

1929

Report of the Belen, New Mexico School Survey

Vernon C. Tolle

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REPORT OF
THE BELEN, NEW MEXICO
SCHOOL SURVEY

B. F. Haight

Chairman of Committee on
Graduate Instruction

by

J. P. Henninga
Major Professor

LEARNING MATERIALS CENTER

COLLEGE OF EDUCATION
UNIVERSITY OF NEW MEXICO

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B. F. Haight
Minor Professor

A THESIS

Submitted for the Degree of
MASTER OF ARTS IN EDUCATION

University of New Mexico

1929

REPORT OF
THE BUREAU OF NEW YORK
JANUARY 1911

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PREFACE

The purpose of this thesis is to compare the Belen Schools in general with other schools of the State and with accepted educational principles and standards.

The author is especially indebted to Dr. S. P. Nan-ninga, for his advice and criticism; to Dr. B. F. Haught, for his assistance in the testing program; to Mr. J. L. Gell, Superintendent of Belen Schools, for his assistance in various ways; to the State Department of Education; to Mr. Clint Gray for the reproduction of Figure 10 in Chapter IV; to Miss Irene Quintana for her painstaking work in reading and typing the manuscript, and to Mrs. Tolle for her invaluable assistance in preparing the tables and graphs.

PREFACE

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CHAPTER I

BELEN AND ITS EDUCATIONAL PROBLEMS

Size, Location, and Industries

In order to more fully understand the task of a school system, it is necessary to understand some of the characteristics of the community and its people.

Belen is a municipality of 2,253¹ inhabitants, situated in the heart of the Rio Grande Valley, and is located approximately in the center of the State of New Mexico. Since it is centrally located, it is known as the "Hub City of New Mexico." It is located approximately 30 miles south of Albuquerque, the metropolis of the State. Belen is one of the most important division points of the Atchison, Topeka and Santa Fe Railroad System, and holds the record for tonnage and number of cars handled in the State. The Railroad employs an average of more than 350 men with a monthly payroll of approximately \$60,000. Approximately 2,000 cars move through Belen daily during the green fruit movement.

¹United States Census for 1920.

CHAPTER I

BELLEN AND ITS EDUCATIONAL PROBLEMS

Size, Location, and Industries

In order to more fully understand the task of a school system, it is necessary to understand some of the characteristics of the community and the people.

Belen is a municipality of 2,323 inhabitants, situated in the heart of the Rio Grande Valley, and is located approximately in the center of the State of New Mexico. It is centrally located, it is known as the "City of New Mexico." It is located approximately 50 miles south of Albuquerque, the metropolis of the State. Belen is one of the most important division points of the American Telephone and Santa Fe Railroad System, and holds the record for tonnage and number of cars handled in the State. The Railroad employs an average of more than 250 men with an annual payroll of approximately \$50,000. Approximately 2,000 cars move through Belen daily during the green chile season.

Other than the railroad industry, farming, truck gardening, fruit raising, dairying, cattle and sheep raising, are the industries of the vicinity of Belen. The reclamation project, now under way, bids fair to make the valley in which Belen is located a still more important agricultural district.

It is quite evident that Belen should emphasize the farming industry in the curriculum of the schools.

Social Organizations

Belen has a Roman Catholic Church, a Federated Church composed of practically all denominations, an Episcopal Church, and a Baptist Church. The Catholic Church has the largest number of members, approximately 1,500. Other organizations include the Masonic Lodge, Order of the Eastern Star, Hispano-Americano Society, Knights of Pythias, Knights of Columbus, Maccabees, Women's Club, American Legion Post, and a Motion Picture Show.

Location of School Buildings

Figure 1¹ shows the location of the various school buildings of Belen. Specific data on the racial composition and occupations of people of each attendance district are not available. However, the superintendent of schools

¹Thanks are due the Belen Water and Light Company for this map of Belen.

Other than the railroad industry, farming, stock raising, fruit raising, battery, cattle and sheep raising, are the industries of the vicinity of Belen. The reclamation project, now under way, bids fair to make the valley in which Belen is located a still more important agricultural district.

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Location of School Buildings

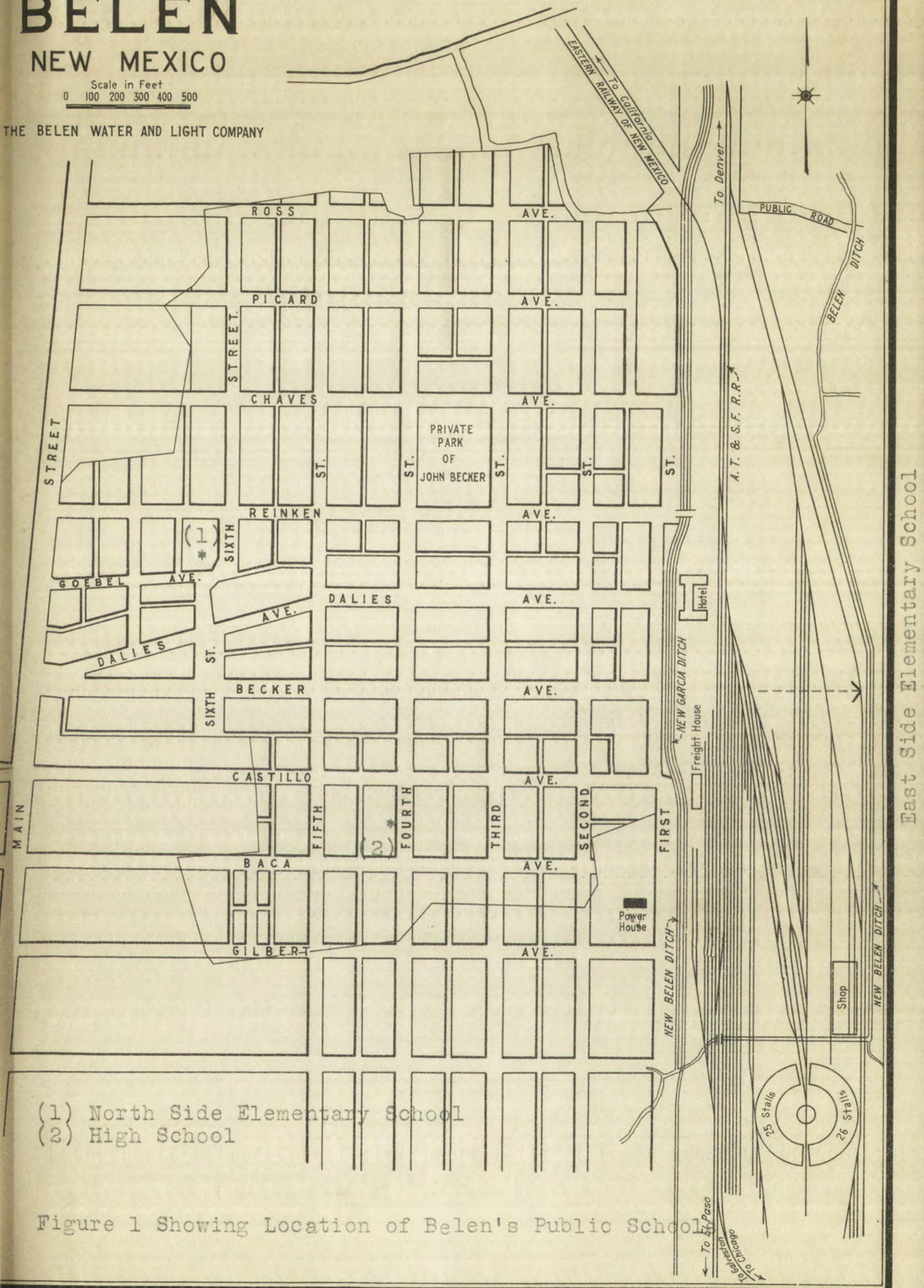
Figure 1 shows the location of the various school buildings at Belen. Specific data on the racial composition and occupations of people of each attendance district are not available. However, the superintendent of schools informs me that the Belen Water and Light Company for this map of Belen.

BELEN

NEW MEXICO

Scale in Feet
0 100 200 300 400 500

THE BELEN WATER AND LIGHT COMPANY



estimates that practically all patrons of the East Side School are Spanish-American, while those of the North Side are approximately 60% Spanish-American, and 40% Anglo-American. The superintendent's estimate on the racial composition of the Belen School district as a whole is approximately 70% Spanish-American, and 30% Anglo-American. The main occupation of the East Side patrons is farming. The North Side patrons are largely farmers and railroad workers. The High School enrollment is made up of pupils from both the East Side and North Side attendance districts and from the surrounding rural communities.

Growth of Belen

Table I gives a comparison of the relative growth in population of the United States and New Mexico over a period of 50 years, and the same data for Belen over a period of 30 years. The figures for Belen are not available for 1880 and 1890. It will be observed that the rate of growth of New Mexico equals or exceeds that of the United States in every decade except that of 1910 to 1920. The rate of growth of Belen for the past 20 years has exceeded by far the rate of growth of both New Mexico and the United States.

estimates that approximately 60% of the population of the East Side School are English-American, while approximately 40% are Anglo-American. The superintendent's estimate of the racial composition of the East Side School district as a whole is approximately 70% Anglo-American and 30% Anglo-American. The main occupation of the East Side district is farming. The North Side district are largely farmers and tailors workers. The High School enrollment is made up of pupils from both the East Side and North Side attendance districts and from the surrounding rural communities.

Table of Data

Table I gives a comparison of the relative growth in population of the United States and New Mexico over a period of 50 years, and the rate of growth for the period of 30 years. The figures for 1930 are 100% and 100% for 1880 and 1890. It will be observed that the rate of growth of New Mexico equals or exceeds that of the United States in every decade except that of 1910 to 1920. The rate of growth of 1920 for the next 50 years has exceeded by far the rate of growth of both 1880 and 1890 for the United States.

Table I

Belen's Rate of Increase in Population
as Compared with that of New Mexico
and that of the United States
(U. S. Census)

Census	Popula- tion of State	Popula- tion of Belen	Percent Increase over Preceding Census		
			U.S.	N.Mex.	Belen
1920	360,350	2,253	14.9	10.1	300
1910	327,301	1,733	21	67.6	157.5
1900	195,310	673	20.7	21.9	-1.7
1890	160,282	685	25.5	34.1	
1880	119,565	not avail- able	30.1	30.1	

Table II shows the per cent of increase in popula-
tion of 16 New Mexico towns. These towns are arranged
with the one making the greatest per cent of increase
between 1910-1920 first. Belen occupies the fifth posi-
tion.

Since Belen is a growing town, her expenditures for
education will be constantly on the increase.

Table I

Bellevue's Rate of Increase in Population
as Compared with that of New Mexico
and that of the United States
(U. S. Census)

Year	Bellevue	New Mexico	U. S.
1920	360,323	14.8	16.1
1910	327,301	11.75	17.8
1900	122,310	6.7	11.9
1890	120,382	3.8	11.1
1880	119,665	not avail.	10.1

Table II shows the per cent of increase in population of 16 New Mexico towns. These towns are compared with the one having the greatest per cent of increase between 1810-1890. Since Bellevue is the fifth most

tion. Since Bellevue is a growing town, but somewhat less than education will be commensurate on the increase.

Table II

Size and Rate of Growth of 16 Towns of New Mexico
(U. S. Census of 1920)

Town	Population			Percent Increase	
	1910	1920	1928 ¹	1910-20	1920-28
1. Clayton	970	2,157	3,000	122.3	39.
2. Deming	1,864	3,212	3,500	72.3	9.
3. Springer	550	915	1,000	66.3	9.4
4. Magdalena	1,226	1,867	2,500	52.2	33.8
5. BELEN	1,733	2,253	2,600	30.	15.4
6. Tucumcari	2,526	3,117	4,000	23.2	31.2
7. Raton	4,539	5,544	7,000	22.1	26.2
8. Alamogordo	1,948	2,363	2,950	21.3	24.8
9. Tularosa	1,022	1,096	1,400	7.2	36.8
10. Santa Rosa	1,031	1,093	1,000	6.	-8.5
11. Lordsburg	1,323	1,325	1,600	.1	20.7
12. Farmington	785	728	728	-7.2	0
13. Portales	1,292	1,154	3,000	-10.6	159.
14. Socorro	1,560	1,256	2,000	-19.4	59.2
15. Carlsbad	2,205	1,736	3,000	-21.2	72.8
16. Artesia	1,883	1,115	2,000	-40.7	88.3

¹Information taken from "New Mexico State Business Directory 1928" published by The Gazetteer Publishing and Printing Co., Denver, Colorado.

Illiteracy

Illiteracy, as defined by the Census Bureau, signifies inability to write in any language, not necessarily English, regardless of ability to read.

Table III gives the percentage of illiteracy in the United States as a whole, Mountain States, Pacific States, and New Mexico. The percentage of illiteracy in New Mexico

Table 11

Size and Rate of Growth of Towns of the United States, 1920-1930

Rank	Town	Population			Growth		
		1920	1930	1940	1920-30	1930-40	1920-40
1	Clayton	370	7,187	2,101	1,000	1,000	1,000
2	Deering	1,000	3,318	1,000	1,000	1,000	1,000
3	Butte	300	1,000	1,000	1,000	1,000	1,000
4	Madison	1,000	1,000	1,000	1,000	1,000	1,000
5	Helena	1,000	1,000	1,000	1,000	1,000	1,000
6	Trompsburg	1,000	1,000	1,000	1,000	1,000	1,000
7	Raton	1,000	1,000	1,000	1,000	1,000	1,000
8	Alamogordo	1,000	1,000	1,000	1,000	1,000	1,000
9	Tulsa	1,000	1,000	1,000	1,000	1,000	1,000
10	San Antonio	1,000	1,000	1,000	1,000	1,000	1,000
11	Lubbock	1,000	1,000	1,000	1,000	1,000	1,000
12	Terrell	1,000	1,000	1,000	1,000	1,000	1,000
13	Porter	1,000	1,000	1,000	1,000	1,000	1,000
14	Scott	1,000	1,000	1,000	1,000	1,000	1,000
15	Carlsbad	1,000	1,000	1,000	1,000	1,000	1,000
16	Artes	1,000	1,000	1,000	1,000	1,000	1,000

Information taken from "New Mexico State Yearbook of Statistics, 1938" published by the State of New Mexico, Santa Fe, New Mexico, 1938.

Table 12

Illinois, as defined by the Census Bureau, 1920-1930

Illinois, as defined by the Census Bureau, 1920-1930

Table 13 gives the percentage of Illinois 1920-1930

United States as a whole, 1920-1930, 1930-1940, 1920-1940

and New Mexico. The percentage of Illinois 1920-1930

Table III

Percentage of Illiteracy in the West
(All persons 10 years old or older - Census of 1920)

Section	: Percentage of Population : Which is Illiterate.
United States	: 6.
Mountain States	: 5.2
Pacific States	: 2.7
New Mexico	: 15.6

far exceeds that of the United States and of the two sections mentioned. Figures on illiteracy are not available for Belen, but it would seem safe to assume that she has at least some responsibility for doing away with illiteracy in the State. Such a condition as exists in New Mexico calls loudly for night schools, since most illiteracy is found among adults.

Wealth

It has been pointed out that Belen is a growing town. Its chief attraction at present is not wholly financial. It is a health center and its mild climate, with abundance of sunshine attracts many people. Its wealth increase will depend in large degree upon the development of the resources of the State and the Belen vicinity. Table IV shows that at present Belen ranks last in comparison with 8 other New Mexico towns in regard to the assessed wealth per capita

Table IV

Assessed Wealth and Real Wealth Per Capita
Population 9 New Mexico Towns

Town	Assessed Wealth	Basis of: Assessed: Wealth ¹	Real Wealth
1. Artesia	\$ 1,934.64	40%	\$ 4,836.59
2. Springer	1,370.03	50	2,740.06
3. Carlsbad	1,364.43	40	3,410.82
4. Deming	1,231.87	45	2,737.48
5. Raton	955.70	50	1,911.40
6. Tularosa	842.15	45	1,871.44
7. Clayton	734.30	41	1,791.09
8. Alamogordo	619.55	45	1,376.76
9. BELEN	537.06	47	1,236.66

population.

In view of the above shown facts, one would naturally expect Belen to levy a relatively high tax rate if the town is to have as good schools as are maintained by other towns.

Belen's Income

Belen receives her income from a general property tax, occupation license tax, and fines.

The tax rate of Belen School District is \$55.50 on each \$1,000 of assessed wealth. This would at first sight seem to be a rather high tax rate, but due to the fact that valuations are low, the rate on the real wealth of

¹Information taken from "An Estimation of True Valuation for Various Counties of New Mexico--A Project in Advanced Economics," by Charles E. Brown.

Table 1
Assessed Wealth and Real Estate Taxes
Population of Various Towns

Town	Assessed Wealth	Real Estate Taxes
1. Arverde	1,334.44	104.00
2. Springer	1,370.00	50.00
3. Oatland	1,324.44	40.00
4. Daring	1,237.27	40.00
5. Heston	983.33	30.00
6. Tolson	843.12	25.00
7. Clayton	734.30	21.00
8. Alamosa	619.65	15.00
9. Belen	527.08	10.00

Population.

In view of the above shown facts, one would naturally expect Belen to levy a relatively high tax rate. It was found that the town is to have as good schools as are maintained in other towns.

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Belen receives her income from a general property tax, occupation license tax, and fines.

The tax rate of Belen School District is \$5.50 on each \$1,000 of assessed wealth. This would at first sight seem to be a rather high tax rate, but one who knows of that valuation system, the rate on the total wealth of that valuation system is \$5.50 on \$1,000 of assessed wealth. Information taken from "An Analysis of Tax Valuation for Various Counties of New Mexico--A Report to the Legislature," by Charles E. Brown.

the district would be much lower than that for the assessed wealth. Computed from the rate for Belen given in the "Basis of Assessed Wealth" column of Table IV, the tax rate on each \$1,000 of real wealth in the district is \$26.08.

Distribution of Belen's Expenditures

Figure 2 gives the relative distribution of Belen's revenues for the main items of expense. It will be seen that 62.39 cents out of each dollar goes to maintain the schools, 8.37 cents for lights, 9.66 for street maintenance, 7.73 for police protection, 4.87 for administration, and 6.98 for miscellaneous.

It would seem that Belen spends her income wisely. In the percentage spent for education, she would rank high with cities of the United States. This is as it should be.

the district would be much lower than in the
wealth. Compared from the rate for other cities in the
"Basis of Assessed Wealth" column of Table IV, the rate
rate on each \$1,000 of real wealth in the district is
\$26.08.

Distribution of Public Expenditures

Figure 2 gives the relative distribution of public
revenues for the main items of expense. It will be seen
that 82.39 cents out of each dollar goes to maintain the
schools, 8.57 cents for lights, 5.56 for street main-
tenance, 7.73 for police protection, 4.37 for education,
and 8.26 for miscellaneous.

It would seem that Helen spends her income wisely in
the percentage spent for education, she would have much
with cities of the United States. This is as it should be.

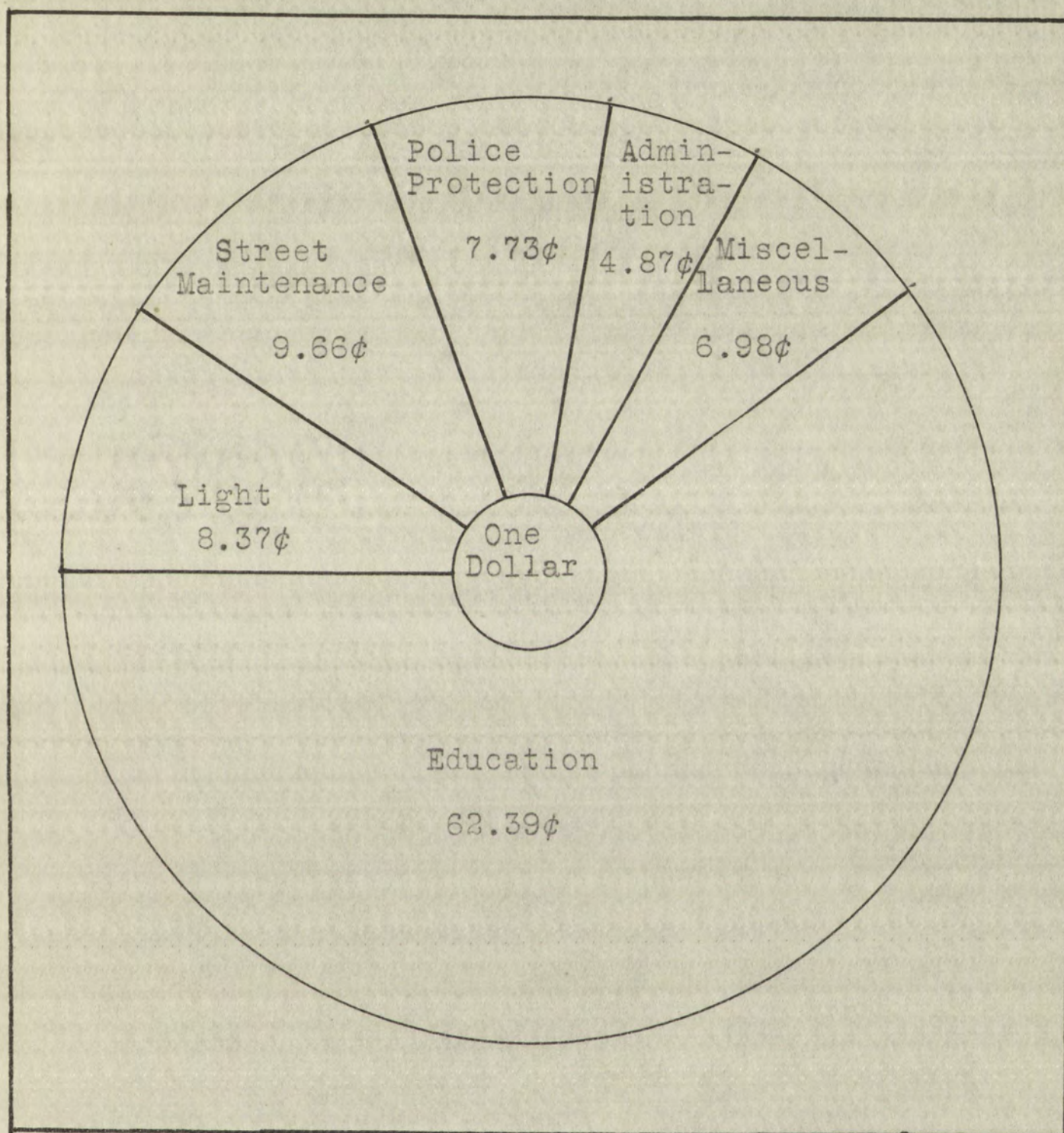


Figure 2. How Belen Spends Its Dollar.

