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A SURVEY OF THE SCHOOL HOUSING

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NEEDS IN ELLENSBURG,

VASHINGTON



\$1.50

A project submitted in partial fulfillment of the requirements for the degree of Master of Education, in the Graduate School of the Central Washington College of Education

-December, 1949

- 5.5



Home Economics Classroom Morgan Junior High School This project is a partial requirement of Education 222, which is a partial requirement for the Master of Education degree at the Central Washington College of Education.

Approved:

Charles Saale, CHAIRMAN (Class Instructor)

D. Thompson

L. Burnett

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ACKNOWLEDGMENTS

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While the accomplishments of this paper are modest, even they could not have been attained without constructive criticism, inspiration and endeavor from others. I take pleasure in affirming my obligation and gratitude to Dr. Charles Saale. I also wish to express my appreciation for the valued assistance rendered by Mr. Angelo Giaudrone. Recognition is gratefully given for the courtesy and cooperation of those people who so willingly aided me in gathering much of the needed materials.

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Chapter I

INTRODUCTION

"The modern school will more truly be the educational center of the community; it will lend itself to the activities of children, of youth, and of adults; and it will be adaptable to educational progress. The colorless and uninviting classrooms of yesterday and today will be supplanted by spacious, adequately lighted, properly heated and ventilated, attractive, cheerful rooms." (2:12)

"Most school plants, old or new, are entirely inadequate to meet the demands of an educational program that recognizes child behavior and growth. Many school buildings are characterized by drabness, dreariness, staleness, crocked maps, and dusty pictures of George Washington. One does not feel that pulsing life has any part in them." (1:28)

The physical plant of a school is something vastly more important than more shelter from the elements. It is the concrete expression of the extent to which the adult population of a state or a community has accepted the responsibility of providing the oncoming generation with the amount and kind of education and training that they will require to live effectively in the age in which they are born to live, namely, the age of science and the interdependence of all mankind. (9:134)

School buildings and grounds, further express the extent to which the adult public has accepted the responsibility of seeking to keep intact and to provide for an improvement in health, emotional stability, the physical well being, and the social adjustment of their

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children and youth as they grow into young men and young women. School buildings are also a measure of the concern of parents for the preservation of the very lives of their children against fire, earthquakes and other forms of disasters. We compel our children to attend school by statute and it seems good common sense that the buildings that house these boys and girls must be safe, sanitary, and have a healthy environment, if they are to become better fitted for life than their parents.

The school plant is a concrete, objective expression of the educational and social philosophy of the community in which it stands. An alert, informed observer with a pass key walking around and through empty school buildings on a Saturday morning can get a more complete and reliable picture of the educational philosophy of the professional staff, the board of education, and the community in a few hours than he could by days of searching through records, reports, bulletins, and publications. (9:134)

*If classrooms are to be learning laboratories they should be designed for children rather than to impress adults or to make it easier to handle large groups of pupils. Schools can be made homelike. Pieces of incidental furniture can add much atmosphere

to a school room." (3:2)

The citizens of every community wish their own children to receive the best type of educational opportunity that is possible for them to receive. But the citizens of a community cannot always know what constitutes a desirable school offering. Not only did these citizens pass through the public school system when the problems to be faced were comparatively simple, but, what is more important, most of them have never considered what the public school system should attempt to do or why, or the space provisions that are necessary to carry out the purposes of the school. (2:11) Discussion of the problem. The improvement of school environment presents a different problem in each school. The problem facing the Ellensburg School District is one of providing more and better school housing. The purpose of this survey is to find out the condition of the present buildings, to make recommendations for improvements and alterations to the existing structures, to point out the needs for future building expansion. This survey is based on the results of an actual school census undertaken during November of this year.

<u>History of Ellensburg's school building program</u>. For many years the Ellensburg Public Schools operated under the handicap of a long-term debt, without a plan for the amortization of this debt. The funds for the construction of the old Washington School, built in 1890, were obtained by the sale of non-callable honds in the sum of \$40,000, bearing interest at a rate of five percent.

In 1910 these bonds were refunded for another twenty years at the same interest rate. Except for a few of these bonds, sold to the district by willing holders, these bonds were finally paid off in 1930. Thus, because of the high interest rate, and of the non-callable feature of the bonds, the old Washington building actually cost three times the original cost of construction.

Meanwhile, the building had burned in 1925 after 35 years service. It had housed Ellensburg's grade and high school; and, for a brief time, it was the home of the State Normal School, now the Central Washington College of Education. Some years later, the Lincoln Grade School was built in West Ellens burg. Because of drainage problems and small attendance, it was finally decided to discontinue this school and to dispose of the property. A two-room portable building had also been built. This building has served consecutively as grade school classrooms, as junior high school classrooms, a manual arts shop, and at the present time it is the music building. In none of these capacities has this building served well. Poorly conceived buildings and poor financing bring in their wake disappointment and disillusionment.

Ellensburg's growth had always been steady. In 1912 the time had come when the citizens of this community again demonstrated their belief in education and in the future of the community by the flotation of a \$90,000 serial bond issue for the erection of a high school. The last of these bonds was paid in 1932. The high school building has served well thousands of students.

In spite of the erection of the high school, the portable, and the new Washington School, the district's growing pains became so acute in 1927 that it became necessary to ask the State Normal School for the temporary use of the third floor of the Edison School (now the College Music Building) for the departmentalized seventh and eighth grades of the city schools.

In 1929 a serial bond issue for \$144,000 for the erection of a new junior high school was floated. This amount was inadequate even for the construction of the first unit which included only the 4

heating plant, thirteen classrooms, and auditorium. The lighting fixtures, linoleum, all equipment, and the architect's fees had to be paid for from the general fund. However, the district did get a well constructed building which should give good service for many years to come. The last of this bond issue will be paid off in 1949.

Although the junior high school was well constructed, it was not large enough. It was necessary to continue to use the old buildings on the site just north of the junior high school building for shops. Moreover, there was no gymnasium, no art room, no laboratory for general science, no cafeteria, and no home economics rooms. Patience could be the only answer to the schools serious needs.

When Civil Works Administration came into being, the district immediately organized a project for the development of the playfield acquired at the time of the building of the junior high school. After the removal of the houses on the playfield, the high school Associated Student Body furnished the money for the labor costs in installing two cement runways at the bed of the creek for carrying off the creek water. The tiles had been bought by the school district. The City of Ellensburg furnished a surveyor and a foreman for the installation. The County and the Ellensburg Telephone Company furnished trucks for the hauling of soil which was donated by The Milwaukee Railroad. Mrs. Frank Hartman donated the seed for the lawn. Thus, the development of the Morgan playfield was the result of fine cooperation among individuals, corporations, county, city, school district, state and federal governments.

