1953

Building needs of the Ekalaka Elementary School 1953-1954

Glen Russell Ausen
The University of Montana

BUILDING NEEDS OF THE EKALAKA ELEMENTARY SCHOOL
1953-1954

by

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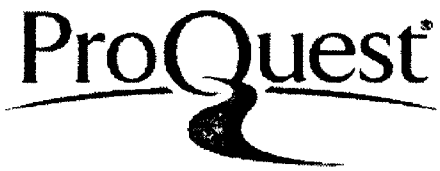

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CHAPTER I

INTRODUCTION

With increased enrollment of out-of-district students and intensified oil development and exploitation in Carter County, Montana, a continually increasing burden has been imposed on the school program and facilities of the Ekalaka Elementary School.

THE PROBLEM

Statement of the problem. The purpose of this study was to propose a building program as well as improvements to the present plant for the Ekalaka Elementary School based on an analysis of trends affecting the school population.

Importance of this study. This study is important because a building program is needed for the Ekalaka Elementary School. Reasons for a building program arise from three factors: (1) a general increase in school population as experienced throughout the United States, (2) an increasing number of students from other school districts, and (3) an increase in the number of new students whose parents are employed by various geophysical companies and who live in Ekalaka.

Circumstances leading to the study. The superintendent of School District 15, Ekalaka, Montana, became

acquainted with many problems related to an influx of oil workers and their families into the community and out-of-district students attending the elementary school. Among the problems that presented themselves was an apparent need for additional building facilities to meet the needs of a rapidly expanding enrollment. When this problem presented itself during the 1952-1953 school year, he used his personal judgment in handling the situation. As Engelhardt states:

> The methods used in forecasting population fall within four general classes, or more if the many possible combinations of these four are considered. Guessing or estimating changes on individual or group judgment represents the more common practice. As yet, no technique followed is free from the element of judgment. The range of expressed opinion may be from simple enthusiastic statements of probable increases to statements of competent experts made after a careful analysis of available evidence.[1]

It is evident then that any approach to this study cannot be based completely on personal judgment, but must include carefully derived projections based on facts.

Type and sources of data. Data which are used in this study came from many sources as indicated in Table I.

Organization of the remainder of this paper. The remainder of this paper will be divided into five parts. Chapter II shall be devoted to the history of events that have created a need for a building program for the Ekalaka Elementary School. Chapter III treats the school population trends that have resulted from the facts mentioned in Chapter II. The present school plant will be discussed in

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[1] Fred Engelhardt, Forecasting School Population (New York: Teachers College, Columbia University, 1925), p. 19.

TABLE I

TYPE AND SOURCES OF DATA

USED IN THIS STUDY

Type of Data	Source
1. Enrollments and Attendance	1. Term returns submitted by the superintendent at the end of the year.
2. Historical Information	2. Interviews with older residents and the head of the Carter County Museum.
3. Educational Facilities	3. First hand observation
4. Auxiliary Services	4. Files of the county superintendent's office.
5. Education Program	5. State Course of Study--State Department.
6. Operation of School	6. Annual reports of the superintendent and the district clerk.
7. Information concerning future development of the town and county.	7. Personal interviews of people residing in the town, oil man, and county census figures.

Chapter IV. Chapter V will enlarge upon a curriculum program that will determine building needs. Chapter VI is a summary of findings and recommendations.

CHAPTER II

BASIC DATA REGARDING THE COMMUNITY

Every school community has characteristics peculiar to it. These characterisitics are important in any overview of the school in that community. The history of the community, physiographic features, and the general economic conditions are aspects that have a direct relationship to the school and must be considered in determing the needs of that community.[1]

History of the community. Ekalaka, the county seat of Carter County, is strategically located in the county. Ekalaka got its start in 1885, when a pioneer by the name of Charles Russell built the first trading post and saloon near the present location. Later this trader married an Indian girl by the name of Ekalaka and the town was named after her. In 1917 Fallon County was subdivided into Fallon and Carter Counties. The town passed through a typical pioneer development until it had reached a population of 475 in 1930. During the depression years of the thirties, the homesteaders almost disappeared from the county decreasing the county population by 20.7 per cent.

An analysis of Table II shows a decrease in population

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[1] Richard M. Mast, Survey of the Building Needs in Joint School District Number 8 (Unpublished Professional Paper, Montana State University, Missoula, 1951), p. 7.