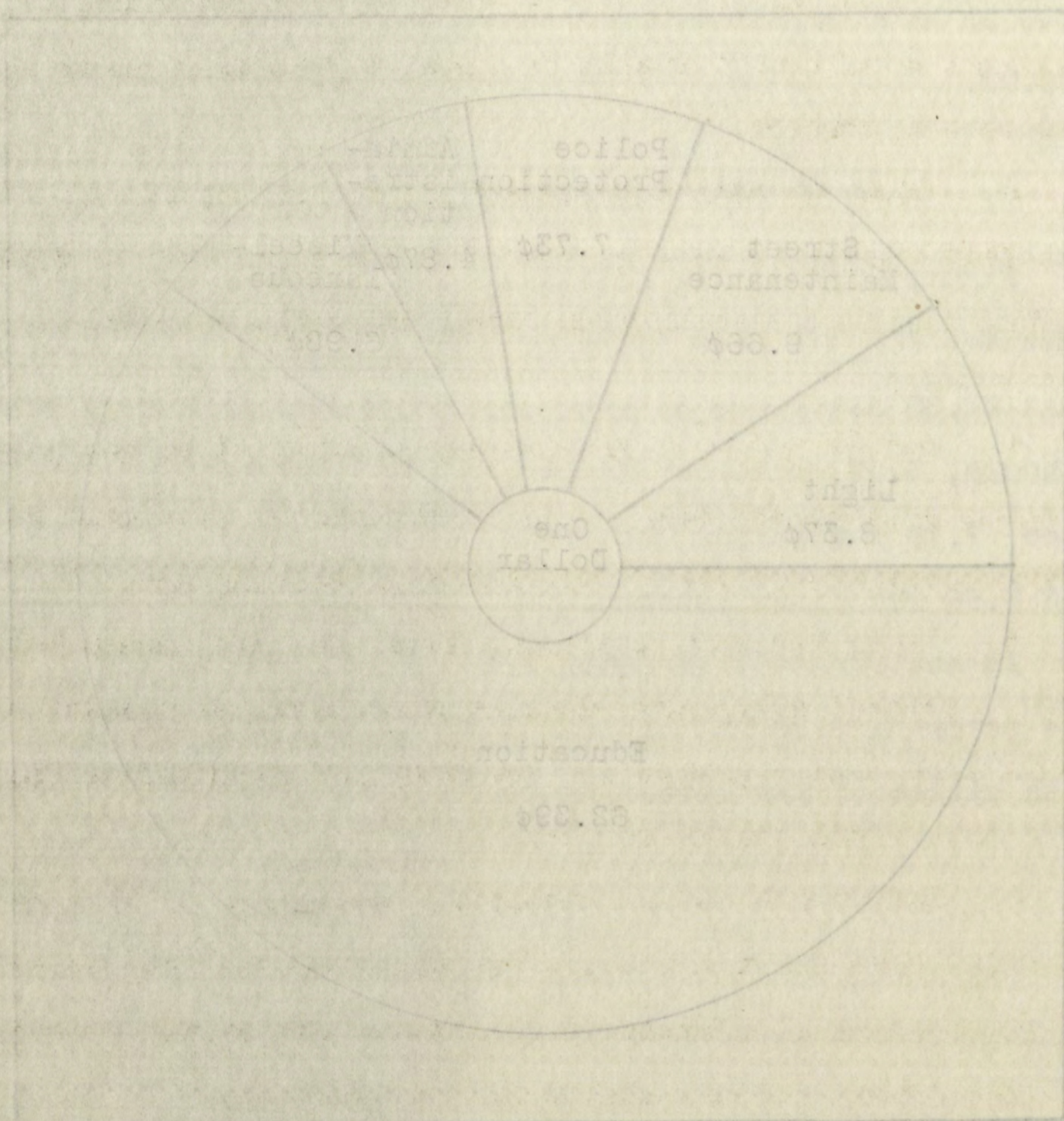


Figure 2. How Belen Spends Its Dollar.

Summary and Conclusions

1. Since the principal occupations of the people of Belen are farming and railroad work, agricultural and mechanical departments should be given a prominent place in the school program.

2. Belen is well represented in social organizations, but there seems to be a lack of organizations such as Mothers' Clubs, Patrons' Associations, etc., directly connected with the schools.

3. Due to the fact that approximately 70% of the population is Spanish-American, much stress should be placed on the acquisition of ability to use the English language.

4. Since Belen is a growing town, she must erect buildings, purchase equipment, develop classroom and special room facilities, and organize her teaching and supervision forces with this rapid growth in mind.

5. New Mexico has an excessive percentage of illiterates. In order that Belen discharge her share of the responsibility of eradicating illiteracy in the State, she should organize a night school for the adults of the community.

6. Since Belen's per capita wealth is small in comparison with other New Mexico towns, it is necessary that she levy a comparatively high tax rate if she maintains as good schools as the children of Belen should have.

7. Belen spends a relatively high proportion of its

1. Since the industrial revolution in the United States

Belien are learning and railroad work, and the industrial
chemical departments should be given a prominent place in
the school program.

2. Belien is well represented in the school curriculum.

but there seems to be a lack of organization and coordination
of the various departments, etc., directed towards the
the schools.

3. Due to the fact that a large percentage of the population
is Spanish-American, and there should be placed on the
acquisition of English as the principal objective.

4. Since Belien is a growing town, and has great industrial
interests, purchase equipment, develop the school and hospital
facilities, and organize for teaching and research in
with this rapid growth in mind.

5. New Mexico has an extensive occurrence of illiterates.
In order that Belien should not share of this responsibility
of eradicating illiteracy in the state, the school should
a night school for the adults of the community.

6. Since Belien's population is small in comparison
with other New Mexico towns, it is necessary that the
a comparatively high tax rate if the situation is poor
schools as the children of Belien should have.

7. Belien needs a relatively high proportion of the

income on education. This shows good management and indicates that the people of the district want and will support a strong constructive educational policy.

income on education. This shows how important it is to
state that the people of the district want and will support
a strong constructive educational policy.

CHAPTER II

ORGANIZATION AND ADMINISTRATION

Legal Status of the District

The Belen Municipal School District was organized July 1, 1913. The organization was effected in accordance with the State School Laws. Sections 804 and 906 give boards of education of municipal districts the power to supervise and control the schools of its district, sites, buildings, equipment and funds, the power to employ and discharge teachers and other school employees, power to employ a superintendent, and power to delegate to the superintendent the responsibility of employing and discharging all teachers and school employees. These powers are given by the State of New Mexico. Therefore, the Board of Education is not only responsible for the faithful performance of its duties to the people of the Belen District, but is responsible to the State as a whole. Figure 3 shows the Belen Municipal School District.

CHAPTER II

ORGANIZATION AND ADMINISTRATION

Local Status of the District

The Helen Municipal School District was organized July 1, 1913. The organization was effected in accordance with the State School Law. Sections 204 and 205 give boards of education of municipal districts the power to supervise and control the schools of its district, direct buildings, equipment and funds, the power to employ and discharge teachers and other school employees, and to employ a superintendent, and power to delegate to the superintendent the responsibility of employing and discharging all teachers and school employees. These powers are given by the State of New Mexico. Therefore, the Board of Education is not only responsible for the efficient performance of its duties to the people of the Helen District, but is responsible to the State as a whole. Figure 1 shows the Helen Municipal School District.

Township No. 5, Range No. 1 and 2 East
County Valencia, New Mexico

1	6	5	4	3	2	1	6	5
12	7	8	9	10	11	12	7	8
13	18	17	16	15	14	13	18	17
24	19	20	21	22	23	24	19	20

Belen Grant

Figure 3. Map Showing Belen Municipal School District.

The Administrative Organization

As has been already stated, the State of New Mexico has devised the machinery for directing the schools of Belen. The first in authority is the people of the State acting through their constitution and their legislature. The School Code provides for a system of schools to be supervised by a state board of education of seven members, five appointive and two ex-officio. The five members are appointed by the Governor and the State Superintendent and Governor serve ex-officio. This board, through the State Superintendent, supervises the schools of the State.

The Belen schools are managed by a board of five members elected at large by the people, each for a term of four years.

Township No. 2, Range No. 1 and 2 East
County Kansas, New Mexico

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Bellevue Grant

Figure 3. Map Showing Bellevue Municipal School District.

The Administrative Organization

As has been already stated, the State of New Mexico has devised the machinery for directing the schools of Bellevue. The first in authority is the people of the State acting through their constitution and their legislature. The School Code provides for a system of schools to be supervised by a state board of education of seven members, five appointive and two ex-officio. The five members are appointed by the Governor and the State Superintendent and Governor serve ex-officio. This board, through the State Superintendent, supervises the schools of the State. The Bellevue schools are managed by a board of five members elected at large by the people, each for a term of four years.

Figure 4 shows the main features of the organization, and indicates the various lines of authority approximately as they operate in the system.

It will be seen from Figure 4 that Belen has no standing committees, a condition that is to be highly praised. The board acts as a whole on the various matters that come before it. It is sometimes necessary and advisable that special committees be appointed for examining situations, assisting in large business contracts, gathering facts, and performing other duties of investigation, but never should questions of any importance be decided by any less than the entire board.

Supervision is carried on by the superintendent, the full time principal of the North Side Elementary School, and the music, physical education, and health directors. The principal of East Side Elementary School teaches full time. The superintendent also acts as principal of the high school. Since it is an accepted standard that a principal should give 50% or more of his time to supervision, it would seem that the superintendent could not possibly have enough time for adequate supervision, since his duties as superintendent would call for a large part of his time. The addition of a principal to the high school would give the superintendent a greater amount of time for the discharge of his duties.

Figure 4 shows the main features of the system.

and indicates the various lines of authority as they operate in the system.

It will be seen from Figure 4 that the system is

ing committees, a condition that is to be strictly

The board acts as a whole on the various questions

before it. It is sometimes necessary to refer

special committees as required for examining

existing in large business concerns, particularly

performing other duties of investigation, but never

questions of any importance be decided by any less than the

entire board.

Supervision is carried on by the superintendent, the

full time principal of the North Side Elementary School,

and the music, physical education, and health directors.

The principal of East Side Elementary School, and the

time. The superintendent also acts as principal of the

high school. Since it is an accepted statement that a

principal should give 60% or more of his time to super-

vision, it would seem that the superintendent could not

possibly have enough time for adequate supervision, since

his duties as superintendent would call for a large

of his time. The addition of a principal to the staff

would give the superintendent a greater amount of time for

the discharge of his duties.

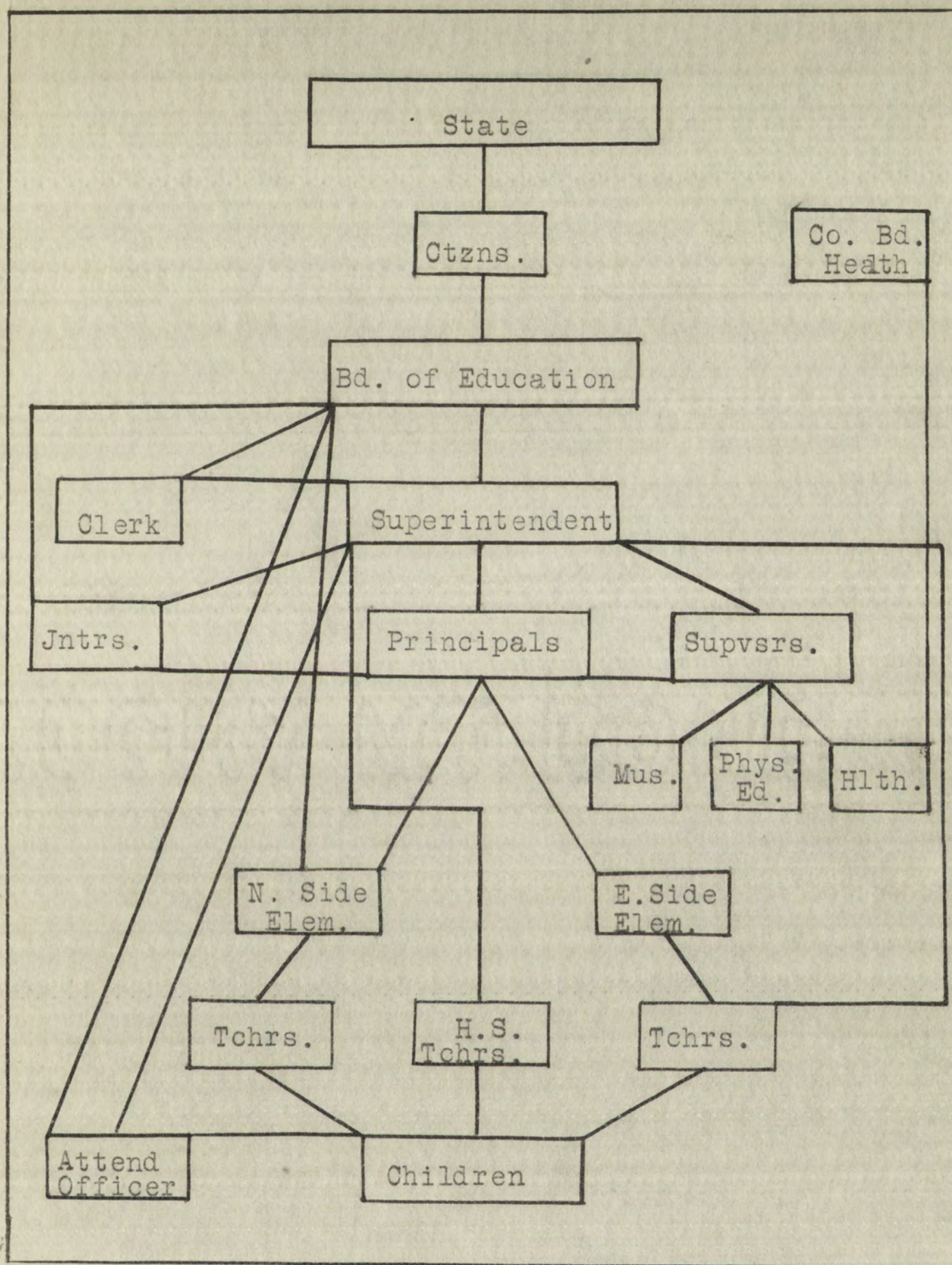


Figure 4. Present Plan of Administrative Organization of the Belen Schools.

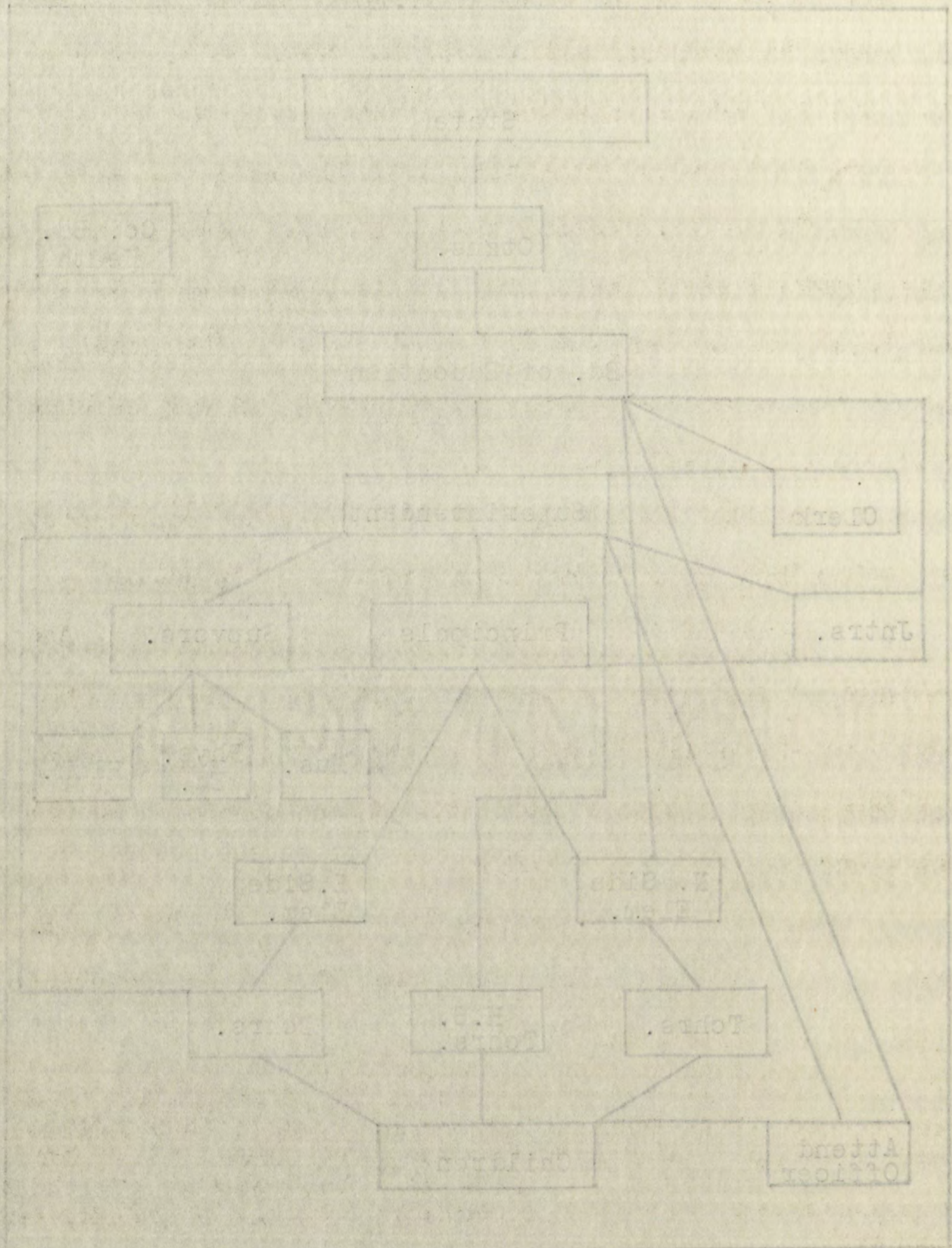


Figure 1. Present Plan of Administrative Organization

The Belen Board of Education gives the superintendent the power to nominate all teachers. This is as it should be. But the board reserves the right to hire janitors, a practice that is not in accord with the best practice over the country at the present time. It will also be observed from Figure 4 that there are two lines of authority from the Principal of North Side School, one to the board, and one to the superintendent. This, again, is out of harmony with the best practice.

The function of a board of education is legislative. The prime duty of a board of education is to select a chief executive. Having selected a superintendent, the function of the board is to pass upon the policies submitted by the superintendent. When these policies are ratified, they serve to guide the superintendent in his administration of the schools.

In the report of the Boise School Survey, Dr. J. B. Sears gives the following functions of a superintendent: as of first importance:

"1. Entire control of all teachers, principals, supervisors, and other special supervisors (as truant officer, clerical help, building inspector, librarian, etc.) having to do with matters of instruction. This should mean power of appointment, transfer, promotion in rank or salary and dismissal.

"2. The selection of textbooks and supplies. Decisions in all such matters will not be reached without the help of teachers and supervisors having special knowledge of the needs of the schools.

The Board of Education... the power to nominate all teachers... be. But the board reserves the right to hire teachers... practice that is not in accord with the... the country at the present time... from figures & that there are two lines of authority... the Principal of North Side School... one to the superintendent... with the best practice.

The function of a board of education is to... The prime duty of a board of education is to select a... chief executive. Having selected a superintendent, the... function of the board is to guide him in the... mitted by the superintendent. When these policies are... tified, they serve to guide the superintendent in the... administration of the schools.

In the report of the Board of Education... Sears gives the following functions of a board of education... as of first importance:

"1. Active control of all teachers, principals, visitors, and other special supervisors... clerical help, building inspection, firemen, etc. having to do with matters of instruction. This should be done by appointment, transfer, promotion in rank or salary and dismissal.

"2. The selection of textbooks and supplies. In all such matters will not be reached without the aid of teachers and supervisors having special knowledge of the needs of the schools.

"3. The development and revision of courses of study. Here again for several reasons the intimate knowledge of teachers and supervisors will be utilized.

"4. Preparation of the annual budget estimates to be passed upon by the board.

"5. Keep the public and the board fully informed. Brief but carefully prepared reports of the conditions and needs of the schools should be laid before the board at each meeting, to the end that the board may legislate promptly and intelligently and keep to a unified school policy.

"6. Furnish professional leadership and stimulate industry and enthusiasm among all teachers and officers, keeping the essential aims of education before his staff of assistants."

These responsibilities added to the necessary classroom supervisory duties of the superintendent in a school the size of Belen, show plainly that the superintendent should be relieved of some of the routine work of the high school principalship. Furthermore, the superintendent should be supplied with a secretary. It is too expensive a program for the district to use a great deal of the time of the highest-paid official in performing clerical tasks that could well be taken care of by a subordinate at a great saving in cost.

In the light of the best practice in school administration throughout the country, the plan of organization shown in Figure 5 is suggested for the schools of Belen.

"3. The development and testing of a new
Here again the several reasons for the
teachers and supervisors will be unified.

"4. Preparation of the annual budget
passed upon by the board.

"5. Keep the public and the board fully informed
but carefully reserve respect of the confidential and
of the schools should be laid before the board at each
meeting, so that the board may have the opportunity
and intelligently and keep in a unified school policy.