When the serious unemployment problem resulted in the formation of the Works Progress Administration and the Public Works Administration, the Ellensburg School District promptly applied for funds for the building of shops, gymnasium, and an addition to the junior high school. The project was promptly approved, but funds were withheld on the grounds of lack of need to take up unemployment slack as other projects were opened up in this area. Finally, tiring of waiting for the allocation of funds and gradually working toward a more advantageous financial position, the school board decided to go on their own and successfully floated a bond issue for \$80,000. This, with the cash on hand, approximately the same amount, was sufficient to build and equip the shops, gymnasium, home economics, art department, general science laboratory, and five large classrooms. This was in 1937. These bonds are being paid off with the ten mills allowed schools under the forty mill limit law.

Then came the time when greatly increased enrollment again made it imperative that Ellensburg School District 401 provide additional facilities for her children. Moreover, 325 children were housed in buildings outside of the Washington School, 258 of these at the Morgan Junior High School, and 67 at the Music Building at Central Washington College of Education.

This arrangement presented many handicaps to the school program. They were removed from visual aids, proper playground facilities, library facilities, and other advantages too numerous to mention. In addition to this fact, enrollments in the classrooms at the Washington School were too large. Classrooms at the Morgan Junior High School were needed for junior high pupils. Rooms at the College are always needed for the young men and young women of that institution. The only satisfactory answer was a new elementary school building.

In this community, music holds a prominent place in the cultural life of the people. This is manifested by community support of the Community Concert Association, by the activities of music clubs, by the participation in music by adults in church and other organizations. There is little doubt but that music here is appreciated far more than in the ordinary community. When school improvements, were thought over shortly after the arrival of V-J Day, many organizations sent letters to the school board and the superintendent urging additional facilities for music. Likewise, the Ellensburg community is unique in having many strong organizations of its farmers. There is much genuine leadership in farm groups here. It is only natural, therefore, that many farmers living in District 401, (incidentally a great many outside as well), desire increased facilities for farm shop and adult agriculture work as well. Onehalf of the assessed valuation of this district lies outside the corporated limits of Ellensburg, and the matter of increased farm shop facilities would be given favorable consideration at the earliest

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opportunity.

The people in this community had an opportunity to express themselves on these matters at the polls. The bond issue for \$295,000 would not take care of all the school's needs, therefore matching funds were sought at once from state and federal sources. This bond issue was not burdensome. It was designed to run for a fifteen year period. The millage required was not excessive, but it was outside of the legal ten mills allowed school districts under the forty mill limit law. This was made necessary because increased operational costs were likely to require the full ten mill levy for the operation of the school, and the payment of the bonds for the additions to the Morgan Junior High School. There will no longer be a levy for the Washington School. The original bonds for the Morgan Junior High School have been liquidated.

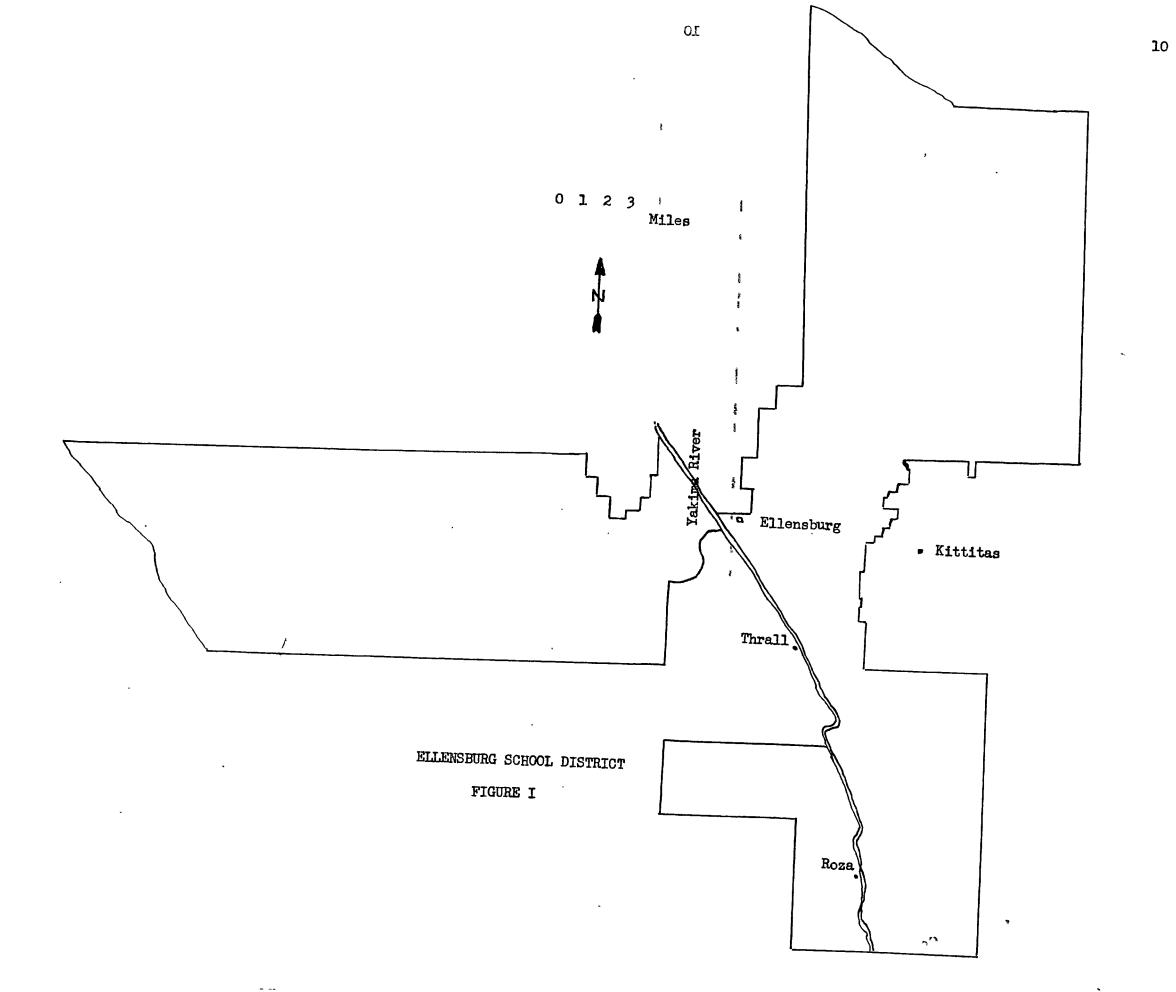
The new Lincoln school that was completed and occupied in November, 1949, is a building which contains many modern features.

Type of community. Ellens burg is in the heart of an irrigated farming area in the Kittitas Valley. Most of the activity of the community depends upon the surrounding farming area.

