and establish in the upper grades and high school, courses which directly prepare for life on the farm. The fact that the pupils in the Nashville schools are from families who have long lived in the community, leads one to believe that most of the children now at school will continue to live in the community. This does not mean that the curriculum should be so narrow as to confine itself to education in agriculture or to make vocational schools of the elementary school and the high school. It does mean, however, that all education must be based on life in a rural community or country life, that the children need the chance to prepare to be intelligent farmers, and homemakers and that the school should offer this opportunity.

The courses of study in the elementary grades in Nashville represent essentially the earlier conceptions of education, where drill on mere fundamentals of knowledge was conceived to be the essential purpose of education. This is true of practically every small school. It seems to be

the chief work of the teachers to convey to children the accumulated knowledge of the past, often with little thought as to its usefulness on the effects of instruction. The old school "tool subjects"--reading, writing, spelling, grammar, and arithmetic--constitute the great bulk of all instruction now offered in Nashville, and but little attempt is made to relate the instruction which is given to the life which surrounds the children. The work was found to be formal and the child chiefly occupied with acquiring facts which, while interesting, do not connect up with the experiences which the child meets with in everyday life situations.

A better situation was observed in the high school. Traditional subjects are on the wane, practical subjects are coming to the fore. Preparation for college, the high school goal in past years, has been displaced by an educational program that looks towards complete living in the community.

The writer wishes to recommend that the principals of the two schools make every effort to unify the work of the school system, and direct the teachers that they may take up the matter of education from the new and progressive viewpoint, that of the child's immediate needs, his interests and desires, his best development, subordinating to these in every lesson the undue importance of the course of study and the amount of subject matter to be covered.

The Teaching Corps

The corp of teachers in Nashville is good; they give an impression of dignity, pleasing personality, interest in their work, and the possibility for professional achievement. All of the teachers have good professional training, but it was observed that they were not always clear in their conception of the aims to be accomplished. In short, the observation of the actual teaching by the writer, leads him to believe that in some cases, the teachers are better than their teaching. The need for forceful and intelligent supervision of instruction is apparent.

Supervision of Instruction

The principals of both the elementary and the high school are men with good professional training. In the judgment of the writer, the fundamental weakness of the administration of the Nashville Schools is the lack of effective classroom supervision. It is the writer's opinion that not all the blame should be put on the principals for the absence of supervision, rather the board of education and the principal must share the responsibility. The board is to blame in the first place for not providing the necessary assistance to relieve the principal of mechanical work, so that he can devote some time to supervision. The principal is to blame

for not insisting that supervision is necessary and must be carried on. He should recognize that it is a waste of public funds to be a mere classroom teacher. While the general work of the teachers is good, it could be much improved by effective supervision. The author suggests that the board of education and the principal recognize that one of the primary duties of a school executive is supervision and arrange for the necessary assistance so that the principal will have time for this important work.

The writer fully realizes that the proper solution for this condition would be to employ a superintendent of schools, who should take supervision of instruction as his leading role and should not make either one school or the other his principal interest. It is a common delusion, to think that it is better to have a principal of the high school and one of the elementary school and do without a superintendent of schools. It should not be necessary to give an argument why this dual principalship system is not as satisfactory as that of having a superintendent. Suffice to say, the dual system of supervision has long ago been abandoned in all progressive school systems. Of course, the writer realizes that it would not be advisable to elect a superintendent of schools during this present period of retrenchment, but as soon as school finances justify, the school boards

should consider putting the schools under the control of one executive.

The Characteristics of the Pupils

The pupils of the Nashville Schools strike the observer as a fine group of boys and girls. Good home training is evident. They are well poised and courteous in manner, attentive in classrooms, as well as orderly in the halls. During the time the author visited the classes, not a single incident occurred that would call for adverse criticism of the conduct of the pupils. On the contrary, there was observed a spirit of loyalty, and a willingness to co-operate with their teachers. In the high school, school loyalty and self-discipline are so well established by custom and traditions of the school, that with regard to the general tone, the writer would rank the Nashville High School among the better schools to be found. He also recognizes the leadership of the principals and the teachers of both schools as being entirely satisfactory.

The Progress of Pupils Through School

In order to clearly understand the degree of success with which the Nashville School System is functioning, it is of importance to ascertain the facts concerning the pupils

in the schools, their ages, their stage of advancement, and their rate of progress through the grades. To do this, the following age-grade distribution table has been prepared:

TABLE III

AGE-GRADE DISTRIBUTION OF ENROLLMENT, 1932-1933

Grades	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
1	4	4	1													9
2		5	7	1												13
3				3												3
4				1	6	2	1									10
5					2	4	1									7
6						1	3	2	1							7
7							1	3	1							5
8								1	4	4						9
I									3	4	8	4	2			21
II										1	2		5			8
III										1		3	1	4		9
IV												1	2	3	3	9
Total	4	9	8	5	8	7	6	6	9	10	10	8	10	7	3	110

The traditional age at which children enter school is 6 years, some do not enter until they are 7. In considering the age-grade table, it is customary to regard children of 6 and 7 years of age as of "normal age" for grade I, and children of 7 and 8 years as "normal age" for grade II, and so on. Al the children that are 8 years old and over in the first grade are considered as "over-age". In the second

grade, children under 7 years of age are considered "under-age", and all 9 or more years of age as "over-age", and so on through the grades allowing two years for normal age, or 9 years for a child entering at 6 to complete the elementary school for normality. This is a liberal allowance for normality, but it is the basis upon which most age-grade studies have been made and is used in this report so that the pupils of Nashville may be compared with the results in other schools.[1]

The first facts to be noted in this table is the small number of children that are "over-age", and that there is no wide age distribution represented in individual grades. The table reveals that there are only 20 pupils that are "over-age" and 21 that are "under-age". Computing this in per cents, we find that 18.2 per cent of the pupils are "over-age", and 19.1 per cent are "under-age". In making a comparison with Dr. Strayer's study,[2] based upon 186 cities, we find that a total of 37 percent , or 18.8 per cent more over-age pupils than Nashville has. Also, he found on the same basis, only 4.5 per cent of the pupils in these cities were under-age as compared to 19.1 per cent in Nashville.

