

T H E S I S

**A STUDY OF REMEDIAL PLANS
FOR IMPROVING THE EFFECTIVENESS
OF RURAL SCHOOL EDUCATION
IN
ROUTT COUNTY,
COLORADO**

Submitted by

H.L.Dotson

**In partial fulfillment of the requirements
for the Degree of Master of Science
Colorado Agricultural College
Fort Collins, Colorado**

August 1, 1933

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EFFECTIVENESS OF RURAL SCHOOL EDUCATION IN ROUTT COUNTY,
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MAJORING IN RURAL EDUCATION

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PREFACE

The writer, for several years, has been confronted with the task of making adjustments in the social and school life of children entering high school from one-teacher rural schools. As superintendent of schools at Hayden, Colorado, he has observed many cases of such students failing in high school. Knowing the conditions existing in these one-teacher schools, he has discovered various causes, general in nature, for these failures.

A social as well as an educational handicap is being imposed upon these rural children, when only meager instructional services are made available to them. Students who have received elementary training under such conditions are often deficient in the fundamentals of reading, spelling, penmanship, arithmetic and the use of English. Upon entering high school they soon realize their predicament, much to their chagrin and embarrassment, and it has been the writer's experience that a difficult period of adjustment is sure to follow. This deficiency in preparation cannot be blamed upon the children or to any lack of application upon their part. When rural children walk or ride horse-back from one to six miles to and from school each day in bitter winter weather, they are not slackers and are entitled to the best educational opportunities the school

district can afford.

Nor can the blame be placed upon the parents of these children. They are intensely concerned over the situation and justly fear that their children may not be receiving adequate training, educationally and socially, to enable them successfully to pass the high school course of study.

In mountainous Routt County are many one-teacher schools which, seemingly, can never enjoy the advantages of consolidation. There is a vital need for the development of some adequate plan that will enable these scattered schools to give a preparation that is satisfactory and that will prepare these children for entrance into high school. For this reason the writer has undertaken the present study, to make an extensive investigation of the educational opportunities offered by the one-teacher schools in Routt County, Colorado, and to present some plan for their improvement.

CHAPTER I

INTRODUCTION

Background of the Problem.-- The preparation of this thesis arose out of a conviction that the usual one-teacher rural schools in Routt County were educationally inefficient, expensive to operate, and inadequate to meet the demands made upon them. The writer felt that these schools could be made to function more efficiently without an increase in costs, and be made to meet in a more adequate way the educational need of their communities.

Since about 1800 the district system of operating schools has been used by the American people. The district system has carried with it the traditional one-teacher school, where the instructor is required to instruct all of the children in the elementary grades, one to eight inclusive. The inadequacy of such a system to meet the educational needs of a modern society has been generally recognized by educators and school patrons.

Routt County, Colorado, lies almost wholly in the mountains. In this respect it is similar to many counties in Colorado and other mountainous states. In this particular county few of the highways are improved. Many roads run through sparsely settled areas and have but little travel. Only one highway in the county is kept open to

auto travel throughout the year. General travel is by horseback or sled during the five winter months.

Because of the dominant cattle and sheep enterprises the land holdings are frequently extensive, causing rural homes to be many miles apart. In such outlying sections of Routt County the consolidations of various small rural schools, involving as they would the accompanying problems of transportation, offer difficulties that are seemingly insurmountable. This situation would necessitate the employment of some other plan in any endeavor to equalize the educational opportunities of these rural children with those of city school children.

The school problem confronting Routt County and other mountainous counties is not how to eliminate the rural school, but rather how to increase its effectiveness.

The Problem Stated.- The present study is an attempt to survey the present rural school situation in Routt County, Colorado, and to suggest some plan whereby the effectiveness of rural school education may be improved.

Objectives.- In this study it is proposed to attain the major objectives by:

1. An educational survey of the schools in Routt County.
2. An instructional survey of one-teacher schools in the county in order to determine the relative efficiency of instruction.

3. A study of remedial plans for improving the rural school situation as applied to Routt County conditions.

Definitions.- Certain terms are used in this study with meanings that may need definition.

1. Instructional service: Everything pertaining to the actual school instruction of the child.
2. Operational services: Everything pertaining to the operation of the school buildings, such as repairs, maintenance, operation and auxiliary agencies.
3. A.D.A.: Average daily attendance. This is obtained by dividing the total days of attendance for all pupils by the number of days school was in session.
4. Zone: A division of the county for educational purposes, having the largest town of that division at approximately the central point.
5. One-teacher school: A school where one instructor is employed to teach all subjects in all elementary grades of that school.
6. H.U.H.S.: Hayden Union High School.
7. Graded school: An elementary school having two or more teachers.
8. State district: A territorial division of the state into units larger than ordinary counties

and including several counties.

9. Jt.: A joint school district having its boundaries in two or more counties.

Source of Data for the Study.- The statistical data related to the study were compiled from the records available in the offices of the county superintendent of schools, the county treasurer and the county assessor at Steamboat Springs, Colorado, and from the office of the superintendent of schools at Hayden, Colorado. Rural schools conveniently accessible were visited by the writer for the purpose of making first-hand observations of actual conditions in these rural schools. Numerous conversations bearing on the topic of rural schools were had with pupils, teachers, patrons and county officials.

Information relating to various plans for improving the efficiency of rural school operation was secured from various libraries, but chiefly from the library of the State Agricultural College at Fort Collins, Colorado. These plans were studied critically and discussed in relation to their possible application to Routt County conditions. The zone plan of control of one-teacher schools which has no exact counterpart, was then formulated and submitted to four citizens of Routt County for constructive criticism. Following these criticisms, certain revisions of the plan were made before it was written in its final form.

CHAPTER II

HISTORICAL REVIEW

Widespread Establishment of Rural Schools.- In all rural districts of the United States, until about 1900, there was but a single method in use for establishing a new school. A few families having children met, discussed their problems, and, if favorably agreed upon, a school district was created. Such districts with their one-room schools increased rapidly from about 1800 until the consolidation movement was launched. A recent summary made at the Federal Office of Education stated that there were 153,000 one-room schools in the United States.¹

Colorado a Pioneer State.- The one-room school followed the pioneer settling of Colorado. Some states have passed through this pioneer stage and grown industrially populous. Colorado, however, is still - in general - so sparsely settled that its schools have not advanced far beyond this early stage. At the present time there are 49 one-teacher schools in Routt County alone.

One-teacher schools apparently are not meeting the demands of modern society, either in Colorado or elsewhere, because a far larger percentage of rural American children never enter high school than do the children

1. Taken from the "Delta School Preview". Vol.2, No.6.
Oct. 5, 1931.

living in cities. Upon the assumption that the high school makes possible a better training in citizenship, a broader industrial outlook and a social and educational contact that deeply enriches the life of the boy and the girl, then these under-privileged rural children are suffering a tremendous handicap.

The Spread of Consolidation.- One of the first definite steps to raise the quality of instruction and to offer to the rural school many advantages possessed by the city school, came with the consolidation movement. The reasons given for eliminating small rural schools and incorporating them into large units were: Their educational work stopped with the eighth grade and offered no high school opportunities; their social opportunities were usually entirely inadequate; the consolidated school could secure the services of more experienced, more mature and better qualified teachers; the costs of education per pupil were abnormally high in the small rural schools, due to low teacher load and needless duplication in maintenance, operation and purchase of supplies and materials. The consolidation movement made marked progress in many sections of the country. The consolidated schools did improve the rural school situation to a measurable degree, but consolidation brought with it other problems. Too elaborate courses of study were often put into operation; transportation often became too expensive an item; many districts

were far too heavily bonded for new buildings and equipment.

In some sections of the country consolidation is feasible. In other localities it is practically, if not entirely, an impossibility. In Routt County, Colorado, one-teacher schools are not doomed to extinction, as this county lies almost entirely in the mountains. The roads are largely unimproved, the county sparsely settled, and heavy snows five months of each year prevent auto travel in any part of the county except along one main thoroughfare, the Victory Highway. For these reasons, consolidation of rural schools will probably never take place. This necessitates the employment of some other plan in any endeavor to equalize educational opportunities of these rural school children with those of city school children. The immediate problem confronting Routt County and other mountainous counties is not that of consolidation, but how to increase the effectiveness of the present rural school.

Review of Literature.- During this study on how to improve the effectiveness of rural school education in Routt County, Colorado, the writer consulted many sources of material. However, in this review of literature only the material pertinent to the control and government of typical rural schools will be reviewed.

Cubberley and Elliott point to the ever changing conditions affecting rural communities and to the need of a larger unit of school control than the usual school

district. They point to the great revolution that has taken place in rural life in the past three-quarters of a century. Because of this change in rural life conditions, they stress the importance of abandoning the district system of school organization and inaugurating a larger unit of school control. They emphasize the necessity for more efficient administration of rural schools. "Our main theme is that the really fundamental need today is that rural and small village education should be reorganized along efficient administrative lines."¹

Ferrier expresses the need of reorganizing the administration of rural schools in his study of three Colorado counties. He points to the fact that certain fields of industry are finding it advantageous to consolidate administrative offices. He explains that consolidation of the administration of rural schools is not unlike the system of city schools where the management of the schools in the city is turned over to one board of education. In the case of the rural schools a superintendent is selected by the board of education and to him is delegated the responsibility for the administration of these schools. He states that the county superintendent is hampered in her contribution to the removal of undesirable educational

1. Cubberley, Ellwood P., and Elliott, Edward C. "Rural School Administration". The Journal of Proceedings and Addresses of the National Educational Association fifty-second annual meeting. St. Paul, Minnesota. July, 1914. pp. 244-249

conditions by the very nature of her office, and must depend largely on her personality rather than on authority. He states further that the boards of school directors act independently in each district, and that a lack of uniformity is bound to result.¹

Indiana, for years, has used the township as the administrative unit. In a report of the Indiana Education Survey Commission of 1923, it is stated that in 1852 a dozen or more school districts were grouped together to form a single township. Trustees were appointed in these townships and local school affairs were entrusted in their hands. This proved unsatisfactory in time, however, the report goes on to say, and in 1873 a county superintendent and a county board of education were authorized to assist the trustees.²

Kentucky used the district as the administrative unit for schools until 1908 when the county unit plan was adopted. A report on "Public Education in Kentucky", made by the Kentucky Educational Commission in 1922, discloses a sincere effort by the people of Kentucky to provide improved administrative methods for typical rural schools. The report states that the establishment of the county

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1. Ferrier, Wallace T. A thesis on "A Survey of Educational Opportunities in Grand, Clear Creek and Jackson counties, Colorado." Chapter II. pp. 54, 55. 1930.
 2. Indiana Education Survey Commission. A Report of the Indiana Education Survey Commission. 1923. Chapter VIII. pp. 131-137.

board in 1908 was a recognition of the fact that the county, not the district, should be the unit for rural educational control. It states further that constructive educational legislation was enacted in 1920 when county boards of five members, to be elected outside of graded school and city school districts, were created. This gave the people a direct voice in the management of rural school affairs. The report goes on to say that the law of 1920 extended the powers of the county boards, both financially and in matters of educational control, even to the appointment of a county superintendent as its executive officer.¹

G.S.Klemmedson, in his "Cost of Public Education from the Viewpoint of Agriculture," tells of the rather unique system of school control in Utah. He states that there are only forty school districts in the State of Utah, and that five of these are cities of the first and second class. H. says that while in the larger districts the clerk of the board of education acts as a purchasing agent, in a majority of the districts the purchasing is done by a district superintendent. He points out the following beneficial results of this system: Equalization of local school taxes throughout the district; savings in purchasing and distributing supplies; more adequate and efficient

1. Kentucky Educational Commission. A Report by the Kentucky Educational Commission. 1922. Chapter III. pp. 27-31.

supervision with a net saving in expense of administration. He states that where Utah has only 40 school districts, Colorado is burdened with 2,032 districts.¹

New York employs a centralized state control plan of school administration. In "A Cyclopedia of Education," it is stated that the control centralized in the Board of Regents for the University of the State of New York, and their executive officer, the Commissioner of Education, is more complete than that found in hardly any other state. It explains that the Commissioner of Education and his assistants have control of those educational functions which in other states are entrusted to county boards of education and county superintendents. The report goes on to say that there are district superintendents instead of county superintendents in New York. "The 57 non-city counties of the state are divided, according to size, into 207 superintendency districts, as follows:

"1 district to the county -	4 counties
2 districts to the county-	8 counties
3 districts to the county-	18 counties
4 districts to the county-	13 counties
5 districts to the county-	7 counties
6 districts to the county-	4 counties
7 districts to the county-	2 counties
8 districts to the county-	1 county" 2

At the close of the school year 1929, there were

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1. Klemmedson, G.S. "Cost of Public Education from the Viewpoint of Agriculture." Bul. 368, Experiment Station. Colo. Agri. College. 1930. pp. 62, 63.
 2. Monroe, Paul. Professor of History of Education, Teachers College, Columbia University. Editor of "A Cyclopedia of Education." Macmillan Company. Vol. IV. pp. 464-467. 1913.