"6. Furnish professional leadership and stimulate
try and enthusiasm among all teachers and officials, keeping
the essential aims of education before his staff of assist-
ants."

These responsibilities added to the necessary ones-

from supervisory duties of the superintendent in a school

the case of Helen, show clearly that the superintendent

should be relieved of some of the routine work of the high

school principals. Furthermore, the superintendent

should be supplied with a secretary. It is the necessary

a program for the district to use a great deal of the time

of the highest-grade officials in performing clerical tasks

that could well be taken care of by a subordinate as a

great saving in cost.

In the light of the best practice in school adminis-

tration throughout the country, the plan of organization

shown in Figure 3 is suggested for the schools of Helen.

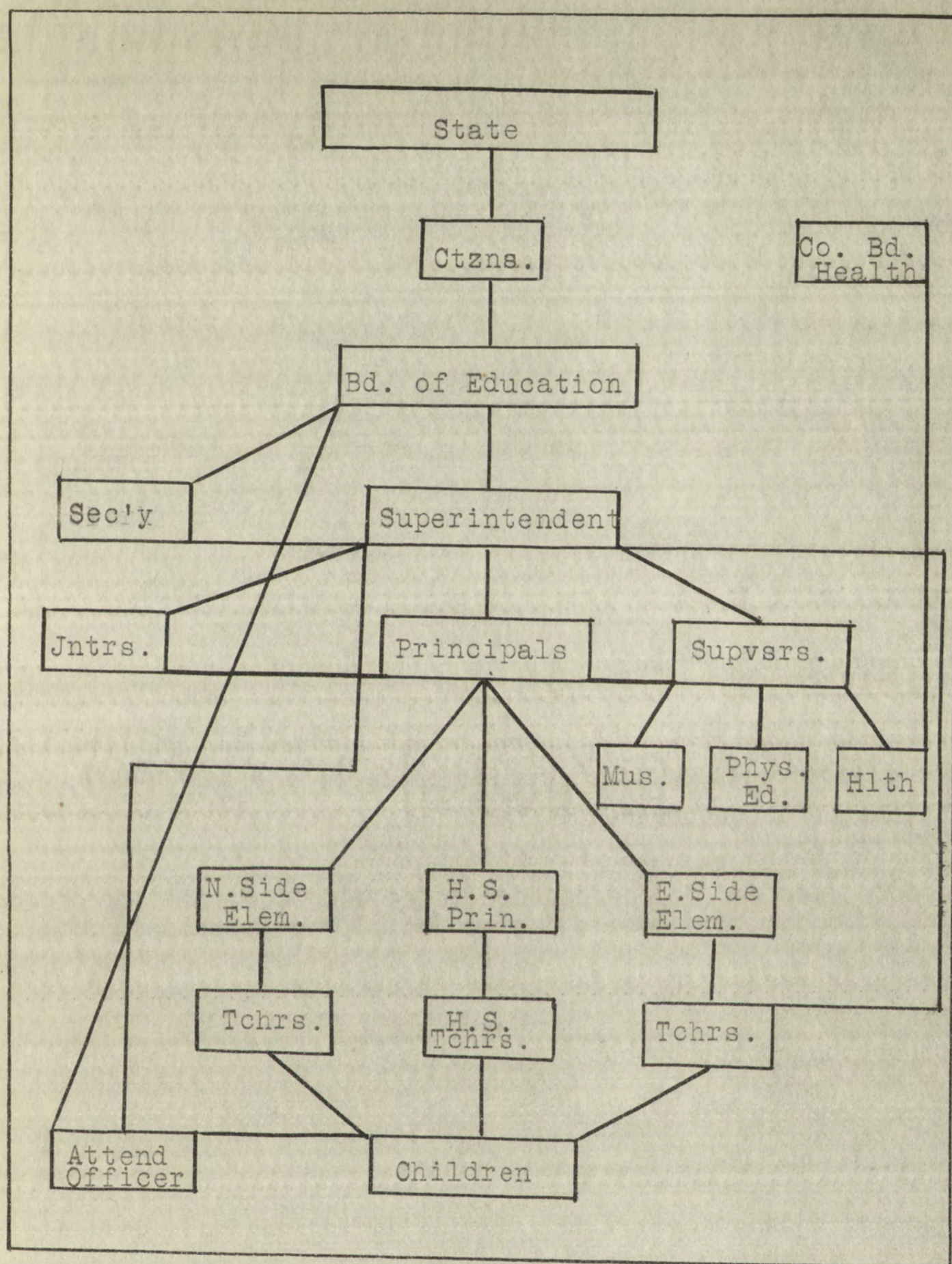


Figure 5.4. Suggested Plan of Administrative Organization of the Belen School.

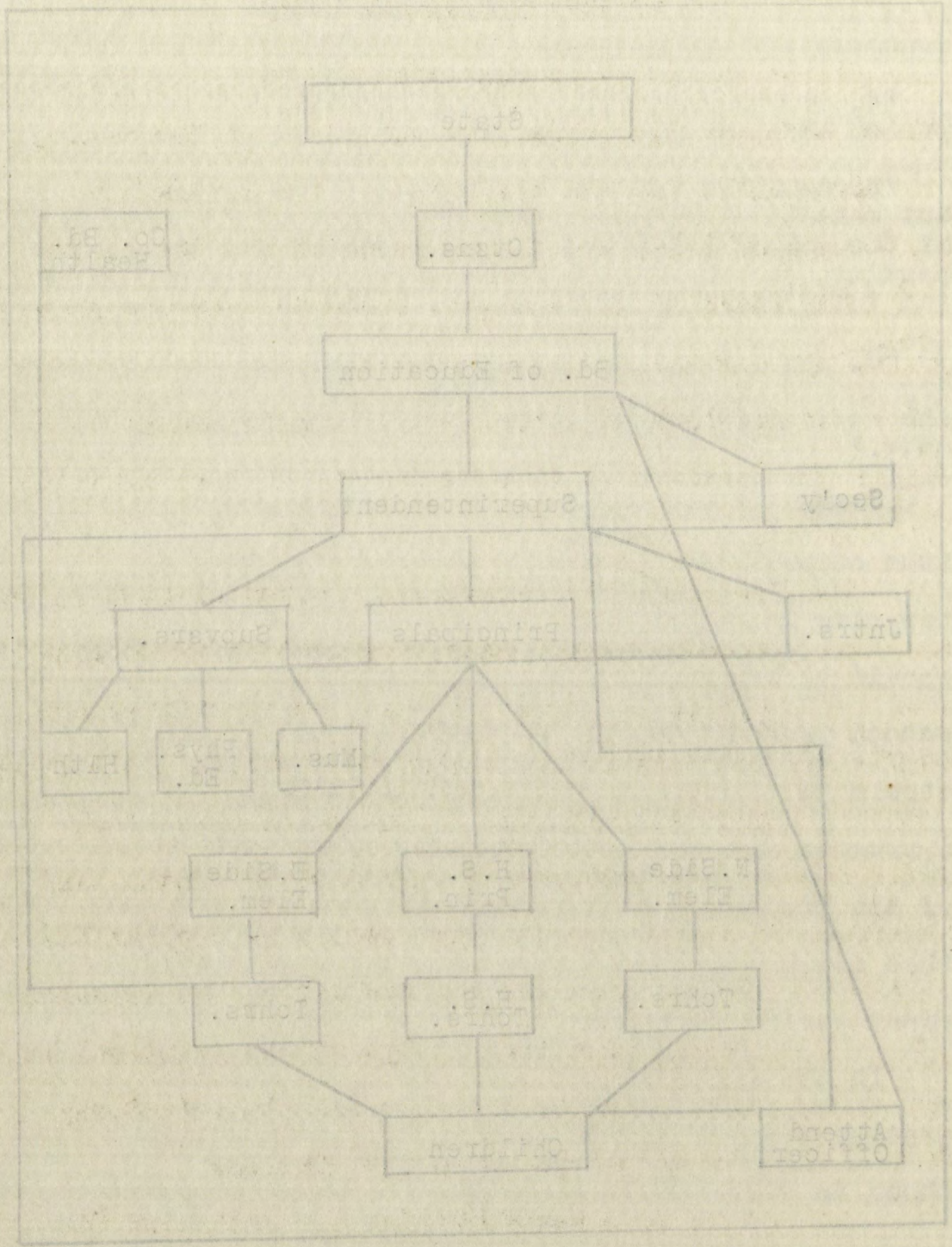


Figure 5. Suggested Plan of Administrative Organization of the State of Education.

Summary and Conclusions

1. Since the Board of Education of the Belen Municipal District receives its power from the State of New Mexico, it is responsible for the discharge of its duties both to the citizens of Belen and the citizens of the State.

2. The board is to be highly commended for the absence of committee control.

3. The practice of allowing the superintendent to nominate all teachers is in accord with the best educational principles.

4. The fact that the janitors are hired without having first been nominated by the superintendent is to be condemned. It is just as important that the superintendent nominate the janitors as it is that he nominate the teachers.

5. As suggested in Figure 5, the principals of all schools should be subordinate to the superintendent, and responsible to him, and he in turn should be responsible to the Board of Education for the conduct of the schools.

6. It is recommended that a high school principal be added to the staff in order that the superintendent may have more time to discharge his proper duties.

7. The hiring of a secretary for the office of the superintendent would be an economical procedure. The secretary under the supervision of the superintendent could also do the clerical work for the Board of Education.

QUALITY AND CONTROL

1. Since the Board of Education of the District of Columbia receives the power from the State of New Mexico, it is responsible for the discharge of its duties in the citizenship of Salem and the citizens of the State.
2. The Board is to be mainly concerned for the quality of committee control.
3. The practice of allowing the superintendent to nominate all teachers is in accord with the best educational principles.
4. The fact that the janitors are hired without being first been nominated by the superintendent is to be condemned. It is just as important that the superintendent nominate the janitors as it is that he nominate the teachers.
5. As suggested in Figure 2, the chairman of the schools should be authorized to the superintendent, and responsible to him, and he in turn should be responsible to the Board of Education for the conduct of the schools.
6. It is recommended that a high school principal be added to the staff in order that the quality and quantity have more time to discharge his proper duties.
7. The hiring of a secretary for the office of the superintendent would be an economical procedure. The secretary under the supervision of the superintendent should also do the clerical work for the superintendent.

CHAPTER III

THE TEACHING STAFF

Size of Staff

Belen is employing at present eighteen elementary teachers, seven high school teachers, one music director, one physical education director, one health director, one supervising elementary principal, one teaching elementary principal, and one superintendent.

Belen ranks second in number of pupils in average daily attendance per teacher in comparison with twelve other New Mexico towns. The number of pupils per teacher for Belen is 23, while for the average of the group compared, the number is 26. It would seem that the Belen teaching force is adequate.

CHAPTER III

THE TEACHING STAFF

Size of Staff

Bellevue is employing at present eighteen elementary teachers, seven high school teachers, one music director, one physical education director, one health director, one supervising elementary principal, one teaching assistant principal, and one superintendent.

Bellevue ranks second in number of pupils in average daily attendance per teacher in comparison with twelve other New Mexico towns. The number of pupils per teacher at Bellevue is 35, while for the average of the group compared, the number is 38. It would seem that the Bellevue teaching force is adequate.

Table V

Number of Pupils in Average Daily Attendance per
Teacher and per Principal in 13 New Mexico Schools¹

Town	Pupils Per	
	Teacher	Principal
1. Santa Rosa	22	No Principal
2. BELEN	23	653
3. Springer	23	325
4. Carlsbad	23	192
5. Raton	24	615
6. Tularosa	24	229
7. Artesia	24	319
8. Clayton	26	251
9. Alamogordo	26	732
10. Tucumcari	27	268
11. Lordsburg	29	No Principal
12. Farmington	33	No Principal
13. Deming	34	980
Average	26	456

¹Computed from the annual reports of the superintendents of the following towns to the State Department of Education, 1927-1928.

Number of pupils in each grade
Teacher and per cent of pupils

Grade	Teacher	Per cent
1. Santa Rosa	25	100
2. Baker	25	100
3. Springer	25	100
4. Carlisle	25	100
5. Eaton	25	100
6. Tipton	25	100
7. Atkins	25	100
8. Olayton	25	100
9. Almondo	25	100
10. Thompson	25	100
11. Leachman	25	100
12. Farnington	25	100
13. Dering	25	100
Average	25	100

Computed from the annual report of the Board of Education of the following towns for the year 1927-1928.

The Training of Belen's Teachers

It will be observed from Table VI that 5 teachers have had some high school plus some advanced work in normal or college or both; 3 have had high school plus full normal course; 12 have had high school plus full normal plus some college; 1 has had high school plus some normal and

Table VI

Kinds and Amount of Training Received by the
Teachers of Belen

Kinds of Training	Number of Teachers		
	Elemen- tary	High School	Total
High School plus some ad- vanced work in Normal or Col- lege or Both	3	2	5
High School plus full Nor- mal Course	3		3
High School plus full Nor- mal plus some College	12		12
High School plus some Nor- mal plus full College		1	1
High School plus full Col- lege Course		5	5
High School plus full Nor- mal and full College Courses		1	1

full college; 5 have had high school plus full college course; and 1 has had high school plus full normal and full college courses. One elementary teacher did not report having had any high school, normal or college

The Training of Belen's Teachers

It will be observed from Table VI that 5 teachers had some high school plus some advanced work in college or normal; 3 have had high school plus full normal course; 13 have had high school plus full normal plus some college; 1 has had high school plus some college.

Table VI

Kind and Amount of Training Received by the Teachers of Belen

Kind of Training	Number of Teachers	
	High School Plus Some College or Normal	High School Plus Full Normal Course
High School plus some advanced work in Normal or College or both	5	3
High School plus full Normal Course	3	13
High School plus full Normal plus some College	1	1
High School plus some Normal plus full College	1	1
High School plus full College	1	1
High School plus full Normal Course	1	1

full college; 3 have had high school plus full college course; and 1 has had high school plus full normal and full college courses. One teacher has no report having had any high school, normal or college

training.

It will be seen from Table VII that the average amount of training above elementary grade received by Belen's elementary teachers is 7.3 years and the median 7 years;

Table VII

Years of Training Above Elementary Grade Received
By Belen's Teachers

	Number of Teachers		
	Elementary	High School	Total
4 Yrs. and 1 Mo. to 5 Yrs.	1		1
5 Yrs. and 1 Mo. to 6 Yrs.	3		3
6 Yrs. and 1 Mo. to 7 Yrs.	6	1	7
7 Yrs. and 1 Mo. to 8 Yrs.	5	6	11
8 Yrs. and 1 Mo. to 9 Yrs.	1	1	2
9 Yrs. and 1 Mo. to 10 Yrs.	1		1
10 Yrs. and 1 Mo. to 11 Yrs.	1		1
11 Yrs. and 1 Mo. to 12 Yrs.		1	1
Average Teachers' Training	7.3 Yrs.	8.1	7.6
Median Teachers' Training	7	8	7.5

while for the high school teachers, the average is 8.1 years and the median 8 years.

The generally accepted standard for the training of elementary teachers is 6 years above the elementary grade, while for the high school teachers the accepted standard is the full four year college or university

beginning.

It will be necessary to have a number of training above elementary for the purpose of having elementary teachers in 7.5 to 8 years.

Table VII

Years of Training for Teachers in 1910-1911
By State or Territory

State or Territory	Number of Teachers	Years of Training
Alabama	1	4 Yrs. and 1 Mo. to 5 Yrs.
Alaska	1	5 Yrs. and 1 Mo. to 6 Yrs.
Arizona	1	6 Yrs. and 1 Mo. to 7 Yrs.
Arkansas	1	7 Yrs. and 1 Mo. to 8 Yrs.
California	1	8 Yrs. and 1 Mo. to 9 Yrs.
Colorado	1	9 Yrs. and 1 Mo. to 10 Yrs.
Connecticut	1	10 Yrs. and 1 Mo. to 11 Yrs.
Delaware	1	11 Yrs. and 1 Mo. to 12 Yrs.
Florida	1	Average Teachers' Training 7.5 Yrs. Median Teachers' Training 7.5 Yrs.

while for the high school teachers, the average is 8 years and one month.

The generally accepted standard for the training of elementary teachers is 7 years and one month, while for the high school teachers the standard is the full four years of college or equivalent.

course or 8 years above the elementary grade. Judging by these standards, very satisfactory conditions prevail in Belen in regard to training of teachers, almost all of the teachers having had the standard amount of training. The average amount of training received by elementary teachers exceeds the standard by 1.3 years, while the training received by high school teachers exceeds the standard .1 year.

Training in Service

Table^{VII} I shows that the range of summer terms attended by the elementary teachers in the last five years is from 2 who attended 1 summer term to 1 who attended 6 terms. The range for the high school teachers is from 2 who attended 1 summer term to 1 who attended 4 summer terms. The total number of summer terms attended by all of Belen's teachers during the past five years is 77.

Of the elementary teachers, 5, and of the high school teachers, 4 have taken 1 correspondence course during the past five years; 1 elementary and 1 high school teacher have taken 2 extension courses; 3 elementary teachers have taken 3 extension courses, and 1 elementary teacher has taken 8 courses. A total of 27 extension courses have been taken by Belen's teachers in the past five years.

There are 3 elementary and 3 high school teachers who

courses or 8 years above the elementary grade. Judging by these standards, very satisfactory conditions prevail in Belen in regard to training of teachers, almost all of the teachers having had the standard amount of training. The average amount of training received by elementary teachers exceeds the standard by 1.5 years, while the training received by high school teachers exceeds the standard .1 year.

Training in Service

Table VII¹ shows that the range of summer terms attended by the elementary teachers in the last five years is from 2 who attended 1 summer term to 1 who attended 8 terms. The range for the high school teachers is from 2 who attended 1 summer term to 1 who attended 4 summer terms. The total number of summer terms attended by all of Belen's teachers during the past five years is 77. Of the elementary teachers, 5, and of the high school teachers, 4 have taken 1 correspondence course during the past five years; 1 elementary and 1 high school teacher have taken 2 extension courses; 3 elementary teachers have taken 3 extension courses, and 1 elementary teacher has taken 5 courses. A total of 37 extension courses have been taken by Belen's teachers in the past five years. There are 2 elementary and 3 high school teachers who

Table VIII

Summer Terms Attended and Extension and Correspondence
Courses Taken During the Past Five Years

	Number of Teachers		
	Elemen- tary	High School	Total
1 summer term	2	2	4
2 summer terms	5	1	6
3 summer terms	6	3	9
4 summer terms	1	1	2
5 summer terms	4		4
6 summer terms	1		1
1 extension course	5	4	9
2 extension courses	1	1	2
3 extension courses	2		2
4 extension courses			
5 extension courses			
6 extension courses			
7 extension courses			
8 extension courses	1		1
1 correspondence course	3	2	5
2 correspondence courses	5		5
3 correspondence courses		1	1
4 correspondence courses	1	1	2

Table VIII

Summer Terms Attended and Extension and Correspondence Courses Taken During the Past Five Years

	Number of Teachers		
	Elementary	High School	Total
1 summer term	2	2	4
2 summer terms	2	1	3
3 summer terms	3	3	6
4 summer terms	1	1	2
5 summer terms	4		4
6 summer terms	1		1
1 extension course	2	4	6
2 extension courses	1	1	2
3 extension courses	2		2
4 extension courses			
5 extension courses			
6 extension courses			
7 extension courses			
8 extension courses	1		1
1 correspondence course	2	2	4
2 correspondence courses	2		2
3 correspondence courses	1	1	2
4 correspondence courses	1	1	2

have taken 1 correspondence course in the past five years; 5 elementary teachers have taken 2; 1 high school teacher has taken 3; and one elementary and one high school teacher have taken 4 correspondence courses. A total of 26 courses have been taken by Belen's teachers in the past five years.

The above statements indicate that Belen's staff is growing professionally. All the members of the staff have attended one or more summer sessions during the past five years. This is a favorable comparison with the attendance of the teachers of the state of Arizona at summer school during the period 1921-1925. The Arizona School Survey, 1925, states that 72% of the teachers had attended at least one summer session during the past four years.

Teaching Experience of Belen's Teachers

Table IX shows that 1 elementary teacher has had between 3 and 4 years of teaching experience; 3 elementary and 1 high school have had between 4 and 5 years; 2 elementary and 3 high school have had between 5 and 6 years; 2 elementary and 2 high school have had between 6 and 7 years; 1 elementary has had between 7 and 8 years; 2 elementary have had between 8 and 9 years; 2 elementary have had between 9 and 10 years; 1 elementary and 1 high school have had between 10 and 11 years; 2 elementary and 1 high school

have taken 1 correspondence course in the past five years; 3 elementary teachers have taken 2; 1 high school teacher has taken 3; and one elementary and one high school teacher have taken 4 correspondence courses. A total of 23 courses have been taken by Helen's teachers in the past five years.

The above statements indicate that Helen's staff is growing professionally. All the members of the staff have attended one or more summer sessions during the past five years. This is a favorable comparison with the attendance of the teachers of the state of Arizona at summer school during the period 1931-1935. The Arizona School Survey, 1935, states that 73% of the teachers had attended at least one summer session during the past four years.