---

1 G. D. Strayer, Age and Grade Census of Schools and Colleges Department of Interior, Bureau of Education, (Bulletin, No. 451) 1911.

2 Ibid, p 144

His study also reveals that there is a spread of 4 years for his "over-age" pupils, while in Nashville the spread is only 2 years, and that in only one grade. Nashville does not have "over-age" pupils in six grades, and it is also of interest that of the pupils that are over-age, 18 are in high school and only 2 in the elementary school. The fact that pupils are out of school for a year or two after they graduate from the elementary school, before they enroll for high school work is one of the causes for this condition. The comparison made ppssibly by Table III is entirely favorable to the Nashville system.

Methods of Promotion

With the exception of the 7th and 8th grades, the pupils in the Nashville Schools are not promoted on marks made in formal examinations, but upon the kind of work the pupils do from day to day. In brief, the teacher decides whether a pupil can do the next grade work. In doubtful cases, the teachers, as they should, confer with the principal, and they decide if it is better for the pupil to be promoted or to be retained in the grade. Of course, occasional tests are given and are used in arriving at a decision in regards to the pupils promotion, but fortunately do not count one-fourth or one-half as is the custom in some school systems. The writer

believes that it is a commendable feature of every school system that abolishes promotional examinations. Of course, it is necessary for the 7th and 8th grade pupils to take the state examinations, as long as they are given, but it is often the case that there is a tendency to teach for the examination and not for the good of the child. Until we cease to measure the product of teaching effort chiefly by what pupils know and can express in a formal test or examination, the knowledge aim will dominate; teachers will prepare pupils for such examinations. Teaching is something more than having pupils learn facts. Teaching has other ends of even greater importance than knowledge, to the accomplishment of which instruction for the sake of knowledge is only a means; these ends are mental development and training resulting in power and skill.

That promotion goes by merit in the Nashville School is shown by the fact that 100 per cent of the pupils in the 7th and 8th grades or 31 pupils, successfully passed the examinations required of them by the State in 1931-'32.

Intelligence of Pupils

If we measure the efficiency of any school system, it must be accomplished by means of comparison with some criterion or standard. The same is true in measuring the quality

of pupil material. The intelligence of the Nashville pupils was measured by means of the Otis Group Intelligence Scale. This test is designed to test general mental ability and the norms are based upon scores of 25,236 pupils from some 200 cities throughout the United States.

The test was given in the Nashville Schools under the direction of the author during the week, February 20 to February 25. The scoring of the tests was done in the Bureau of Educational Measurements of the Kansas State Teachers College of Emporia, under the immediate direction of the director of the Bureau, Dr. H. E. Schrammel.

The intelligence quotient was computed from the total score made by the pupil, by the Otis Deviation Method. This method gives approximately the same intelligence quotients as those based on the Stanford Revision of the Binet-Simon Intelligence Scale.[3]

The range on the intelligence tests for the high school is from 82, which indicates ability below average, to 122, which indicates ability that is superior.[4] The range is slightly higher for the elementary school, ranging from 81 to 127. The median for the high school is 105 and 106.7

---

3 Manual of Directions, Otis Group Intelligence Scale, p 10

4 Lewis M. Terman, The Measurement of Intelligence, p 79 Houghton Mifflin Company, Boston (1916) 362 pp

for the elementary school. The distribution of intelligence quotients for both, the high and elementary schools is shown in the following table:

TABLE IV

DISTRIBUTION OF INTELLIGENCE QUOTIENTS OF PUPILS ACCORDING TO GRADES IN ELEMENTARY AND HIGH SCHOOLS

I. Q.	Elementary School by Grades								High School by Years			
	1	2	3	4	5	6	7	8	I	II	III	IV
125 to 129					1			1				
120 to 124		3			1				1	1		1
115 to 119			2		1	1	1	1	1		1	
110 to 114		6				1		2	3	1		
105 to 109	2	1	1	1	2	4	3	3	2	3	5	2
100 to 104	5	1		3				2	3		1	1
95 to 99	2			1	1				6	1		3
90 to 94		1		3		1			2		1	
85 to 89				1		1					1	1
80 to 84		1		1			1			1		

In order to show the facts presented in Table IV in a different relation, the medians of the Intelligence Quotients for the different grades were computed. We find that the

high meidan is 115.5 for the third grade and the fourth grade has the lowest median, a median of only 94. The following table shows the medians for the different grades and years in high school:

TABLE V

CLASS MEDIANS OF INTELLIGENCE QUOTIENTS ARRANGED ACCORDING TO GRADES AND YEARS

Grades	Elementary School Medians	Years	High School Medians
1	103.5		
2	112.5	I	102.0
3	115.5		
4	94.0	II	106.5
5	108.0		
6	107.0	III	106.5
7	105.5		
8	107.5	IV	99.1

The third grade in the elementary school has only three pupils enrolled, which accounts for the unusual high class median of 115.5. The class median for the fourth grade is the lowest, although ten pupils are enrolled in this grade. However, in general, we may safely draw the conclusion that the group as a whole is average or a slightly above average group.