2,725 one-teacher districts in the State of New York having an average attendance of from one to ten pupils.¹

1. Twenty-sixth Annual Report of the State Education Department, State of New York. 1930. Vol. II, p.7.

CHAPTER III

PRESENT RURAL SCHOOL SITUATION
FOR ROUTT COUNTY, COLORADO

Topographical Presentation.— Routt County is a beautiful mountainous country of many low hills, green valleys and winding mountain streams, situated in the northwestern part of Colorado. One large river, the Yampa, flowing westward and draining eventually into the Colorado, runs the entire length of the county, and the adjacent country is known as the Yampa Valley. Tributary to the Yampa River are many small rivers and streams that head in the eastern part of the county. At high elevations in the mountainous sections wonderful wooded slopes of pine and spruce protect the wild game and hold the winter snows late in the spring, providing the country with one of the most marvelous watersheds in the world.

In this county there are three types of land that affect the type of agriculture, and thereby the density of population as well as the accessibility of rural schools. First, the mesa lands (not characteristically flat as the word mesa suggests) lie on either side of the rivers and streams at an elevation of about 50 to 200 feet higher than the valley land, and constitute approximately one-half of the entire area of the county.



Immediately beyond the buildings in the picture, one can see the type of valley land that lies along the rivers. To the right and in the background above the river bluffs, are fields of wheat on mesa land. On this so-called mesa land are the dry-land farms, where, due to sufficient precipitation and fertile soil, fields of small grain and alfalfa dot the gentle slopes and shallow gulches during the summer months. Second, river-bottom lands, or valley lands, lie along the banks of the rivers and constitute but a small part of the county. During any season, these valleys, with their broad meadows and tree-bordered river banks, afford a colorful scene to the casual observer. The third type of land in Routt County is more mountainous, attaining elevations ranging from 7,000 to 9,000 feet. Here are found small but turbulent streams, mountain lakes

and marshes, mountain parks and timbered slopes. Because this picturesque land lends itself so profitably to the raising of cattle and sheep during the summer months, one will find thousands of cattle and sheep grazing contentedly in the peaceful atmosphere of these highlands.



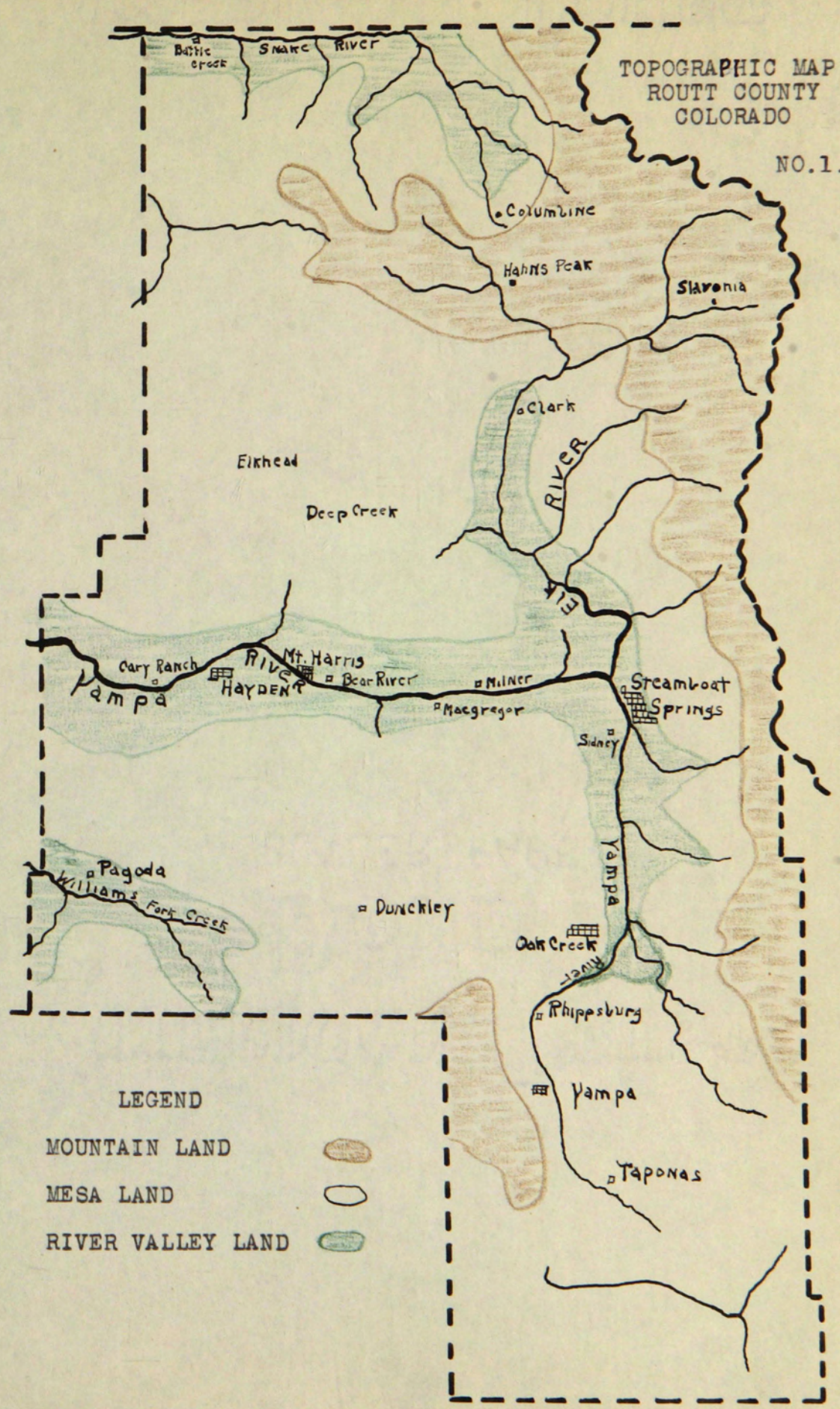
1920. Valley from Rabbit Ear Pass Colo.

This picture shows the broad valley lands in the foreground. In the background can be seen the mountains of higher elevation than the mesa land. At still higher levels of approximately 10,000 feet, are lakes and forests on the Continental Divide. This Divide runs in a northerly and southerly direction in the extreme eastern part of the county. During the season of heavy snowfalls, the Continental Divide forms an effective barrier between the people of northwestern Colorado and that part of the state known as the eastern slope. Since the one railroad traversing the county has its terminus ten miles west of the county

line, this northwestern section of Colorado becomes almost a little country unto itself, especially during the winter months.

The climatic conditions of Routt County have as distinct a bearing upon the ramifications of this study, as do the geographic conditions. In a country where the winters are long and severe, the density of the population and the accessibility of the rural schools are bound to be affected. The snow begins piling up usually in November and, because of periodic winds, drifts of great depth blockade the roads leading to the main highway. The main, or Victory, highway is the only road kept open to auto travel during the winter. In the valleys the snow will measure two feet on the level, and for four, sometimes five months, the firmly packed snow takes the place of Mother Earth for travel. The only means of transportation for people living away from the main highway is on horseback or by sled. Winter temperatures are severe, at times reaching the low level of 42 degrees below zero.

The spring in Routt County is nothing but a period of break-up from the winter. The unimproved roads become veritable seas of mud and water, and are even more impassable than the winter snow roads. This condition lasts usually well into May, when the roads gradually begin to dry up and normal travel can be resumed. The summer season, though short, is the most delightful of all, as are also the fall months of September and October.



TOPOGRAPHIC MAP
ROUTT COUNTY
COLORADO

NO. 1.

- LEGEND
- MOUNTAIN LAND
 - MESA LAND
 - RIVER VALLEY LAND

Scale 1/4 IN = 8666 ft.

The winters are severe in this country and are the cause of many of the problems with which the inhabitants have to deal. Transportation is by no means the least of these. When only one highway between the largest towns is kept open to auto travel; when for four or five months of the year the only means of transportation for the rural people, living sometimes as far as 30 miles from the main highway, is on horseback or by sled, it can be readily seen that social intercourse for these folk is reduced to a minimum.

Schools.- Routt County embraces 2,310 square miles, or 1,417,764 acres. There are 47 school districts within its boundaries, 2 of which are union high school districts. The remaining 45 districts vary considerably in size, pupil enrollment and A.D.A. The smallest district has approximately 10 square miles in it; the largest, 233 square miles. Pupil enrollment by districts varies from 4 to 347, and A.D.A. ranges from 2.3 to 250, as shown in Table I. This information would indicate a wide variance in these important factors affecting the rural school situation.

Forty districts contain forty-nine one-teacher schools, generally located in sparsely populated areas. In the 45 districts having elementary grades, one to eight inclusive, the A.D.A. in 15 districts is less than 10; in 18 districts, between 10 and 20; and in 12 districts, over 20.

Table I. Schools, Enrollment and Attendance,
Routt County Districts, Grades 1 to 8,
1931-1932

District :	Graded Schools :	One-teacher Schools :	Total Enrollment :	A.D.A.
33	1	0	347	250.2
4	1	0	295	224.4
3	1	1	256	187.9
2	1	3	180	156.5
32	1	0	127	97.8
6	1	1	117	90.4
25	1	0	94	76.9
12	1	0	82	49.3
43	1	0	42	34.0
31	1	0	35	34.0
8	0	3	33	30.0
19	1	0	24	21.6
Jt. 4	0	2	24	18.3
29	0	1	20	15.0
13	0	1	20	13.0
16	0	1	14	12.7
35	0	1	19	12.4
1	0	4	13	12.1
37	0	2	15	12.0
27	0	1	16	11.7
10	0	1	14	11.5
18	0	1	14	11.3
36	0	1	15	11.3
Jt. 5	0	1	14	11.2
9	0	1	17	11.1
14	0	2	14	10.8
42	0	1	16	10.4
5	0	1	11	10.3
15	0	1	12	10.1
23	0	1	10	9.0
40	0	1	9	8.7
34	0	2	12	8.0
7	0	1	12	7.8
21	0	1	8	7.8
24	0	1	9	7.0
30	0	1	11	6.7
28	0	1	8	6.0
22	0	1	9	5.9
17	0	1	7	5.5
39	0	1	5	4.6
41	0	1	5	4.2
20	0	1	4	3.9
26	0	1	5	3.0
38	0	1	7	2.9
11	0	2	8	2.3
45	11	49	2,029	1,551.5

(Data from records of ofc. of County Supt., Routt County.)