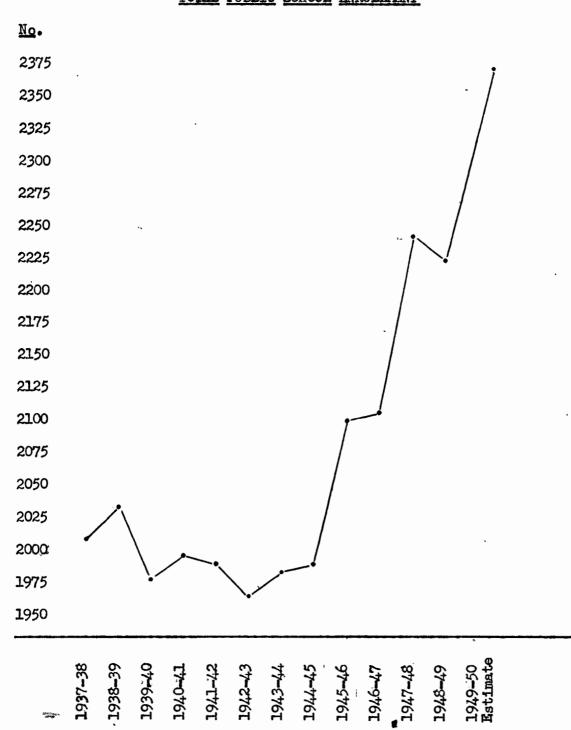
The Central Washington College of Education is located in Ellensburg and this is a leading factor in helping the people of the community to become more educationally minded than in other school communities of similiar size.

On the the following pages, in a way of introduction to the

problems that involve the Ellensburg School District, will be found a map of the Ellensburg School District and three graphs showing the total public school enrollment, present enrollment by grades and the Lourdes Academy enrollment.



GRAPH I



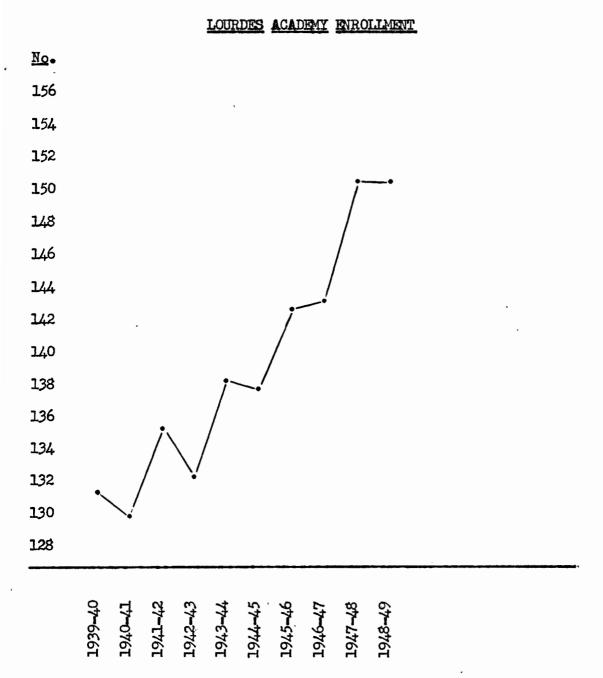
GRAPH II

PRESENT ENROLLMENT BY GRADES

November 1, 1949

No.														
220	1											•	•	
210														
200	L.													
190	ŀ			1										
180			1											
170		ŕ												
160														
150														
140										ł				
130											1			
120								·						
110									·			1		
100														
90			ł											
80														
70			u											
60														
50														
40			ļ											
Grade	1	2	3	4	5	6	7	8	9	10	11	12	₹×6-	

GRAPH III



Chapter II

EVALUATION OF PRESENT BUILDINGS

Use of score cards. The elementary school and the high school buildings of the Ellensburg School District were evaluated by the writer, Mr. Angelo Giaudrone, Superintendent of the Ellensburg Public Schools, and members of the local P.T.A. by the use of the Strayer-Engelhardt and the Holy-Arnold score cards. These score cards were published in 1933 and 1936 respectively, and therefore in comparison to 1949 standards they are extremely conservative in many respects. Much progress has been accomplished since before the start of World War II.

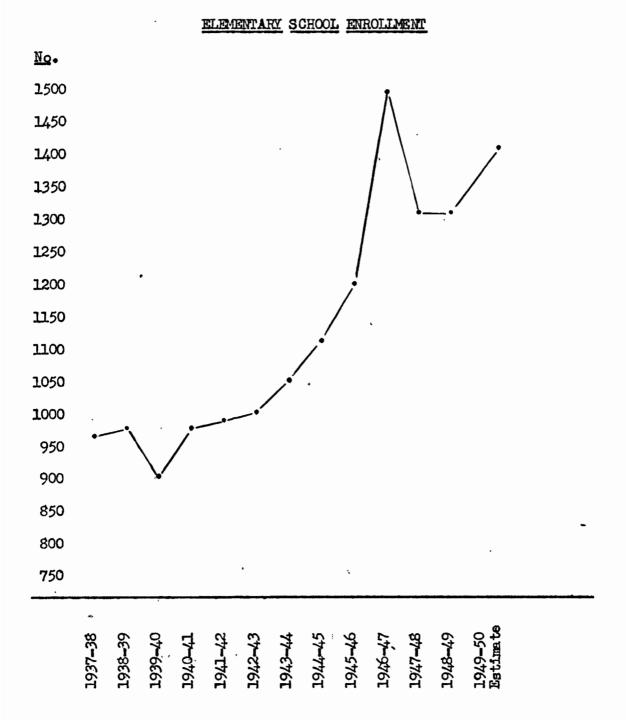
The Strayer-Engelhardt score card was designed for elementary school buildings and the Holy-Arnold score card was designed for scoring junior and senior high school buildings. These score cards are based on 1000: points representing an ideal or perfect building. Any building rating over 900 would be considered nearly perfect. Buildings that score between 800 and 900 points are generally quite satisfactory and require very little in the way of alterations to make them effective. Buildings that score between 400 and 700 points are considered inferior or lack many of the essentials for a good school program. Buildings that score in this range generally justify the expenditure of funds in order to make them reasonably effective.

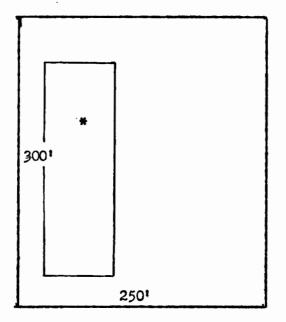
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Buildings that score less than 400 points should generally be abandoned. Most buildings that are forty or fifty years old fit in this category. They are generally so obsolete that no large expenditure of public monies should be made on them. The building ratings are dependent upon subjective judgment even though certain standards are set up by the authors, therefore a degree of error is possible but when one considers that the standards were set up in the middle thirties it is hardly probable that the buildings were rated too severely.