TABLE II

POPULATION TRENDS FOR CARTER COUNTY
AND FOR THE TOWN OF EKALAKA,
1930-1950*

	1950	1940	1930	Per cent 1940 to 1950	Increase 1930 to 1940
Carter County	2,798	3,280	4,136	-14.7	-20.7
Ekalaka	904	719	475	20.4	33.9

*U. S. Bureau of the Census, U. S. Census of Population: 1950. Volume 1, Number of Inhabitants, Chapter 26, Montana U. S. Government Printing Office, Washington, D. C., 1951. p. 8.

for the county between 1930 and 1940. At the same time, the opposite was true of the town of Ekalaka which increased over 33 per cent.

During the war years between 1940 and 1945, this ratio of town to county population increased even more. This proportion probably would be even greater but for the fact that as the town of Ekalaka grew larger, it tended to keep the county population from decreasing more rapidly.

OIL DEVELOPMENT

Certain developments in the past few years have taken place in and around Ekalaka that have influenced that local school situation. Since oil was first discovered in eastern Montana around Richey, seismograph crews have moved into Carter County. Because of its location and other geographical features, Ekalaka was selected as the place for these people to live.

Tables III, IV and V indicate the changes in community building that have taken place in recent years. Reasons for this increase in building and improvements seem to stem from more farmers moving to town, overall good times as experienced throughout the United States, and most important, the excitement that goes along with the prospects of oil discoveries.

Signs that point to this discovery of oil and the prosperity it will bring have influenced local people to build and improve on their property. Such optimism towards improve-

TABLE III

CONSTRUCTION, IMPROVEMENTS, AND PROPOSED ACCOMMODATIONS IN EKALAKA, 1948-1953

		1948	1949	1950	1951	1952	1953
Homes	New			2		9	5*
	Improved					6	
Hotels	New						
	Improved				1	1	
Motels	New	1					
	Improved					1	
Trailer Courts	New				1	2	
	Improved					1	
Apartments	New						
	Improved				1	1	
Basement Homes	New					3	
	Improved						

*Process of building

TABLE IV

CONSTRUCTION AND IMPROVEMENTS TO PLACES OF BUSINESS OTHER THAN ACCOMMODATIONS

		1948	1949	1950	1951	1952	1953
Fraternal Organizations	New					1	
	Improved					1	
Stores	New				1	1	
	Improved					3	1
Offices	New					1	
	Improved					1	
Gas Stations	New			1		1	
	Improved				1	1	#
New Businesses	New				1	2	
	Improved						
Cafes	New					1	
	Improved					1	

#Proposed

TABLE V

PUBLIC OR CIVIC IMPROVEMENTS

		1948	1949	1950	1951	1952	1953
Paved Main Street	New			1			
	Improved						
Hospital	New						
	Improved				1		
Electric Signs	New	1		1		9	
	Improved					1	
Swimming Pool	New						#
	Improved						
Grade School	New						1
	Improved						
High School	New						
	Improved					1	
City Sewage System	New	1					
	Improved					1	

#Proposed

ments would probably not be present if people did not believe that Carter County was a part of the rich Williston or Powder River Basins and a potential oil-producing area.

Authorities do not agree as to whether Carter County is in the Williston or Powder River Basin. The American Association of Petroleum Geologists has this to say.

> The Powder River Basin area covers 32,000 square miles in southeastern Montana and northeastern Wyoming, being part of a major structural basin lying between the Black Hills and the Big Horn Mountains. Oil seeps have been known on all sides of the Powder River Basin in Wyoming since pioneer days . . . . The Powder River Basin has not been actively prospected for oil and gas heretofore, for (1) there is little local deformation, and (2) the depths to promising objectives are thought to be relatively excessive.[2]

On the other hand, Dr. John Paul Gries, of the South Dakota School of Mines and Technology at Rapid City, guest speaker at the annual Founder's Day banquet of the Carter County Geological Society, said as quoted in an editorial:

> Geologically, the Williston Basin extends southward to a divide between it and the Powder River Basin and to the Black Hills. Dr. Gries made the statement about the geological boundry of the Basin in response to a question regarding Time magazine's recent map showing the southeastern boundry of the basin as ending a considerable distance north of Ekalaka. Time's Williston Basin map was accurate, . . . but added that it was based on arbitrary lines drawn up at a bull-session of Amerada Oil Company brass and was used by Amerada for book keeping purposes only.[3]

To date, the following geophysical and drilling com-

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[2] A. I. Levorsen, Possible Future Oil Provinces of the United States and Canada (Tulsa: The American Association of Petroleum Geologists, 1941), p. 50.