The small enrollment in so many of these schools is doubtless due to the sparsely populated areas, and the relatively low A.D.A. found in some schools is due to the long routes school children must travel, and the severe climatic conditions which would especially affect the regular attendance of younger children.

Small enrollments naturally increase the per-pupil costs. An illustration of extremely high per-pupil costs is disclosed in the educational situation of Districts Nos. 8 and 28 in Routt County. According to records in the County Superintendent's office, District No. 8 had but three children enrolled in the one-room school during the 1932-1933 school year. The teacher lived with the family from which the three pupils came, and the father accepted hire for hauling the teacher and his children to and from school. The annual cost of this school is about \$1,000. At a glance it is seen that the per capita cost in this case is close to \$333 for the year. District No. 28 will have but a single child attending school during the 1933-1934 school year, but the people of that locality are planning to continue operation of their school. The legal budget for District No. 28 is \$901.25.

The teachers in Routt County's one-teacher schools have a paramount influence upon educational affairs. School patrons and board members give very little, if any, assistance educationally, and the county superintendent

may visit the schools but once or twice a year. These teachers, as a rule, have very little contact with educational sources outside their school district, and far too often the full responsibility of educational progress rests with them. Too many teachers begin work in county schools without previous teaching experience. Some have little professional training. Of the 49 teachers teaching in one-teacher schools in Routt County, 7 have had 4 years of college training; 8 have had 3; 25 have had 2 years, and 3 have had less than 1 year of training.

Table II. Training of Teachers in 49 One-Teacher Schools, Routt County.
In Terms of Years of Study of College Grade
1932

<u>Years of Training</u>	<u>Number of Teachers</u>	<u>Approximate Percentage</u>
1-	2	4
1	9	18
2	25	51
3	4	8
3+	2	4
4	7	14

Source:- Records of County Superintendent's office, Steamboat Springs.

The County Superintendent.- This officer is elected by the people at each general election as the chief educational leader for the county, with limited powers. She has power to change district boundary lines, to conduct teachers examinations, to supervise teachers and to act in an

advisory capacity to boards of education. Too often, because of political^{or}/personal differences, school directors disregard the superintendent's good advice. As for supervision, it is utterly absurd to expect this officer effectively to supervise the 49 teachers in typical rural schools scattered over an area of 2,310 square miles or 1,417,760 acres. Because of the great distances between schools and the mountainous country, it requires several days to visit two or three schools. Should the superintendent require certain changes in instructional procedure of a single rural teacher, it is probable that no follow-up could be made within the year by that officer.

This important educational officer is greatly handicapped under the laws of Colorado, as in other states, not only by the political aspect of the position, but by the limitations of authority and insufficient assistance. Many educators qualified to pass judgment on this office, state that greater power, relative to instructional matters in rural schools, should be invested in the county superintendent's office; provided, however, increased tenure of service could be made more certain than is now possible. Dr. Cubberley has aptly described the county superintendent situation, in part at least, in his book, "Rural Life and Education," by saying:

"In twenty-seven of the forty states having a county superintendent, he is elected by the people at popular elections. In eighteen of the twenty-eight states, he is elected for but two-year terms, and in two

of these eighteen states, the county superintendent is actually made ineligible, by the state constitution, to serve more than four years in the office. In other words, the county superintendent of schools, a man who ought to enter the work only after careful study and training for it as a life career, and with the idea of becoming an educational leader, as does a city superintendent, is by the people regarded merely as a political officer and clerk, and the office is passed around among the electorate without regard to the effect of this action on the schools. The county superintendent must first become a resident of the county and a voter, must then work up in the party ranks, and extend his acquaintanceship to secure a nomination, must win the primary and stump the county against an opponent, and pay his political assessments and campaign expenses ---, all for a temporary and poorly paid political job, and always with the risk of defeat staring him in the face. Every other year, in eighteen of our states, he must waste six months of his time and possible educational efficiency in such political work, and he must also keep his political eye open all the time in between." 1

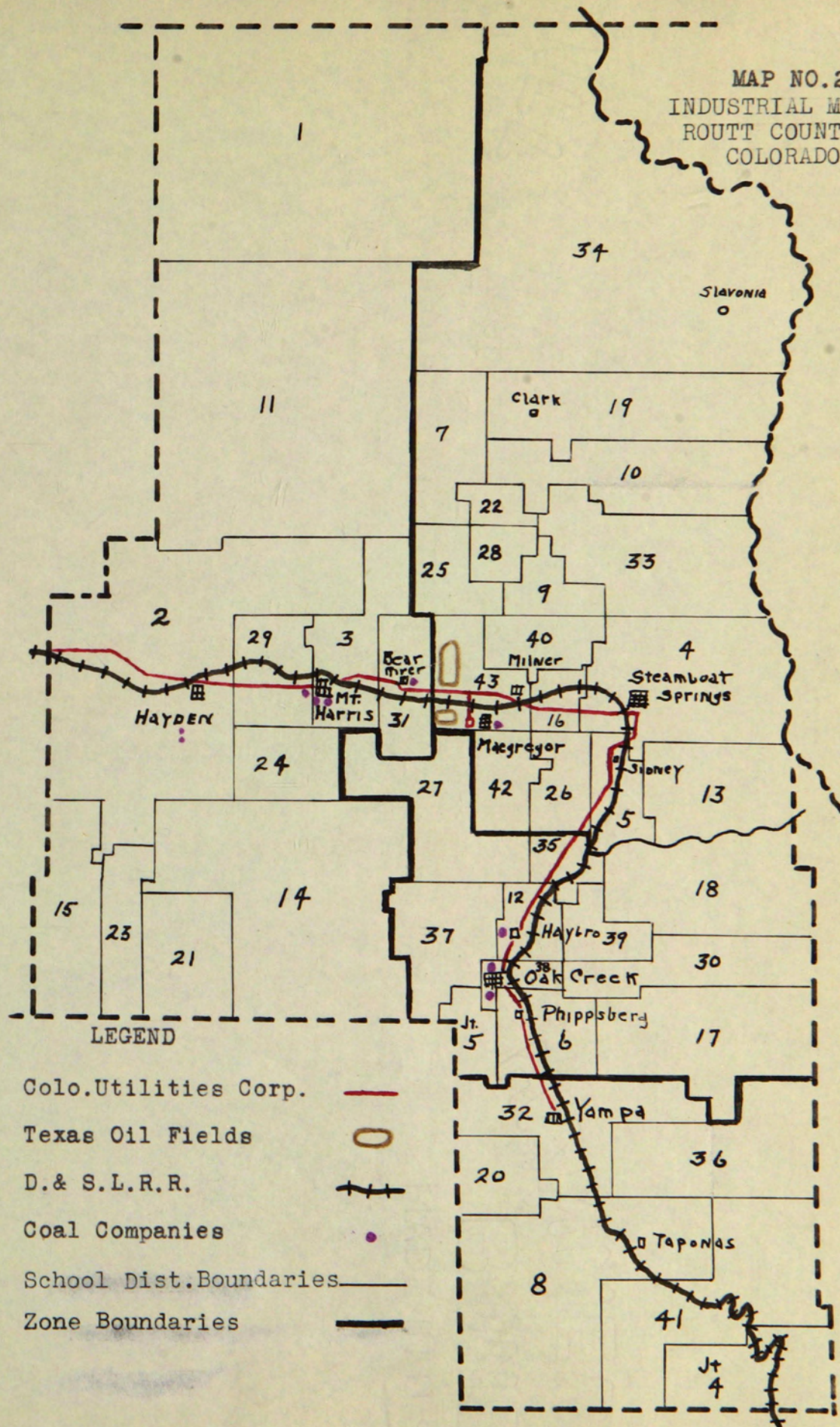
Rural School Boards.-- The board of school directors in each district consists of three members as provided by state law, and elected accordingly for one term of three years. Of the 141 school directors in Routt County, probably a few have adequate knowledge regarding instructional matters. Generally speaking, people elected have a limited conception of such matters as qualifications of teachers, teacher certification, modern teaching skills, techniques, procedures, methods, aids, instructional supplies and textbooks. In the larger school districts, which are first and second class districts, a superintendent or school principal is employed by the board of education. Because of his professional qualifications, and experience,

1. Cubberley, Elwood P. "Rural Life and Education".
Riverside Series. 1922. Houghton Mifflin Co. p. 315.

matters relating to instruction are delegated to him. Smaller districts, usually districts of the third class, cannot afford such specialized service, and since their sole official counsellor is the county superintendent of schools, the responsibility of managing school affairs rests largely with the local school boards. These district boards of education are supreme in authority. They have power to elect teachers and discharge them; select and purchase textbooks; fix salaries; alter courses of study; increase or decrease the length of the school term; determine the amount of tax levies for school purposes; decide upon instructional supplies and aids; and provide or deny any teacher supervision. These school directors are practically independent as a body. They may act without any reference to the policies and actions of other school districts. Reasonable uniformity of school management policies is doubtful under the present district system.

Industrial Presentation.- In Routt County there are seven major coal companies, one railroad and one utilities corporation. The locations of these industries are presented in Map 2. Naturally enough, these coal companies are located along the railroad, or near the railroad, as are the larger towns and the utilities corporation. The Denver and Salt Lake Railroad operates one out-going and one incoming passenger train daily. Numerous freight trains carry the cattle, sheep and coal to outside markets.

MAP NO.2.
INDUSTRIAL MAP
ROUTT COUNTY
COLORADO



LEGEND

Colo. Utilities Corp.

Texas Oil Fields

D. & S. L. R. R.

Coal Companies

School Dist. Boundaries

Zone Boundaries

Scale 1/4 IN. = 3666 ft.

The largest coal companies are located at Mount Harris and Oak Creek, both on the railroad, and they pay a large portion of the school tax in the districts where those towns are located. The Colorado Utilities Corporation is located at Macgregor, with its power lines connecting the larger towns, and it pays considerable tax money into the school funds.

The geographical situation of industrial concerns in Routt County affects school revenues in that all school districts receive incomes from the taxable wealth of these industries through what is called the county general school fund, but only those school districts in which the taxable wealth is actually located enjoy financial support through the special school fund. Take the railroad for example. While all persons in Routt County are customers directly or indirectly of the Denver and Salt Lake Railroad, yet only those districts through which the right-of-way actually runs, receive financial aid from the railroad through the special fund. The significance of this situation lies in the fact that typical one-teacher school districts are not located near the railroad and therefore receive no school revenue from the special fund to which they are seemingly entitled. Table III shows the uneven distribution of taxable wealth in a few representative districts.

Table III. The Uneven Distribution of
Taxable Wealth as Shown by
Selected Districts.
1932

School Dist.	: Industrial: : Property : Assessed : Valuation	District : : Property : Assessed : Valuation	: : Total : Valuation	: Total : : Income : : Special : : Levy :	:Pupil :Enroll- :ment
41	\$176,050	\$52,370	\$ 218,420	\$ 655.26	5
38	995,430	71,280	1,066,710	18,134.07	347
31	295,740	84,370	380,110	3,230.94	35
Jt. 4	262,950	88,510	351,460	966.51	18
36	none	62,390	62,390	811.07	12
21	none	58,960	58,960	471.68	8

Note: The industrial properties shown are largely,
if not entirely, properties of the Denver and
Salt Lake Railroad and Colorado Utilities
Corporation.

Regarding Tax Collections.- At the present time, due
to the depression, the title to approximately one-third of
the land in Routt County has reverted to the county. De-
linquent taxes on other land are being slowly paid. The
larger industrial companies have kept their tax payments
up, thereby saving the day, so to speak, for the schools.