On the following pages appear consecutively the summary of elementary and secondary school building ratings followed by the actual item by item scoring. The last part of this chapter is devoted to the scoring of the elementary and secondary school buildings by the use of the Moehlman score card. $(6t274-30 \text{ A}_{\cdot})$

GRAPH IV





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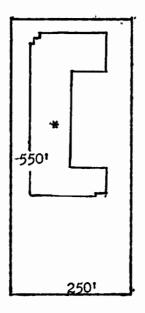
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-WASHINGTON ELEMENTARY SCHOOL*

FIGURE II

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*SITE 1.72 ACRES
LOCATION NEAR CITY CENTER
DATE OF CONSTRUCTION 1925
COST OF CONSTRUCTION \$120,000.00
TYPE OF CONSTRUCTION BRICK
SQUARE FEET OF FLOOR SPACE 32,000
NUMBER OF STORIES TWO
NUMBER OF CLASSROOMS TWELVE
AUXILIARY SPACE OFFICE, PIAYROOM, LIBRARY, NURSE'S ROOM KINDERGARTEN, TEACHER'S ROOM



LENCOLN ELEMENTARY SCHOOL*

FIGURE III

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*SITE 3.11 ACRES
LOCATION SOUTH SIDE OF CITY
DATE OF CONSTRUCTION 1949
COST OF CONSTRUCTION \$750,000.00
TYPE OF CONSTRUCTION BRICK
SQUARE FEET OF FLOOR SPACE 50,650
NUMBER OF STORIES TWO
NUMBER OF CLASSROOMS FOURTEEN
AUXILIARY SPACE GYM, LUNCHROOM, TEACHER'S ROOM, CLINIC, OFFICE, KINDERGARTEN, LIBRARY, ACTIVITY ROOM



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SUMMARY OF

ELEMENTARY SCHOOL BUILDING RATINGS

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Name of School	Total Score	Site	Building	Service System	Class- rooms	Special Classrooms	Genèral Service Rooms	Administration Rooms
Total Possible Points	1000	100	160	225	205	125	125	60
Washington	637	58	123	153	179	66	39	19
Lincoln	769	57	141	190	205	75	61	40

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A copy of the rating sheet is included on the pages to follow so the comments on ratings will be more easily understood ~

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TABLE II

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Strayer-Engelhardt Score Card for Elementary School Buildings. (8:7)

			Possible Points	<u>Rating</u> <u>Washington</u>	For Lincoln
l.	SITE	1	100	58	57
۸.	Se1	ection	15	10	10
B.	Loc	ation	30	23	26
	1.	Determination	10	8	8
	2.	Accessibility	10	5	10
	3.	Environment	10	10	8
C.	Top	ography	20	14	10
	1.	Elevation	5	3	3
	2.	Soil and Subsoil	. 5	5	5
	3.	Natural Features	5	3	2
	4•	Landscaping and Upkeep	5	.3	0
\mathtt{D}_{ullet}	Pro	visions for Use	35	11	11
	1.	Size and Form	15	7	7
	2.	Roads, Approaches and			
		Parking	5	3	3
	3.	Play Courts and Play Fields	10	l	l
	4.	School Gardens	5	0	0
II.	BUI	ĻDING	160	123	1/1
A.	Pla	cement	20	17	15

			Possible Points	<u>Rating</u> Washington	<u>r For</u> Lincoln
	l.	Position on Site	10	10	10
	2.	Orientation	10	· 7	5
B.	Gro	ss Structure	90	73	88
	l.	Style of Architecture	5	4	5.
	2.	Plan Type	10	7	10
	3.	Construction Types	10	7	10
	4•	Height	5	5	5
	5∙	Foundations	10	10	10
	6.	Walls	10	10	10
	7.	Roof	5	5	5
	8.	Entrances	5 -	4	5
	9.	Fenestration	ູ 5	3	5
	10.	Utilization	10	10	8
	11.	Aesthetic Balance	5	4	5
	12.	Acoustics	5	1	5
	13.	Condition	5	3	5
C.	Int	ernal Structure	50	33	38
	l.	Corridors	15	7	12
	2.	Stairways and Ramps	15	11	11
	3.	Color Scheme	10	10	10
	4•	Basement	5	0	O ²
	5.	Roof Space	5	5	5

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		Possible Points	Rating Washington	<u>For</u> Lincoln
III	SERVICE SYSTEMS	225	153	190
A.	Heating and Ventilating	50	25	48
4	1. Kind	15	15	15
	2. Installation	10	10	10
	3. Air Supply	5	∕> 0	5
	4. Fans and Motors	5	0	, 5
	5. Distribution	5	0	5
	6. Temperature Control	5	0	3
	7. Special Provisions	5	0	5
₿₀	Fire Protection System	30	28	29
	1. Fire Resistance	15	13	14.
	2. Exits and Fire Escapes	5	5	5
	3. Apparatus	3	3	3
	4. Electric Wiring	2	2	2
	5. Fire Doors and Partitions	3	3	3
	6. Exit Lights and Signs	2	2	2
C.	Cleaning System	15	14	14
	l. Kind	5	4	4
	2. Installation	5	5	5
	3. Efficiency	5	5	5
D.	Artificial Lighting System	20	18	20
	1. Electric Lighting	5	4	5
	2. Light Sources and Intensities	. 3	3	3

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			Possible Points	<u>Rating</u> Washington	For Lincoln
	3. Switches and S	witchboards	3	3	3
E.	4. Outlets and Ad	justments	3	3	3
	5. Method of Illu	mination	3	3	3
	6. Maintenance an	d Inspection	3	2	3
	Electric Service S	ystem	10	10	10
	1. Clocks		3	3	3
	2. Telephones		2	2 .,	2
	3. Fire Alarm Sys	tem	2	2	.2
	4. Call System		2	2	2
	5. Electric Power	Supply	1	1	l
F.	Electrical Teaching	g Aids	10	5	5
	1. Audio-Visual E	quipment	5	5	5
	2. Radio Equipment	t	5	0	0
G∙	Water Supply System	10	20	15	18
	1. Drinking Founts	ains	5	5	5
	2. Lavatories		5	5	5
	3. Sinks		5	5	5
	4. Bathing Facili	ties	5	0°	× 3.
H.	Toilet System		30	27	29
	1. Distribution a	nd Arrangement	5	5	5
	2. Fixtures		5	4	5
	3. Adequacy		5	5	5

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			Possible Points	<u>Rating For</u> Washington Lincoln	
	4.	Seclusion	5	5	5
	5∙	Sanitation	5	3	4
	6.	Supplies	5	5	5
I.	Mec	hanical Service Systems	3	00	<u>l</u>
J ,•	Loc	ker Service	15	22	2
	l.	Home Lockers	5	0	0
	2.	Gymnasium Lockers	5	0	a
	3.	Lockers for Special Classrooms	3	0	0
	4.	For Teachers and Staff Workers	2	2	2
K.	Lau	ndry Service	2	Q	2
L.	Sto	rage Service	20	9	12
	l.	Custodial Storerooms	l	1	1 ³
	2.	School Supply Storage	l	0	, 1
	3.	Educational Equipment Storage	1	0	0
	4.	Book Storage	1	1	l
	5.	Storage for Instructional Room	3 2	2	2
	6.	Storage-Aural-Visual Materials	1	_0	0
	7.	Gymnasium Storage	1	0	l
	8.	Auditorium Storage	2	0	0
	9.	Receiving and Shipping Room	1	0	l
	10.	Fuel Storage	2	2	2
	11.	Custodian's Work Shep	l	0	0