[3] Editorial in The Ekalaka (Montana) Eagle, March 13, 1953.

panies have appeared on the books in the county assessor's office at Ekalaka: Arkee Drilling Company, Fitzerald Drilling Company, Macdonald Drilling Company, Rogers Geophysical Company, Western Geophysical Company, and the Taylor Geophysical Company. Five of these six companies have their headquarters and living quarters in Ekalaka.

One wildcat well was drilled by the Macdonald Drilling Company in the summer of 1952 and was found to be a dry well. However, this past spring, the "Cabin Creek" well, located in Fallon County, started producing and is today one of the top producing wells in the state. This Cabin Creek well is less than twenty miles from Carter County.

Drilling is again going on in Carter County according to the Daily Missoulian.

> The Carter Oil Company has started a 9,500 foot test on the most southeasterly wildcat in Montana. This well is in extreme northeast Carter County, five miles west of the Dakota-Montana boundary.[4]

This well is within driving distance of Ekalaka so accomodations for the oil workers will no doubt be secured in Ekalaka.

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[4] The Daily (Montana) Missoulian, June 28, 1953.

CHAPTER III

POPULATION TRENDS INFLUENCING EKALAKA'S GRADE SCHOOL

To approach properly the problem of a construction program for the Ekalaka Elementary School, trends based on past and present population in Carter County as well as in the town of Ekalaka must be determined. A comparison will be made in this chapter between population changes in the county and the town. This comparison will cover a fourteen-year span and will illustrate the difficulty of predicting elementary school enrollments for Ekalaka.

COUNTY AND TOWN POPULATION CHANGES

Since 1930, the population of Carter County has decreased rapidly from 4,136 to 2,798, a decrease of about 32 per cent. In this same twenty-year period the population of School District 15 has increased from 722 to 1,100, an increase of slightly more than 34 per cent. Table VI shows clearly the population trends for both Carter County and the town of Ekalaka.

Table VI shows that School District 15 contained 38.99 per cent of the total population of Carter County in 1950. Assuming that pre-school children were distributed in the same proportion, School District 15 included 143 of the 366 children up to five years of age that were recorded in the 1950 census as shown in Table VIII. These 143 children, when divided over

a five year period, give an average of twenty-eight children for the first grades in School District 15 for the school years 1955-1959.

However, it will be noted from Tables II and VIII that the population of Carter County dropped over 14 per cent between 1940 and 1950 inclusive, while the number of children under five years of age increased 15 per cent. If this proved to be the population trend for future years, then the present school plant would indeed represent a most difficult problem. The school census would increase while the number of people who could be taxed for a capital outlay would decrease. At any rate it would be unsafe to positively predict construction needs in School District 15 on these assumptions solely.

In this movement of population away from the open country areas in the United States, Carter County is strikingly consistent. Arthur Raper of the Department of Agriculture writes:

> The proportion of the total population living in the open country and in towns of less than 10,000 dropped from 72 per cent in 1890 to approximately 50 per cent in 1950. Towns of 2,500 to 10,000 showed a slight constant gain in the proportion of the total population. Population living in incorporated towns under 2,500 increased from 1890 to 1910, and since then has declined.
>
> The population in the open country showed a marked decline--from 57 per cent of the total population in 1890 to 35 per cent in 1950. The declining proportion of the total population living in towns of 2,500 and in the open country is the reverse side of the increasing urban population.[1]

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[1] Arthur F. Raper, A Graphic Presentation of Rural Trends (Bureau of Agricultural Economics, Washington, D. C.: United States Department of Agriculture, 1952), p. 5.

TABLE VI

SCHOOL DISTRICT NUMBER 15 POPULATION TREND AS COMPARED TO CARTER COUNTY, BY CENSUS COUNT*

Year	1930	1940	1950
School Dist. No. 15	722	859	1,100**
Ekalaka-Town	475	719	904
Carter County	4,136	3,280	2,798
District 15's per cent of the total county population	17.45%	26.19%	38.99%

*U. S. Bureau of Census, U. S. Census of Population 1950. Volume 1, Number of Inhabitants, Chapter 26, Montana U. S. Government Printing Office, Washington, D. C., 1951. p. 9.

**Includes District Number 2 which was annexed to District 15 in 1952.

With the disappearance of many of the early homesteaders and the improvement of economic conditions, the average size ranch in Carter County in 1950 has risen to 3720.6 acres.[2] The average ranch in the county in the 1945's contained little more than 3363.8 acres.[3]

NUMBER OF SCHOOLS IN DISTRICT 15

To plan a school construction program, the total potential school enrollment and the number of schools which are expected to be operating when school begins each fall must be determined.