CHAPTER IV

EDUCATIONAL RESULTS OF
PRESENT RURAL SCHOOL INSTRUCTION

As Reflected by Training of Teachers.- Table IV, based upon records of the County Superintendent of Schools, shows that of the 49 teachers in one-teacher schools of Routt County, 11 teachers or 22 percent of the total have had but one year or less of college training. Since this training is somewhat meager, it would not be amiss to emphasize further training by requiring these teachers to attend summer school at least once every three years. Undoubtedly the instruction in the one-teacher schools could be made vastly more effective by conducting teacher institutes each month at convenient towns and by making it mandatory that these teachers attend these meetings.

Table IV also shows the considerable variation that exists in the types of certificates held by the 49 teachers.

As Reflected by Rating of Teachers.- The rating of all teachers of one-teacher schools in Routt County at the end of the 1932-1933 school year by the county superintendent shows that 10 are above average, 20 are average, and 19 are below average. ¹

1. Personal communication, Pearl A. Funk, County Superintendent of Schools.

Table IV. Certification and Training of Teachers in One-
Teacher Schools in Routt County, Colorado.

No. of Teachers:	School where Teaching :	Certificate Held:	Years of College Training
1	Columbus Mt.	First Grade	Two years
2	Willow Creek	Second Grade	Two years
3	Battle Creek	Second Grade	Two years
4	Smuen Gulch	First Grade	One year
5	Twin Mesa	Five Year Temp.	Four Years, A.B.
6	Wolf Creek	First Grade	25 Quarter hours
7	Heart Mt.	Second Grade	25 Quarter hours
8	Clark	Second Grade	One year
9	Toponas	Life	Two years
10	Egeria	Five Year Temp.	Two years
11	Burns	Five Year Temp.	Two years
12	Fly Gulch	First Grade	Three years
13	Moon Hill	Five Year Temp.	Four years
14	Elkhead	First Grade	Two years
15	Mt. View	Second Grade	Two summers
16	Mesa	Life	Three years
17	Dunckley	Five Year Temp.	Two years
18	Cow Camp	Life	Two years
19	Pagoda	First Grade	One year
20	South Side	Five Year Temp.	Two years
21	Morrison Creek	First Grade	One year
22	Pleasant Valley	First Grade	Two years
23	Lancaster	Life	Two years
24	Beardsley	Life	Two years
25	Long Gulch	First Grade	Two years
26	Dunstan	Five Year Temp.	Two years
27	Windy Point	Five Year Temp.	Two years
28	Cow Creek	Second Grade	One year
29	Foidl Canon	Five Year Temp.	Four years, A.B.
30	Mystic	First Grade	One year
31	Pleasant View	First Grade	Two years
32	Cobb	Second Grade	Two years
33	Tow Creek	Five Year Temp.	Four years, A.B.
34	Middle Elk	Five Year Temp.	Two years
35	Hahns Peak	Second Grade	Two years
36	Columbine	Five Year Temp.	Three years
37	Deer Park	Life	Two years
38	Love Spring	Life	Four years
39	Lower Trout Creek	Five Year Temp.	Two years
40	Pinnacle	Five Year Temp.	Four years, B.S.
41	Yellow Jacket	Second Grade	Three and 3/4 yrs.
42	Fairplay	First Grade	One year
43	Red Dirt	Five Year Temp.	Four years
44	Eddy	First Grade	Two years
45	Couger Mesa	First Grade	One year
46	Toponas	Second Grade	Three and 3/4 yrs.
47	Pine Grove	Second Grade	One year
48	McCoy	First Grade	Three years
49	South Fork	Professional Certificate	Two years

1. Data taken from the records at the county superintendent's office, County of Routt, State of Colorado.

As Reflected by Accomplishments of Rural School

Graduates in Town Schools.— Most of the students in the senior high school at Hayden are either from that town or from Mount Harris, Colorado. Approximately 10 percent of the high school students are from rural one-teacher schools. By studying the permanent record sheets of all failing students in this school for the last three years, the writer found that every third failing student came to the H.U.H.S. from a one-teacher school. While approximately 90 percent of the student body came from graded schools, one-third of the students doing unsatisfactory work came from one-teacher schools. Some students who were rated "A" in rural schools failed the ninth grade. Not only in the actual studies are they inadequately prepared to cope with high school work, but in the social graces they are woefully lacking. For six years the writer has noticed the extreme self-consciousness and lack of poise in boys and girls entering the H.U.H.S. from rural districts.

As Reflected by the Reaction of Rural Communities.—

In communities where the children attend one-teacher schools, there is a deep-rooted feeling that graduates from the rural school may not succeed in their high school work. It is not uncommon to hear parents of rural school graduates express their fear that their children may not make good in the H.U.H.S. They often accuse high school teachers of unfair discrimination against rural students, at the same

time realizing that rural school children are not as thoroughly trained in the fundamental subjects of elementary grades as are the town school children. This weakness of the rural school was acknowledged at a meeting of the board of school directors of the H.U.H.S. in May of the present year, 1933, when an article was added to the by-laws of that institution to the effect that in the future the superintendent and high school teachers shall give special attention and extra time to all students entering the H.U.H.S. from rural schools.

As Reflected by the Reaction of Others.- Floyd Moon, County Agent for Routt County, in commenting on rural school teachers said, "I have talked with many rural school teachers while serving in this office and I have concluded that, as a rule, they show a decided lack of general information and reasoning power. Perhaps I expect too much of them, but it seems to me that they over-emphasize training for knowledge and do not stress training for citizenship."¹

Richard McConnell, a young and inexperienced teacher in District No. 42 at Eddy School, where several children attend all eight grades, said, "The members of the board are always fighting. One day some member of the board will tell me to allow the same amount of time for all subjects in all grades. Another member will advise combining

1. Floyd Moon. Personal comment.

certain grades to provide longer recitation periods. If I divide the school day of 312 minutes equally between 52 needed recitations, six minutes would be available for each subject recitation. Just how I am to prepare those pupils properly for further education is a problem." ¹

The results from present instruction in rural schools in Routt County must not be satisfactory in the opinion of the county superintendent. When interviewed by the writer in May, 1933, she made the following recommendations for increasing the effectiveness of class room instruction in the rural schools:

1. Install standardized testing programs.
2. Adopt uniform textbooks
3. Train teachers for both primary and intermediate work, but not for one at the exclusion of the other.
4. Insist on supervised seat work.
5. Supply an abundance of work books.
6. Combine certain grades.
7. Provide supervision of rural school teachers in addition to the supervision given by the county superintendent.
8. Eliminate all rural school boards.
9. Consolidate certain school districts and then give them adequate educational leadership. ²

By these recommendations from a woman who has served as county superintendent for the past five years, it appears, in her judgment at least, that better results can be had from the rural schools in Routt County.

As Reflected by Instructional Supplies and Equipment Used.— According to the county superintendent of schools,

-
1. Richard McConnell. Personal comment.
 2. Pearl A. Funk, County Superintendent of Schools.

20 percent of the textbooks used this last year in rural schools of the county were copyrighted before 1915. Five years ago when she took office, approximately 40 percent of the textbooks used in rural schools of the county were copyrighted before 1915. She said the quality of paper used in many of these textbooks was poor and that the size of type used was unsatisfactory.

Regarding instructional supplies such as construction paper, work books, writing paper, song books, pastes, ink, chalk, crayolas and charts, she stated that there was very little uniformity in these materials and in 50 percent of the schools the amount of these supplies was inadequate. Only a few schools have a piano or portable victrola to aid the teacher in music. Maps, charts and globes are conspicuous by their absence. Blackboards are poor in quality and the continued use of them often causes eyestrain. The writer has observed these same conditions relative to instructional supplies and equipment in no less than a dozen rural schools visited by him.

As Reflected by Attendance.- Table V shows that during the school year 1932-1933, there were 32.8 percent more pupils enrolled in the first grade in Routt County than were enrolled in the eighth grade. The enrollment for the first and second grades is comparatively high. There is no significant change from the third grade through the sixth grade. The drop comes when the seventh and eighth grades

are reached. If this enrollment by grades could be considered as an average, it might be said that as a class advanced through the elementary grades the enrollment declined at such a rate that when the pupils of any beginning class reached the eighth grade, one pupil would be missing for every three beginners. In Colorado the law permits children as young as 14 years of age to remain out of school, and many children discontinue elementary school work as soon as the compulsory school attendance age limit is reached. To the writer's knowledge, several cases of this nature have occurred in Routt County.

Table V. Pupil Enrollment of Boys and
Girls in Routt County Schools
1932-1933

<u>Grade</u>	<u>Boys</u>	<u>Girls</u>	<u>Total</u>
1	163	154	317
2	150	135	285
3	143	105	248
4	140	102	242
5	123	144	267
6	135	110	245
7	112	103	215
<u>8</u>	<u>111</u>	<u>102</u>	<u>213</u>
Totals	1,077	955	2,032

Source: Records of County Superintendent's
office, Steamboat Springs, Colorado.

CHAPTER V

A PROPOSED COUNTY ZONE PLAN AS
APPLIED TO ROUTT COUNTY

General Statement.-The plan presented in the present chapter has no counterpart in the various statewide plans that have been proposed for other states. It has been designed to meet the peculiar educational needs of Routt County. The present chapter will present the plan in considerable detail. The following chapter will contrast the application of this County Zone Plan with the results that might be expected from the application of plans in use elsewhere as they would affect the situation in Routt County.

It is proposed in the County Zone Plan to increase the efficiency of education in the one-teacher schools of Routt County with very little, if any, increase in costs. Briefly, it is proposed to realize this objective by making certain geographic divisions of the county into zones. Each zone would have one educational center located in its largest town, or trade center, where certain educational powers and duties would be centralized in one officer, the superintendent of schools. The plan also sets forth a definite division of labor between the superintendent of schools at each zone center and the district boards of education in their respective districts. It proposes a scheme whereby the supervision of

teachers may be improved, and it provides educational leadership for all teachers in one-teacher schools.