Achievement of Pupils

For the purpose of comparison in school achievement, the Every Pupil Scholarship tests, distributed by the Bureau of Educational Measurements of the Kansas State Teachers College of Emporia, were used. These tests are built and published by the Bureau, and were used in a nation wide scholarship contest. For the contest, which was held on April 5, 1933 several thousand tests were distributed. The participating school used the tests, scored them, and sent the reports of the scores to the Bureau. From the scores reported in each subject, a summary percentile report was computed.[5] From this report, schools may interpret the scores of the students and classes in comparison with the scores of several thousand students.

For the first three grades, the Every Pupil Primary Achievement test was used. The authors of this test are Kathryn Kayser and H. E. Schrammel, and the test is distributed by the Bureau. The test consists of six parts: Arithmetical Computation, Reading, Sentence Spelling, Word Knowledge, Sentence Understanding, and Paragraph Comprehension. This test was used for the Every Pupil Scholarship

---

5 H. E. Schrammel and Vera Davis, Report of the Eighteenth Nation-Wide Every Pupil Scholarship Test, April, 1933 Bureau of Educational Measurements, The Kansas State Teachers College of Emporia, Kansas

Test, April 5, 1933, thus the results of the Nashville Scores can be compared with the State medians.

Due to the fact that all classes in Nashville are rather small, comparisons are not made according to percentile rankings, but rather according to the median and range of scores. The following table gives the comparisons of the scores made by Nashville pupils on the Primary Achievement Test with the State medians and range of scores:

TABLE VI

MEDIAN CLASS SCORES AND RANGE OF SCORES ON PRIMARY ACHIEVEMENT TEST FOR ELEMENTARY SCHOOL AND STATE

Grade	Nashville		State	
	Median	Range	Median	Range
I	28	3 - 56	24	0 - 67
II	69	22 - 80	55	11 - 117
III	105	90 - 106	82	19 - 117

It will be noted from this Table that every grade in Nashville is from four to twenty-three points above the State median. The range is also smaller in every case, due primarily to the smaller number of pupils in the class. The extreme is noticed in Grade III, in which the Nashville range

range is 16 and the range for the State is 108. However, the writer is justified in his conclusions by stating that the pupils are doing good average work.

The Scholarship Tests were also given in the following subjects: Spelling, Arithmetic, English, History, and Geography. The following tables give the results of the tests and show the comparisons between the Nashville class medians and range of scores with those of the State. *

TABLE VII

COMPARISON OF SCORES IN READING

Grades	Nashville		State	
	Median	Range	Median	Range
3	20	15 - 21	17	0 - 38
4	19	9 - 28	23	1 - 38
5	28	15 - 31	27	4 - 39
6	31	27 - 35	31	0 - 41
7	34	15 - 33	33	8 - 41
8	36	30 - 40	35	15 - 41

*Note: The results of the Nashville tests were received by the author on April 8. The State results are taken from the Bulletin of Information, Report of the Eighteenth Nation-Wide Every Pupil Scholarship Test, by H. E. Schrammel and Vera Davis, April, 1933. (Bulletin, No 121, Bureau of Educational Measurements, Kansas State Teachers College of Emporia, Kansas

TABLE VIII

COMPARISON OF SCORES IN SPELLING

Grades	Nashville		State	
	Median	Range	Median	Range
3	41	38 - 44	37	0 - 65
4	48	38 - 68	47	0 - 69
5	56	48 - 64	53	9 - 74
6	42	35 - 47	47	5 - 69
7	63	60 - 71	56	19 - 73
8	70	67 - 71	61	29 - 75

TABLE IX

COMPARISON OF SCORES IN HISTORY

Grades	Nashville		State	
	Median	Range	Median	Range
6	43	29 - 54	39	3 - 74
7	42	14 - 53	46	8 - 83
8	66	56 - 81	57	10- 94

TABLE X

COMPARISON OF SCORES IN GEOGRAPHY

Grades	Nashville		State	
	Median	Range	Median	Range
7	54	37 - 51	53	14 - 77
8	50	33 - 60	45	20 - 87

that the Nashville median is below the State median in the fourth and seventh grades. In the other four grades they rank above the State median. The range of scores is smaller in Nashville in every case.

Table VIII, reveals that the sixth grade is five points below the State median in spelling. The median of the Intelligence Quotients for this grade is high, thus it appears that in this grade there is need for a careful analysis of spelling difficulties with remedial treatment likely needed.

The Table showing the scores in arithmetic (Table XI) shows that three grades are from 1 to 3 points below the State medians. This is not serious, but an attempt should be made to bring up the achievement in these grades. It is of interest to note that the fifth grades is 13 points above the State median which indicates strength in arithmetic in this grade.

Table XII reveals that the seventh grade is 10 points below the State median in English. This is rather serious; emphasis should be placed on English instruction and an effort should be made to make the work so interesting for the pupils that they will be anxious to do better work.

A study of Tables IX and X, show that the work in history and geography compares favorably to that done in other schools of the State.