Teaching Experience of Helen's Teachers

Table IX shows that 1 elementary teacher has had between 3 and 4 years of teaching experience; 3 elementary and 1 high school have had between 4 and 5 years; 2 elementary and 3 high school have had between 5 and 6 years; 3 elementary and 2 high school have had between 6 and 7 years; 1 elementary has had between 7 and 8 years; 2 elementary have had between 8 and 9 years; 2 elementary have had between 9 and 10 years; 1 elementary and 1 high school have had between 10 and 11 years; 2 elementary and 1 high school

have had between 11 and 12 years; 1 elementary teacher has had between 15 and 16 years; 1 elementary teacher

Table IX
Amount of Teaching Experience of Teachers in
Belen

	Number of Teachers		
	Elemen-	High	
	tary	School	Total
Less than 1 year			
1 to 2 years			
2 to 3 years			
3 to 4 years	1		1
4 to 5 years	3	1	4
5 to 6 years	2	3	5
6 to 7 years	2	2	4
7 to 8 years	1		1
8 to 9 years	2		2
9 to 10 years	2		2
10 to 11 years	1	1	2
11 to 12 years	2	1	3
12 to 13 years			
13 to 14 years			
14 to 15 years			
15 to 16 years	1		1
16 to 17 years	1		1
17 to 18 years			
18 to 19 years			
19 to 20 years	1		1
20 to 21 years			
21 to 22 years			
22 to 23 years		1	1
Average Teacher's Experience	8.4	8.3	8.4 years
Median Teacher's Experience	8	6.5	6.7 years

has had between 16 and 17 years; one elementary teacher has had between 19 and 20 years; and one high school teacher has had between 22 and 23 years of teaching experience.

have had between 11 and 12 years; 1

has had between 13 and 14 years; 1

Table 12

Amount of Teaching Experience of Teachers

Less than 1 year		Average Teacher's Experience	
1 to 2 years	1	1	1
2 to 3 years	3	3	3
3 to 4 years	3	3	3
4 to 5 years	4	4	4
5 to 6 years	5	5	5
6 to 7 years	6	6	6
7 to 8 years	7	7	7
8 to 9 years	8	8	8
9 to 10 years	9	9	9
10 to 11 years	10	10	10
11 to 12 years	11	11	11
12 to 13 years	12	12	12
13 to 14 years	13	13	13
14 to 15 years	14	14	14
15 to 16 years	15	15	15
16 to 17 years	16	16	16
17 to 18 years	17	17	17
18 to 19 years	18	18	18
19 to 20 years	19	19	19
20 to 21 years	20	20	20
21 to 22 years	21	21	21
22 to 23 years	22	22	22
Average Teacher's Experience		10.5	10.5
Median Teacher's Experience		10	10

has had between 15 and 16 years; 1

has had between 17 and 18 years; 1

er has had between 19 and 20 years; 1

The average elementary teacher's experience is 8.4 years, while the average high school teacher's experience is 8.3 years. The median elementary teacher's experience is 8 years, while the median high school teacher's experience is 6.5 years.

Figure 6 shows the kinds of experience of teachers in Belen.

Figure 6.

Kinds of Experience of Teachers in Belen

	Elementary School	High School
Elementary School Only	18	0
High School Only	0	9
Elementary and High School	3	3
Elementary and Principalship	2	0
High School and Principalship	2	0
Elementary, High School & Principal	0	2
Elem., High School and Supervisional	2	2
Number Teachers	1:2:3:4:5:6:7:8:9:10:11:12:13:14:15:16:17:18:19	1:2:3:4:5:6:7:8:9

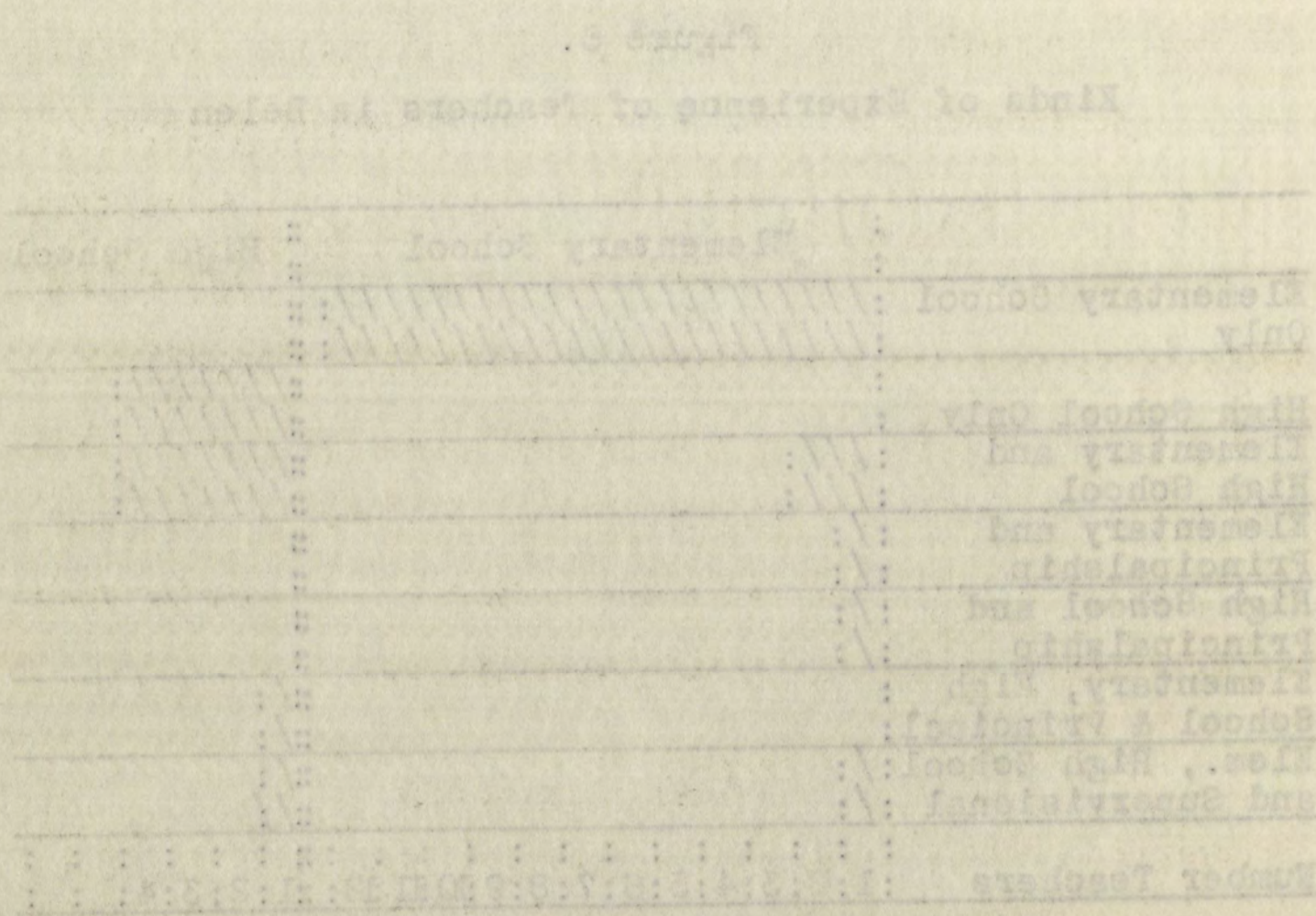
Of Belen's 19 elementary teachers, 18 have taught outside of Belen.

Of Belen's 19 elementary teachers, 13 have taught outside of New Mexico.

Of Belen's 9 high school teachers, 8 have taught outside of Belen.

The average elementary teacher's experience is 4 years, while the average high school teacher's experience is 8.3 years. The median elementary teacher's experience is 6 years, while the median high school teacher's experience is 6.5 years.

Figure 3 shows the kinds of experience of teachers in Belen in Belen.



Of Belen's 19 elementary teachers, 13 have taught outside of Belen.

Of Belen's 19 elementary teachers, 13 have taught outside of New Mexico.

Of Belen's 6 high school teachers, 5 have taught outside of Belen.

Of Belen's 9 high school teachers, 7 have taught outside of New Mexico.

Again, Belen occupies a favorable position in regard to the amount of experience of teachers. As compared with statistics on this matter in the Arizona School Survey, 1925, Belen's teachers have had an average of approximately two years more experience than the average for Arizona teachers. It is a generally accepted principle that, in general, the quality of instruction does not improve after about the fifth or sixth year of experience unless the teacher receives additional training, or in some other way becomes better prepared for the work. Since Belen has 18 teachers who have had more than this amount of experience, it would seem advisable that summer school attendance and other means of obtaining additional training be definitely encouraged.

Ages of Belen's Teachers

It will be observed from Table x that the range of ages of Belen's teachers is from 25 to 39 years. The average elementary teacher's age is 29 years and the average high school teacher's age is 30 years. The median elementary teacher's age is 28.2 years and the median high school teacher's age is 30 years. The median age of Belen's elementary teachers is practically the same

Of Helen's 9 high school teachers, 7 have taught outside of New Mexico. Again, Helen occupies a favorable position in regard to the amount of experience of teachers. As compared with statistics on this matter in the Arizona School Survey, 1933, Helen's teachers have had an average of approximately two years more experience than the average for Arizona teachers. It is a generally accepted principle that, in general, the quality of instruction does not improve after about the fifth or sixth year of experience unless the teacher receives additional training, or in some other way becomes better prepared for the work. Since Helen has 18 teachers who have had more than this amount of experience, it would seem advisable that her school attendance and other means of obtaining additional training be definitely encouraged.

Ages of Helen's Teachers

It will be observed from Table I that the range of ages of Helen's teachers is from 25 to 59 years. The average elementary teacher's age is 39 years and the average high school teacher's age is 39 years. The median elementary teacher's age is 38.3 years and the median high school teacher's age is 39 years. The median age of Helen's elementary teachers is practically the same

Table X
Ages of Belen's Teachers

	Number of Teachers		
	Elementary	High School	Total
25 years	3	1	4
26 years	2	0	2
27 years	4	3	7
28 years	2	0	2
29 years	2	0	2
30 years	0	1	1
31 years	1	1	2
32 years	0	1	1
33 years	1	0	1
34 years	0	1	1
35 years	0	0	0
36 years	2	0	2
37 years	0	1	1
38 years	0	0	0
39 years	2	0	2
Average Teacher's Age	29	30	29 years
Median Teacher's Age	28.2	30	27.5 years

as that of the Arizona elementary teachers, and the median age of Belen's high school teachers exceeds that of Arizona's high school teachers by one year.

Birthplace of Belen's Teachers

Table XI shows that Belen draws her teachers from 14 different states of the Union and that the birthplace of the parents of these teachers is distributed over 15 states and three foreign countries. The teachers are 100% from the United States with 21.4% from New Mexico.

Table X
Ages of Helen's Teachers

Number of Teachers			
Elementary School		High School	
Total		Total	
25 years	1	2	1
26 years	0	3	0
27 years	3	4	0
28 years	0	2	0
29 years	0	3	0
30 years	1	0	0
31 years	1	1	0
32 years	1	0	0
33 years	0	1	0
34 years	1	0	0
35 years	0	0	0
36 years	0	2	0
37 years	1	0	0
38 years	0	0	0
39 years	0	2	0
Average Teacher's Age		29	30
Median Teacher's Age		28.5	30

as that of the Arizona elementary teachers, and the median age of Helen's high school teachers exceeds that of Arizona's high school teachers by one year.

Birthplace of Helen's Teachers

Table XI shows that Helen draws her teachers from 14 different states of the Union and that the birthplace of the parents of these teachers is distributed over 15 states and three foreign countries. The teachers are 100% from the United States with 51.4% from New Mexico.

Belen cannot be accused of "inbreeding" since only approximately one-fifth of the teaching staff is native to New Mexico.

Table XI

Birthplace of Belen's Teachers and of the Parents
of Belen's Teachers

Place of Birth of Teachers and Their Parents	Fathers	Mothers	Teachers
1. Indiana	4	1	2
2. Wisconsin	2	1	
3. Iowa	1	2	3
4. New Mexico	5	6	6
5. Illinois	2	3	2
6. Ireland	1		
7. Canada	2	1	
8. Missouri	2	3	3
9. Tennessee	1	2	1
10. Texas	1		1
11. Nebraska			2
12. Ohio	1	2	
13. Colorado			1
14. Kansas	1	1	3
15. Arkansas	1	1	1
16. Kentucky	1	1	1
17. New York			1
18. Massachusetts		1	
19. Utah			1
20. Denmark	1	1	
21. Georgia	1		1
22. Alabama		1	
Per cent from U. S.	84.8	92.6	100
Per cent from Europe	7.6	3.7	0
Per cent from Canada	7.6	3.7	0
Per cent from New Mexico	19.2	22.2	21.4

Belen cannot be accused of "immaturity" since only

approximately one-third of the teaching staff is native to New Mexico.

Table XI

Hitherto of Belen's Teachers and of the Parents of Belen's Teachers

Place of Birth of Teachers and Their Parents			
Teachers	Parents	Teachers	Parents
1. Indiana	4	1	3
2. Wisconsin	3	1	1
3. Iowa	1	2	3
4. New Mexico	3	3	3
5. Illinois	3	3	3
6. Ireland	1		
7. Canada	2	1	
8. Missouri	2	2	2
9. Tennessee	1	3	1
10. Texas	1		
11. Nebraska			
12. Ohio	1	2	
13. Colorado			1
14. Kansas	1	1	
15. Arkansas		1	1
16. Kentucky	1	1	1
17. New York			1
18. Massachusetts		1	
19. Utah			1
20. Denmark	1	1	
21. Georgia	1		1
22. Alabama		1	
Per cent from N. M.			
34.8	32.8	100	
Per cent from Europe			
7.8	3.7	0	
Per cent from Canada			
7.8	3.7	0	
Per cent from New Mexico			
12.2	22.2	21.4	

Teachers' Salaries

Figure 7 shows the distribution of salaries of teachers in Belen for the year 1928-1929. In regard to salaries of elementary teachers, 1 receives \$1600 per year; 1 receives \$1400; 5 receive \$1300 each; 8 receive \$1250 each, and 4 receive \$1200 each. In the high school, 1 teacher receives \$1600; 3 receive \$1500 each; 4 receive \$1450 each, and 1 receives \$1300.

Figure 7.

Distribution of Teachers' Salaries in Belen
1928-1929

Elementary School								High School							
\$:	:	:	:	:	:	:	\$:	:	:	:	:	:	:
1600	///	:	:	:	:	:	:	1600	///	:	:	:	:	:	:
1400	///	:	:	:	:	:	:	1500	///	///	///	///	///	///	:
1300	///	///	///	///	///	///	///	1450	///	///	///	///	///	///	:
1250	///	///	///	///	///	///	///	1300	///	///	///	///	///	///	:
1200	///	///	///	///	///	///	///								:
	:	:	:	:	:	:	:		:	:	:	:	:	:	:
	1	2	3	4	5	6	7		1	2	3	4			

The average elementary teacher's salary is \$1278, while the average high school teacher's salary is \$1305. The average of all teachers' salaries is \$1287. The average of all teachers' salaries of towns of New Mexico, as determined from the superintendent's annual reports for 1927-1928, was \$1215 per year.

Teachers' Salaries

Figure 7 shows the distribution of salaries of teachers in Belen for the year 1927-1928. In regard to salaries of elementary teachers, 1 receives \$1900 per year; 1 receives \$1400; 5 receive \$1300 each; 8 receive \$1250 each, and 4 receive \$1200 each. In the high school, 1 teacher receives \$1800; 5 receive \$1500 each; 4 receive \$1450 each, and 1 receives \$1300.

Figure 7.

Distribution of Teachers' Salaries in Belen 1927-1928

Salary	Elementary School	High School
\$1900	1	1
\$1400	5	1
\$1300	8	4
\$1250	4	1
\$1200	1	1
\$1800	5	1
\$1500	4	1
\$1450	1	1
\$1300	1	1

The average elementary teacher's salary is \$1278, while the average high school teacher's salary is \$1200. The average of all teachers' salaries is \$1287. The average of all teachers' salaries of towns of New Mexico, as determined from the superintendent's annual reports for 1927-1928, was \$1212 per year.

It will be observed from table XII that the minimum salary received by Belen's elementary teachers is somewhat above the average minimum for the 12 New Mexico towns, but the maximum is less.

Table XII

Comparative Minimum and Maximum Salaries Paid Teachers in 12 New Mexico Towns, 1927-1928¹

Town	Teachers : Elementary		Teachers : High School		Principal		Supt.
	Min.	Max.	Min.	Max.	Elem.	High	
1. Raton	\$1200	\$1655	\$ 900	\$2072	\$1637	\$2800	\$3800
2. Tucumcari	1200	1800	1200	2000	1420	2200	3500
3. Carlsbad	1140	1380	1200	1716	1600	2000	3000
4. Artesia	1020	1500	1020	1560	1500	1800	3000
5. Santa Rosa	810	1350	1350	1575			
6. Deming	1200	1600	1300	1950		2400	3600
7. Farmington	900	1125	1350	1550			2300
8. Springer	1140	1320	1320	2300	1800	None	2700
9. Tularosa	900	900	1350	2400	1000	1500	2400
10. Clayton	990	1350	1000	2100	1530	1800	4500
11. Magdalena	100	1500	1400	1500	1500	None	2500
12. Belen	1200	1350	1400	1700	2000	None	3000
Average	\$ 983	\$1402	\$1233	\$1869	\$1554	\$2071	\$3096

The minimum high school salary in Belen is somewhat more than the average for the group, while the maximum is considerably less than the average.

¹ Information taken from the annual reports of the superintendents of the following towns to the State Department of Education, 1927-1928.

It will be observed from Table XII that the minimum

salary received by Helen's elementary teachers is some-

what above the average minimum for the 13 New Mexico

towns, but the maximum is less.

Table XII

Comparative Minimum and Maximum Salaries Paid
Teachers in 13 New Mexico Towns, 1937-1938

Town	Elementary : High School : Teachers :			
	Min. :	Max. :	Min. :	Max. :
1. Raton	\$1200 :	\$1800 :	\$1200 :	\$1800 :
2. Tucuman	1200 :	1800 :	1200 :	1800 :
3. Garfield	1150 :	1800 :	1150 :	1800 :
4. Artesia	1050 :	1800 :	1050 :	1800 :
5. Santa Rosa	810 :	1350 :	810 :	1350 :
6. Denning	1200 :	1300 :	1200 :	1300 :
7. Tularosa	900 :	1125 :	900 :	1125 :
8. Springer	1150 :	1350 :	1150 :	1350 :
9. Tularosa	900 :	1350 :	900 :	1350 :
10. Clayton	950 :	1350 :	950 :	1350 :
11. Magdalena	100 :	1500 :	100 :	1500 :
12. Belen	1200 :	1350 :	1200 :	1350 :
Average	\$ 983 :	\$1403 :	\$1233 :	\$1854 :

The minimum high school salary in Belen is somewhat

more than the average for the group, while the maximum is

considerably less than the average.

Information taken from the annual reports of the superintendents of the following towns to the State Department of Education, 1937-1938.

Summary and Conclusions

In regard to Belen's teaching staff, the following points are of interest:

1. The fact that the Superintendent of Schools nominates all teachers is to be commended.
2. The Belen Schools are adequately staffed in comparison with other New Mexico towns.
3. The average amount of training of both the elementary and the high school teachers is a little above the accepted standard.
4. Belen's teachers seem to be growing professionally.
5. Belen employs only experienced teachers. The present policy of the Board of Education should be continued. However, since experience ceases to be an asset after about the fifth or sixth year, unless the teacher receives further training, or in some other way becomes better prepared for the work, the Board and Superintendent should definitely encourage the teachers to secure additional training.
6. The ages of Belen's teachers compare favorably with the ages of teachers elsewhere.
7. From the standpoint of birthplace, Belen's teachers are a cosmopolitan group. This is conceded to be an asset.
8. When judged by salaries paid in other towns of New Mexico, Belen's salaries are up to standard.

Summary and Conclusions

In regard to Belen's teaching staff, the following

points are of interest:

1. The fact that the Superintendent of Schools nomin-

ates all teachers is to be commended.

2. The Belen schools are adequately staffed in com-

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However, since experience comes to be an asset after about

the fifth or sixth year, unless the teacher receives further

training, or in some other way becomes better prepared for

the work, the Board and Superintendent should definitely

encourage the teachers to secure additional training.

6. The ages of Belen's teachers compare favorably

with the ages of teachers elsewhere.

7. From the standpoint of distribution, Belen's teach-

ers are a cosmopolitan group. This is conceded to be an

asset.

8. Much judged by salaries paid in other towns of

New Mexico, Belen's salaries are up to standard.

CHAPTER IV

BUILDINGS AND GROUNDS

Belen has one high school building with a gymnasium and a building used for home economics close by. The building used for home economics was once used for a residence. Belen has two elementary school buildings, the North Side, and the East Side. None of these buildings is standard except the gymnasium unit. The ages of the buildings and the year of erection are shown in Figure 8.

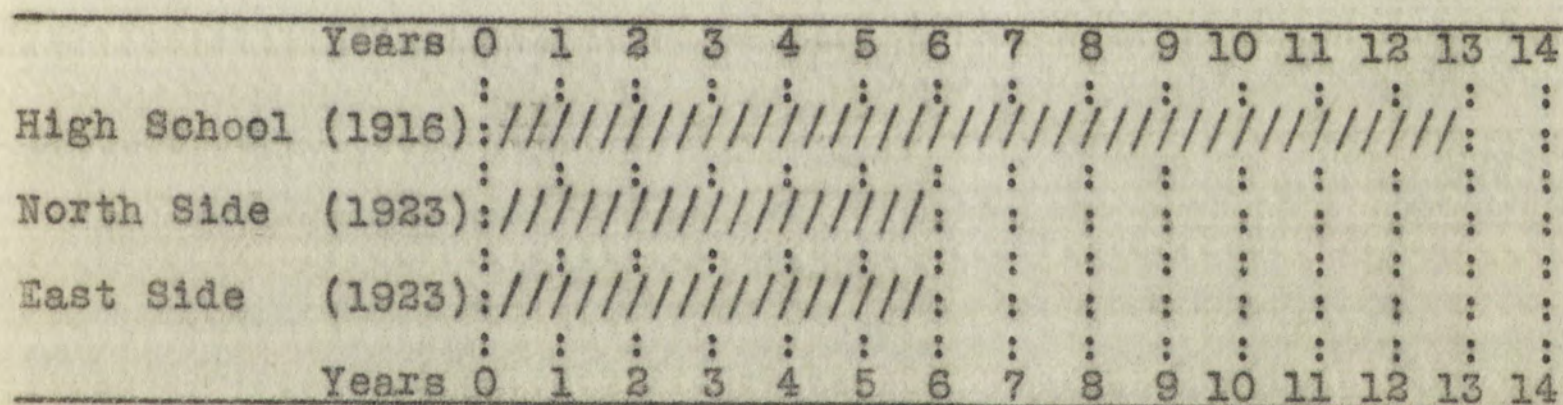


Figure 8. Ages of Belen's Buildings.