While the number of children in School Distric Number 15 increased by 25 per cent from 1943 to 1953, there was one less school functioning in the same district.[4] Table VI shows that this is about the gain in enrollment that might be expected from the growth of Ekalaka. Data concerning School District 15 census is shown in Table VII. The flucuation between 1947 and 1953 can, in part, be accounted for by a number of older inhabitants changing residence, the annexing of three other school districts to School District Number 15[5] and an increase of new people entering the community.

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[2] U. S. Bureau of Census, U. S. Census of Agriculture: 1950. Volume 1, Counties and State Economic Areas, Chapter 27, Montana U. S. Government Printing Office, Washington, D. C., 1952. p. 40.

[3] Ibid., p. 40.

[4] Compiled from County Census Report (Unpublished School Census Report, County Superintendent's Office, Carter County, Ekalaka, Montana, 1943-1953)

[5] Ibid.

TABLE VII

SCHOOL DISTRICT 15 CENSUS AS COMPARED TO THE NUMBER OF SCHOOLS IN OPERATION FOR 6-21 YEARS*

Year	No. of Children	Per Cent of Increase	No. of schools operating in District 15
1939-1940	243		4
1940-1941	252	3.56	4
1941-1942	226	-11.50	4
1942-1943	234	3.47	4
1943-1944	231	-1.21	4
1944-1945	217	-5.99	3
1945-1946	242	10.33	3
1946-1947	264	8.33	3
1947-1948	290	8.99	2
1948-1949	277	-4.69	2
1949-1950	276	-0.38	2
1950-1951	260	-6.15	2
1951-1952	309	15.81	2
1952-1953	308	-0.30	3

*Compiled from County Census Report (Unpublished School Census Report, County Superintendent's Office, Carter County, Ekalaka, Montana, 1943-1953)

A glance at Table VII shows that the school population in District 15 also declined during these years. The reason for this may be traced to the fact that when the older inhabitants left the community they took along with them children who were between the age of 6 and 21 years, while many of the newer families did not have children or had children under six years of age.[6]

SCHOOL CENSUS

One approach of reasonably predicting school enrollment which has had success in other towns of less than 2,500 people, has been to assume that the birthrate would continue to be approximately constant.[7] The infeasibility of this approach for the Ekalaka Elementary School construction planning may be demonstrated in Table VII. Even though the figures are given for the whole county, they show, when compared to Table VIII, a rapid increase in birthrate for pre-school children for School District 15 and for Carter County. A high post war birth rate was a contributing factor accounting for this population increase.

POPULATION TRENDS IN CARTER COUNTY

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[6] Compiled from Superintendent's Annual Report (Unpublished Annual School Report, Superintendent's Office, Carter County, Ekalaka, Montana, 1953).

[7] Arther F. Raper, A Geographic Presentation of Rural Trends (Bureau of Agriculture Economics, Washington, D. C.: United States Department of Agriculture, 1952), p. 5.

TABLE VIII

CENSUS BY AGES (CARTER COUNTY)*

Carter County (all ages)	1950 population	1940 population
Under 5 years	366	311
Under 1 year	65	58
1 and 2 years	155	)
3 and 4 years	146	253)
5 to 9 years	271	303
5 years	52	68
6 years	53	67
7 to 9 years	166	195
10 to 14 years	240	318
14 years	40	64
15 to 19 years	191	303
15 years	41	71
21 years and over	1,694	1,959

*U. S. Bureau of the Census, U. S. Census of Population: 1950. Volume II, Characteristics of Population, Chapter b, Montana U. S. Government Printing Office, Washington, D. C., 1952. p. 48.

In addition to the population trends mentioned, a projected elementary enrollment is further complicated by other factors. The elementary school draws from other districts in the county, plus a certain number of children of transient oil workers. The numbers contributed from these two sources are extremely difficult to secure in any dependable terms. In Table IX, enrollment ratios of each of these two factors and the total school enrollment are shown.

Opinions and predictions of the past have, within only the last few years, been quite reversed. Witness this cautious and pessimistic statement by MacConnell and Odell:

> What of the future? Are these trends to continue? If factors that determine population would remain constant, it would not be too difficult to make a fairly accurate prediction for any school system or area. However, the variations due to present world conditions may tend to introduce unforseeable trends as occured during the last war when the exodus of many Montana residents to war production areas caused a sharp--if temporary--drop in population. According to the Bureau of Census estimates, Montana's population actually dropped, from 1940 to 1945, by more than 20 per cent.[8]

This picture has been completely changed by the recent oil development and the attending influx of oil crews. In the 1952-1953 school year, children of oil crews and survey teams composed 7.1 per cent of Ekalaka's Elementary School enrollment. These children, combined with the students from other districts in the county, accounted for 17 per cent of the 1952-1953 elementary school enrollment.