—— An analysis of these tables show that in four grades, no class falls below the State median, while in three classes the Nashville pupils fall below the State median in two subjects. The following table shows these facts:

TABLE XIII

NUMBER OF TESTS TAKEN IN DIFFERENT GRADES AND NUMBER OF SCORES BELOW STATE MEDIANS

Grades	No. of Tests Taken	No. of Subjects Below State Med'n
1	1	0
2	1	0
3	4	0
4	4	2
5	4	0
6	6	2
7	6	2
8	5	0

Pupil Achievement in High School

The Every Pupil Scholarship Tests were also used to compare the work done in the high school with that done in other schools of the State. It was not possible to show the the results in tabular form according to years, as these subjects are not taught during the same year in every school. Also, in many cases, the classes are open to two groups of

students, for example, American History is open to both Juniors and Seniors. The same method of comparison is used as was used in the grade school subjects. The following table shows the results of the tests:

TABLE XIV

COMPARISON OF MEDIAN SCORES AND RANGE OF SCORES IN HIGH SCHOOL SUBJECTS

Subjects	Nashville		State	
	Median	Range	Median	Range
English	103	73 - 104	100	23 - 150
World Hist.	58	43 - 77	56	25 - 90
Am. History	71	46 - 96	68	26 - 107
Sociology	73	66 - 89	72	45 - 95
Algebra	43	31 - 67	39	9 - 74
Bus. Law	86	69 - 100	84	20 - 113
Foods	76	69 - 80	70	20 - 96
Typw. I	77	65 - 95	75	0 - 100
Psychology	52	48 - 72	53	30 - 78
English I	90	78 - 130	94	16 - 150
English III	107	64 - 129	108	31 - 150
Geometry	52	26 - 82	56.8	9 - 134

A study of this table reveals that the Nashville High School pupils are doing good average work. Out of the twelve tests taken, they fall slightly below the State median in four subjects, Psychology, English I, English III, and

Geometry. This however is not serious, the greatest difference being only 4.8 points. The range of scores is much smaller in every case than the range of scores reported to the Bureau.

Conclusions

The quality of instruction in the Nashville Schools is good. The results of the tests however, cause the author to believe that the instructors in the Nashville Schools put too much emphasis upon studying for examinations. If teachers prepare pupils for examinations, the knowledge aim of instruction will dominate.

The emphasis of teaching should not be placed upon having pupils learn facts, rather that the pupils acquire power and skill for effective thinking. Facts are needed, to be sure, for effective thinking; the writer cannot agree with those who say that facts clog the mind. But while we recognize the value of the ability to assertain new facts, the child's ability to exercise discriminating judgment must also be developed. Our schools must specialize in boys and girls, rather than courses of study and their requirements.

While the pupil from a progressive school enters adult life with far less book knowledge than pupils from the

traditional school, he has the faculty of digging out knowledge by his own efforts, knows how and where to look for things he needs to know, and knows how to cope successfully with unforseen situations. The progressive school must give the child an opportunity to live at the present moment; develop in him the faculty to solve situations as they arise in the future.

CHAPTER VI

EDUCATIONAL EXPENDITURES

"Money spent for schools is an investment for citizenship. The financial problem of education is not how cheaply the schools may be operated but how wisely the school revenues are expended."[1] In the past, information about schools in general, has been based largely on the growth of the school. This has been favorable publicity because it has been an evidence of the fact that the public is using the schools more and more. The schools have been growing so fast during the last fifteen years, however, that the mounting cost of education is being critized in terms of costs rather than results. This of course has been brought about to a large extent by our economic recession. It is necessary, therefore, that school publicity in the future puts the emphasis upon results, or rather the dividends on the investment that the public is making in education. The emphasis must be placed on the fact that ignorance is the most expensive thing in the world and money wisely expended for education is the best investment that any community can make. Good schools

---

1. School Survey and Building Program for Dodge City, Kansas Bureau of School Service, University of Kansas (1923)

can never be maintained cheaply. During our present economic re-adjustments, retrenchments are probably necessary in many cases, but school officials should be careful and consider in detail proposals to eliminate the new developments in our schools. Many of our new features, often dubbed fads and frills, are of more educational value than some of the traditional features of the school which have outlived their usefulness. No retrenchments should be made in Nashville that will seriously hamper the carrying on of the school work, and the writer has enough confidence in the broadminded citizens of the community, to state that as long as the money provided is being well expended, this will not be done.

Nashville's Educational Needs

The educational investment of a community must be judged by comparison with its educational needs, and with the investment being made by other similar communities. For significant comparisons with other communities, the writer chose the cities of Kingman County having rural high schools. There are seven rural high school districts in the county, all of which are similar with respect to population, type of school organization, and general status of the community.

For the purpose of comparing on the same basis the educational needs of Nashville with those of the other cities, the following table has been prepared. The population of townships by age is used, as there are no available data from which one can compute the needs of individual school districts.

TABLE XV

POPULATION OF TOWNSHIPS IN KINGMAN COUNTY, 1930

Township	Age, (Years)			Total Population Under 24
	Under 5	5 to 14	15 to 24	
Allen	21	34	50	105
Belmont	37	69	54	160
Bennett	71	158	118	347
Canton	33	63	50	146
Chikaskia	37	89	75	201
Dale	35	75	60	170
Dresden	40	107	93	240
Eagle	37	95	67	199
Eureka	29	68	65	162
Evan	41	98	79	218
Galesburg	37	70	63	170
Hoosier	40	82	56	178
KINGMAN	62	122	77	261
Ninnescah	59	112	70	241
Peters	69	116	67	252
Richland	25	71	53	149
Rochester	65	103	93	261
Rural	43	102	83	228
Union	38	71	63	172
Valley	19	78	58	155
Vinita	43	54	40	137
White	35	99	99	253

This table is based on the populations given in the 1930 United States Census. The purpose of this table is not to show that the school population of the townships is much the same, but to show that the number of school children for the different ages, to the population of the township is constant. It is not possible to calculate from this table the exact ratio of the number of school children to the population of the community, because the district boundries do not correspond with township lines. But if the relation of the number of school children to the population of the township is constant, there is a basis for the statement that Nashville's educational needs compare favorably to those of the other Kingman County cities.