Method of Evaluating Buildings and Grounds

The buildings and grounds were rated by the Strayer-Engelhardt Score Cards, high school and elementary. The scale used in this card is divided into 1000 points and is made up of weighted scores for the main items of school

CHAPTER IV BUILDINGS AND GROUNDS

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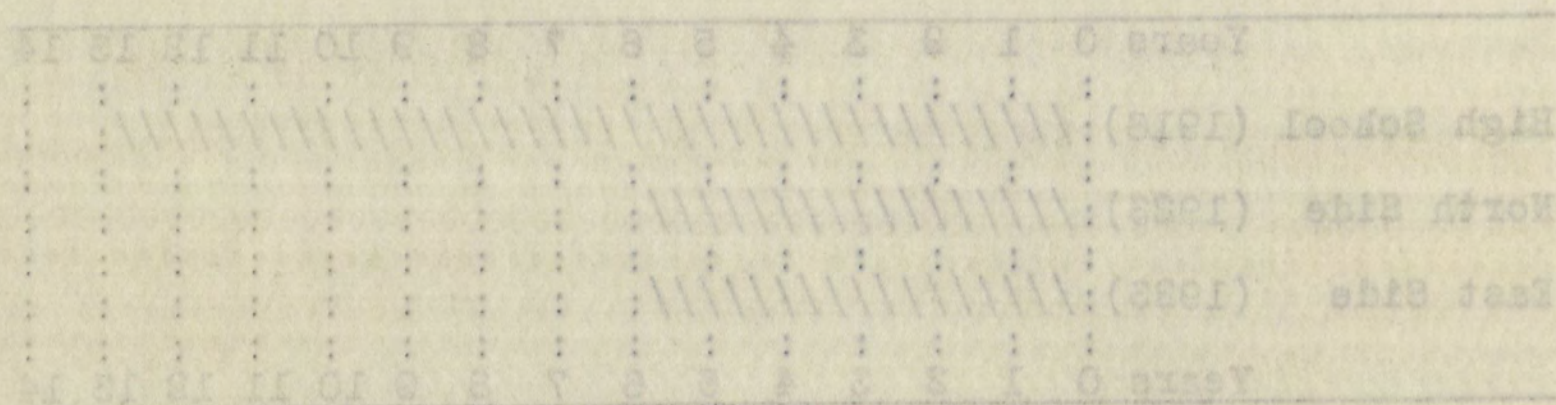


Figure 8. Ages of Belen's Buildings.

Method of Evaluating Buildings and Grounds

The buildings and grounds were rated by the Strayer-Engelhardt Score Card, High School and elementary. The scale used in this card is divided into 1000 points and is made up of weighted scores for the main items of school

building construction. These main items are further divided into several smaller items and each separate part is given a number of points according to its relative importance.

The ratings for the high school plant were determined after careful inspection by five persons, one being the Superintendent of Schools. The North Side School was inspected by two persons accompanied by the Superintendent, and the East Side School was inspected by two members of the committee mentioned above.

The grading of the high school building in comparison with the standard is presented in partial detail in Table XIII. The grading of the elementary school buildings in comparison with the standard for grade buildings is shown in Table XIV. The comparative gross ratings of all buildings are shown in Figure 9.

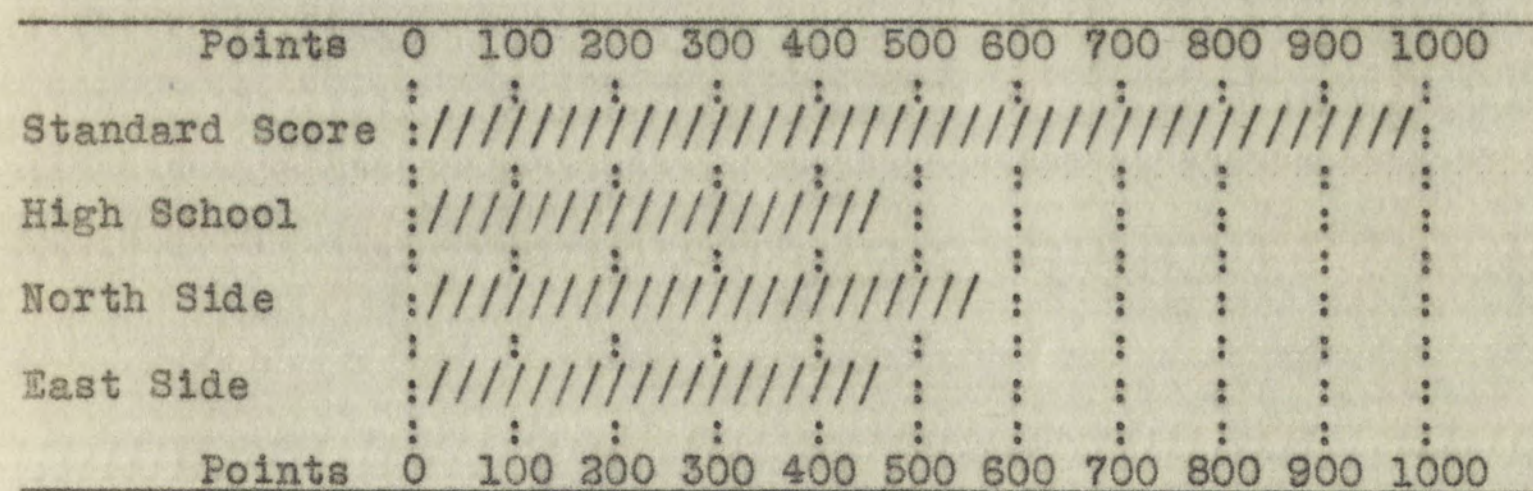


Figure 9. Gross Efficiency Ratings of Belen School Buildings by Strayer-Engelhardt Scale.

It is an easy matter to read the points in each case on a percentage basis. The high school, grading 485 points,

building construction. These main items are further di-

vided into several smaller items and each separate part is

given a number of points according to its relative importance.

The ratings for the high school plant were determined

after careful inspection by five persons, one being the

Superintendent of Schools. The North Side School was in-

spected by two persons recommended by the Superintendent,

and the East Side School was inspected by two members of

the committee mentioned above.

The grading of the high school building in comparison

with the standard is presented in partial detail in

Table XIII. The grading of the elementary school build-

ings in comparison with the standard for grade buildings

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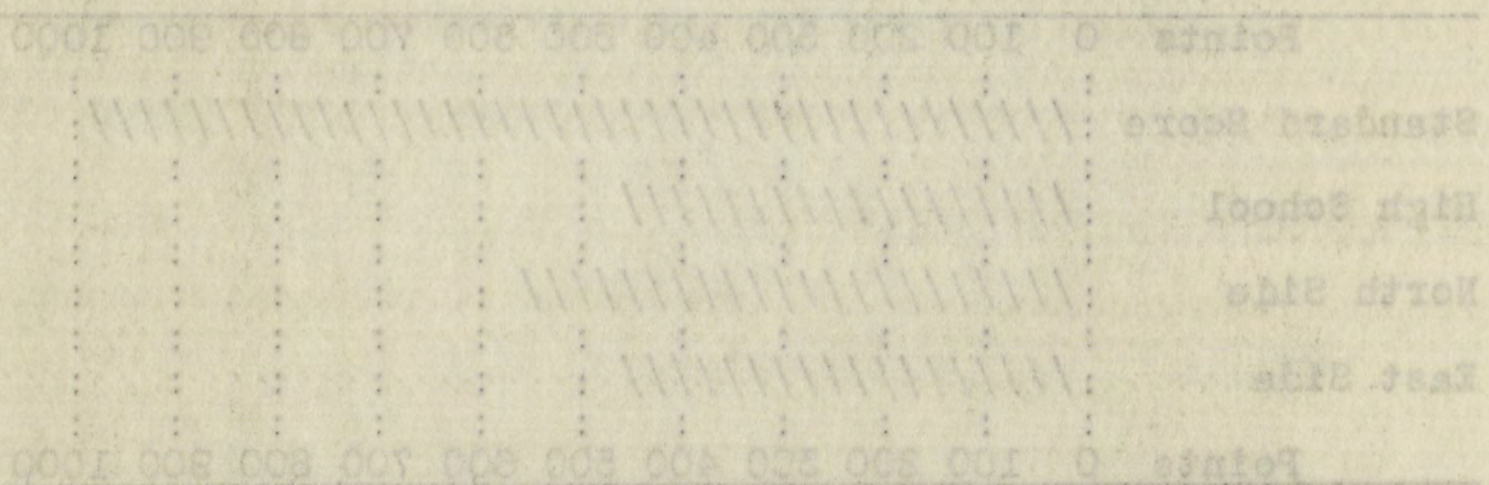


Figure 9. Gross Efficiency Ratings of School Buildings by Sixty-Ingredient Scale.

It is an easy matter to read the points in each case on a

percentage basis. The high school, grading 485 points,

Table XIII

Rating of Belen High School
Building by Strayer-Engelhardt Scale

		Std.	Belen
		Score	Score
I	SITE	100	65
	A. Location	30	22
	B. Nature & Conditions	20	8
	C. Size & Form	50	35
II	BUILDING	155	106
	A. Placement	10	7
	B. Gross Structure	75	51
	C. Internal Structure	70	48
III	SERVICE SYSTEMS	270	125
	A. Heating & Ventilation	50	20
	B. Fire Protection System	55	25
	C. Cleaning System	15	5
	D. Artificial Lighting System	25	20
	E. Electrical Service System	12	3
	F. Water Supply System	30	18
	G. Toilet System	40	19
	H. Mechanical Service System	5	0
	I. Locker Service	20	10
	J. Laundry Service	3	0
	K. Storage Service	15	5
IV	CLASS ROOMS	145	103
	A. Location & Construction	20	18
	B. Construction & Finish	65	42
	C. Illumination	40	30
	D. Equipment	20	13
V	SPECIAL CLASS ROOMS	140	35
	A. Service Laboratories	36	14
	B. Household Arts Laboratory	35	10
	C. Industrial Arts Shop	36	5
	D. Commercial Class Rooms	15	6
	E. Drawing & Art Class Rooms	10	0
	F. Music Rooms	8	0
VI	GENERAL SERVICE ROOMS	140	47
	A. Auditorium	45	0
	B. Cafeteria	20	0
	C. Gymnasium Facilities	30	20
	D. Swimming Pool	10	0
	E. Library	20	12
	F. Study Halls	15	15
VII	ADMINISTRATION ROOMS	50	4
	A. Administrative Office	17	4
	B. Teachers Rooms	10	0
	C. Health Service Rooms	15	0
	D. Student Activity Rooms	2	0
	E. Custodial Service Rooms	6	0
	TOTAL SCORE	1000	485

Table XIII

Rating of Helen Kirk School
Building by Strayer-Engelhardt Scale

TOTAL SCORE		1000	800	600	400	200	0
VII ADMINISTRATION ROOMS							
A.	Administrative Office	10	10	10	10	10	10
B.	Teachers Rooms	10	10	10	10	10	10
C.	Health Service Rooms	10	10	10	10	10	10
D.	Student Activity Rooms	10	10	10	10	10	10
E.	Custodial Service Rooms	10	10	10	10	10	10
VI GENERAL SERVICE ROOMS							
A.	Auditorium	10	10	10	10	10	10
B.	Cafeteria	10	10	10	10	10	10
C.	Gymnasium Facilities	10	10	10	10	10	10
D.	Swimming Pool	10	10	10	10	10	10
E.	Library	10	10	10	10	10	10
F.	Study Halls	10	10	10	10	10	10
V SPECIAL CLASS ROOMS							
A.	Service Laboratories	10	10	10	10	10	10
B.	Household Arts Laboratory	10	10	10	10	10	10
C.	Industrial Arts Shop	10	10	10	10	10	10
D.	Commercial Glass Rooms	10	10	10	10	10	10
E.	Drawing & Art Class Rooms	10	10	10	10	10	10
F.	Music Rooms	10	10	10	10	10	10
IV CLASS ROOMS							
A.	Location & Construction	10	10	10	10	10	10
B.	Construction & Finish	10	10	10	10	10	10
C.	Lighting	10	10	10	10	10	10
D.	Sound	10	10	10	10	10	10
III SERVICE SYSTEMS							
A.	Heating & Ventilation	10	10	10	10	10	10
B.	Fire Protection System	10	10	10	10	10	10
C.	Cleaning System	10	10	10	10	10	10
D.	Artificial Lighting System	10	10	10	10	10	10
E.	Electrical Service System	10	10	10	10	10	10
F.	Water Supply System	10	10	10	10	10	10
G.	Toilet System	10	10	10	10	10	10
H.	Mechanical Service System	10	10	10	10	10	10
I.	Locker Service	10	10	10	10	10	10
J.	Laundry Service	10	10	10	10	10	10
K.	Storage Service	10	10	10	10	10	10
II BUILDING							
A.	Placement	10	10	10	10	10	10
B.	Grass Structure	10	10	10	10	10	10
C.	Interior Structure	10	10	10	10	10	10
I SITE							
A.	Location	10	10	10	10	10	10
B.	Water & Conditions	10	10	10	10	10	10
C.	Size & Form	10	10	10	10	10	10
TOTAL SCORE		1000	800	600	400	200	0

Table XIV

Ratings of Belen Elementary School
Buildings by Strayer - Engelhardt Scale

		: Std. :	North :	East :
		: Score :	Side :	Side :
I	SITE	: 125 :	102 :	87 :
	A. Location	: 55 :	43 :	40 :
	B. Drainage	: 30 :	24 :	7 :
	C. Size and Form	: 40 :	35 :	40 :
II	BUILDINGS	: 165 :	112 :	125 :
	A. Placement	: 25 :	14 :	17 :
	B. Gross Structure	: 60 :	35 :	47 :
	C. Internal Structure	: 80 :	63 :	61 :
III	SERVICE SYSTEM	: 280 :	111 :	34 :
	A. Heating & Ventilation	: 80 :	38 :	9 :
	B. Fire Protection System	: 65 :	12 :	12 :
	C. Cleaning System	: 20 :	11 :	11 :
	D. Artificial Lighting System	: 20 :	0 :	0 :
	E. Electrical Service System	: 15 :	3 :	0 :
	F. Water Supply System	: 30 :	13 :	2 :
	G. Toilet System	: 50 :	34 :	0 :
IV	CLASS ROOMS	: 290 :	232 :	234 :
	A. Location & Connection	: 35 :	33 :	35 :
	B. Construction & Finish	: 95 :	71 :	68 :
	C. Illumination	: 85 :	68 :	68 :
	D. Cloakrooms & Wardrobes	: 25 :	25 :	25 :
	E. Equipment	: 50 :	35 :	38 :
V	SPECIAL ROOMS	: 140 :	26 :	7 :
	A. Large Rooms - General Use	: 65 :	6 :	0 :
	B. Rooms for School Officers	: 35 :	15 :	2 :
	C. Other Special Service Rooms	: 40 :	5 :	5 :
	TOTAL SCORE	: 1000 :	583 :	487 :

rates 48.5 per cent efficient; North Side, 58.3 per cent; and East Side 48.7 per cent. The grand total of the scores of all Belen's buildings is 1,555 points. By the standard used, the efficiency of the school plant is approximately 50 per cent.

Table XV gives a comparison of the relative high school scores of Belen, Socorro, the median of 9 New Mexico schools belonging to the North Central Association, and the median of 5 New Mexico high schools not belonging to the North Central Association. It will be observed that Belen's total score is somewhat below that of the median of the North Central Schools and just equals the median of the schools not belonging to the North Central Association. Belen is on the North Central list of schools.

Table XVI compares Belen's elementary schools with those of Socorro and Griegos, a Bernalillo County School.

We shall now consider somewhat in detail the ratings on the various items enumerated on the score card. The order of discussion follows the items as they appear on the Strayer-Engelhardt scale.

Sites

The sites of the Belen school buildings are rather favorable from the standpoint of location. Drainage is fairly good with the exception of the East Side grounds. The grounds range in size from approximately 55,000 square feet to 180,000

rates 48.5 per cent efficient; North Side, 58.5 per cent;

and East Side 48.7 per cent. The grand total of the scores

of all Helen's buildings is 1,585 points. By the standard

used, the efficiency of the school plans is approximately

50 per cent.

Table XV gives a comparison of the relative high school

scores of Helen, Socorro, the median of 8 New Mexico schools

belonging to the North Central Association, and the median

of 8 New Mexico high schools not belonging to the North Cen-

tral Association. It will be observed that Helen's total

score is somewhat below that of the median of the North Cen-

tral schools and just equals the median of the schools not

belonging to the North Central Association. Helen is on the

North Central list of schools.

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on the various items enumerated on the score card. The

order of discussion follows the items as they appear on

the Strayer-Kryghardt scale.

Sites

The sites of the Helen school buildings are rather favor-

able from the standpoint of location. Drainage is fairly

good with the exception of the East Side grounds. The grounds

range in size from approximately 55,000 square feet to 150,000

Table XV

Comparative Ratings of Representative New Mexico
High School Buildings by Strayer-Engelhardt
Scale.

	Scale.			Median	
	: Std. :	: Belen: So- :	: 9 N.C.: 5 Non:		
	: Score: H.S.:	: corro:	: H. S.: N. C.:		
SITE	: 100 :	: 65 :	: 73 :	: 81 :	: 80 :
A. Location	: 30 :	: 22 :	: 20 :	: 26 :	: 26 :
B. Nature & Conditions	: 20 :	: 8 :	: 13 :	: 18 :	: 15 :
C. Size and Form	: 50 :	: 35 :	: 40 :	: 40 :	: 40 :
BUILDINGS	: 155 :	: 106 :	: 122 :	: 111 :	: 117 :
A. Placement	: 10 :	: 7 :	: 7 :	: 8 :	: 8 :
B. Gross Structure	: 75 :	: 51 :	: 60 :	: 62 :	: 60 :
C. Internal Structure	: 70 :	: 48 :	: 55 :	: 51 :	: 44 :
SERVICE SYSTEMS	: 270 :	: 125 :	: 138 :	: 161 :	: 119 :
A. Heating & Ventilating	: 50 :	: 20 :	: 27 :	: 33 :	: 24 :
B. Fire Protection System	: 55 :	: 25 :	: 50 :	: 25 :	: 23 :
C. Cleaning System	: 15 :	: 5 :	: 2 :	: 7 :	: 5 :
D. Artificial Lighting System	: 25 :	: 20 :	: 16 :	: 19 :	: 20 :
E. Electrical Service System	: 12 :	: 3 :	: 1 :	: 3 :	: 3 :
F. Water Supply System	: 30 :	: 18 :	: 5 :	: 27 :	: 13 :
G. Toilet System	: 40 :	: 19 :	: 30 :	: 30 :	: 31 :
H. Mechanical Service System	: 5 :	: 0 :	: 0 :	: 0 :	: 0 :
I. Locker Service	: 20 :	: 10 :	: 0 :	: 0 :	: 0 :
J. Laundry Service	: 3 :	: 0 :	: 0 :	: 0 :	: 0 :
K. Storage Service	: 15 :	: 5 :	: 7 :	: 9 :	: 6 :
CLASSROOMS	: 145 :	: 103 :	: 115 :	: 130 :	: 122 :
A. Location & Connection	: 20 :	: 18 :	: 10 :	: 20 :	: 19 :
B. Construction & Finish	: 65 :	: 42 :	: 50 :	: 57 :	: 53 :
C. Illumination	: 40 :	: 30 :	: 37 :	: 38 :	: 34 :
D. Equipment	: 20 :	: 13 :	: 18 :	: 17 :	: 16 :
SPECIAL CLASSROOMS	: 140 :	: 35 :	: 60 :	: 42 :	: 30 :
A. Science Laboratories	: 36 :	: 14 :	: 18 :	: 15 :	: 9 :
B. Household Arts Laboratory	: 35 :	: 10 :	: 25 :	: 13 :	: 8 :
C. Industrial Arts Shops	: 36 :	: 5 :	: 7 :	: 5 :	: 5 :
D. Commercial Classrooms	: 15 :	: 6 :	: 10 :	: 7 :	: 4 :
E. Drawing & Classrooms	: 10 :	: 0 :	: 0 :	: 0 :	: 0 :
F. Music Rooms	: 8 :	: 0 :	: 0 :	: 0 :	: 0 :
GENERAL SERVICE ROOMS	: 140 :	: 47 :	: 44 :	: 50 :	: 33 :
A. Auditorium	: 45 :	: 0 :	: 34 :	: 31 :	: 24 :
B. Cafeteria	: 20 :	: 0 :	: 0 :	: 0 :	: 0 :
C. Gymnasium Facilities	: 30 :	: 20 :	: 0 :	: 0 :	: 0 :
D. Swimming Pool	: 10 :	: 0 :	: 0 :	: 0 :	: 0 :
E. Library	: 20 :	: 12 :	: 10 :	: 0 :	: 1 :
F. Study Halls	: 15 :	: 15 :	: 0 :	: 5 :	: 10 :
ADMINISTRATION ROOMS	: 50 :	: 4 :	: 4 :	: 10 :	: 4 :
A. Administrative Offices	: 17 :	: 4 :	: 4 :	: 4 :	: 4 :
B. Teachers' Rooms	: 10 :	: 0 :	: 0 :	: 3 :	: 0 :
C. Health Service Rooms	: 15 :	: 0 :	: 0 :	: 0 :	: 0 :
D. Student Activity Rooms	: 2 :	: 0 :	: 0 :	: 0 :	: 0 :
E. Custodial Service Rooms	: 6 :	: 0 :	: 0 :	: 0 :	: 0 :
TOTAL SCORE	: 1000 :	: 485 :	: 561 :	: 605 :	: 485 :

Table XVI

Comparative Ratings of Belen Elementary Schools,
Socorro Elementary Schools, and Griegos, a Berna-
lillo County Elementary School, by the Strayer
Engelhardt Scale

	: Stan-	: Belen	: Socorro	: Grie-
	: dard:	: North:	: East:	: gos:
	: Side:	: Side:	: Main:	: East:
	: Bldg:	: Bldg:	: H.S.:	: Bldg:
	: (Bern):			
	: Co.:			
SITE	: 125:	: 102:	: 87:	: 88:
A. Location	: 55:	: 43:	: 40:	: 30:
B. Drainage	: 30:	: 24:	: 7:	: 28:
C. Size and Form	: 40:	: 35:	: 40:	: 30:
BUILDING	: 165:	: 112:	: 125:	: 84:
A. Placement	: 25:	: 14:	: 17:	: 20:
B. Gross Structure	: 60:	: 35:	: 47:	: 39:
C. Internal Structure	: 80:	: 63:	: 61:	: 25:
SERVICE SYSTEMS	: 280:	: 111:	: 34:	: 39:
A. Heating & Ventilating	: 80:	: 38:	: 9:	: 15:
B. Fire Protection System	: 65:	: 12:	: 12:	: 6:
C. Cleaning System	: 20:	: 11:	: 11:	: 7:
D. Artificial Lighting System	: 20:	: 0:	: 0:	: 0:
E. Electrical Service System	: 15:	: 3:	: 0:	: 0:
F. Water Supply System	: 30:	: 13:	: 2:	: 2:
G. Toilet System	: 50:	: 34:	: 0:	: 9:
CLASSROOMS	: 290:	: 232:	: 234:	: 186:
A. Location & Connections	: 35:	: 33:	: 35:	: 35:
B. Construction & Finish	: 95:	: 71:	: 68:	: 62:
C. Illumination	: 85:	: 68:	: 68:	: 49:
D. Cloakrooms & Wardrobes	: 25:	: 25:	: 25:	: 15:
E. Equipment	: 50:	: 35:	: 38:	: 25:
SPECIAL ROOMS	: 140:	: 26:	: 7:	: 4:
A. Large Rooms--General Use	: 65:	: 6:	: 0:	: 1:
B. Rooms for School Officials	: 35:	: 15:	: 2:	: 1:
C. Other Special Serv. Rooms	: 40:	: 5:	: 5:	: 2:
TOTAL SCORE	: 1000:	: 583:	: 487:	: 401:

square feet. There is ample room in every case to allow much more than the standard requirement of 100 square feet of play space per pupil. The best form is found in the East Side grounds. The high school grounds are not sufficiently large to provide an adequate athletic field. It is the judgment of the scorers that Fourth Street which separates the high school grounds into two parts, should be closed and made a part of the high school property. Some of the more important facts relative to sites and buildings are shown in Table XVII.