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[8]James D. MacConnell and William R. Odell, Missoula Plans Its Educational Future (Palo Alto, California: Stanford University, 1952), p. 22.

The number of students from other districts in the county entering District 15 Schools is very flexible. The number is dependent almost entirely on the number of high school students entering from other districts in the county, and the number of brothers and sisters these students have, and the number of families who are going to move into town to live so that their children can enter high school. Many times the mother will move to town with the high school students, along with other members of the family.

TABLE IX

STUDENTS FROM OUTSIDE ATTENDING EKALAKA ELEMENTARY SCHOOL 1950-1952*

				Per cent of the total enrollment		
Year	1950	1951	1952	1950	1951	1952
Total	15	26	33	7.7	14.1	17.0
Students from districts other than District 15	15	23	19	7.7	12.5	9.9
Oil Workers' Children	0	3	14	0	1.6	7.1
Total enrollment of School District 15	193	184	196			

*Superintendent's Records

Because of the vast size of the county, poor road conditions, and small population, the school cannot furnish

bus transportation or provide facilities for the children to commute by car.

It seems unlikely that these two trends, oil and out-of-district students, will be altered appreciably in the next several years. Since Ekalaka is the only incorporated town with available housing, oil crews must turn to this town for a place to live. Also, Ekalaka has the only high school in Carter County as well as the only sizable elementary school.

The opinions of the oil workers themselves and of the town populace are that regardless of any major negative results from mineral developments, the present number of people involved will not change for at least three or four years.[9] On the contrary, the concern is, will there be a sudden increase in the number of oil families in the next few years.

The trend, now traditional, of a rancher's entire family moving into Ekalaka so that a son or daughter may attend the county high school is unlikely to change. Many of these families will also have children of elementary school age who will attend the elementary school in District 15.[10]

One other factor affecting a building program should be kept in mind. The population trend of the district points

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[9] From Interview with George Chaunaek and Frank Buck, Ekalaka, Montana, May 16, 1950.

[10] Compiled from County Census Report (County Superintendent's Office, Carter County, Ekalaka, Montana, 1950-1953).

to an increased primary enrollment. Also, of the fourteen oil workers' children, ten have been in the primary grades. This will put a heavy burden on the first three grades in school, undoubtedly creating a necessity for two first grade teachers in the 1953-1954 school year.