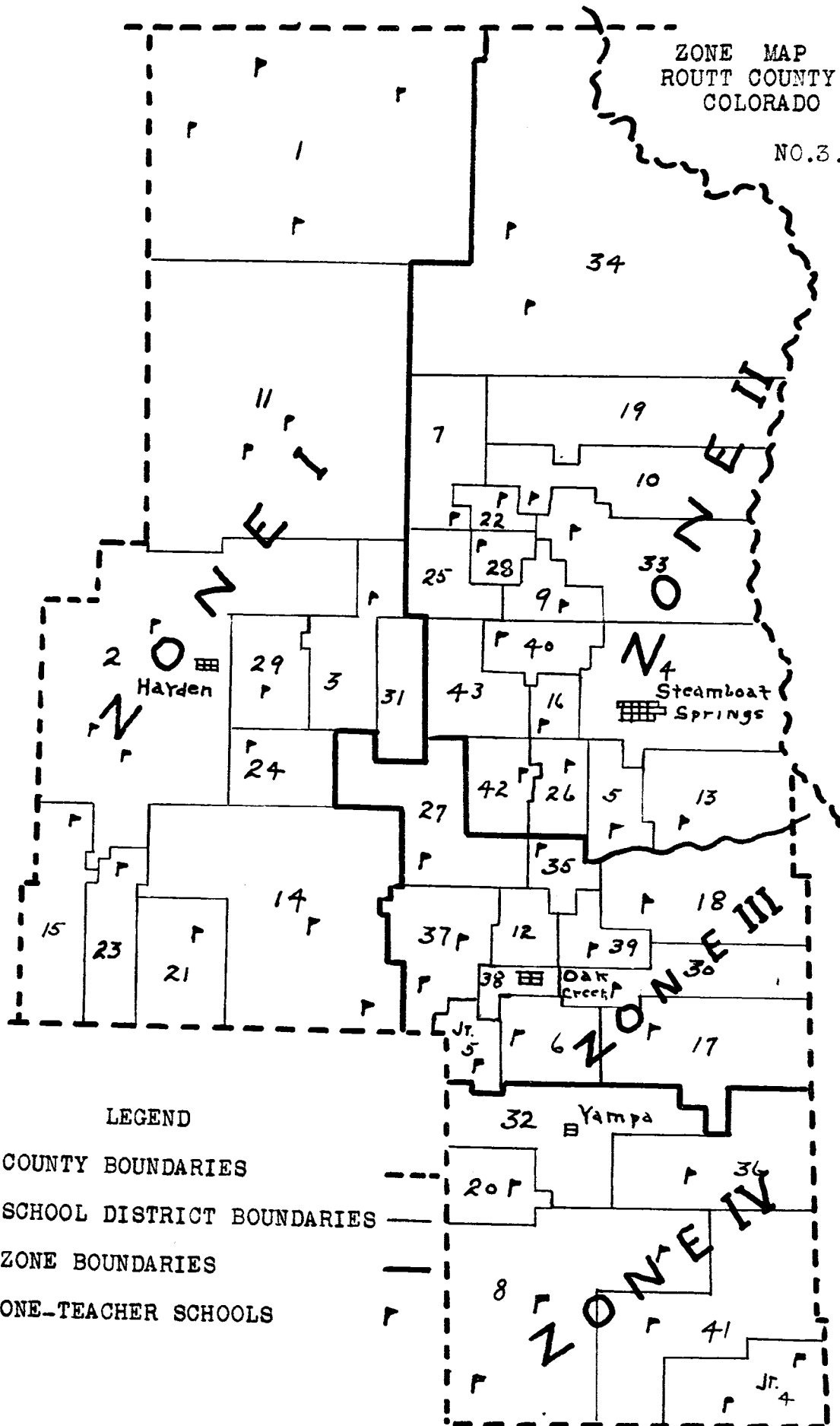
Boundaries.- Let the County of Routt be divided into four zones, referred to as Zones I, II, III, and IV; with Hayden, Steamboat Springs, Oak Creek and Yampa as zone centers, respectively. Since it would not be advantageous from an administrative standpoint to divide any school district so that part of it would be in one zone and part in another, the zone boundary lines would necessarily follow the boundaries of certain districts. The allocation of the districts to their respective zones, as shown in Map No. 3, would be based largely upon county and state roads which pass thru these districts and lead to the most accessible trading center. Other features, geographic in nature, affect the direction of the zone boundaries. A river forms the natural zone boundary between districts twelve and thirteen; and a hilly divide makes another zone boundary between the districts thirty-seven and fourteen. Otherwise the boundaries of these zones should be such as to include the natural trading territory served by each of the four largest towns, Hayden, Steamboat Springs, Oak Creek and Yampa.

Map No. 3 also shows the approximate location of the one-teacher schools in each zone.

Administration.- The four suggested zones would operate in the same manner and under similar administra-

ZONE MAP
ROUTT COUNTY
COLORADO

NO.3.



tion. For the sake of illustration, Zone I will be used for an explanation of the plan.

In this proposed zone there are placed eleven school districts with a total of seventeen one-teacher schools within its boundaries. (Rural schools having two or more teachers are not considered in this plan, because they are usually located in small communities that are on improved roads leading to the county seat and have comparatively little difficulty in reaching the county superintendent.) Since Hayden is the largest and most accessible trading center, it has been selected as the zone center. Under the zone plan these seventeen schools would be managed jointly, and on a cooperative basis, by the respective district boards of education, a zone board, the county superintendent and a zone superintendent. The duties of these two officers and of the district boards and the zone board are different, and for the sake of brevity, an outline of their respective duties is shown below and on the following pages.

The duties of the individual boards of education of the various districts would be:

1. Officially authorizing the zone superintendent as purchasing agent for the district.
2. Approving the budget prepared by the zone superintendent.
3. Paying bills approved by the zone superintendent.
4. Officially certifying the school tax levy to the county superintendent.

5. Operation duties
 - a. Heating
 - b. Water supply
 - c. Janitorial duties
 - d. Lighting
 - e. Playgrounds
 - f. Outbuildings
6. Maintenance duties
 - a. Repair of buildings
 - b. Repair of equipment
 - c. Repair of furniture
7. Transportation duties
 - a. Road conditions
 - b. Shelter for horses
8. General management duties
 - a. Social functions at school
 - b. Teacher conduct
 - c. Pupil conduct
 - d. Rules and regulations
9. Signing of warrants
10. Arranging for teacher's living accomodations.

The proposed zone board would have but a single duty to perform, that of employing the zone superintendent. This board, its membership and its operation, is explained later in this chapter.

The duties of the zone superintendent under the proposed zone plan in relation to one-teacher schools would be:

1. Employing teachers
 - a. Checking their certification
 - b. Checking their qualifications
 - c. Recommending prospective teachers to district boards.*
2. Mapping out educational program
 - a. Content of program
 - b. Assisting teachers in scheduling work
 - c. Deciding on methods to be used
 - d. Planning the use of instructional supplies

3. Purchasing needed instructional supplies
 - a. Preparing an annual order of supplies and materials for the zone
 1. Textbooks
 2. Instructional supplies and equipment
 3. Janitorial supplies
 - b. Sending annual zone order to the county superintendent by July first
 - c. Assisting county superintendent in the letting of contracts for supplies and equipment.
4. Approving payment of bills by district boards *
5. Distributing instructional supplies
 - a. Storing
 - b. Issuing
 - c. Recording
 - d. Securing receipts
 - e. Accounting
6. Setting up a testing program
 - a. Selecting tests
 - b. Assisting teachers in testing
 - c. Compiling test data
 - d. Analyzing results
 - e. Planning and carrying out remedial work
7. Planning extra-curricular activities
8. Distributing reports to various school boards
9. Making reports to county superintendent.

*Duties which are in the nature of making recommendations. Other duties listed are to be executed by the zone superintendent without consulting district school boards.

The duties of the county superintendent under the proposed zone plan as related to one-teacher schools would be:

1. Serving in an advisory capacity to district boards thru zone superintendents.
2. Consolidating the annual zone orders for supplies and equipment by July fifteenth.

3. Letting contracts for zone supplies and equipment with the assistance of the four zone superintendents acting as a body.
4. Cooperating with zone superintendents in the management of one-teacher schools.
5. Cooperating with zone superintendents in holding teacher institutes in each zone.

The present method of electing members to district school boards would remain unchanged under the county zone plan. These boards would continue to hold regular monthly meetings and special meetings, as called, to discuss and act upon school business coming under their jurisdiction. Matters pertaining to instructional service, budgetary measures, and the purchase of supplies and equipment would be delegated to the zone superintendent by these boards.

It is proposed under the county zone plan to create a board of five members, to be known as the zone board. Its single function would be the election of the zone superintendent. Three members of the zone board would come from the district in which the high school and zone center are located. The other two would be selected from the boards of education of the remaining districts in the zone, this to be done at a meeting of the school directors of these districts. This representation would seem equitable since the zone center district under this plan would pay more of the superintendent's salary than would all the other districts combined, and has more children involved than all the other combined districts in the zone.

The zone superintendent, according to the zone plan, would be responsible for three divisions of educational work: the graded elementary schools at the zone center; the high school at the zone center; and one-teacher schools in the zone. He should, therefore, possess sufficient professional training, experience and knowledge to enable him to carry on the work in these three fields of education efficiently. The major share of his work will be with the schools located at the zone center. A smaller share of his time would be devoted to the one-teacher schools in the zone. The writer, who has been superintendent of schools at Hayden for the past six years, feels justified thru his experience there in proposing that the zone superintendent devote approximately one-half his time to the H.U.H.S., one-third to the elementary schools of Hayden, and one-sixth to the one-teacher schools. Such a distribution of his time would seem equitable and sufficient in the opinion of the writer.

Regarding the salary of the zone superintendent, it is proposed that it be borne by all districts receiving his services; that one-half be paid by the district in which the zone center is located, on the basis of his position as chief executive of the high school there; and that the other half be pro-rated among the remaining ten districts on the basis of the A. D. A. of the one-teacher schools in these districts and the A. D. A. of the elementary school in the zone center. In the following table

is shown the districts in Zone I, the A. D. A. by districts, and the amount each would contribute toward the zone superintendent's salary. The A. D. A. of the high school is not considered, due to the fact that one-half of his salary is to be paid by the high school district. The remaining one-half is pro-rated among the other districts in the following manner. Take district No. 15 as shown in the table. The A. D. A. of the one-teacher school in this district is 10.10. The total A. D. A. of one-teacher schools in all the districts is 240.62. The total amount paid by these districts is \$1500.00. Therefore

$\frac{10.10}{240.62} \times \frac{1500.00}{1} = \67.11 , or the amount paid by district No. 15.

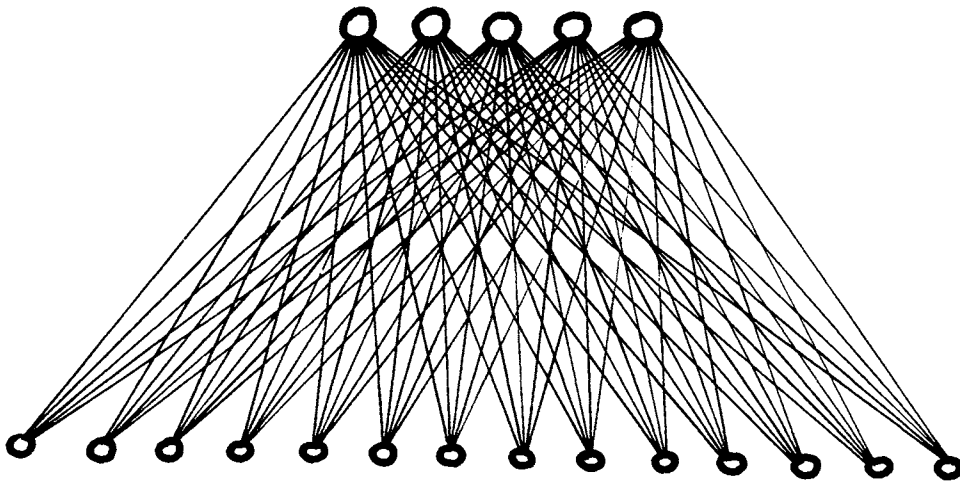
Table VI. Proposed Plan for Paying Superintendent's Salary in Zone I, as Based upon the School Records of 1931-1932

Districts Contributing	Type of School	A. D. A.	Amount
H.U.H.S.No.1	High School	-	\$1500.00
No. 2	Town Elem.School	156.46	972.35
No.29	One-teacher	15.00	92.97
No. 1	One-teacher	12.09	75.35
No.14	One-teacher	10.80	68.31
No.15	One-teacher	10.10	67.11
No. 3	One-teacher	10.00	62.32
No.23	One-teacher	9.00	55.67
No.21	One teacher	7.84	47.77
No.24	One-teacher	7.00	43.63
No.11	One-teacher	2.33	14.52
Total	11	240.62	\$3000.00

This county zone plan does not eliminate the office of the county superintendent of schools, but it does provide a means of greater cooperation between this office and the four superintendents of schools at Hayden, Steamboat Springs, Oak Creek and Yampa. In addition to the work outlined for the county superintendent as related to the county zone plan, he would continue to perform most of the present duties of his office as organized under the district system. Such items as office records and reports, certifying levies to the county commissioners and the supervision of schools within the county having two or more teachers would remain unchanged by the county zone plan. However, to offset the responsibilities of teacher institutes and purchase of supplies added to his office by the zone plan, he would not be required to visit or supervise the elementary schools at Yampa, Oak Creek, Steamboat Springs, Hayden, or the forty-nine one-teacher schools in the county. The elimination of the usual travel to these schools would save considerable time for this office and expense to the county.