Table XVII

Miscellaneous Data on School Property in Belen
from Figures Supplied by Superintendent

Property	Date of Bldg.	No. of Class Rooms	No. of Spec. Rooms	Size of Bldg. Sq. Ft.	Cost of Bldg.	Size of Grounds	Cost of Grounds	Number of Pupils
High School	1916	8	2	14,675	\$30,000	180,000	Donated by John Becker Sr.	272
West Side	1923	14	0	8,037	37,000	180,000	\$350.00	400
East Side	1923	4	0	396	7,900	55,800	100.00	57

Playground Apparatus

Belen maintains a minimum amount of playground equipment. East Side school has 1 stride, 1 basketball court,

square feet. There is ample room in every case to allow much more than the standard requirement of 150 square feet of play space per pupil. The best form is found in the Side grounds. The high school grounds are not sufficient large to provide an adequate athletic field. It is the judgment of the board that Fourth Street which separates the high school grounds into two parts, should be closed and made a part of the high school property. Some of the more important facts relative to sites and buildings are shown in Table XVII.

Table XVII

Miscellaneous Data on School Property in Belton from Figures Supplied by Superintendent

Property	Side	Rooms	Ac. Ft.	Side	Grounds	Ac. Ft.	Cost	Value
High School	1918	8	14,875	330,000	180,000	100,000	100,000	100,000
High School	1923	14	8,037	37,000	180,000	100,000	100,000	100,000
High School	1925	4	333	7,200	25,800	100,000	100,000	100,000

Playground Association

Belton maintains a minimum amount of playground equipment. West Side school has 1 teacher, 1 basketball court,

and see-saws. North Side has 2 chinning bars, 1 slide, 2 strides, see-saws and 1 basketball court. This is a good nucleus for a minimum allotment of standard apparatus for each school.

Buildings

The buildings are rather well placed on the side, but no particular attention has been given to their orientation. All buildings, with the exception of the unit used for home economics, are constructed of brick. The high school and North Side are of the two-story type. In general, they present a pleasing appearance and show that they were built for utility. None of the buildings are strictly fireproof. Practically all interior work is of wood construction. The corridors have been especially well planned in all buildings. They compare favorably in size with the standard which is from 11 to 13 feet in width.

Service Systems

The heating systems seem to be rather adequate in all schools except East Side, which is heated by stoves. But no special provision is made for ventilation. The fire protection systems in all buildings are very inadequate. Since the buildings are not fireproof, every precaution possible should be taken to safeguard the lives of the pupils against fire. Janitors use brooms and sweeping com-

and see-saws. North Side has 2 climbing sets, 1 slide, 2 slides, see-saws and 1 basketball court. This is a good nucleus for a minimum allotment of standard apparatus for each school.

Buildings

The buildings are rather well placed on the site, but no particular attention has been given to their orientation. All buildings, with the exception of the unit used for home economics, are constructed of brick. The high school and North Side are of the two-story type. In general, they present a pleasing appearance and show that they were built for utility. None of the buildings are strictly fireproof. Practically all interior work is of wood construction. The corridors have been especially well planned in all buildings. They compare favorably in size with the standard which is from 11 to 13 feet in width.

Service Systems

The heating systems seem to be rather adequate in all schools except East Side, which is heated by stoves. But no special provision is made for ventilation. The fire protection systems in all buildings are very inadequate. Since the buildings are not fireproof, every precaution possible should be taken to safeguard the lives of the pupils against fire. Janitors are present and sweeping com-

pounds. There seems to be evidence that sufficient janitor's supplies are furnished. Artificial lighting is provided only in the high school. North Side and the high school each has a telephone. The East Side should have one in order to be in direct connection with the office of the superintendent. The water supply system in each building is inadequate. More drinking fountains are needed in each building. Washing and bathing facilities in the grade buildings should be more adequately provided for. East Side school has outside toilets. Both the high school and North Side school have an insufficient number of toilets. The fact that the entrance to the boys' toilet in the high school is directly across the hall from the entrance to the girls' toilet is especially to be condemned. The members of the scoring staff are unanimous in recommending that an entrance to the girls' toilet be cut through the south cloak room wall.

Classrooms

The location and connection of classrooms is very satisfactory. They are up to standard in size and shape in North Side and East Side and approach the standard in the high school as well as may be expected from the age of the building. The number of classrooms seems to be adequate in all cases except the high school. Some arrangement should be made in the near future for more classrooms there. There

There seems to be evidence that sufficient
supplies are furnished. Additional supplies are pro-
vided only in the high school. Both the high school and the
school each has a telephone. The high school has a
one in order to be in direct connection with the office of
the superintendent. The water supply system in each build-
ing is inadequate. More drinking fountains are needed in
each building. Bathing and bathing facilities in the high
buildings should be more adequately provided for. Each high
school has outside toilets. Both the high school and the
high school have an insufficient number of toilets. The
fact that the entrance to the boys' toilet in the high school
is directly across the hall from the entrance to the girls'
toilet is especially to be condemned. The members of the
scouting staff are anxious in recommending that an entrance
to the girls' toilet be cut through the south cloak room
wall.

Classrooms

The location and connection of classrooms is very satis-
factory. They are up to standard in size and shape in both
side and East side and approach the standard in the high
school as well as may be expected. The number of class-
rooms except the high school. Some changes may be made
made in the near future for some classrooms that are

is a lack of bulletin boards in all buildings. Composition blackboards are in evidence in all rooms. Slate or ground glass boards should be substituted for these wherever possible. Table XVIII shows that the blackboards in every

Table XVIII

Height of Blackboards (from Floor to Chalk Rail)
in Elementary Rooms of Belen, in Comparison
with Standard Heights¹

Grade	Standard	High School	North Side	East Side
8th	30 in.	39 in.	35 in.	35 in.
7th	30 "		35 "	35 "
6th	28 "		35 "	35 "
5th	28 "		35 "	35 "
4th	26 "		35 "	35 "
3rd	26 "		35 "	35 "
2nd	24 "		31 "	31 "
1st	24 "		31 "	31 "

case are placed higher than the standard height. They should either be lowered or a platform should be built underneath the blackboards to bring the pupils to the height necessary. In the high school and East Side school there is a total absence of closet space in the classrooms.

Lighting of Classrooms

In the high school, one-half of the rooms are lighted exclusively from the left. Only 1 room in the North Side school is up to standard in this respect, while East Side rooms are all up to standard.

¹Information from Superintendent of Schools.

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blackboards are in evidence in all rooms. State of ground
glass boards should be substituted for these wherever pos-
sible. Table XVII shows that the blackboards in every

Table XVII

Height of Blackboards (from Floor to Black Rail)
in Elementary Rooms of Better, in Comparison
with Standard Heights

Grade	Standard	High School	North Side	East Side
8th	30 in.	30 in.	35 in.	35 in.
7th	30	"	35	35
6th	30	"	35	35
5th	30	"	35	35
4th	30	"	35	35
3rd	30	"	35	35
2nd	34	"	31	31
1st	34	"	31	31

case are placed higher than the standard height. They
should either be lowered or a glassboard should be built
underneath the blackboards to bring the pupils to the
height necessary. In the high school and East Side school
there is a total absence of closet space in the classrooms.

Lighting of Classrooms

In the high school, one-half of the rooms are lighted
exclusively from the left. Only 1 room in the North Side
school is up to standard in this respect. While East Side
rooms are all up to standard.

The accepted standard for amount of window space in a classroom is 1 square foot of glass to every 5 square feet of floor space.

There are 9 of the 10 high school rooms up to standard in this respect. Neither of the elementary buildings has any rooms that are up to the accepted standard for amount of window space. All buildings are fairly well-equipped with the proper kind of window shades. The cloakrooms and wardrobes are mostly of the closet type. A good type of classroom with proper wardrobes is shown in figure 10. Future buildings should provide such classrooms. More adjustable seats should be provided.

Special Rooms

In the high school, there is a shortage of science and home economics rooms. In the elementary schools, library rooms are especially needed.

General Service Rooms

The gymnasium at the high school should be more adequately equipped for auditorium purposes. Visualization equipment should be purchased as soon as practical.

Administrative Rooms

The administrative offices are inadequate in that no private offices are provided and that no supply rooms are available. A safe is provided in the superintendent's office. Teachers' rooms are utterly lacking in all buildings.

The accepted standard for amount of window space in a classroom is 1 square foot of glass for every 15 square feet of floor space.

There are 3 of the 15 high school rooms up to standard in this respect. Whether of the elementary building has any rooms that are up to the accepted standard for amount of window space. All buildings are fairly well-equipped with the proper kind of window shades. The classrooms and wardrobes are mostly of the closet type. A good type of classroom with proper wardrobes is shown in figure 10. The buildings should provide such classrooms. More adequate side seats should be provided.

Special Rooms

In the high school, there is a shortage of science and home economics rooms. In the elementary schools, library rooms are especially needed.

General Service Rooms

The gymnasium at the high school should be more adequately equipped for auditions purposes. Visualization equipment should be purchased as soon as practical.

Administrative Rooms

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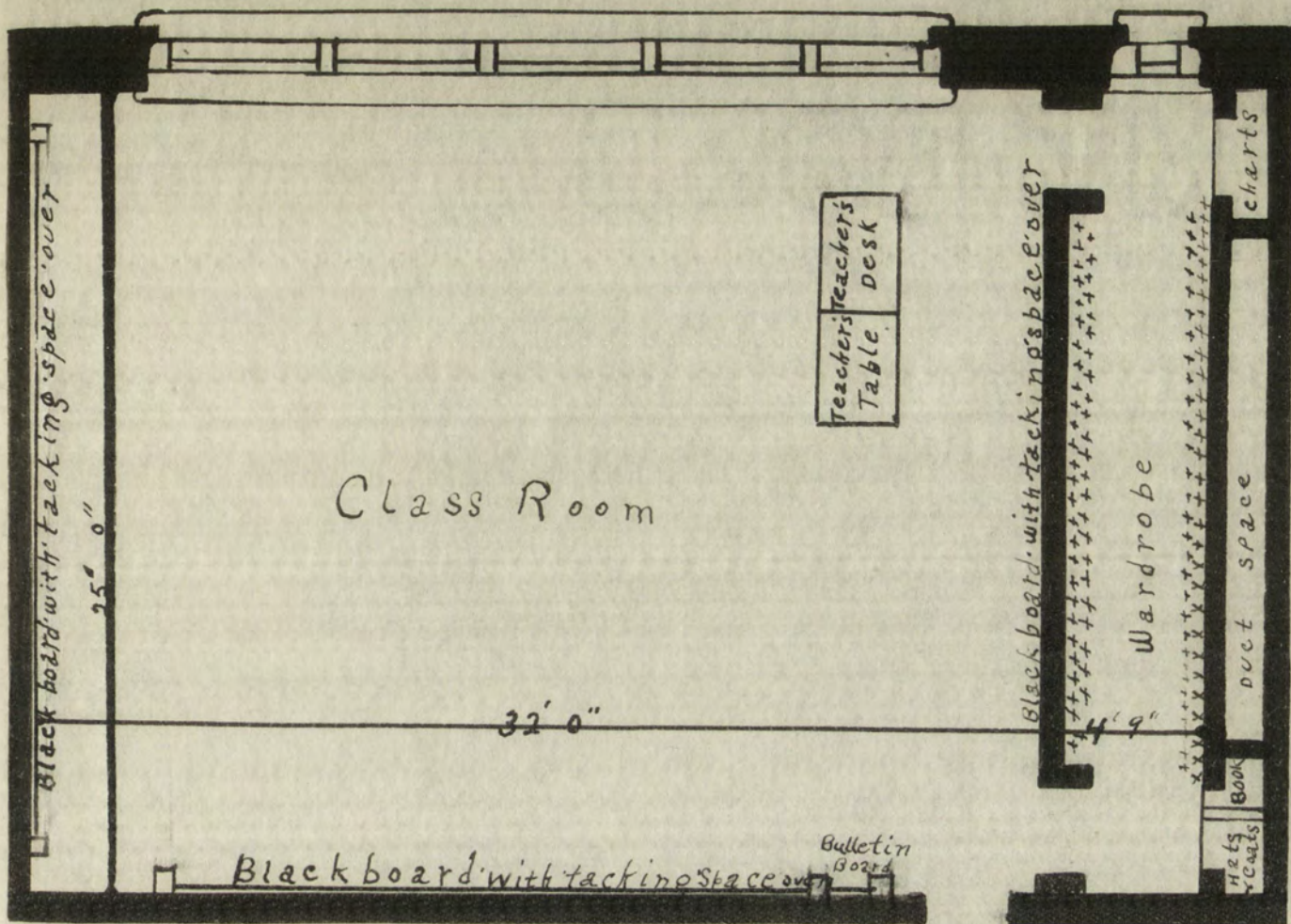


Figure 10. Plan Devised by a Cleveland Architect for the Schools of that City. (Suggested Plan for Future Classrooms of Belen Schools.)

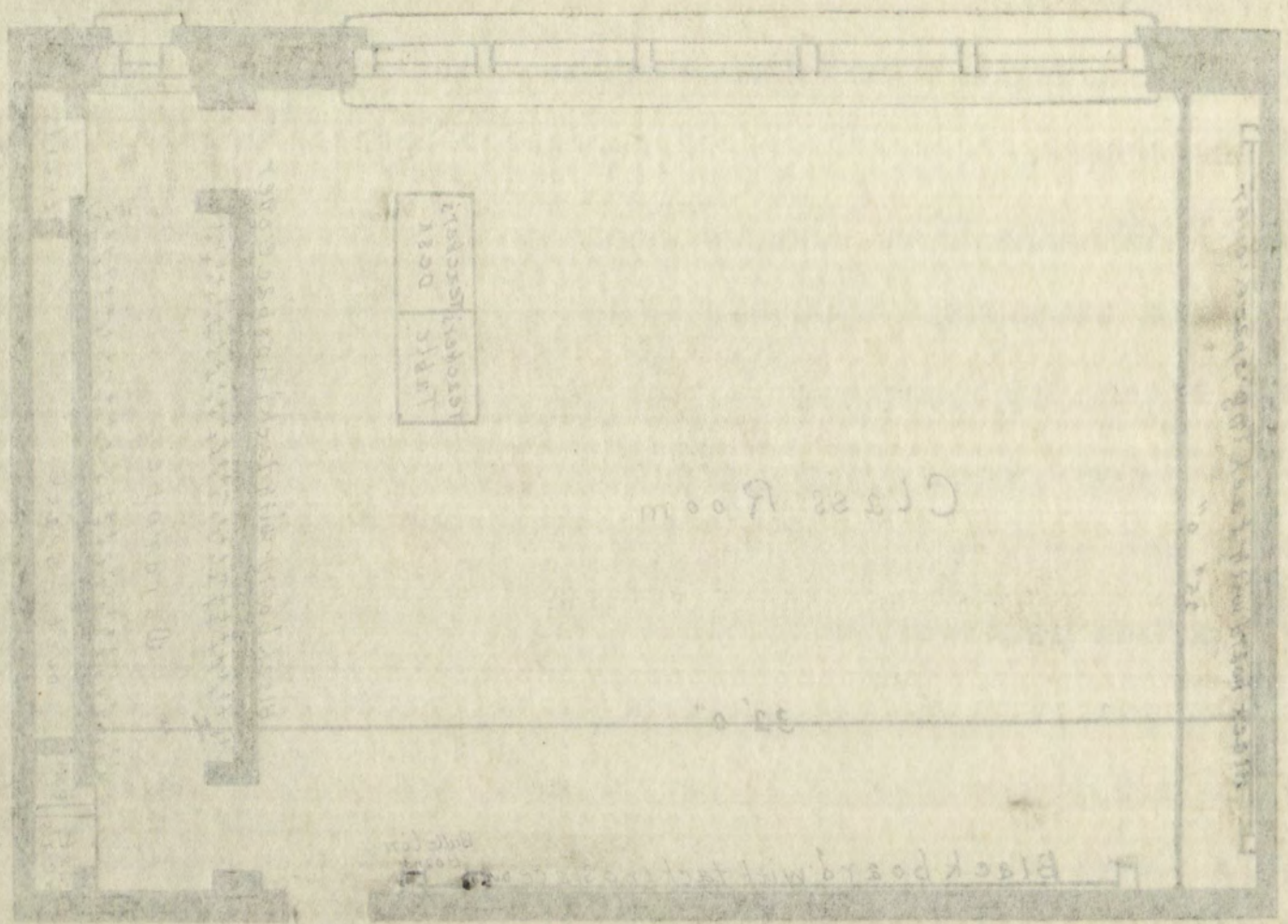


Figure 10. Plan Designed by a Cleveland Architect for the Schools of that City. (Suggested Plan for Future Classrooms of Better Schools.)

Health service rooms are not adequately provided.

Health service rooms are not adequately provided.

Summary and Conclusions

1. Belen has no school buildings that are up to standard except the gymnasium unit of the high school. Suggestions are made throughout the body of this chapter as to how the buildings may be brought more nearly up to the standard.
2. The average rating of the buildings on the Strayer-Engelhardt score card is approximately 50 per cent.
3. The locations of the schools are desirable. Grounds are adequate in size for play space, except that the High School should have a larger athletic field.
4. Since none of the buildings are fireproof, fire-protection equipment should receive immediate attention. Every building should be provided with a good fire hose for each floor and a sufficient number of extinguishers. Fire alarms should be installed.
5. East Side should have telephone connections with the office of the superintendent.
6. More drinking fountains are needed.
7. Better washing and bathing facilities are recommended for the elementary schools.
8. More toilets should be provided. A different entrance to the girls' toilet should be made.
9. More classrooms should be provided for the High School.

Summary and Conclusions

1. Belen has no school buildings that are up to standard except the gymnasium unit of the high school. Improvements are made throughout the body of this chapter as to how the buildings may be brought more nearly up to the standard.
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8. More toilets should be provided. A different entrance to the girls' toilet should be made.
9. More classrooms should be provided for the High School.

10. Blackboards are of a poor quality. Standards as given in a previous table should govern the height of blackboards.

11. Comparatively few rooms receive their light from the proper direction. The High School rooms receive the standard quantity of light, while the other schools do not receive enough light.

12. There should be more adjustable seats and desks to provide for the varying sizes of the children.

13. It is suggested that more bulletin boards be provided and used.

14. More special rooms should be provided in all future buildings.

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12. There should be more adjustable seats and desks to provide for the varying sizes of the children.
13. It is suggested that more bulletin boards be provided and used.
14. More special rooms should be provided in all future buildings.

CHAPTER V

THE ACHIEVEMENT OF PUPILS

It shall be the purpose of this chapter to answer the following questions with respect to the achievement of pupils in the Belen elementary schools:

1. How do the pupils of the Belen Schools compare with the standard norms of achievement?
2. Are the pupils of the Belen Schools achieving in proportion to their ability?
3. Are the pupils graded and classified so as to do most effective work?

To evaluate properly the achievement of pupils requires the use of two types of tests; one to measure what the pupils have actually learned, and the other to measure their capacity to learn. The Stanford Achievement Test was used to measure what the pupils have learned, and the National Intelligence Test was given to determine the capacity of the pupils to learn.

CHAPTER V

THE ACHIEVEMENT OF PUPILS

It shall be the purpose of this chapter to answer the following questions with respect to the achievement of pupils in the Helen elementary schools:

1. How do the pupils of the Helen schools compare with the standard norms of achievement?
2. Are the pupils of the Helen schools achieving in proportion to their ability?
3. Are the pupils graded and classified so as to do most effective work?