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			Possible Points	<u>Rating</u> Washington	For Lincoln
	12.	Storage for Non-Teaching Staff	l	. 1	1
	13.	Bicycle Storage	2	l	1
	14.	Parking Space	2	l	l
	15.	Out-of-Doors Service Storage	1	0	0
IV.	GEN	ERAL CLASSROOMS	205	179	205
A.	Lòc	ation	35	30	35
B.	Con	struction and Finish	90	84	90
	1.	Size and Utilization	25	25	25
	2.	Sufficiency	10	1Q_	10
	3.	Floors	10	10	10
	4∙	Walls and Ceilings	10	7	10
	5₊	D _{oors}	5	5	5
	6.	Built-in Equipment	10	8.	10
	7.	Chalk Boards	5	4	5
	8.	Bulletin Boards	5	5	5
	9•	Color Scheme	10	10	10
C.	I11	umination	40	40	40
	l.	Glass Area	15	15	15
	2.	Windows	15	15	15
	3.	Shades and Curtains	10	10	10
D.	Mova	able Equipment	40	35	40
	, 1.	Seats and Desks	20	20	20

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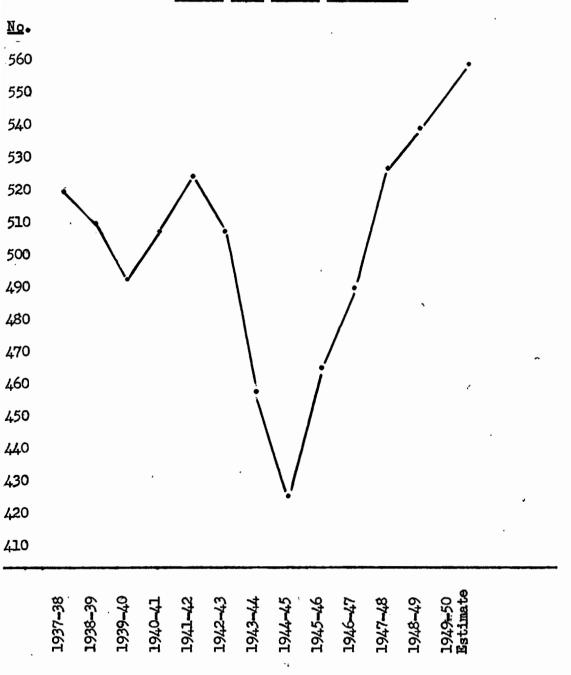
			Possible Points	<u>Rating</u> Washington	For Lincoln
	2.	Teachers' Desks	5	0	5
	3.	Other Equipment	15	15	15
٧.	KINDERGARTEN		35	31	35
	l.	Location and Connection	5	5	5
	2.	Size and Shape	10	8	10
	3.	Construction and Finish	5	3	5
	4.	Cloakroom and Toilets	5	5	5
	5.	Illumination	5	5	5
	6.	Equipment and Storage	5	5	5
VI.	SPE	CIAL ACTIVITY ROOMS	90	35	40
۸.	Art	Room	10	0	0
₿∙	Hom	e Economics Room	10	0	0
C.	Ind	ustrial Arts Rooms	10	0	0
\mathtt{D}_{ullet}	Lib	rary	30	25	30
E.	Mus	ic Room	10	0	a :
F.	Sci	ence and Nature Study Rooms	10	0	0
G.	Oth	er Rooms	10	10	10
VII.	GE	NERAL SERVICE ROOMS		39	61
A.	Aud	itorium or Assembly Room	50	28	0
	1.	Purpose	5	3	0
	2.	Orientation and Purpose	5	4	ο
	3.	Size	10	10	0

			Possible Points	<u>Rating</u> Washington	For Lincoln
	4•	Construction and Finish	5	3	0
	5.	Stage	5	3	Θ
	6.	Stage Dressing Rooms	3	0	. Q i
	7∢	Property Room	2	0	0
	8.	Artificial Lighting	4	l	0
	9∎	Heating and Ventilating	4	l	0
	10.	General Equipment	4	0	0.
	11.	Audio-Visual Equipment	3	3	o
₿•	Gym	nasium	25	0	23
	l.	Location	5	0	5
÷	2.	Size	10	0	10
	3.	Construction and Finish	5	0	5
	4.	Gymnasium Service Rooms	3	0	3
	5.	Seating Arrangements	2	0	0
C.	Pla	y Rooms or Shelters	10	10	10
D.	Swi	mming Pool	10	00	0
E,	Caf	eteria or Lunch Room	30		28
	l.	Location	5	0	5
	2.	Size	10	0	10
	3.	Construction and Finish	5	O	5 /
	4.	Equipment	3	0	3
	5.	Kitchen	5	1	5

			Possible Points	<u>Rating</u> Washington	For Lincoln
	6.	Faculty Lunch Room	2	0	0
VIII		DMINISTRATION ROOMS	60	19	40
	•	inistration Offices	25	19	40
.		Principal's Private Office	5	5	5
		-	5	0	0
	2.	Assistant Principal's Office	-	-	-
	3.	General Office	5	5	5
	4•	Reception Room	2	0	2
	5.	Attendance Office	3	0	0
	6.	Conference Room	2	0	2
	7.	Other Administrative Offices	3	0	3 .
B.	Tea	chers' Rooms	10		7
	1.	Women's Rest Room	7	4	7
	2.	Men's Retiring Rooms	3	α	0
C.	Hea	1th Service Rooms	15	4	11
	1.	Medical Clinic	5	0	5
*	2.	Nurse's Room	4	. 4	4
	3.	Dental Clinic	4	Ð	Θ
	4.	Other Health Service Rooms	2	0	2
D	Cus	todial Service Rooms	10	11	5
	1.	Head Custodian's Office	3	0	3
	2.	Engineer's Room	3	0	0
	3•	Janitors	2	1	2
	4•	Janitresses	2	0	0



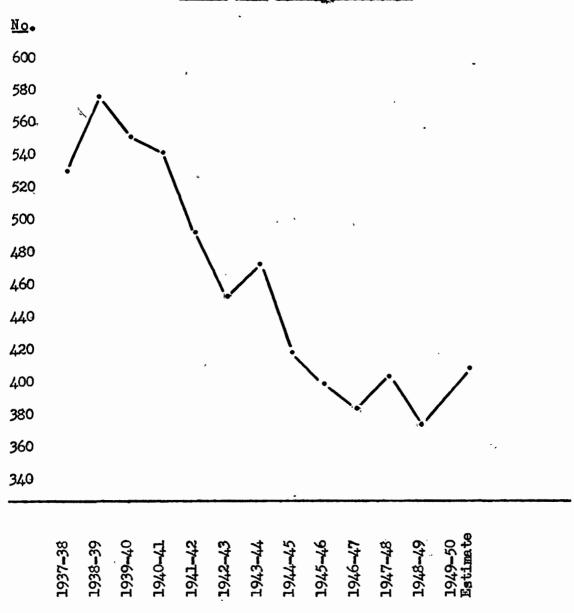
Classroom Senior High School



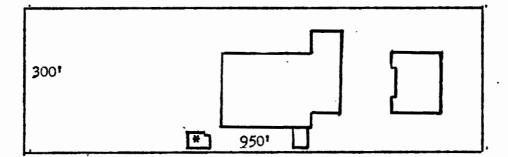
JUNIOR HIGH SCHOOL ENROLLMENT

GRAPH IV

GRAPH V



SENIOR HIGH SCHOOL ENROLLMENT



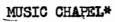


FIGURE IV

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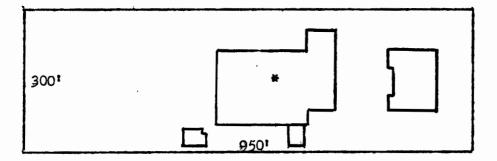
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*SITE 6.2 ACRES
LOCATION SOUTH SIDE OF CITY
DATE OF CONSTRUCTION
COST OF CONSTRUCTION \$1500.00
TYPE OF CONSTRUCTION FRAME
SQUARE FEET OF FLOOR SPACE 1700
NUMBER OF STORIES ONE
NUMBER OF CLASSROOMS _ 2 ONE