Purchase and Distribution of Supplies.- For the sake of illustration, let it be supposed that five book companies in Chicago supply all the textbooks used by the fourteen one-teacher schools in Zone II. Further, that each of these fourteen schools order and receive their textbooks directly from the companies. Figure 1 represents the situation when each of the fourteen schools order directly from the five companies. The duplication of mail service, telegraphic communications, express services, handling, hauling, and checking is obvious. There are seventy separate shipments. The chart shows the overlapping and expensive method used today in many rural school districts.

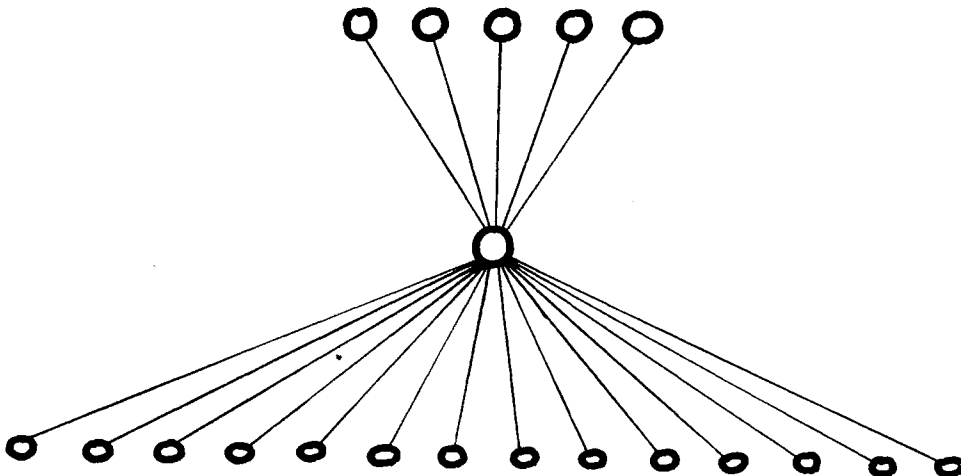
Figure 1. Showing Seventy Shipments Between Five Book Companies and Fourteen School Districts - District Plan.



Instead of practicing such a clumsy method of purchasing books, the zone superintendent, assisted by teachers, would estimate the textbooks needed. He would place one order with each of the five companies at Chicago, shipment to be made by freight to the zone center, which would be Steamboat Springs, Colorado, in the case of Zone II. When the shipment of these books had been received and stored in the supply room at Steamboat Springs, the various teachers in Zone II would be notified to call for their supplies.

In the figure below it is shown clearly how simple the newer method would make the problem of purchase and delivery of books.

Figure 2. Showing Five Shipments Between Five Book Companies and the Zone Superintendent Under the Proposed County Zone Plan.



When books are ordered as shown in Figure I, shipment is usually by express. Such packages released at a value of \$10.00 or less require a rate of eight cents a pound anywhere in the United States. Contrasted with these rates is the freight rate of \$4.64 per cwt. for books shipped from Chicago to Steamboat Springs, as could be used by the County Zone Plan. If each of the fourteen schools mentioned ordered ten pounds of books annually from five Chicago companies, \$11.20 of school funds would be expended for transportation. The shipment of these 140 pounds by freight, as they would be under the County Zone Plan, would be but \$6.50, which represents a saving of \$4.70 on the transportation of 140 pounds of merchandise from Chicago to Steamboat Springs. Such an example is only an indication of the saving that could be realized, since several times this quantity is ordered from Chicago annually by the rural schools of Routt County. Similar savings could be made in the transportation of such materials as chalk, flat fowels, paper, sweeping compounds, liquid soap, floor oils, and other supplies. The following table compares express and freight rates from Chicago to Steamboat Springs.

Table VII. Freight and Express Charges Compared.
Chicago to Steamboat Springs, Colorado.

By	Weight	Rate per pound	Total Trans. Charge	Savings by Freight
Express, \$10 or less	140 lbs.	8¢	\$11.20	\$ 4.70
Express, Flat	140 lbs.	15.4¢	21.50	15.06
Freight	140 lbs.	4.6¢	6.50	None

Data given by E. F. Collier, Station Agent, Denver and Salt Lake Railway, Hayden, Colorado.

Further efficiency of the school dollar at work could be realized by taking advantage of the quantity lot prices quoted by all supply houses and book companies. An illustration can be made with the ordinary punched note book paper weighing four and one-half pounds per ream. In lots of ten reams or less, the price is 67¢; lots between ten and fifty, 61¢; and when purchased in case lots, as it would be under the zone plan, 56¢. This differentiated price list represents an actual saving of 11¢ per ream when this commonly used paper is ordered in case lots. Like savings could be realized in the purchase of many other materials used in the operation of rural schools.

Improvement of Instruction.— Probably the greatest single improvement along the line of instruction would be realized by having trained school executives select and

recommend prospective teachers to the district school boards. Only the teachers so recommended would be employed. Generally, our rural school teachers are selected by laymen, who apparently have limited knowledge of reliable sources from which qualified teachers may be drawn. The state laws concerning the qualifications of teachers seem to be overlooked at times. There are known cases where a friend of the board had a friend who wanted to teach school and needed a job and got it, without any apparent attention being paid to qualifications. The employment of more highly qualified instructors may be expected to result if that responsibility were assigned to professionally trained educators.

Further improvement of instruction should result where teachers of one-teacher schools are aided by adequate supervision. Under the county district system as practiced in Routt County, the county superintendent is the only official supervisor available to these teachers. To the writer's knowledge, the county superintendent in Routt County is able to make only one visitation a year to some of the schools under her supervision. She has often bemoaned this situation and is supported in her protest by such comments as, "Under the most favorable conditions a superintendent, single-handed and alone, cannot properly supervise the schools of an entire county." ¹

1. Public Education in Kentucky, 1922. A Report by the Kentucky Educational Commission. 37.

In the proposed County Zone Plan, as an aid to improving the effectiveness of rural education in Routt County teachers' institutes would be held each calendar month at each of the zone centers at Yampa, Oak Creek, Steamboat Springs and Hayden. Attendance of all teachers from one-teacher schools would be compulsory as stipulated in their contracts. At these meetings matters pertaining to courses of study, subject content, teaching technique, teaching practices, preparation and presentation of lessons, recitation methods, written and oral work, use of instructional supplies, and similar matters, would be discussed by the teachers under the guidance of some qualified chairman. Much benefit should be derived from these meetings, since uniform practices, which would improve the quality of teaching, would be adopted, with the object of promulgating higher standards of work in all graded subjects.

Instruction in the below average one-teacher schools would be improved by the adoption of a uniform course of study in all graded subjects. In some schools of Routt County the standards set up in the state course of study are not reached. For instance, there are those known cases where the teacher had no knowledge of the number of primers that should be read by the class during the school term. In the proposed County Zone Plan, instructional supplies would be purchased thru a central purchasing

agent. This would make for uniformity in the class room work done by the elementary pupils in one-teacher schools. More up-to-date textbooks would be used. Not only would this have a favorable effect upon the quality of instruction and be a great aid to the teacher, but in some schools the scope of work done would be measurably increased.

In the zone plan a uniform testing program, covering the basic subjects and serving as a method for checking results, would be set up. In this way the work of every rural school child in one-teacher schools could be studied, and remedial work begun where needed. Furthermore, the work of rural school children could be compared with that of the town school children by a common method of measure. The present county examination given to all eighth grade pupils is not as extensive or effective as would be the subject ability tests by grades.

Professional Improvement.- Generally, rural school teachers are careless and negligent in the pursuit of professional improvement. This situation exists chiefly because of two major reasons: first, facilities and materials are, as a general rule, decidedly lacking in the rural schools; secondly, there is little leadership, if any, to inspire them to professional study and improvement. Many schools in Routt County never acquire the Colorado Reading Circle books as required, and many isolated teachers have no contact with educational leaders

from the beginning of the term until the closing of the school in the fall or spring, as the case may be.

Under the zoning method, the town superintendent for a particular zone, knowing the budgets for the several school districts within his jurisdiction, could set aside the necessary eight dollars, as is the case for 1933, for Reading Circle Books. He could require all rural teachers in that zone to study these books and stand examinations. Regarding leadership of the inspirational type, small teacher institutes could be organized. Group meetings could be scheduled and held; case problems could be mimeographed and mailed; attendance at summer schools could be encouraged; teachers' qualifications could be discussed; and many other worthy schemes could be employed which would promote professional improvement on the part of sincere instructors. The non-progressive instructors might become discouraged and quit the profession, as they should.

Opinions From a Few Routt County Citizens as to the Proposed County Zone Plan.- In an endeavor to secure the reaction of a few citizens toward this plan for increasing the effectiveness of education in one-teacher rural schools in Routt County, it was submitted to four individuals for criticism. Each one of the four has had considerable knowledge of schools either as a board member, a teacher, a county superintendent of schools, or as an

attorney at law. They commended the plan unanimously. Complete copies of their written statements may be found in Appendix A. Excerpts from each letter are given below.

Fred Videon, an attorney at Hayden, says in part,

"The argument in your thesis-----is very interesting. That the educational facilities in our one-teacher schools are inadequate is apparent. -----Your zoning plan attacks the weaknesses of the system. It substitutes trained school men for untrained school boards. It substitutes thru quantitative, careful purchasing, economy for waste. It provides for the selection of teachers because of their fitness, ----- and as a result it equalizes educational opportunity, providing the country child with most of the advantages enjoyed by his town brother. ----- The plan is a good one, and I believe could be made to work, and certainly the benefits and real values to be derived from such a plan are vital needs in every country community."

Pearl A. Funk, the county superintendent of schools and a former teacher, states in part,

"As a result of my work in the field of education I realize more than anyone else perhaps, the dire need of reorganization of ----- the one-teacher schools in the county. Such a plan as Mr. Dotson has formulated in his thesis has my most hearty endorsement. -----The monthly institute idea is a splendid one. ----- it is virtually a physical impossibility for this office to get to each teacher as it should. -----Mr. Dotson's plan as a whole would be workable, and such a reorganization is bound to come."

M. F. Hofstetter, secretary of school district No. 2, writes in part,

"I am certain that the solutions he presents for the different problems are the most definite, most feasible and most logical that have ever been presented, to my knowledge. They are fair to all concerned."

Another board member, W. W. Sloan of Mount Harris, Colorado, says in part,

"I can heartily endorse the plan as outlined by Mr. H. L. Dotson in the thesis he has prepared. -----In my opinion it is only the central schools that have proper supervision by competent superintendents. The small out-lying schools lack proper supervision.----- It appears to me that some system should be adopted whereby instruction in the rural schools would be improved to an extent where it is more on a level with that afforded by the town schools."

CHAPTER VI

REMEDIAL PLANS AS APPLIED TO ROUTT COUNTY.

For years Colorado has used the common school district as the unit for local school control. Other units used in certain other states consist of the county, the township, the state district (including several counties and even the entire state itself). These various plans were reviewed in Chapter II. The present chapter discusses these plans in relation to any remedial results their application might have upon the rural school conditions of Routt County.