To evaluate properly the achievement of pupils requires the use of two types of tests; one to measure what the pupils have actually learned, and the other to measure their capacity to learn. The Stanford Achievement Test was used to measure what the pupils have learned, and the National Intelligence Test was given to determine the capacity of the pupils to learn.

Question 1. How do the pupils in the Belen Schools compare with standard norms of achievement?

In order to make comparisons, it is necessary to reduce all test scores to a common basis. The Stanford Achievement Test is a standardized test; that is, it has been given to a sufficiently large number of children that norms or standards have been established. Throughout this chapter, all test scores and standards are reported in terms of age scores. The age standards are arrived at by determining the average score made on the test by a large number of pupils of the given age. For example, an age score of twelve means that the average twelve-year-old pupil makes that score on the test.

The age scores for any school subject are called the subject ages for that subject. The composite of all these age scores for an individual pupil in the various subjects is called the educational age of that pupil.

Table XIX

Median Educational Ages of
Belen Pupils and Grade Standards

	School Grade					
	4	5	6	7	8	
Belen	9-8	10-6	11-6	12-10	13-7	
Standard	10-1	11-1	12-0	12-11	14-2	

Question I. How do the pupils in the Belen Schools

compare with standard norms of achievement?

In order to make comparisons, it is necessary to reduce all test scores to a common basis. The Stanford Achievement Test is a standardized test; that is, it has been given to a sufficiently large number of children that norms or standards have been established. Throughout this chapter, all test scores and standards are reported in terms of age scores. The age standards are arrived at by determining the average score made on the test by a large number of pupils of the given age. For example, an age score of twelve means that the average twelve-year-old pupil makes that score on the test.

The age scores for any school subject are called the subject ages for that subject. The composite of all these age scores for an individual pupil in the various subjects is called the educational age of that pupil.

Table XIX

Median Educational Ages of Belen Pupils and Grade Standards

	School Grade				
	1	2	3	4	5
Belen	8-9	10-11	11-12	12-13	13-14
Standard	10-11	11-12	12-13	13-14	14-15

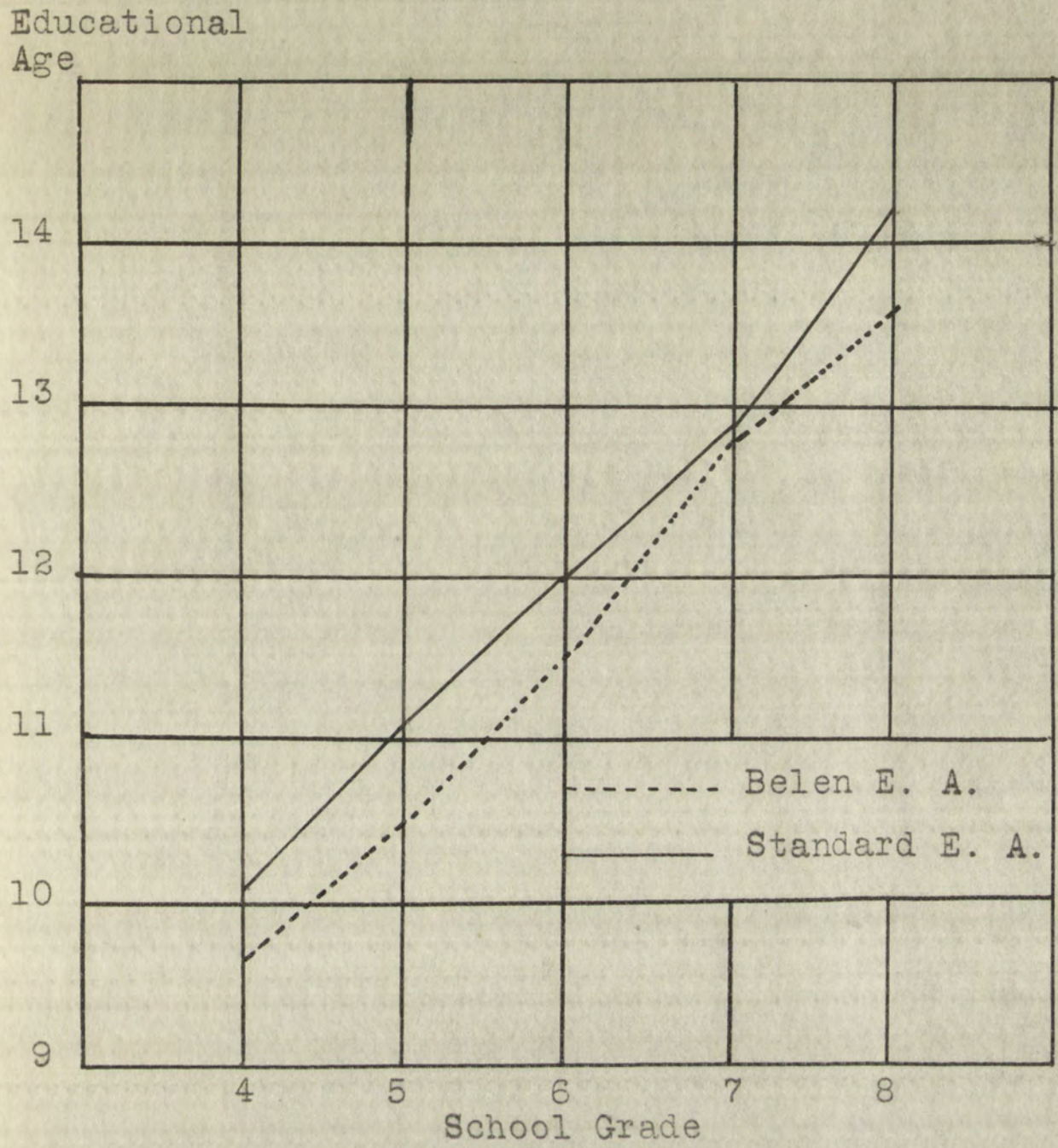


Figure 11. Median Educational Ages Belen and Standard.

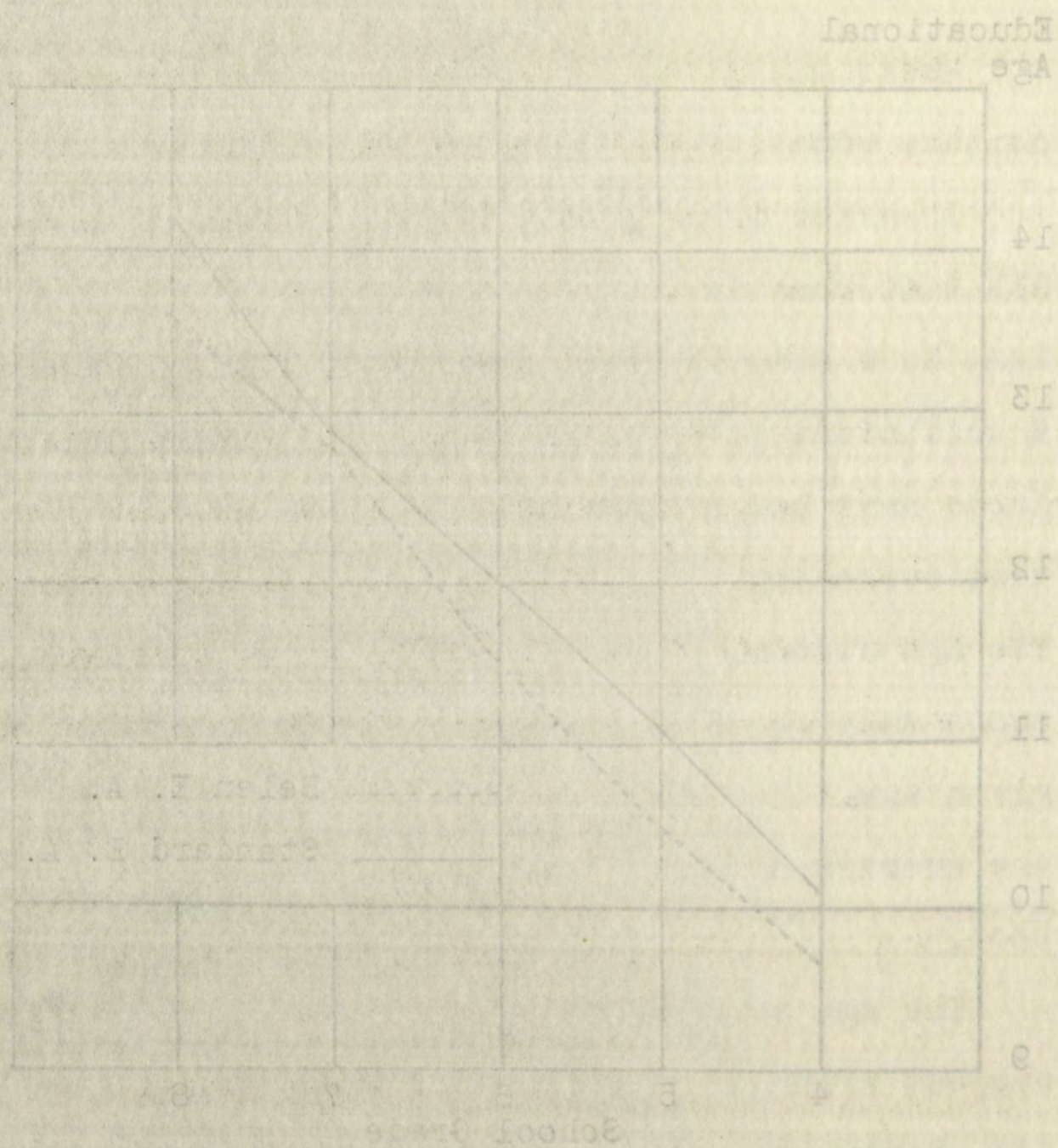


Figure 11. Median Educational Age Belated Standard

Table XIX gives the median educational ages of Belen pupils, Grades 4 to 8, inclusive, together with the standard for the country as a whole. Figure 11 shows the same facts graphically.

It will be observed from Table XIX and Figure 11 that, in comparison with grade norms, the median pupils in all grades are below standard. In grade 4, they are five months below standard. In grade 5, they are seven months below standard. Grade 6 is six months below standard. Grade 7 is approximately at standard. Grade 8 is seven months below standard.

Table XX

Median Arithmetic, Reading, and Language Ages

Grade	Belen Scores			
	Arithmetic	Reading	Language	Standard
4	10-1	10-0	10-0	10-1
5	11-2	10-7	10-7	11-1
6	12-4	10-10	11-0	12-0
7	14-2	12-2	11-10	12-11
8	14-2	13-4	13-6	14-2

Table XX gives the age scores for arithmetic, reading, and language, together with the standard age scores. It will be observed that in arithmetic each grade either equals or surpasses the standard, while in language and reading,

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Table XX
Median Arithmetic, Reading, and Language Ages

Grade	Arithmetic	Reading	Language	Standard
4	10-1	10-0	10-0	10-1
5	11-3	10-7	10-7	11-1
6	12-4	10-10	11-0	12-0
7	14-2	12-3	11-10	13-11
8	14-3	13-4	12-3	14-2

Table XX gives the age scores for arithmetic, reading, and language, together with the standard age scores. It will be observed that in arithmetic each grade either equals or surpasses the standard, while in language and reading,

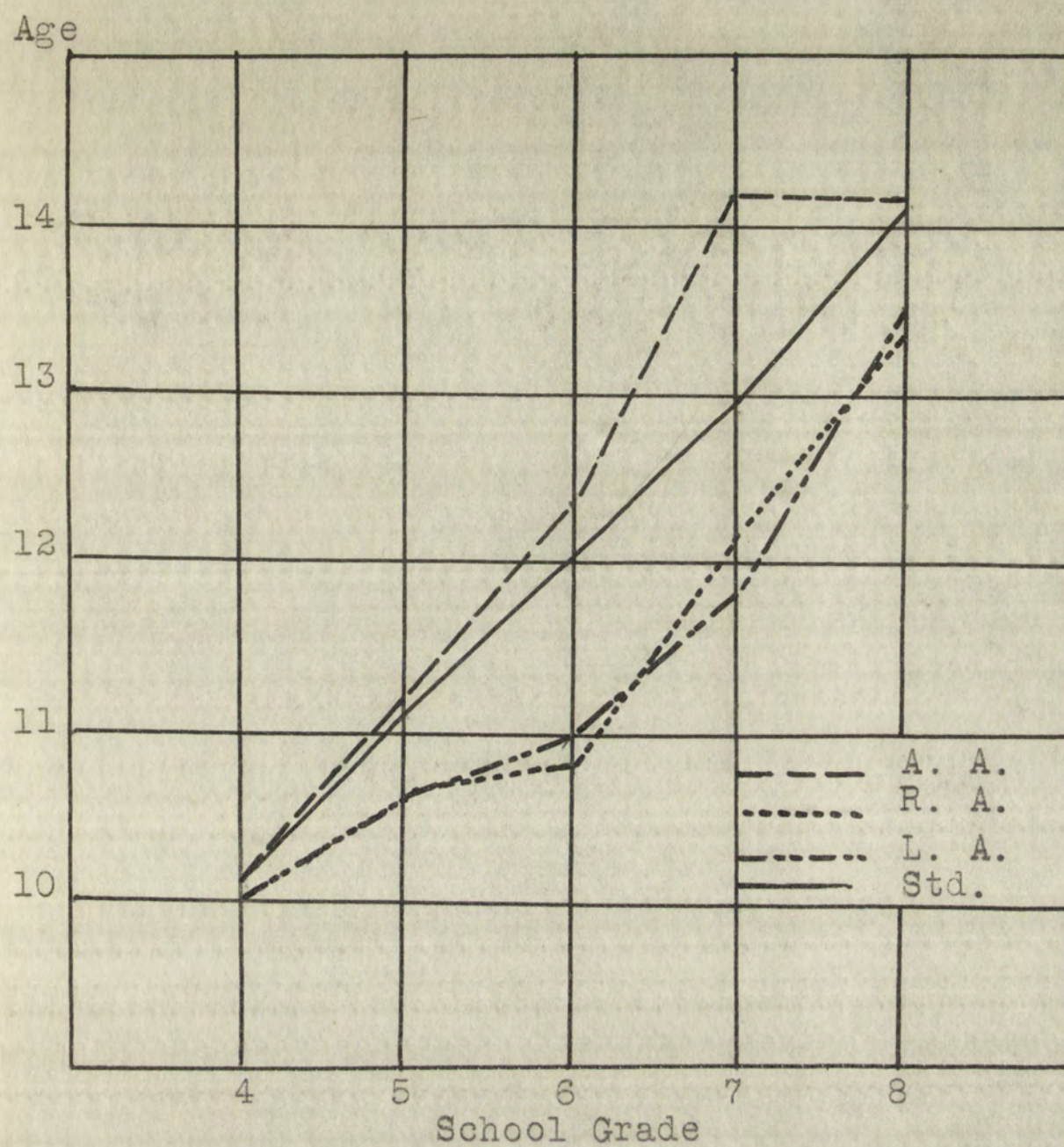


Figure 12. Median Arithmetic, Reading, and Language Ages. Belen Scores and Standard.

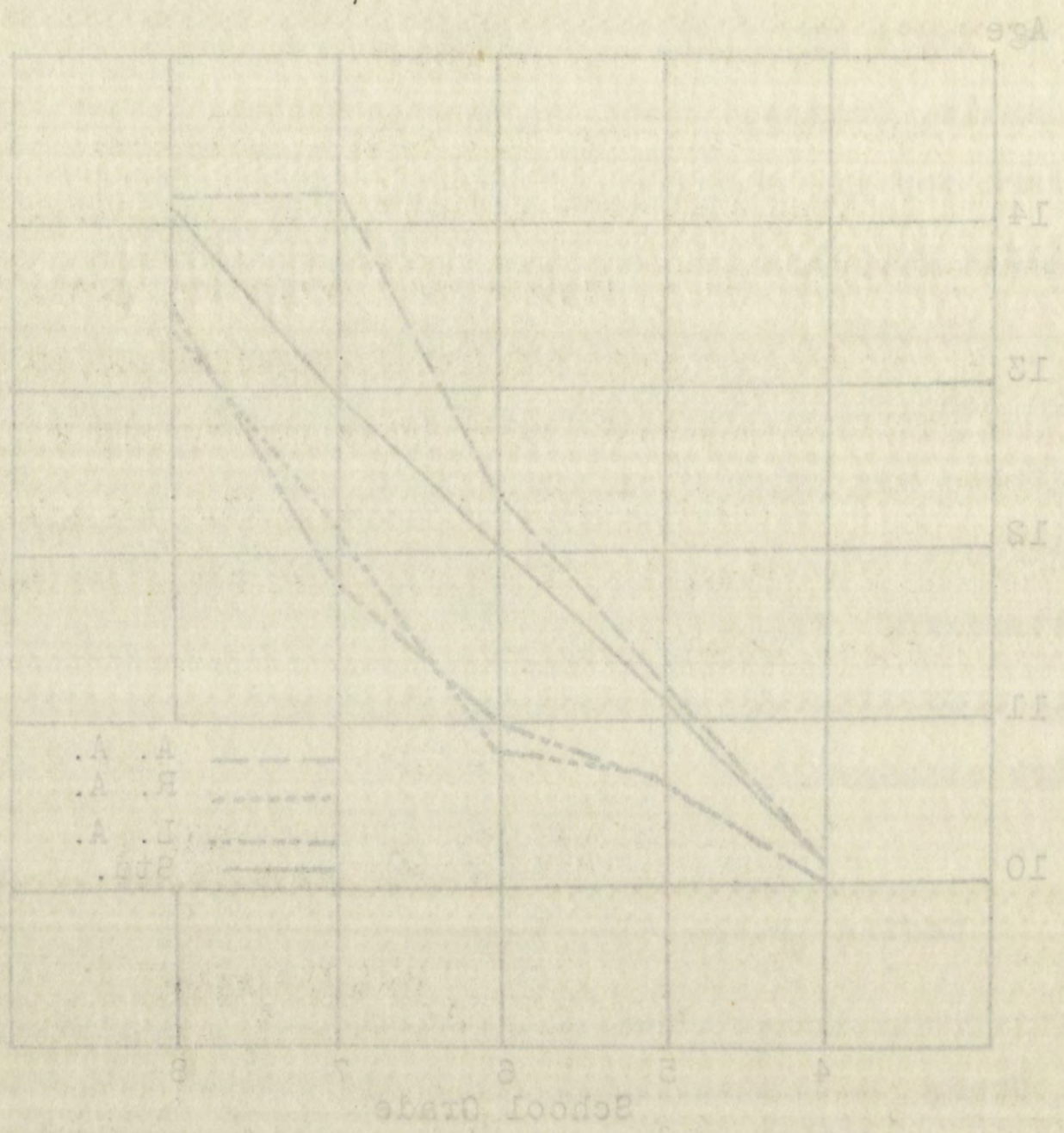


Figure 12. Median Arithmetic, Reading, and Language Ages. Below Scores and Standards.

each grade is below the standard.

Figure 12 shows the same data in graphical form.

It is also desirable to take into consideration the chronological age of pupils when comparing grade standards. It is possible to keep the grade standards up to the norm by classifying students in a given grade, say 4, who are old enough chronologically and far enough advanced educationally for grade 5. This condition would be far from satisfactory educationally.

Table XXI

Median Educational Age and Median
Chronological Age for Each Grade

	School Grade					
	4	5	6	7	8	
Educational Age	9-8	10-6	11-6	12-10	13-7	
Chronological Age	10-11	11-5	12-9	13-0	14-2	

Table XXI and Figure 13 give a comparison of the educational and chronological ages of the pupils of the various grades. The educational ages of the pupils of grades 4, 5, and 6 are considerably lower than the chronological ages for the same groups. The educational ages for grades 7 and 8 more nearly approach the chronological ages for

each grade is below the standard.

Figure 12 shows the same data in graphical form.

It is also desirable to take into consideration the chronological age of pupils when comparing grade standards. It is possible to keep the grade standards up to the mark by classifying students in a given grade, say 4, who are old enough chronologically and yet enough advanced educationally for grade 5. This condition would be far from satisfactory educationally.