CHAPTER IV

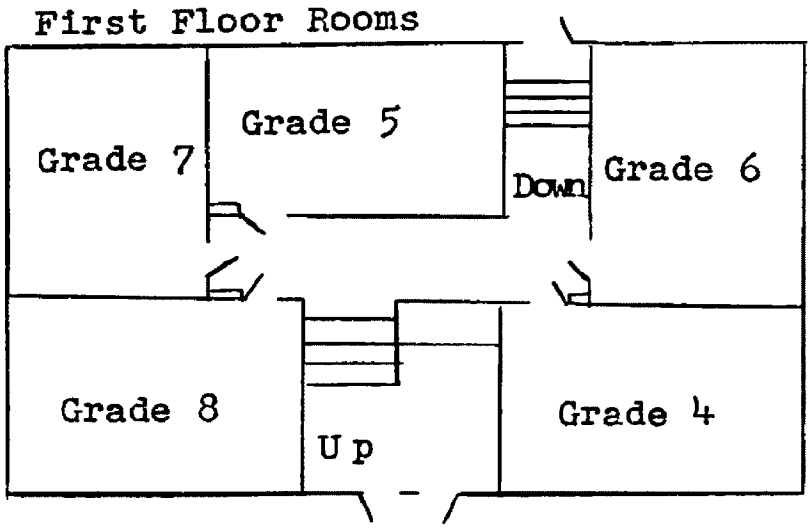
PRESENT SCHOOL PLANT

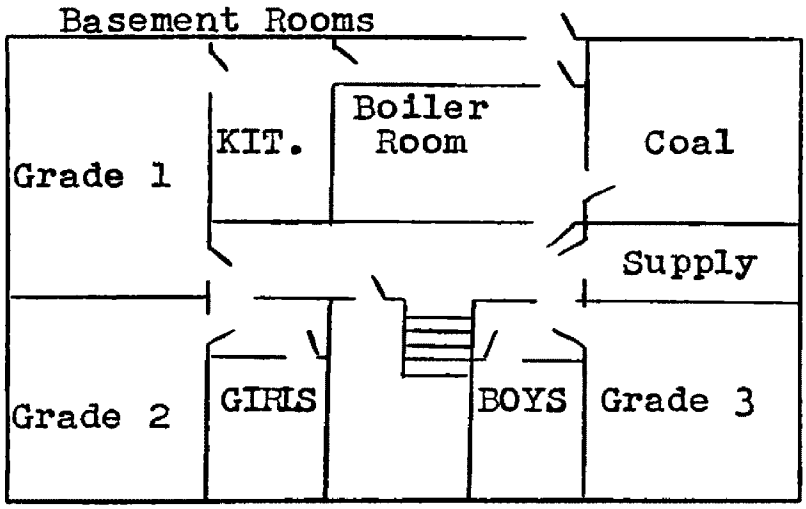
Population and curriculum change require that educational planning be continuous and long-range in its approach. If the educational program is to be looked upon as modifiable, buildings must be constructed in such a manner as to be adaptable to an ever-changing program. They must be designed to handle the present program to be sure; however, in order that the physical plant shall not become a restraining factor in the development of the educational program of the future, care must be taken to see that both present and future facilities are adaptable to changing needs.

In planning for additional school plant facilities for Ekalaka, it is financially impossible to begin all over again. The present school building is there, more or less unchangeable, and must be reckoned with.

In order to estimate the future school building needs for Ekalaka, it is first necessary to take an inventory of the present facilities. Figure I shows the present Ekalaka Elementary School

Classroom size. The size of the rooms is one of the most important matters to be considered in evaluating the usefulness of a school building. After all, most of the day is spent in the classroom, and its size, shape, and arrangement facilitate or impede the instructional program in important





1 inch equals 22 feet

FIGURE 1

DIAGRAM OF THE PRESENT

EKALAKA ELEMENTARY SCHOOL

TABLE X

SIZE OF CLASSROOMS IN THE EKALAKA ELEMENTARY SCHOOL

Rooms	Average number of square feet per classroom	Recommended minimum number of square feet per classroom*	Deficiency per classroom
Grade I	768 sq. ft.	900 sq. ft.	-132 sq. ft.
Grade II	480 sq. ft.	900 sq. ft.	-420 sq. ft.
Grade III	480 sq. ft.	900 sq. ft.	-420 sq. ft.
Grade IV	768 sq. ft.	900 sq. ft.	-132 sq. ft.
Grade V	768 sq. ft.	900 sq. ft.	-132 sq. ft.
Grade VI	768 sq. ft.	900 sq. ft.	-132 sq. ft.
Grade VII	768 sq. ft.	900 sq. ft.	-132 sq. ft.
Grade VIII	768 sq. ft.	900 sq. ft.	-132 sq. ft.

*James MacConnell and William R. Odell, Missoula Plans Its Educational Future (Palo Alto, California: Stanford University, 1952), p. 38.

ways.

> School authorities recommend 900 to 1,000 square feet of floor space for elementary school classrooms. This provides space to carry on activities and programs other than of a seat nature.[1]

According to Table X many teachers in the Ekalaka elementary school are handicapped by having much smaller rooms than recommended.

Three basement rooms are currently being used in the elementary school. Two of these basement rooms are limited to little more than one-half the recommended space needed to carry on a satisfactory school program. The other six rooms are almost satisfactory according to this standard. According to the principal's evaluation of the school in Table XI both new construction and improvements to the present building are essential to make this a satisfactory overall school plant. A gymnasium, teachers work room, heating improvements, office for the superintendent, and a sick room are some of the things that are needed in the present total school plant.

Heating and ventilation. The school heating system is capable of producing sufficient heat, but due to faulty and inadequate register controls, it is impossible to maintain a comfortable classroom temperature of 72° F without using the windows as ventilators. This situation is particularly true for the three basement rooms whose ceilings are

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[1] James D. MacConnell and William R. Odell, Missoula Plans Its Educational Future (Palo Alto, California: Stanford University, 1952), p. 38.

less than standard heighth.[2] The five classrooms located on the first floor of the building are satisfactory in respect to proper ventilation.