The State Plan.- If Colorado should adopt the state plan of educational control as practiced in New York, it would establish superintendency districts thruout the sparsely settled parts of the state. The towns and cities would continue to employ superintendents as they now do. An undesirable feature of the state plan when applied to Routt County is that in all probability it would prove more expensive than the proposed zone plan of control. It would entail a state department of education, involving as it would a commissioner of education, assistant commissioners, state educational office buildings and numerous minor expenses. Each county would have its share of the cost to bear. The zone plan could be put into operation with very little additional cost over the present

system. Another undesirable feature of the state plan is, because of the high degree of control the department would have over their schools, the people would eventually assume a passive attitude toward local school problems. In a county such as Routt where the schools are a most vital factor in each community where they are located, this control might not foster the highest degree of contentment. Under the zone plan, the local rural boards still function and have a voice in the management of their schools.

A point decidedly in favor of the state plan is that of uniformity. Educational policies, qualification of teachers, courses of study, equalization of educational opportunity and like problems can be more effectively directed, as a rule, thru large units of control than thru smaller units of control.

The County Plan.- In applying the county plan to Routt County, certain unfavorable conditions or weaknesses appear. First, added responsibilities fall to the county superintendent and the county board, entailing the added expense of clerks, assistants, supervisors and necessary travel. Second, because of the political aspect, a county superintendent who is unqualified may be elected to office. Third, when the members of the county board are elected at general elections, typically rural areas may frequently not be represented. Kentucky acknowledged this weakness of the county unit when in 1920 a law was passed causing county board members to be elected from districts outside

graded school and city school districts. A commendable feature of the county plan is that matters pertaining to instructional services are placed in one office. This should promote higher educational standards and results, and greater uniformity in educational practices. The writer believes the zone plan somewhat more applicable to Routt County since it provides for less expense in the county set-up and for representation from each district. Furthermore, while it does not abolish the office of the county superintendent, the political aspects of the county plan are neutralized by the comparative permanency of the zone superintendents.

The Township Plan.- In regard to territorial division of the county, the township plan, when applied to Routt County, is similar to the proposed zone plan. In each of these plans, areas surrounding important towns within the county are mapped out. It seems to the writer that the weakness of the township plan lies in its administrative aspects. The trustees, either elective or appointive, seemingly would be subjected directly or indirectly, to political influences to a greater extent than are school superintendents who are elected by boards of education. Furthermore, trustees under the township plan apparently need to be organized as a body and have to have outside assistance. This was evidenced in the state of Indiana in 1873, when county superintendents and county boards of five

members each, were established for the purpose of assisting the township trustees. This would create additional positions and salaries. To this the people of Routt County might object, especially during the present economic depression. The zone superintendents under the zone plan could administer the educational needs of the county without creating additional salaries as in the case of township trustees.

The State District Plan.- The state district unit is between the county and state in size. It divides the state into districts varying in size according to density of population and topographical features of the country. In the case of Routt County, it would be grouped with adjacent counties to form a state district. The chief advantages of this plan lie in its allocation of school administration to the various districts; and it obviously divides the state into fewer districts than does the ordinary school district plan. However, such a plan creates a duplication of the state plan, only in districts and on a smaller scale, and entails more expense in its operation, the writer feels, than would the proposed zone plan. Where Routt County is grouped with other sparsely settled counties, the item of travel expenses alone would seem to far exceed the operative costs of the zone plan.

General Conclusion of Plans.- These plans as applied to Routt County seem to point out the following general conclusions:

1. The zone plan apparently is less expensive than other plans, yet very efficient.

2. Units larger than the ordinary school district remove the management of schools from the people living near the schools, approaching to some degree a situation of taxation with very little representation.

3. The important item of instructional services would be placed in the hands of officers who are sometimes subject to the whims of a politically minded public.

4. Zone superintendents would have more knowledge of local problems than would the educational officers under the state, the state district, or county unit plan. The township trustee plan is an exception.

5. People would respect the zone superintendent as an educational leader in preference to a layman or politician.

6. The zone superintendent would be easily accessible since he is located at the natural trading center.

7. The zone plan does not require the expense of county boards, state commissioners, or township trustees.

CHAPTER VII

SUMMARY

This study is an attempt to survey the present rural school situation in Routt County, Colorado, with especial reference to one-teacher schools, and to suggest some plan whereby the effectiveness of rural school education may be improved. Altho dealing with a specific locality, the problem involves elements that are fundamental in nature and applicable to any similar locality.

The problem was started by making a survey of the one-teacher schools existing in Routt County. Other phases of the problem were studied from statistical records and personal interviews; from the topographical, climatic and industrial aspects of the country; and from personal observations of the conditions actually existing in the one-teacher schools in Routt County.

This study embraces two major objectives:

a. An instructional survey of one-teacher schools in the county in order to determine the relative efficiency of instruction.

b. A study of remedial plans for improving the rural school situation as applied to Routt County conditions and setting up an effective plan whereby the conditions might be bettered.

Forty-seven school districts lie within the

boundaries of Routt County. Forty of these are typical rural districts having one or more one-teacher schools. From the topographical and climatic conditions of the county, the problem of the administration of these schools has to be dealt with from the standpoint of long distances, severe winters, mountainous country and sparsely settled areas. From the educational conditions, it must be dealt with from the standpoint of poorly qualified teachers, inadequate instructional supplies, little educational leadership, untrained rural school boards and a woeful lack of uniformity in educational practices.

In all rural districts until about 1900 the only method in use for establishing a new school was the creation of a school district with its one-room school. One-room schools increased rapidly until the consolidation movement was launched. A recent summary shows 153,000 one-room schools in the United States.

One-teacher schools apparently are not meeting the demands of modern society. The consolidation movement was one of the first steps to improve the rural school situation. In Routt County, however, because of the physical nature of the country, consolidation seems unfeasible. The problem confronting Routt County and other mountainous counties is not that of consolidation, but one of increasing the effectiveness of the present rural school.

Since 1800 various units of school control have been used, such as the township, the district, the county and

the state. Indiana employs the township as the administrative unit; Kentucky, the county; Utah, the state district; and New York, the state. Colorado uses the district plan and has 2,032 districts compared with Utah's 40 districts under the state district plan.

Routt County is a mountainous country, embracing 2,310 square miles, consisting of mesa land, which constitutes approximately one-half of the entire area of the county, valley land along the rivers and streams, and the higher mountain sections. Both the geographic and climatic conditions have a bearing on the rural school situation in Routt County. The winters are severe and the roads are mostly unimproved, making transportation a real problem for four or five months of the year.

There are forty-nine one-teacher schools in Routt County, generally located in sparsely populated areas and having a wide variance in A. D. A. and enrollment.

The teachers in these one-teacher schools have a paramount influence upon educational affairs. As a rule these teachers are young and untrained. They can expect but little assistance outside their own school district under the present system.

The county superintendent is the chief educational leader. He has limited powers and is subject to the whims of political parties. This officer is expected to supervise schools scattered over 2,310 square miles or

1,417,760 acres. He hopes to visit each school at least once a year. Present lines of contact between the county superintendent and rural school teachers are cumbersome and wasteful.

District school boards are supreme in authority. The members are laymen and they direct educational matters on which, as a rule, they have decidedly limited knowledge; 141 school directors administer the schools of the county. Each board acts independently of the others and uniformity in educational practices can scarcely be expected to result. A few wealthy and more densely populated districts enjoy the advantages of educational leadership by superintendents or principals.

The industrial enterprises of Routt County consist of seven major coal companies, one railroad and one utilities corporation. They contribute considerable tax money to the school funds. However, only those districts in which these enterprises are actually located enjoy financial support thru the special school fund. This produces an uneven distribution of taxable wealth and the typical one-teacher schools suffer, because they are not located near the industrial enterprises.

Educational results of present rural school instruction in Routt County are not what they might be. This is seen in the inadequate training of some of the teachers; the number of below-average teachers; the percent of failures of one-teacher rural school graduates in town schools;

the feeling in rural communities toward the lack of success of one-teacher rural school graduates in town schools; the opinions of teachers and the county superintendent concerning the needs of one-teacher rural schools; the inadequacy of instructional supplies now used in the one-teacher schools; and the drop in attendance as the seventh and eighth grades are reached.

The County Zone Plan is proposed to cope with this situation. It has been designed to meet the peculiar educational needs of Routt County, and has no counterpart in the various statewide plans that have been proposed.

The County Zone Plan proposes to divide the county into four zones, referred to as Zones I, II, III and IV, with Hayden, Steamboat Springs, Oak Creek and Yampa as zone centers, respectively. These four zones contain a number of districts, and their boundaries should be such as to include the natural trading territory served by the four zone centers.

Under the County Zone Plan the one-teacher schools in each zone would be managed jointly and on a cooperative basis by the respective district boards of education, a zone board, the county superintendent and a zone superintendent.

The district boards of education under the zone plan would take care of all school business relating to operation of schools, maintenance of schools, transportation

and general management of the schools.

The proposed zone board would have only one duty to perform, that of employing the zone superintendent. It would be composed of five members, three from the district in which the high school and zone center are located, and two selected from the district boards of education.

The proposed zone superintendent would not only act as superintendent of schools in the zone center, but matters pertaining to instructional service, budgetary measures, and the purchase of supplies and equipment in all one-teacher schools in the zone would be delegated to him. A major share of his time would be spent in taking care of the schools in the zone center; a minor share of his time would be devoted to the one-teacher schools in the zone. He would recommend qualified teachers to the district boards. He would act in an advisory capacity to all teachers in one-teacher schools. He would approve the payment of all bills by the district boards. In other words he would be an educational leader in the zone in which he is located.

The salary of the zone superintendent is paid by all districts receiving his services. It is proposed that one-half be paid by the district in which the high school is located, and one-half by the remaining districts on the basis of the A. D. A. of the one-teacher schools in the zone and the A. D. A. of the elementary school in the zone center.

The county superintendent under the proposed County Zone Plan, in addition to present duties, would cooperate with the zone superintendents in holding teacher institutes each month and in the general management of the one-teacher schools in the zone. He would serve in an advisory capacity to district boards thru the zone superintendents. He would not be required to visit the one-teacher schools in the county, as he now is, and this would save time and money to the county.

The expense of the operation of the proposed County Zone Plan would be partially, if not entirely, offset by the savings to be gained thru careful, quantitative buying of all instructional supplies and equipment.

The County Zone Plan is aimed to improve instruction in the one-teacher schools in Rountt County. This would be realized by having trained school executives select and recommend qualified teachers; by holding teacher institutes once each month at each of the zone centers where matters pertaining to educational needs and practices would be discussed; by adopting a uniform course of study in all graded subjects in all one-teacher schools; and by setting up a uniform testing program by which the work of every rural school child in one-teacher schools could be studied, compared with town work, and remedial work begun where needed.

The County Zone Plan is aimed to promote professional

improvement by requiring all teachers in one-teacher schools to study the Reading Circle books and stand examinations; by organizing small teacher institutes; by requiring attendance at summer schools and by employing other schemes that would inspire teachers to further their professional improvement.

In comparing the various plans used in certain other states with the County Zone Plan as applied to Routt County, it would seem that the County Zone Plan is not only more applicable but more economical.

The state plan as practiced in New York would entail a more expensive state department. It would centralize the control of the schools, and in a county such as Routt where the schools are a vital factor in each community where they are located, this control might not foster the highest degree of contentment. The County Zone Plan could be put into operation with very little additional cost over the present system and it leaves the rural boards to have a voice in the management of their schools. However, it must be said in favor of the state plan that it promotes uniformity and is a large unit of control, which often can be operated more effectively than a smaller unit of control.