To show more specifically the educational needs in Nashville, the school enrollment since 1920 for both the elementary and the high school age is given. The percentage of increase and decrease over each preceding year based on the total enrollment is shown.

In studying the Table, (see next page for Table) we observe that there is an increase in enrollment each year with the exception of three years. The largest increase has taken place in the high school. It is difficult to perdict the future elementary school enrollment, because the two parochial schools are absorbing part of the school

TABLE XVI

PUBLIC-SCHOOL ENROLLMENT BY SCHOOLS, 1920 to 1933, WITH PERCENT OF INCREASE AND DECREASE OVER EACH PRECEDING YEAR

Year	Elementary School	High School	Total Enr'mt	Percent Increase	Percent Decrease
1920-21	54	15	69		
1921-22	48	18	66		.45
1922-23	68	24	92	3.8	
1923-24	70	26	96	.43	
1924-25	50	15	65		3.2
1925-26	51	20	71	.9	
1926-27	50	22	72	.014	
1927-28	56	25	81	1.2	
1928-29	64	29	93	1.48	
1929-30	52	32	84		.96
1930-31	61	40	101	2.0	
1931-32	71	35	106	.05	
1932-33	64	48	112	.056	

enrollment. At the present time, the Lutheran Day School has an enrollment of 28 and the Saint Leo's School has 106. No data were available to study the enrollment trends in these two schools. There is, however, always the possibility of these pupils being transferred to the public school. In such a case, a marked increase would take place. This condition is improbable for next year because churches are making plans for operating their schools next year. They will undoubtedly continue their schools, if economic conditions become adjusted.

The Expenditure of the Tax Dollar

Educational needs determine what a city ought to spend; the resources govern the amount that it can spend. The generally accepted practice represents not an educational goal, but rather a compromise between what is desirable and what is possible. Of the total amount of money raised by taxation, the proportion devoted to school maintenance indicates the relative value which the community places upon education.

The county records are of such a nature, that without much work in calculating items, it is impossible to show exactly the expenditure of the tax dollar in Nashville. But in order to become acquainted with the tax situation in Kingman County, the expenditure of the tax dollar for the county is pictured in Diagram I. (See next page) This diagram is based on material from the County Clerks office, collected by the Kingman County Agricultural Agent.[2]

If the city is used as a basis it is found that the total tax rate for all purposes for the city of Nashville in 1932 was 21.87 Mills and of this total, 14.20 Mills was used for school purposes.[3] For the purpose of comparing on the