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-JUNICR HIGH SCHOOL*

FIGURE V

*SITE 6.2 ACRES
LOCATION SOUTH SIDE OF CITY
DATE OF CONSTRUCTION 1930
COST OF CONSTRUCTION \$210,000.00
DATE OF ADDITION 1937
TYPE OF CONSTRUCTION BRICK
SQUARE FEET OF FLOOR SPACE 65,000
NUMBER OF STORIES THREE
NUMBER OF CLASSROOMS TWEN TY_ONE
AUXILARY SPACE TWO SHOPS, ONE FARM SHOP, ONE GYM, ONE OFFICE, MUSIC ROOM, AUDITORIUM, ONE NURSE ROOM

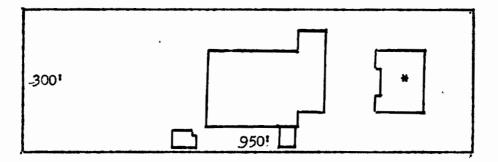




FIGURE VI

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SITE 6.2 ACRES
LOCATION SOUTH SIDE OF CITY
DATE OF CONSTRUCTION 1912
COST OF CONSTRUCTION \$60,000.00
TYPE OF CONSTRUCTION BRICK
SQUARE FEET OF FLOOR SPACE 15,000
NUMBER OF STORIES TWO PLUS BASEMENT
NUMBER OF CLASSROOMS FIFTEEN
AUXILIARY SPACE LIBRARY, STUDY HALL, CAFE, OFFICE SPACE FOR THE SUPERINTENDENT AND FOR THE PRINCIPAL, TEACHER'S LUNCH ROOM

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TABLE III

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SUMMARY OF

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SECONDARY SCHOOL BUILDING RATINGS

.

Name of School	Total Score	Site	Building	Academic Classrooms	Special Classrooms	General , Service Rooms	Administrative Rooms	Service Systems
Total Possible Points	1000	120	158	167	19Ì	153	92	139
Morgan	607	90	112	129	92	58	33	93
Senior High	391	95	65	94	29	25	9	74

A copy of the rating sheet is included on the pages to follow so the comments on ratings will be more easily understood.

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TABLE IV

Holy Arnold Score Card for Secondary School Buildings. (5:69-73)

			Possible Points	<u>Rat</u> Morgan	ting For Senior High
I.	SITE		120	90	95
T •	OTT				
A.	Lòc	ation	49	49	49
	l.	Accessibility	27	27	27
	2.	Environment	22	22	22
₿₊	Phy	sical Features		29	29
	l.	Size of Site	20	5	5
	2.	Form	14	14	14
	3.	Nature of Soil	10	10	10
C.	Imp	rovements	27	12	17
	1.	Arrangement of Space	. 17	9	9
,	2.	Landscaping	. 10	3	8
II.	BUI	LDING	158	112	65
A.	Pla	cement	23	20	14
	l.	Orientation	12	9	3
	2.	Position on Site	11	11	11
₿₊	Edu	cational Plan	43	17	10
	1.	Flexibility	16	4	0.
	2.	Expansibility	13	3	3
	3.	Economy of Plan	14	10	7

			Possible Points	<u>Rat</u> Morgan	ting For Senior High
C.	Gro	oss Structure	45	41	28
	1.	Material	8	8	2
	2.	Foundations	7	7	7
	3.	Walls	6	4	3
*	4•	Roof	5	5	5
	5 <u>,</u>	Height	4	4	4
	6,	Exits	7	7	7
3	7∙	Condition of Building	8	6	0
D_{\bullet}	Iņt	ernal Structure	47	34	13
	l.	Stairways	14	14	4
	2.	Corridors	14	7	4
۵	3.	Lobbies	7	4	2
	4•	Basement	12	9 .	3
III.	AC	ADEMIC CLASSROOMS	167	129	94
۸.	Con	struction	107	84 -	61
	l.	Size	18	13	9
	2.	Shape	12	12	9
	3.	Windows	11	11	8
	4.	Shades	4	3	3
	5.	Floors	9	9	. 7
	6.	Walls and Ceilings	9	7	7
	7.	Doors	8	8	8

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			Possible Points	<u>Rati</u> Morgan	lng För Senior High
	8.	Color Scheme	8	4	0
	9•	Blackboards	11	6	3
	10.	Bulletin Boards	8	6	4
	11.	Closets and Built-in Cases	9	5	3
B.	Equ	ipment	60	45	33
	1.	Туре	36	27	27
	2,	Arrangement	24	18	6
IV.	SPE	CIAL CLASSROOMS	171	92	29
Ac	Sci	ence Laboratories	34	16	17
		Junior High Schools			
	l.	General Science	22	16	· .
	2.	Biology	12	0	
	;	Senior High Schools			
	l.	General Science	7	•:	, o
	2.	Biology	9		5
	3.	Chemistry	9		7
	4•	Physics	9		5
B₊	Home	e Economics	37	32	0
	l•'	Foods Laboratory	14	14	0
	2.	Home-Making Rooms	10	5	0
	3₽	Clothing Laboratory	13	13	0
C.	Indu	strial Arts	- 16	25	0

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			Possible Points		<u>senior High</u>
	l.	General Shop	11	11	0
	2.	Print Shop	4	0	0
	3.	Automobile-Repair Shop	5	0	0
	4.	Electric Shop	6	0	0
	5.	Woodworking Shop	9	9	0
	6.	Machine Shop	5	5	0
	7.	Sheet-Metal Shop	6	0	O
D_{\bullet}	Con	mercial Rooms	23	0	12
	l.	Bookkeeping Room	11	0	6
	2.	Typewriting Room	12	0	6
E.	Dra	wing and Fine-Arts Rooms	31	19	0
	1.	Mechanical Drawing	8	8	0
	2	Art	11	11	0
	3.	Music	12	0	0
٧.	GENE	RAL SERVICE ROOMS	153	58	25
A.	Aud	itorium	34	34	0
	l.	Assembly Room	21	21	0
	2.	Stage	13	13	0
B₊	Phy	sical-Education Rooms	39	24	0
*	1.	Gymnasium	14	14	0
	2.	Dressing and Shower Rooms	7	4	0
	3.	Corrective Room	. 4	3	0