Fenestration. The two upper grade rooms that face the north are very satisfactory in respect to fenestration, but it is a different matter in those rooms on the east, west and south side of the school. It is difficult to control light of any intensity and it is a cause of irritation and distraction to the students. When sunlight enters the classroom, it results in a great deal of heat, bright spots, dark shadows, and intolerable glare. This is of primary concern to the fifth grade room which happens to face the south.

Artifical lighting. The three basement classrooms are lighted by flourescent tubes. Due to a limited amount of natural light caused by an inadequate number of windows, these rooms use their lights continuously. The upper five rooms on the first floor have direct lighting which is inadequate as these lights do not diffuse equally throughout the classroom. Because of adequate window light, artificial lighting in these rooms is held to a minimum.

Existing school site. Ekalaka's elementary school site of two acres is inadequate from the standpoint of providing playground space. The recommended acreage for a school with

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[2] State Department of Public Instruction, A Foundation Program for Elementary Schools of Montana Including Self-Evaluation Basic to Accreditation (Helena, Montana: The Department, 1951), p. 30.

an enrollment of 200 pupils is around eight acres. With the present playground area of less than two acres the school is in need of more school playground area.[3] The playground situation is somewhat alleviated by the fact that the county commissioners have allowed the school to use two acres of county land adjoining the school site. This is a temporary arrangement, so the problem of additional school playground space has not been solved.

Library. The unused kitchen located in the basement is presently used as a central library for the upper five grades. The lower grades have their libraries located in their home rooms. Because of the small, poorly lighted kitchen, restrictions are placed on free reading in the library. This library is very unsatisfactory to the whole school program as there is no available space for magazines and other current reading materials.

Lavatories. Lavatories are located in the basement of the building. The boys' and girls' lavatories are located in separate parts of the building. Based on the recommendations of school planning authorities, the lavatories have adequate washing and toilet facilities.[4]

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[3] Ibid., p. 34.

[4] Engelhardt, M. L., N. L. Engelhart Jr. and Stanton Leggett, Planning Secondary School Buildings (New York: Reinhald Publishing Corporation, 1949), p. 168.

TABLE XI

PRINCIPAL'S EVALUATION OF THE PRESENT SCHOOL ELEMENTARY PLANT

Date of Construction	1940
Type of Construction	Concrete Block Structure
Fire-Resistant Qualities	Semi-fire Resistant
Acoustics	Average
Heating	Not Adequate
Sanitary Facilities	Adequate
Kitchen	Yes
Hot Lunch Program	No
Audiorium-Gymnasium	No
Teachers Room	No
Class Room	8
Basement Rooms (Used for classrooms)	3
Office for Superintendent	No
Sick Room	No
Lavatories for Students	Adequate

CHAPTER V

CURRICULAR REQUIREMENTS THAT DETERMINE BUILDING NEEDS

In the case of the Ekalaka Elementary School, the slogan "Equal educational opportunities for every child," is not being achieved. That the school is not meeting the needs of the students is demonstrated by the number of students who drop out of school in the eighth grade when they reach the age of sixteen or those who do not continue with their education after the eighth grade.[1] Also, there are many students in the school who are merely marking time until graduation or until they become of legal age to quit school. With a wider curriculum it seems that some way could be devised to help these children to accept a learning situation and to enjoy school.

The program. The grade school program has largely been one of subject-centered study. Many of the subjects offered are closely directed by the Montana State Course of Study. This has been the pattern of subjects in the past, but it need not continue. In examining a State Course of Study, one can find other subjects that are recommended. However, the manner of presenting them is left entirely up to the school.

The present over-crowded conditions in the school are

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[1] Compiled from the Superintendent's Annual Report (Unpublished Annual School Report, Superintendent's Office, Ekalaka Elementary School, Ekalaka, Montana, 1950-1953)

not conducive to good teaching. Restrictions are placed upon a learning situation, resulting in less chance for developing the individuals through social and group activities.

An examination of the curricular offerings of the elementary school provides several facts of significance to future building needs.

1. Curriculum offerings are based on a state course of study and high school preparation.

2. Available classroom space is completely utilized.

3. Band, movies, and music must be carried on in class rooms and at certain available times.

4. Physical education is limited during the winter months to the upper three grades who must use the county high school gymnasium when it is available.

5. The reading and library program is restricted to the small kitchen used for this purpose.

6. In certain curriculum offerings, additional class room space is required. This is particularly true for the first grade, as prospects for the 1953-1954 school year necessitate additional space.

7. The teacher load has been satisfactory except in the eighth grade where the principal has functioned as supervisor and eighth grade teacher.