In the county plan as practiced in Kentucky, there are a county superintendent and a county board, entailing the expense of clerks, assistants, supervisors and neces-

sary travel. The political aspect of the situation is apparent, and frequently typically rural areas may not be represented. The County Zone Plan provides for less expense in the county set-up and for representation from each district. While it does not abolish the office of the county superintendent, the political aspects of the county plan are neutralized by the comparative permanency of the zone superintendents.

The township plan, as practiced in Indiana, is similar to the proposed zone plan in that areas surrounding important towns within the county are mapped out. The weakness of this plan when applied to Routt County is largely administrative. There are township trustees, assisted by county superintendents and county boards. This would create additional positions and salaries. Under the zone plan, the zone superintendents could administer the educational needs of the county without creating additional salaries.

In the state district plan, as practiced in Utah, the unit of control is between the county and state in size. In the case of Routt County, under this plan, it would be grouped with adjacent counties to form a state district. In counties as sparsely settled as these are, travel expense alone would be an important item of cost. This plan does allocate school administration to the various districts and divides the state into fewer districts than does the ordinary district plan, but it creates a

duplication of the state plan only in districts, and on a smaller scale, and entails more expense in its operation than would the proposed zone plan.

CHAPTER VIII

CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

Conclusions.- The following conclusions were drawn from this study:

1. A study of the rural school situation in Routt County should be fairly representative of other mountainous counties in this and other states of comparable conditions.
2. Routt County is a sparsely settled mountainous country where severe climatic conditions prevail for four or five months of each year. The condition of the roads is not the best, making for slow travel. Such conditions are not conducive to the consolidation of schools.
3. In Routt County, Colorado, educational opportunities were not equalized between the children of graded town schools and children attending one-teacher rural schools, to as high a degree as might be possible with the present expenditures and the present educational leadership.
4. From the viewpoint of supervision, a large group of the rural school teachers in Routt County had received insufficient supervision. Those possessing the minimum of professional training were generally found teaching in the most inaccessible one-teacher schools where the county superintendent can visit seldom.

5. The organization and establishment of teacher institutes in Routt County would eliminate considerable travel over the county by the county superintendent.

6. Rural school boards seemingly lack sufficient information and organization to enable them to manage, with the highest degree of proficiency, such important matters as instructional service, purchase of supplies and school budgets.

7. These boards generally act independently of each other. There is no organized effort to purchase supplies in quantity lots on a cooperative basis. The establishment of a centralized purchasing system in Routt County would save the rural school districts many dollars.

8. The superintendent of schools at Hayden, Steamboat Springs, Oak Creek and Yampa could render greater services to the school children of Routt County than is being given at present if needed reorganization will permit them to extend their fields beyond their local districts into the one-teacher districts.

9. The reorganization of educational administration of one-teacher schools in Routt County is needed to effect certain improvements in instructional service.

10. The county could be divided into four zones, with four zone superintendents, qualified professional educators, who should have control of instructional services and budgetary measures in the one-teacher schools.

11. The state, state district, county and township plans for educational control did not seem as feasible for the control of one-teacher schools in Routt County as the proposed zone plan would be.

Recommendations.- As a result of the findings of this study, the following recommendations are made:

1. That the people of Routt County adopt the County Zone Plan of control of rural one-teacher schools, or some other plan approximately as efficient and economical, whereby the responsibility of providing adequate instructional service will be removed from rural school boards and vested in the four superintendents of schools located at Hayden, Steamboat Springs, Oak Creek and Yampa, respectively.

2. That a similar study be made of the high schools in Routt County to ascertain the feasibility of dividing the county into four union high school districts, with the four zone superintendents as the executive officers of the respective high schools.

Limitations.- This study was largely limited to the educational and administrative needs of one-teacher schools in Routt County, Colorado. This county being mountainous and thinly populated, it might not be amiss to have a similar study made of other sparsely settled counties located in the plains section of the state.

The nature of this study did not permit a treatment of the high school situation in Routt County. It is hoped that this study of one-teacher schools will inspire someone else to make a survey of the possibility of using the four zones proposed in this thesis as four separate and distinct union high school districts.

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A P P E N D I X

APPENDIX A

Criticiams of Zone Plan by

Fred A. Videon
Pearl A. Funk
M. F. Hofstetter
W. W. Sloan

APPENDIX B

Table 1. Number and Size of School Districts,
Routt County. 1932-1933.

APPENDIX A

CRITICISMS OF ZONE PLAN BY FRED A. VIDEON

Hayden, Colorado
July 22, 1933

The argument in your thesis, "A Suggestion for Increasing the Efficiency of Education in One-Teacher Schools of Routt County," is very interesting.

That the educational facilities in our one-teacher schools are inadequate is apparent. This inadequacy arises from personnel and lack of equipment, with the result that many children entering town schools or high schools are seriously handicapped, for a time at least.

Local school boards are more often than not composed of small farmers or ranchmen who are not qualified to furnish good educational facilities. Often petty jealousies, family self interests, and politics, crowd out problems of education, with great expense and without results so far as the children are concerned. Even where this does not exist, the board is usually helpless because its members are unqualified. As a result, teachers are related to or are friends of some member of the board; schools are located for the convenience of some member of the board; contracts for supplies, etc., are with some member of the board; to make the school board is to achieve directly or indirectly some financial relief; a breach within the board divides whole communities; teachers are hired and fired; school houses are moved; and so bitter and important are these considerations that the development and training of the children are side-tracked or forgotten.

It is only fair to say these conditions do not exist in every school district, and all of them are not found in any one district, but there are abuses, and in most districts free from them there is a helplessness as to what to do, with the result that nothing is done.

Your zoning plan attacks the weaknesses of the system. It substitutes trained school men for untrained school boards. It substitutes, through quantitative, careful purchasing, economy for waste. It provides for the selection of teachers because of their fitness rather than for personal reasons, with little or no regard for qualifications. As a result, it equalizes educational opportunity, providing the country child with most of the

advantages enjoyed by his town brother.

Each zone embraces a large portion of the county. The executive officer whose powers are derived from some school district will have certain powers beyond the limits of his district. If the plan is to be workable, each school district in the zone would demand some voice in the choice of the executive, how much voice the school districts beyond the limits of the executive officer's own district would have to be determined on some fair proportionate basis such as average daily attendance, or assessed valuation. Your system of supervision could be eliminated, I think, without any harm to your plan. Supervisors would increase expenses and create additional jobs, which would not appeal to the public. If teachers require supervision they are likely to be the type that would revert to old habits as soon as the supervisor had gone to the next school. The visit of the supervisor would be a "break in the monotony" but something not to be regarded too seriously.

It seems to me that if trained men select trained, qualified teachers, the result sought in your thesis is achieved. Those teachers will not need supervision, and their difficulties and problems could be solved by a meeting, perhaps once a month, with the executive officer and all the other teachers in the zone.

The plan is a good one, and I believe could be made to work, and certainly the benefits and real values to be derived from such a plan are vital needs in every country community.

Fred A. Videon
Carpenter and Videon
Attorneys at Law
Hayden, Colorado.

CRITICISMS OF ZONE PLAN BY PEARL A. FUNK

Steamboat Springs, Colorado
July 22, 1933

For the past five years I have acted in the capacity of County Superintendent of Routt County, Colorado. Prior to that time I taught school for several years. As a result of my work in the field of education, I realize more than anyone else perhaps, the dire need of reorganization of the rural schools in the county, and especially of the one-teacher schools. Such a plan as Mr. Dotson has formulated in his thesis has my most hearty endorsement.

The features I especially like about it are these: First, it provides supervision of rural teachers in addition to that given by the county superintendent. The monthly institute idea is splendid. Each teacher would be able to attend these meetings,- perhaps one or two in the dead of winter might have to be omitted for the teachers farthest away from the "zone center",- where now it is virtually a physical impossibility for this office to get to each teacher as it should. I have long deplored this condition. The institute idea would go far toward alleviating it. Second, it would put the important matters of budgeting, tax levying, selection of teachers, and instructional service in the hands of executives trained for those things. Third, it would foster uniformity in courses of study. This is a much needed reform.

Personally, I should like to see all rural school boards eliminated, and all matters pertaining to the school put into the hands of competent school men. However, Mr. Dotson's plan as a whole would be workable, I believe, and such a reorganization is bound to come.

Pearl A. Funk
County Superintendent
Routt County
Steamboat Springs, Colorado

CRITICISMS OF ZONE PLAN BY M. F. HOFSTETTER

Hayden, Colorado
July 21, 1933

Having read and discussed the subject matter and charts of the thesis being prepared by Mr. H. L. Dotson on "A Suggestion for Increasing the Efficiency of Education in One-Teacher Schools in Routt County," I am certain that the solutions he presents for the different problems are the most definite, most feasible and most logical that have ever been presented, to my knowledge. They are fair to all parties concerned.

Mr. Dotson has "rubbed elbows" with teachers, pupils and parents from these isolated sections and knows whereof he speaks.

Of necessity, many of these problems have been discussed in board meetings and because of the present school set-up have been partially but not satisfactorily solved. Educators in the state, working under similar conditions as we have in Routt County, have similar problems.

The solutions that Mr. Dotson has here presented, have been obtained by a constant watchfulness of how things are done and by figuring out how they could be done to save the taxpayers much needless expense and still give to the children more and better educational advantages.

M. F. Hofstetter
Secretary, School District No. 2
Routt County, Colorado

CRITICISMS OF ZONE PLAN BY W. W. SLOAN

Mount Harris, Colorado

July 22, 1933

Having been on boards of education in this section of the state for the past ten years, and having studied the school problems and needs, I can heartily endorse the plan as outlined by Mr. H. L. Dotson in the thesis he has prepared. I have discussed this plan with Mr. Dotson at various times in the past few years, as we have been closely associated in school affairs during this time.

As a matter of fact, there is now a movement on foot to work out a similar plan in this county. There has been a meeting of all school directors of the county, and committees have been appointed to formulate an organization for this purpose.

In my opinion it is only the central schools that have proper supervision by competent superintendents. The small out-lying schools lack proper supervision. Experience in the selection of teachers, and an understanding of school budgeting and tax levies does not obtain in the usual rural school board.

It appears to me that some system should be adopted whereby instruction in the rural schools would be improved to an extent where it is more on a level with that afforded by the town schools.

W. W. Sloan
President, Board of Education
School District No. 3
Mount Harris, Colorado

APPENDIX B

Table 1. Number and Size of School Districts,
Routt County. 1932-1933.

District Number	Square Miles in District	Square Miles Per Pupil
1	171	6.10
2	160 1/2	.98
3	28 3/4	.13
4	95 5/16	.36
5	9 15/16	1.54
6	31 5/16	.29
7	14 1/2	.52
8	57 1/2	.91
9	16 11/16	.90
10	77 11/16	3.90
11	224 1/16	8.29
12	15 1/4	.16
13	38 9/16	2.41
14	114 1/4	8.78
15	35 7/16	.96
16	14 7/16	1.44
17	64	2.56
18	54 5/16	4.93
19	117	4.63
20	23 1/2	7.83
21	27 5/16	1.93
22	10 10/16	2.65

Table 1. (Continued)

District Number	Square Miles in District	Square Miles Per Pupil
23	30 9/16	2.77
24	17 1/4	2.87
25	20	.25
26	28 7/16	2.03
27	43 1/4	4.80
28	33 1/4	8.31
29	11 3/4	.73
30	42 15/16	2.25
31	18	.5
32	36 7/16	.51
33	73 3/4	10.53
34	233	14.56
35	16	1.06
36	29	2.41
37	26 3/4	.66
38	16 1/2	.04
39	20 7/8	1.16
40	21 1/16	2.62
41	45 1/4	2.16
42	27 5/16	2.49

Data taken from the records of the county superintendent's office, County of Routt, State of Colorado.