			Possible Points	<u>Rat</u> Morgan	ting For Senior High
	4•	Offices	3	2	. 0
	5.	Examination Room	3	0	0
	6.	Storage Room	3	l	0
	7.	Laundry	l	0	. 0
	8.	Swimming Pool	4	Ο,	0 -
C.	Lib	rary	35	0	13
	l.	Reading Room	14	0	· 7
	2.	Equipment	9	0	5
	3.	Workroom	4	0 ·	' l
	4•	Library Classroom	4	0	0
	5.	Conference Rooms	4	0	0
\mathtt{D}_{ullet}	Caf	eteria	27	0	7
	l.	Lunchroom	12	0	3
	2.	Kitchen	9	0	3
	3.	Auxiliary Rooms	6	0	l
E.	Stu	dy Halls	18	Q	5
VI.	ADM	INISTRATIVE ROOMS	92	33	9
A .	Adm	inistrative Offices	34.	25	7
	l.	General Office	9	7	3
	2.	Principal's Private Office	7	7	0
	3.	Reception Room	4	4	0
	4.	Supply Room	4	3	0

		Possible Points	<u>Rat</u> Morgan	ing For Senior High
	5. Bookroom	4	` 1	ב
	6. Vault	3	3	0
	7. Other Offices	3	0	3
B₊	Teachers' Rooms	15	0	22
	1. Workrooms	7	0	0
	2. Rest Rooms	8	0	2
C.	Community Rooms	8	0	0
D.	Student-Activity Rooms	10	0	0
E.	Clinics	10	0	<u> </u>
F.	Pupils' Rest Rooms	7	4	0
G.	Janitors' Rooms	8	4	0
VII.	SERVICE SYSTEMS	139	93	74
A.	Heating and Ventilating	25	13	6
₿₊	Artificial Lighting	17	9	Q
C.	Water Supply	24	16	10
	1. Purity of Water	8	8	8
	2. Plumbing	5	3	0
	3. Drinking Fountains	• 4	3	1
	4. Lavatories	4	2	1
	5. Showers	3	0	Q
D.	Toilets	19	15	19
	1. Locations	10	10	10

			Possible Points		<u>Senior High</u>
	2.	Rooms	9	5	3
E.	Fir	e-Protection Systems	23	16	15
	1.	Fire-Resistive Construction	8	6	.6
	2.	Fire-Protection Equipment	4	2	2
	3.	Elimination of Fire Hazards	6	4	4
	4.	Exits and Fire Escapes	5	4	3
F.	Ele	ctric Systems	16	16	16
	ļ.	Telephones	5	5	5
	2.	Radio	3	3	3
	3.	Clock and Program System	5	5	5
	4•	Motion-Picture Equipment	3	3	3
G.	Loc	kers	10	5	5
H.	Cle	aning Systems	5	3	3

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Classroom Washington Elementary School

TABLE V

Moehlman Score Card for School Buildings. (6:274-30 A.)

		Washington	Lincoln
SII	E Contraction of the second seco		
1.	Location: A site may be considered excel- lent if located so that its drawing power from all directions is equal.	Fair	Fair
2.	<u>Size</u> : The following site sizes are consi- dered excellent: elementary, 10-15 acres; secondary, 15-40 acres.	Poor	Poor
3.	Expansibility of Site: Expansibility may be considered excellent if enlargement is possible at reasonable expense and without creating hazards.	Poor	Poor
4•	<u>Disturbing Factors</u> : Noise. A site may be considered excellent if free from disturbing or interfering noise either by direct location size, or protective screening.	Good	Good
5•	Shape: In general, site shape is considered excellent if rectangular (2-3), (3-4) or square, and in a single unit.	Good	Good
6.	<u>Traffic Hazards</u> : Sites may be considered free from hazards (excellent) if all traffic areas around them are free from impediments (parking) or protected by traffic light signals, officers, underpass or overpass.	Fair	Poor
7.	<u>Playground</u> : A site may be considered excelled which provides a minimum of 200 square feet per child in working capacity of usable playground, exclusive of gardens and parked areas.	Poor	Poor

8. <u>Screening</u>: A site may be rated excellent which provides through both fencing and landscaping screening for the playground and noise areas effectively enough to reduce 7

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		Washing ton	Lincoln
	neighborhood nuisances and annoyances (conflicts) by deadening noise and elimi- nating trespass.	Good	Fair
9.	Landscaping: <u>General Effect</u> , A judgment on the effect of the planting of the school site as a whole to secure a subjective feeling of the extent to which the totality of building, site, screening, and planting improves the neighborhood.	Fair	Poor
10.		Fair	Fair
11.	Drainage:	Poor	Poor
THE	BUILDING		
1.	Age: Buildings over fifty years of age are generally rated "poor"; buildings over thirty years, "fair".	Good	Good
2.	Structural Safety (fire resistant): Fire resistant Class & buildings are considered excellent, Class B buildings, satisfactory; Classes C and D in urban districts, poor.	Fair	Fair
	<u>Plan Hazards</u> : The basic plan is considered good if there are no hazards to safety, such as blind coves, blind corridors, unguarded stairs, slippery stairs, abstructions to traffic. In general, open plans have a lower psychological hazard than closed plans.	Good	Good
4•	Expansibility: A building may be rated good with respect to expansibility when addi- tions can be made effectively and economically without destroying or wasting space. Open plans are expansible; closed plans are nonexpansible.	Fair	Fair
5.	Flexibility: A building may be rated good		

5. <u>Flexibility</u>: A building may be rated good with respect to flexibility if the basic plan is so designed that internal changes

	can be made efficiently and economically.	Washing ton	Lincoln
	Structurally, flexibility demands that all longitudinal walls shall be curtain and not bearing walls.	Fair	Fair
6.	Traffic Efficiency: Ratio between the in- structional area of a building and the area devoted to corridors, stairways, and entrance halls.	Fair	Good
7.	Instruction-Envelope-Efficiency: The product of the instruction-envelope-efficiency and the physical-envelope-efficiency.	Fair	Fair
8.	Use: Relation of membership and program to the working capacity of a building.	Good	Good
9•	Natural Lighting: A classroom may be con- sidered good which has twenty per cent natural lighting.	Good	Good
10.	Artificial Lighting: A classroom may be considered good which can produce from 10 to 15 foot candles at desk level without the natural lighting.	Good	Good
11.	Heating and Ventilating: A building may be rated good that can provide at least three air changes an hour and maintain a uniform classroom temperature of 68° to 72° with a relative humidity of 45° to 50° economically.	Poor	Good
12.	Sanitation: A building may be rated good if the sanitary facilities are adequate, well located, well ventilated, provide direct sunlight, and are free from undesirable edors.	Poor	Fair
13.	<u>Basement</u> : Basement rooms are considered poor as classrooms if they are more than three feet below finished grade; satisfactory if they are from three feet to grade level, and good if completely above grade level.	Good	Good

14. <u>Height</u>: The optimum height for secondary buildings is three stories, for elementary

		<u>Washington</u>	Lincoln
	buildings, two stories.	Good	Good
15.	<u>Operating Efficiency</u> : Rating to be made on results of factual evidence.	Good	Good
16.	<u>Unkeep Efficiency</u> : Rating to be made on results of factual evidence.	Fair	Goad
GEN	ERAL SUMMARY RATING:	Fair	Fair

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Classroom with Radio Broadcasting Booth in Rear, Senior High School

TABLE VI

Moehlman Score Card for School Buildings. (6:274-30 A.)