---

2 F. W. Kirton, Project (Co-operative Extension Work) Jan. 11, '32

3 1932 Tax Rate Book, League of Kansas Municipalities, p 31

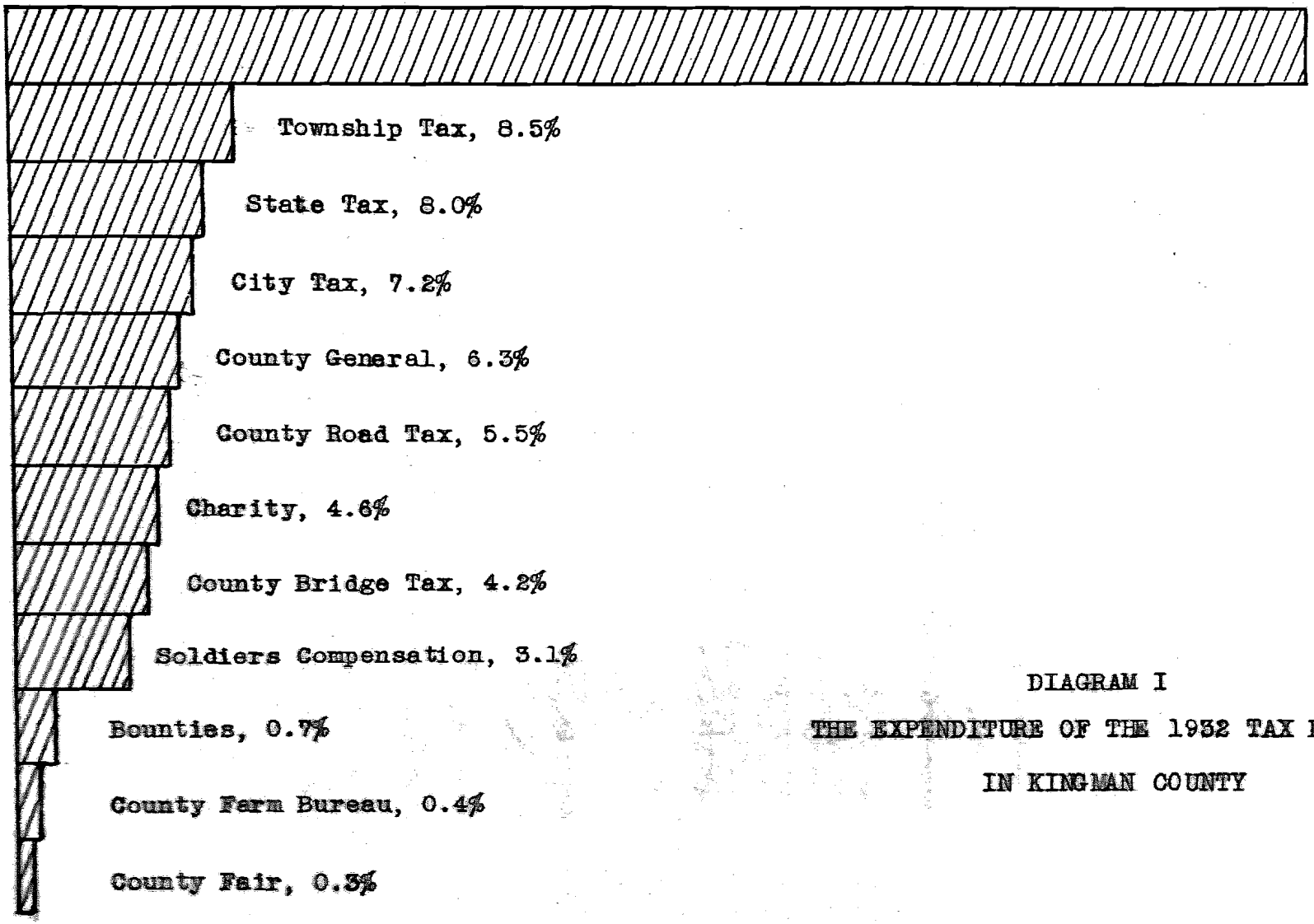


DIAGRAM I

THE EXPENDITURE OF THE 1932 TAX DOLLAR

IN KINGMAN COUNTY

same basis, the educational investment in Nashville with that of the other Kingman County cities having rural high schools, the following table has been prepared:

TABLE XVII

RATIO OF TOTAL TAX RATE TO RATE FOR EDUCATIONAL PURPOSES IN KINGMAN COUNTY CITIES

City	Total tax rate in mills	School tax rate in mills	Per cent
NASHVILLE	21.87	14.20	64.8
Norwich	30.43	15.66	51.4
Zenda	22.68	10.48	46.2
Spivey	24.1	9.94	41.5
Cunningham	25.77	9.70	37.6
Belmont	-----	-----	----
Adams	-----	-----	----

It will be seen from this table that Nashville expends for school purposes 64.8 per cent of the tax dollar, or 13.4 per cent more than the next ranking city. The average for the group is only 48.3 per cent, or in other words, Nashville spends 20.1 per cent more of her city tax dollar on education than the average. From the foregoing Diagram and Table, the fact is obvious that Nashville's educational expenditure is above that of the other cities of Kingman County maintaining rural high schools, and also above the per cent of the tax dollar spent for education in the county as a whole.

It will be of interest to see how Nashville's expenditures for high school purposes compare with those of the other rural high schools of Kingman County. The following table is based on the County Superintendents Report to the State Department. In this table, the capital outlays have been eliminated.

TABLE XVIII

CURRENT EXPENSES OF RURAL HIGH SCHOOLS IN KINGMAN COUNTY AND COST OF TUITION PER MONTH ON A. D. A. AND ENROLLMENT

School	Total Current Expenditures	Cost of Tuition		Total Enrollment
		A.D.A.	Enr't	
Zenda H.S.	12,035.00	19.89	21.51	69
Norwich H.S.	11,419.68	24.06	21.15	60
Cunningham	9,062.09	10.76	10.07	75
Belmont	8,260.08	21.09	20.59	45
NASHVILLE	8,135.08	23.13	22.07	41
Spivey	7,896.85	15.55	14.87	58
Adams	5,103.64	31.54	29.84	19

From this Table, it is to be noted that Nashville ranks fifth on the basis of the total current expenditures, sixth on the basis of the cost of tuition on enrollment, and fifth on the basis of average daily attendance. The logical method of lowering the per-pupil cost on enrollment and on the average attendance is to make an effort to increase the enrollment

of the school. It is also to be noted that if every pupil had been in perfect attendance, the cost would have been no more than it actually was, but the educational returns would have been greater.

The question may be asked: "Though Nashville ranks high in comparison with other Kingman County cities on the amount of money expended per pupil, is it expending as much as they are in proportion to its wealth?" For the purpose of analysis, summaries of both the elementary and the high school situations have been prepared.

TABLE XIX

SUMMARY OF ELEMENTARY SCHOOLS OF CITIES USED FOR COMPARISON, 1932

School	Valuation of District	Total Mills Levied	Total Enrollment
Norwich	957,165	11.10	116
Cunningham	563,573	9.60	113
NASHVILLE	510,407	7.70	70
Adams	440,121	5.66	22
Spivey	418,140	9.50	41
Zenda	361,889	13.00	51
Belmont	277,459	8.70	37

TABLE XX

SUMMARY OF HIGH SCHOOLS OF CITIES

USED FOR COMPARISON, 1932

School	Valuation of District	Total Mills Levied	Total Enrollment
Cunningham	2,615,697	2.70	75
Norwich	2,448,377	8.84	60
Zenda	1,921,162	5.90	69
NASHVILLE	1,533,118	6.00	41
Adams	1,117,182	3.13	19
Spivey	1,112,898	6.00	58
Belmont	1,020,328	5.50	45

The summaries in Tables XIX and XX are based on the County Superintendents Annual Report to the State Department, dated June, 1932.[4] From these two Tables we can compute the property valuation per pupil enrolled, based upon the valuation of the school districts. We find that Nashville ranks third from the top in wealth per pupil enrolled in the high school and fifth from the top for the elementary school. The following tables show these facts:

---

4 Edward Naanes, County Superintendent of Kingman County, State Report, June, 1932

TABLE XXI

PROPERTY VALUATION PER PUPIL ENROLLED IN THE ELEMENTARY SCHOOL BASED ON VALUATION OF DISTRICT, 1932

School	Valuation per Pupil enrolled
Adams	20,000.95
Spivey	10,198.54
Norwich	8,251.42
Belmont	7,498.89
NASHVILLE	7,291.53
Zenda	7,095.86
Cunningham	4,987.56

TABLE XXII

PROPERTY VALUATION PER PUPIL ENROLLED IN THE HIGH SCHOOLS, BASED ON VALUATION OF DISTRICT, 1932

High School	Valuation per Pupil Enrolled
Adams	58,799.05
NASHVILLE	57,595.12
Zenda	27,842.93
Cunningham	24,877.42
Belmont	22,673.95
Norwich	20,806.28
Spivey	19,187.89