More recognition should be provided for the regarding of youth in the school and curriculum. About 25 per cent of the school's enrollment were members of the grade school band during the 1952-1953 school year; the needs of

the poor reader and slow learner are not being met; and the first grade is not meeting the needs of entering six-year olds who are not ready for phonics and reading.

These are some of the more noticeable needs that must be met in an expanded curriculum program and should strongly influence any building plans.

CHAPTER VI

SUMMARY AND RECOMMENDATION

PURPOSE OF THE STUDY

The primary purpose of the study was to analyze the building needs for the Ekalaka Elementary School, (1953-1954). More specifically, the purposes of the study were as follows:

(1) To determine if the present school plant is adequate.

(2) Whether or not the present school plant could be remodeled to meet the immediate need without new construction.

(3) To analyze the present population trend in respect to an increased school enrollment.

(4) To interpret the findings and offer recommendations which seem warranted as a result of the study.

PROCEDURE

The procedure used was to collect data from the County Superintendent, School District clerk and from similar studies; such as, Missoula Plans Its Schools, and The Building Needs of Joint School District Number 8. Special considerations were given to such things as population trends, oil developments, an evaluation of the present school plant in light of an increased school enrollment, and a proposed curriculum program that would determine future building needs.

FINDINGS

(1) Ekalaka is a small rural community with a population of 904, located almost in the center of Carter County. The town is unique in that it is the only community in the county with a population of over fifty people. Also, Ekalaka is the county seat for Carter County.

(2) In the past two years, many seismograph and oil crews have moved into the county causing excitement as to the future prospects for oil. Most of these oil crews live in Ekalaka where their children attend the local school, adding problems to an already over-crowded school plant. In the 1952-1953 school year, these children made up 7.1 per cent of the school enrollment.

(3) Because of poor roads and a sparce population, high school students live in Ekalaka so that they can attend the county high school. Many families move to town with their high school children, bringing along other members of the family, many of whom are of school age and attend the local elementary school. During the 1952-1953 school year, these out-of-district students made up 9.9 per cent of the total enrollment for the elementary school.

(4) Over the past five years, a great deal of new construction has been completed in Ekalaka. Much of this construction can be traced to the anticipation of oil developments in the county.

(5) The county population decreased from 4,136 people

to 2,798 since 1930. The town of Ekalaka increased during these same years from 475 to 904 people. This is a 25 per cent decrease for the county and a 53 per cent increase for the town.

(6) Over a fourteen year period 1940-1953, the elementary school census increased by one third and the faculty was increased by 50 per cent.

(7) The classrooms are much smaller than recommended for a room with equal enrollment.

(8) Heating and ventilation inadequate in all rooms, particularly in the three primary rooms.

(9) Three of the classrooms are located in the basement of the school building. Each of these three rooms is inadequate in respect to (1) size, (2) heating and ventilation, (3) lighting.

(10) The curriculum is affected greatly by the lack of certain facilities and construction. (1) The physical education program is limited to the upper three classes because of weather and the inability to secure the high school gymnasium at all times. (2) An expanded curriculum in the three primary grades is impossible because of inadequate space. The seats in these rooms are semi-permanent and cannot be moved at will. (3) Visual-aids (movies) are limited because a classroom has been used for these in the past, and it interrupts the class room schedule.

RECOMMENDATIONS

From the facts presented in this survey, the school should have the following remodeling and improvements to the present school plant in addition to new construction to present an adequate educational program that will meet the needs of the students.

A. Improvements to the present school plant.

1. Change the direct lighting in the five upper grade rooms to semi-direct or other satisfactory means of illumination.

2. Put regulators on the radiators to improve ventilation facilities.

3. Utilize the three basement rooms for other than regular academic class rooms.

   a. Change one room into a library, fixing shelves and other facilities proper for such a room.

   b. Use one room for an audio-visual aids program and band room. Sound-proofing this room would make it satisfactory for such purposes.

   c. The third basement room should be used as a combination manual arts, science laboratory, and arts room.

B. New Construction.

1. At least three classrooms are needed to meet the immediate needs of grades one, two, and three and to get these grades out of the basement rooms they now occupy.

2. Provide an office for the superintendent and a safe for storage of permanent records and other valuables.

3. Build a gymnasium for an adequate physical education program.

4. Provide teachers' room where some privacy may be obtained. This room could be utilized also as a student sick room.

5. Secure adequate playground space and equipment.

6. Assuming that the birth rate and population trends continue unabated, and those students entering school over a period of the next six years continue in school with only a small per cent of drop-outs and retentions, three more primary rooms should be constructed by 1957.

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