		Morgan	Senior High
SI	TE de la constante de la const		
1.	Location: A site may be considered excel- lent if located so that its drawing power from all directions is equal.	Fair	Fair
2.	<u>Size</u> : The following site sizes are con- sidered excellent: Elementary, 10-15 acres; secondary, 15-40 acres.	Poor	Poor
3.	Expansibility of Site: Expansibility may be considered excellent if enlargement is possible at reasonable expense and without creating hazards.	Poor	Poor
4•	Disturbing Factors: Noise. A site may be considered excellent if free from disturb- ing or interfering noise either by direct location size, or protective screening.	Good	Good
5.	Shape: In general, site shape is con- sidered excellent if rectangular (2-3), (3-4) or square, and in a single unit.	Fair	Fair
6.	Traffic Hazards: Sites may be considered free from hazards (excellent) if all traffic areas around them are free from impediments (parking) or protected by traffic light signals, officers, underpass or overpass.	Fair	Fair
7.	<u>Playground</u> : A site may be considered ex- cellent which provides a minimum of 200 square feet per child in working capacity of usable playground, exclusive of gardens and parked areas.	Poor	Poor

8. <u>Screening</u>: A site may be rated excellent which provides through both fencing and landscaping screening for the playground and noise areas

		Morgan	Senior High
	effectively enough to reduce neighborhood nuisances and annoyances (conflicts) by deadening noise and eliminating trespass.	Fair	Fair
9.	Landscaping: <u>General Effect</u> , A judgment on the effect of the planting of the school site as a whole to secure a subjective feeling of the extent to which the totality of building, site, screening, and planting improves the neighborhood.	Fair	Fair
10.	<u>Provisions for Parking</u> : A site may be rated good that provides sufficient area for the parking of normal automobile concentration caused by the presence of the school.	Poor	Poor
11.	Drainage:	Fair	Fair
THE	BUILDING		
l.	Age: Buildings over fifty years of age are generally rated "poor"; buildings over thirty years, "fair".	Good	Fair
2.	Structural Safety (fire resistant): Fire resistant Class A buildings are considered excellent, Class B.buildings, satisfactory; Classes C and D in urban districts, poor.	Fair	Fair
3.	<u>Plan Hazards</u> : The basic plan is considered good if there are no hazards to safety, such as blind coves, blind corridors, unguarded stairs, slippery stairs, obstructions to traffic. In general, open plans have a lower psychological hazard than closed plans.	Fair	Fair
	Expansibility: A building may be rated good with respect to expansibility when additions can be made effectively and economically without destroying or wasting space. Open plans are expansible; closed plans are nonexpansible.	Poor	Poor
	Flexibility: A building may be rated good	<u>- 001</u>	<u></u>

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		Morgan	Senior High
	with respect to flexibility if the basic plan is so designed that internal changes ca be made efficiently and economically. Structurally, flexibility demands that all longitudinal walls shall be curtain and not bearing walls.	n <u>Poor</u>	Poor
6.	Traffic Efficiency: Ratio between the in- structional area of a building and the area devoted to corridors, stairways, and entrance halls.	Fair	Poor
7.	Instruction-Envelope-Efficiency: The pro- duct of the instruction-envelope- efficiency and the physical-envelope- efficiency.	Fair	Fair
8.	<u>Use</u> : Relation of membership and program to the working capacity of a building.	Fair	Fair
9•	Natural Lighting: A classroom may be considered good which has twenty per cent natural lighting.	Good	Fair
10.	Artificial Lighting: A classroom may be considered good which can produce from 10 to 15 foot candles at desk level with- out the natural lighting.	Fair	Poor
11.	Heating and Ventilating: A building may be rated good that can provide at least three air changes an hour and maintain a uniform classroom temperature of 68° to 72° with a relative humidity of 45° to 50° economically.	Fair	Poor
12.	Sanitation: A building may be rated good if the sanitary facilities are adequate, well located, well ventilated, provide direct sunlight, and are free from un- desirable odors.	Fair	Poor
13.	<u>Basement</u> : Basement rooms are considered poor as classrooms if they are more than three feet below finished grade;		

		Morgan	Senior High
	satisfactory if they are from three feet to grade level, and good if completely above grade level.	Good	Poor
14.	<u>Height</u> : The optimum height for secondary buildings is three stories.	Good	Good
15.	Operating Efficiency: Rating to be made on results of factual evidence.	Fair	Fair
16.	Unkeep Efficiency: Rating to be made on results of factual evidence.	Fair	Poor
GEN	ERAL SUMMARY RATING:	Fair	Poor

Chapter III

RECOMMENDATIONS AND SUMMARY

Board of Education. It shall be the responsibility of the Board of Education to consider and approve the educational needs, standards, and plans as presented by the Superintendent and to make provision for the financing of the school plant program, according to law.

<u>Superintendent</u>. No single individual has the ability to visualize all the needs and services of a modern public school. It is, however, the business of the Superintendent of schools to see the entire school system in all its relationships and thus be able to advise and to guide the local Board of Education. The wise Superintendent will carefully study the individual qualifications of his staff members and certain leaders in the community, and utilize their special abilities in making a study of community needs. As the chief executive efficer of the board, he will serve as the director of the study, or he may, with the approval of the board, call in outside specialists. (2:13)

Buildings and Sites.

- A careful study should be made regarding the possibility of procuring a suitable site in the Northwest part of Ellensburg. The erection of an economical primary unit in this area would be highly desirable.
- 2. An additional school site in Southeast Ellensburg is recommended for future planning of secondary educational plant facilities.
- 3. The present school plants for the elementary and junior

high people are deemed adequate, upon the completion of the present contemplated plans.

- 4. The interior decoration, artificial lighting and plumbing facilities in the senior high school need immediate attention.
- 5. It is strongly recommended that careful and continuous educational planning be carried on during the next three years.

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- APPENDIX

ARTIFICIAL LIGHTING

The following figures show the amount of light at desk level, on a normal sunshine school day in an average classroom in Washington and Lincoln Elementary Schools. The study hall was selected for the Senior High School. The light was measured with the inside row of lights on in the elementary schools, but all of the lights were in use in the high school test. The 1949 recommended standard is from twenty to forty footcandles in ordinary classrooms and fifty or more in classrooms where seeing tasks are unusually difficult. (1:226).

Dr. Charles W. Saale has made many suggestions that should be taken into consideration before any major changes are decided upon to improve any present situation deemed necessary. (11:121-23)