TABLE XXI

PROPERTY VALUATION PER PUPIL ENROLLED IN THE ELEMENTARY SCHOOL BASED ON VALUATION OF DISTRICT, 1932

School	Valuation per Pupil enrolled
Adams	20,000.95
Spivey	10,198.54
Norwich	8,251.42
Belmont	7,498.89
NASHVILLE	7,291.53
Zenda	7,095.86
Cunningham	4,987.36

TABLE XXII

PROPERTY VALUATION PER PUPIL ENROLLED IN THE HIGH SCHOOLS, BASED ON VALUATION OF DISTRICT, 1932

High School	Valuation per Pupil Enrolled
Adams	58,799.05
NASHVILLE	57,393.12
Zenda	27,842.93
Cunningham	24,877.42
Belmont	22,673.95
Norwich	20,806.28
Spivey	19,187.89

Nashville is fortunate that it does not have a bonded indebtedness, nor unpaid outstanding school warrants. The fact that the high school building was constructed in 1929, and is completely paid for, tends to show that the financial condition of the high school district is sound. Both, the elementary and the high school buildings are sufficiently large, it will be years before they will be filled to their capacity at the present rate of growth.

The Financial Administration and Accounting Procedure

It has been shown that the financial condition of the Nashville Public Schools is sound, but it is necessary to point out that the financial administration, in the light of modern methods and scientific management, is subject to severe criticism. This criticism, however, is to be understood as applying to methods and not to individuals. In every case, the financial records were found to be neat and correct, but like numerous other small school systems in the country, the Nashville school authorities maintain no accounting system in the technical sense of the word. Though the financial records are kept according to the forms usually used for schools in the State of Kansas, the records tell little or nothing, and without much work in calculating the items throughout, it is impossible to tell what distinct items

such as instruction, operation of plant, and plant maintenance are actually costing. All of the financial statements are to be criticized as masses of un-digested data, giving little information, and are of practically no value for administrative review.

Every business man is vitally concerned about the returns made on his investment. To determine these, he finds it imperative to keep a more or less detailed and accurate record of his incomes and expenses. Such records often involve extremely intricate and detailed analyses of the cost of operation, and the selling of his commodities. They give facts relative to costs and profits, and form the basis upon which business policies are adopted, modified, or rejected. What is true of the business man is even more true of corporations. Prpper accounting and a thorough understanding of the true financial state of a business is the basis for a successful enterprise.

It is imperative that school authorities keep similar accurate records of income and expenses. It is true, the computation of educational profits cannot be reduced to the exact quanitive basis of the manufacturer, nor is it possible to measure them in terms by methods used in industry. But at the same time, it is impossible to spend the people's money wisely and economically, and in such a way as to get the

greatest benefit from the money expended, unless small wastes can be checked and remedied to the advantage of the school. The taxpaying public is vitally concerned with the proper spending of public funds, and their proper accounting is an important factor in securing adequate support. The business of the schools, which is the major business of the community, cannot be successfully organized without a complete system of accurate and adequate financial records.

It is outside the scope of this study to set up a system of accounting applicable for the Nashville schools, but authorities in the field of school business management are agreed on the major functions that any school accounting system should perform, whether it be for a one room district school or for the large city school system. Harry P. Smith, who is recognized as an authority on the business administration of public schools, gives the following functions:[5]

1. Giving a record of funds received--both revenue and non-revenue--allocated by sources;

2. Recording expenditures by functions, by administrative units, and by instructional divisions;

3. Giving a complete record of every financial transaction, including the original documents;

4. Controlling budget appropriations;

5. Giving data for the computation of unit costs;

---

5 Harry P. Smith, Business Administration of Public Schools pp 232-233

6. Presenting financial facts for complete and accurate financial reports.

These functions can only be met, if the school authorities use a system of records which makes provision for two types of necessary facts,--those pertaining to assets and liabilities, and those pertaining to income and expenditure.[6] A system which does not furnish all these facts is inadequate; it has sacrificed a basic principal for simplicity. This after all is the prime test of an efficient financial-accounting system, it must combine simplicity with adequacy. The writer considers it important that a new form of records be put into use, he urges that the Boards of Education consult their school administrators in choosing a system adapted to their particular needs.*

Conclusions

In reviewing the financial conditions of the Nashville Public Schools, it will be noted that the fincial situation is sound. The tax rate for Nashville compares favorable with that of other Kingman County cities, both for high and elementary schools.

---

6 Ward G. Reeder, Op. Cit. pp 91-124

* For an excellent set of financial accounting forms, the reader is referred to the book, Accounting Procedure for School Systems, by Engelhardt and Von Borgersrode, published by Teachers College, Columbia University, N. Y. (1927)

When we consider the fact that Nashville is the only city that has constructed a new building during the last five years, and has no indebtedness on it, we must state that the financing of the schools has been good. During the last five years, the tax rate has been as low as 4.5 mills in 1927, and never higher than it was in 1928, 6.8 mills.

It has been pointed out with reference to educational needs, that Nashville is above the average of the group of cities with which comparisons were made, Nashville is apportioning more of its funds to the schools than are other Kingman County cities in comparable situations.

An attempt has been made to present the school expenditures in a form that will be as illuminating as possible to the average citizen, also to present facts in sufficient detail to secure his intelligent review and criticism. It is believed that in the main, the analysis is correct. The writer is convinced that if the taxpayers of the Nashville community see clearly the manner of school expenditure, and that the tax dollar is wisely spent, they will continue to give their financial support to the schools.

CHAPTER VII

SUMMARY AND CONCLUSIONS

A careful analysis of this study will disclose the fact that for the most part, the author has approved of the Nashville Public Schools. The chief purpose of the survey was, however, not merely to indicate whether or not a favorable state of affairs as a whole existed, but rather to suggest proper points of departure for constructive improvements. Suggestions and recommendations of this nature have been made throughout the report. It now remains to summarize the more important recommendations of the author. It is not urged that all of these must necessarily be put immediately into operation, but it seems reasonable to expect that no great length of time shall elapse before, under the direction of the school administrators, authorized and supported by the Board of Education, the majority of the suggestions of the writer shall enter into actual school practice. A summary of the major recommendations follows:

1. The proper relationship between the School Boards and the principals of both schools should be established in that the school board acts as a legislative body delegating all executive functions to the principals of the school.

2. The janitor service in the elementary school is below standard. The janitor should be placed under the authority of the principal, who should demand a high standard of cleanliness and efficiency. The salary of the janitor should be sufficient so that the best services can be demanded.

3. The school authorities should recognize the importance of healthful work and play, which is essential for children. They should consider the improvement of the playground and the purchasing of equipment.

4. The elementary school building constitutes a grave fire hazard, and steps should be taken immediately for reasonable protection for the safety of the children housed in the building.

5. There should be more supervision in both the elementary and high school, which can be accomplished by relieving the principals of enough routine work to enable them to devote more time to this important function.

6. Consideration should be given in the course of study to the out-of-school activities of the children in the elementary grades.

7. An adequate school accounting system is of paramount importance in modern school administration. Without such a

system the school authorities lack the data for intelligent formulation of policies, all of which have their financial aspects. A sound financial policy of the public schools depends for their accuracy on the soundness of the accounting system.

--o--

BIBLIOGRAPHY

Allen, W. H. "Next Steps in Educational Surveying", EDUCATIONAL REVIEW, Vol XLVII, February, 1924. pp 78-90

Almack, John, C., Report, Redwood City (Calfornia) School Survey, (Unpublished Report) May 10, 1927. 95 pp

Anthony, W. A., "Surveys and Surveys", EDUCATION, Vol. 13, June, 1930. pp 675-677

Bliss, Don, C., Methods and Standards for Local School Surveys, D. C. Heath and Company, Boston (1918) 264 pp

Bliss, Don, D., "Local School Surveys" EDUCATIONAL REVIEW, Vol. LXI, February 21, 1921 pp 93-99

Burr, S. E., "Values of a Public School Self-Survey", SCHOOL EXECUTIVES MAGAZINE, Vol. 48, January, 1929. pp 201-203

Carpenter, W. H., "Recent Educational Surveys", EDUCATIONAL REVIEW, Vol. LXVIII, September, 1919 pp 130-142

Caswell, Hollis, L., "Antidote for Politics and Inefficiency", NATIONAL EDUCATION ASSOCIATION JOURNAL, Vol. 19 November, 1930. pp 267-269

Caswell, Hollis, L., City School Surveys, Bureau of Publications, Teachers College, Columbia University New York City, 1929. 130 pp

Caswell, Hollis, L., "Outstanding City School Surveys", SCHOOL AND SOCIETY, Vol. 31, Feb. 1, 1930 p 156

Claxton, P. P., Survey of the Schools of Wilmington, Delaware, (Report) Department of the Interior, Bureau of Education, Washington. (Bulletin) No. 2, 1921 Part I and II

Claxton, P. P., Educational Survey of Elyria, Ohio. Department of the Interior, Bureau of Education, Washington Bulletin, No. 15, 1918. 300 pp

Dean, A., "School Surveys", INDUSTRIAL ARTS MAGAZINE, Vol. XXIV, October, 1929 pp 99-100

Engelhardt, N. L., "School Surveys and the Recommendations", SCHOOL EXECUTIVES MAGAZINE, Vol. 48, May, 1929. pp 387-389

Garlin, R. E., "Factors Conditioning the Success of School Surveys", SCHOOL AND SOCIETY, Vol. 28, September 15, 1928 pp 337-340

Garlin, R. E., "Giving Publicity to City School Surveys", SCHOOL AND SOCIETY, Vol. 26, August, 1927. pp 277-80

Jones, G., "Survey of Extra-Curriculum Activities in the Small High Schools", SCHOOL REVIEW, Vol. 34, December, 1926. pp 734-744

High School Buildings and Grounds, Department of Interior, Bureau of Education, Government Bulletin, No. 23 1922.

Klein, Arthur, J., Educational Surveys, Department of Interior, Bureau of Education, Washington. Bulletin No. 11, 1928

"Recent Educational Surveys", SCHOOL LIFE, Vol. 16, May, 1931 p 178

Sears, J. B., The School Survey, Houghton, Mifflin Company Boston, 1925, 440 pp

Smith, Henry, L. A Survey of a Public School System, Bureau of Publications, Teachers College, Columbia University, New York City. 1917, 304 pp

"Some Results of Educational Surveys", SCHOOL AND SOCIETY, Vol. 25, June 25, 1927 pp 745-746

Strayer, George, D. Some Problems in City School Administration, (Survey Series) World Book Company, New York. 1916, 234 pp

Survey of the Schools of Brunswick and of Glynn County, Georgia, Survey Report, Department of Interior, Bureau of Education, Washington, Bulletin, No. 27 1920, 82 pp

Zook, G. R., "Outstanding Achievements in the Field of Educational Surveys", SCHOOL LIFE, Vol. 9, May, 1924 pp 99-201

--o--