Table XII

Median Educational Age and Median Chronological Age for Each Grade

	School Grade				
	4	5	6	7	8
Educational Age	8-8	10-8	11-8	12-10	13-7
Chronological Age	10-11	11-8	12-8	13-0	14-3

Table XII and Figure 12 give a comparison of the educational and chronological ages of the pupils of the various grades. The educational ages of the pupils of grades 4, 5, and 6 are considerably lower than the chronological ages for the same groups. The educational ages for grades 7 and 8 more nearly approach the chronological ages for

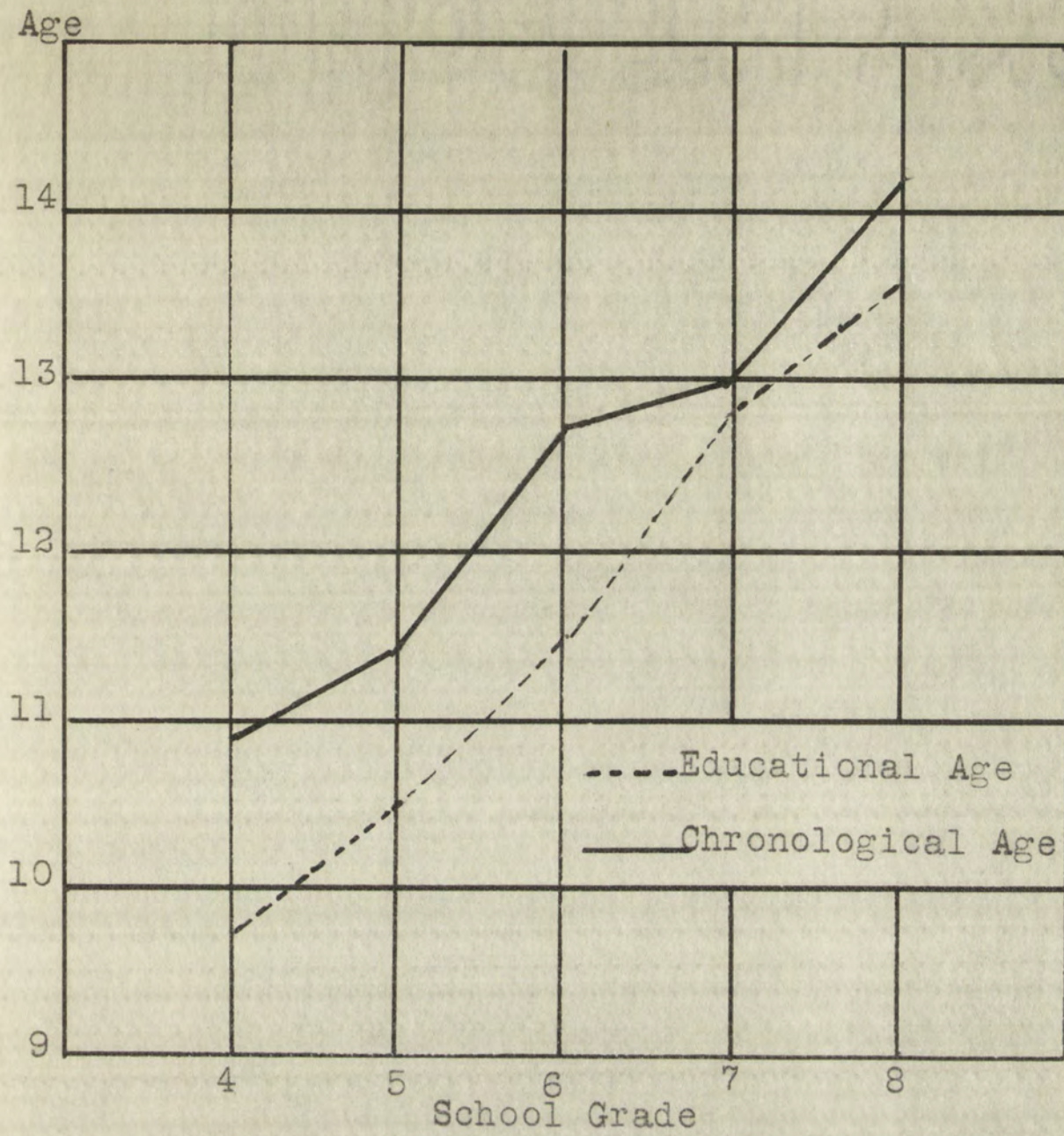


Figure 13. Educational Age Compared with Chronological Age.

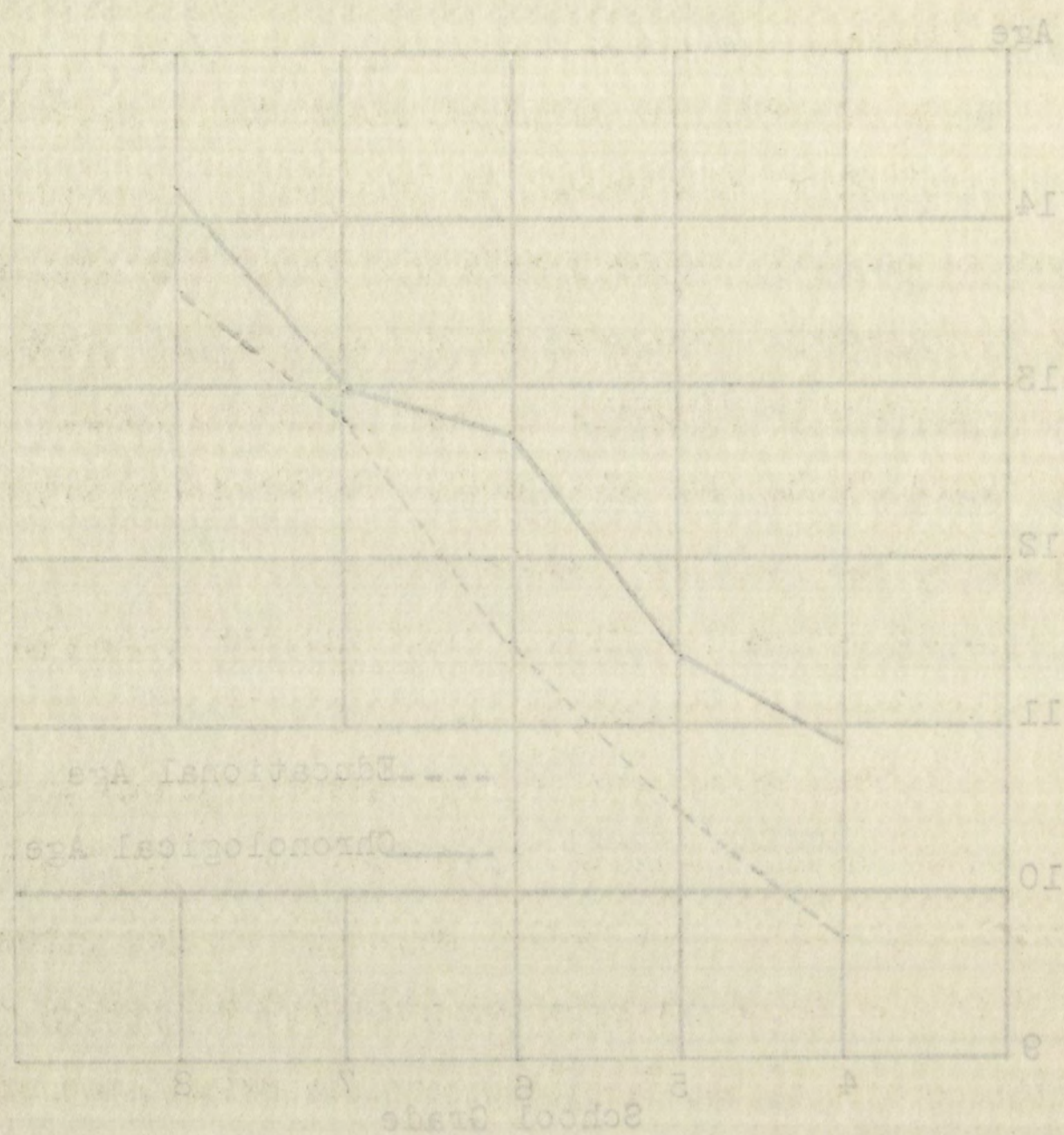


Figure 13. Educational Age Compared with Chronological Age.

those grades.

After careful and detailed statistical analysis of the data available, the answer to Question 1 of this chapter is that in general, Belen pupils are below the standard norms in achievement. However, in the subject of arithmetic, each grade either equals or surpasses the norm.

Question 2. Are the pupils in the Belen Schools achieving in proportion to their ability?

Of the three questions, this chapter attempts to answer, this is the most fundamental.

It is the ideal goal of any school system to so organize and carry on instruction, that each pupil will work up to his mental capacity. The mental capacity of the elementary pupils of the Belen Schools was measured by giving them an intelligence test. The data for the comparison of the mental ability with the achievement of the Belen pupils are given in Table XXII. The most important comparisons are also presented graphically in Figures 14 and 15.

Figure 14 shows that in grades 4, 5, and 6, the chronological ages of the Belen pupils exceed both the standard mental ages and the Belen mental ages for the respective grades, while in grades 7 and 8, the chronological ages of the Belen pupils exceed the Belen mental ages, but are less than the standard mental ages. Figure 14 also shows that the Belen mental ages are considerably lower in each grade

those grades.

After careful and detailed statistical analysis of the data available, the answer to Question 1 of this chapter is that in general, Helen pupils are below the standard range in achievement. However, in the subject of arithmetic, each grade either equals or surpasses the norm.

Question 2. Are the pupils in the Helen schools so far below the standard in their ability?

Of the three questions, this chapter attempts to answer this is the most fundamental.

It is the ideal goal of any school system to be organized and carry on instruction, that each pupil will grow up to his mental capacity. The mental capacity of the elementary pupils of the Helen schools was measured by giving them an intelligence test. The data for the comparison of the mental ability with the achievement of the Helen pupils are given in Table XIII. The most important comparisons are also presented graphically in Figures 14 and 15.

Figure 14 shows that in grades 4, 5, and 6, the chronological ages of the Helen pupils exceed the Helen mental ages, but are less than the standard mental ages. Figure 15 also shows that the Helen mental ages are considerably lower in each grade than the chronological ages of the Helen pupils.

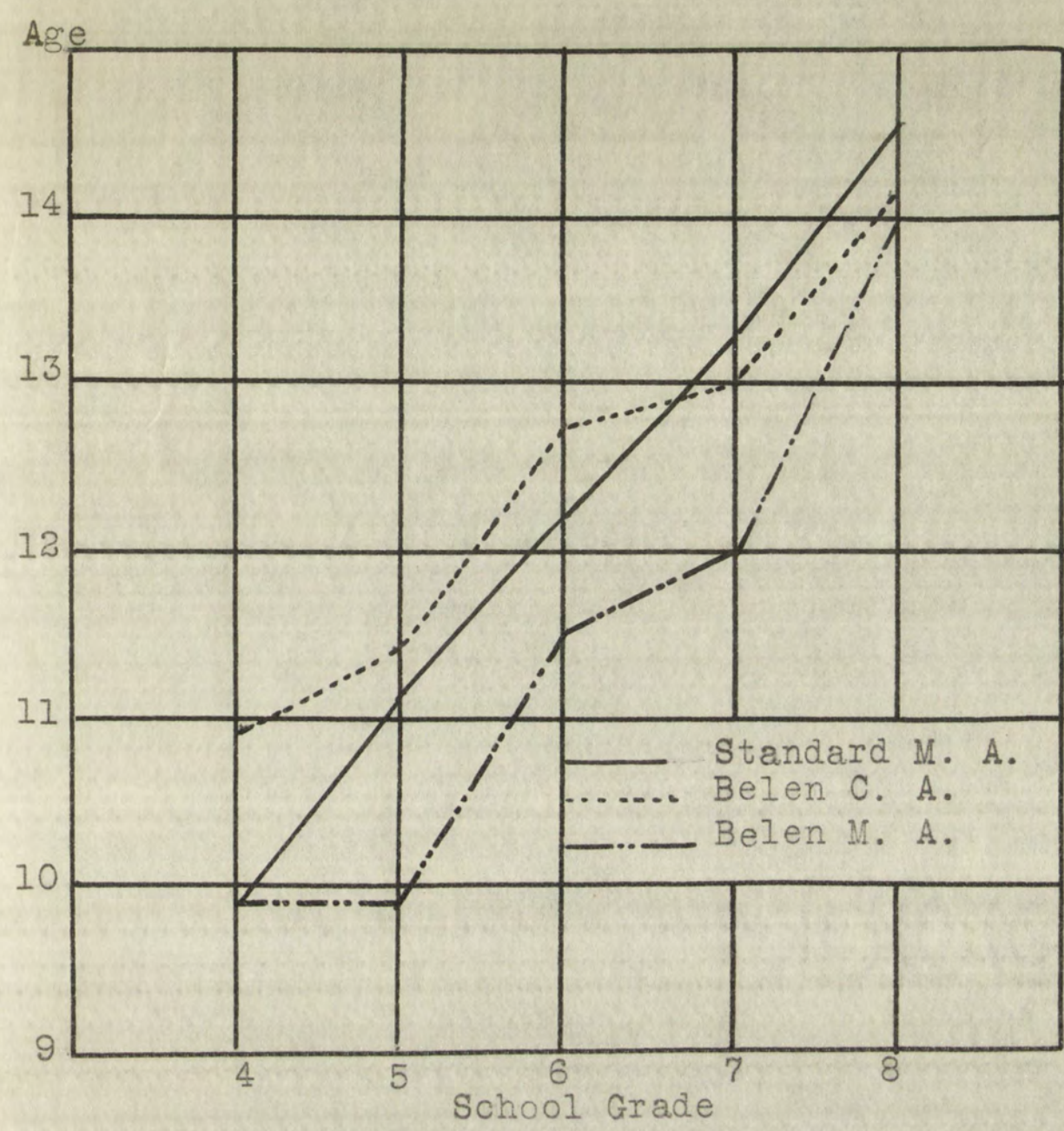


Figure 14. Median Mental and Chronological Ages Compared with Standard Mental Ages.

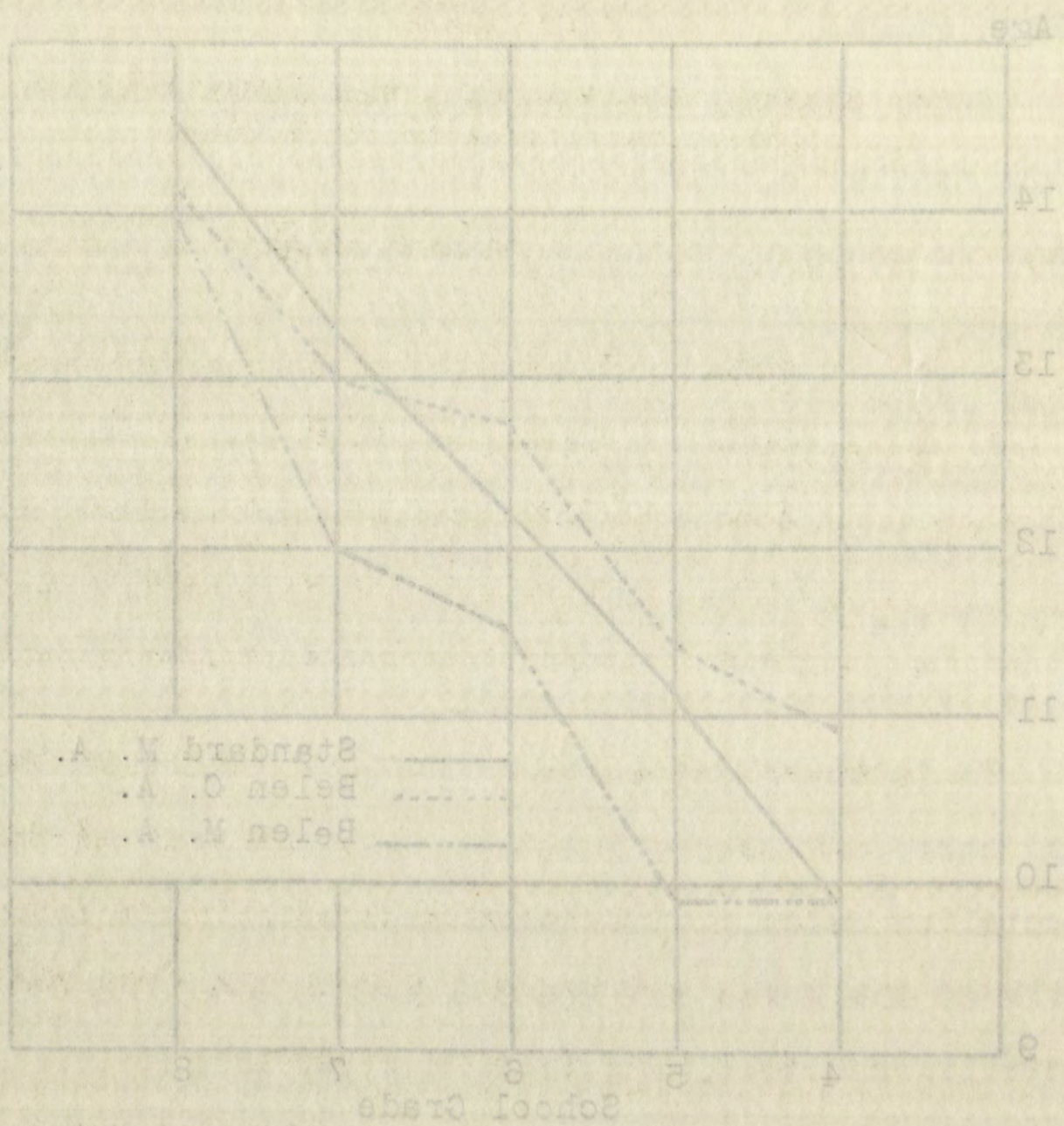


Figure 14. Median Mental and Chronological Ages Compared with Standard Mental Ages.

Table XXII

Belen Mental, Educational, and Chronological
Ages, and Standards by Grades

	School Grade				
	4	5	6	7	8
Standard *					
M. A.	9-11	11-2	12-3	13-4	14-7
Belen					
M. A.	9-11	9-11	11-6	12-0	14-0
Belen					
E. A.	9-8	10-6	11-6	12-10	13-7
Standard					
E. A.	10-1	11-1	12-0	12-11	14-2
Belen					
C. A.	10-11	11-5	12-9	13-00	14-2

than the standard mental ages for the corresponding grades.

These facts would indicate that the present mental status of the Belen pupils is considerably below that of the typical pupils for the several grades and that their mental rate of development is also slower.

To answer the question asked in the beginning of this part of the chapter, the method used is to compare grade by grade, the average educational age with the average mental age. This is shown in Figure 15. It will be seen that both the average mental age and educational age of Belen pupils are below the standard educational age. With the exception of grades 4 and 8, the Belen educational age either equals or exceeds the Belen mental age.

Based on the evidence obtained through the use of both intelligence and achievement tests, all things considered

* Standards used are based on National Test for January.

Table XVII

Bellevue Mental, Educational, and Character
Age, and Standard of Grades

Bellevue	Standard	E. A.	10-1	11-1	12-0	13-1	14-2
Bellevue	Standard	E. A.	9-2	10-3	11-4	12-5	13-6
Bellevue	Standard	E. A.	8-3	9-4	10-5	11-6	12-7
Bellevue	Standard	E. A.	7-4	8-5	9-6	10-7	11-8
Bellevue	Standard	E. A.	6-5	7-6	8-7	9-8	10-9
Bellevue	Standard	E. A.	5-6	6-7	7-8	8-9	9-10
Bellevue	Standard	E. A.	4-7	5-8	6-9	7-10	8-11
Bellevue	Standard	E. A.	3-8	4-9	5-10	6-11	7-12
Bellevue	Standard	E. A.	2-9	3-10	4-11	5-12	6-13
Bellevue	Standard	E. A.	1-10	2-11	3-12	4-13	5-14
Bellevue	Standard	E. A.	0-11	1-12	2-13	3-14	4-15
Bellevue	Standard	E. A.	0-12	1-13	2-14	3-15	4-16
Bellevue	Standard	E. A.	0-13	1-14	2-15	3-16	4-17
Bellevue	Standard	E. A.	0-14	1-15	2-16	3-17	4-18
Bellevue	Standard	E. A.	0-15	1-16	2-17	3-18	4-19
Bellevue	Standard	E. A.	0-16	1-17	2-18	3-19	4-20
Bellevue	Standard	E. A.	0-17	1-18	2-19	3-20	4-21
Bellevue	Standard	E. A.	0-18	1-19	2-20	3-21	4-22
Bellevue	Standard	E. A.	0-19	1-20	2-21	3-22	4-23
Bellevue	Standard	E. A.	0-20	1-21	2-22	3-23	4-24
Bellevue	Standard	E. A.	0-21	1-22	2-23	3-24	4-25
Bellevue	Standard	E. A.	0-22	1-23	2-24	3-25	4-26
Bellevue	Standard	E. A.	0-23	1-24	2-25	3-26	4-27
Bellevue	Standard	E. A.	0-24	1-25	2-26	3-27	4-28
Bellevue	Standard	E. A.	0-25	1-26	2-27	3-28	4-29
Bellevue	Standard	E. A.	0-26	1-27	2-28	3-29	4-30
Bellevue	Standard	E. A.	0-27	1-28	2-29	3-30	4-31
Bellevue	Standard	E. A.	0-28	1-29	2-30	3-31	4-32
Bellevue	Standard	E. A.	0-29	1-30	2-31	3-32	4-33
Bellevue	Standard	E. A.	0-30	1-31	2-32	3-33	4-34
Bellevue	Standard	E. A.	0-31	1-32	2-33	3-34	4-35
Bellevue	Standard	E. A.	0-32	1-33	2-34	3-35	4-36
Bellevue	Standard	E. A.	0-33	1-34	2-35	3-36	4-37
Bellevue	Standard	E. A.	0-34	1-35	2-36	3-37	4-38
Bellevue	Standard	E. A.	0-35	1-36	2-37	3-38	4-39
Bellevue	Standard	E. A.	0-36	1-37	2-38	3-39	4-40
Bellevue	Standard	E. A.	0-37	1-38	2-39	3-40	4-41
Bellevue	Standard	E. A.	0-38	1-39	2-40	3-41	4-42
Bellevue	Standard	E. A.	0-39	1-40	2-41	3-42	4-43
Bellevue	Standard	E. A.	0-40	1-41	2-42	3-43	4-44
Bellevue	Standard	E. A.	0-41	1-42	2-43	3-44	4-45
Bellevue	Standard	E. A.	0-42	1-43	2-44	3-45	4-46
Bellevue	Standard	E. A.	0-43	1-44	2-45	3-46	4-47
Bellevue	Standard	E. A.	0-44	1-45	2-46	3-47	4-48
Bellevue	Standard	E. A.	0-45	1-46	2-47	3-48	4-49
Bellevue	Standard	E. A.	0-46	1-47	2-48	3-49	4-50
Bellevue	Standard	E. A.	0-47	1-48	2-49	3-50	4-51
Bellevue	Standard	E. A.	0-48	1-49	2-50	3-51	4-52
Bellevue	Standard	E. A.	0-49	1-50	2-51	3-52	4-53
Bellevue	Standard	E. A.	0-50	1-51	2-52	3-53	4-54
Bellevue	Standard	E. A.	0-51	1-52	2-53	3-54	4-55
Bellevue	Standard	E. A.	0-52	1-53	2-54	3-55	4-56
Bellevue	Standard	E. A.	0-53	1-54	2-55	3-56	4-57
Bellevue	Standard	E. A.	0-54	1-55	2-56	3-57	4-58
Bellevue	Standard	E. A.	0-55	1-56	2-57	3-58	4-59
Bellevue	Standard	E. A.	0-56	1-57	2-58	3-59	4-60
Bellevue	Standard	E. A.	0-57	1-58	2-59	3-60	4-61
Bellevue	Standard	E. A.	0-58	1-59	2-60	3-61	4-62
Bellevue	Standard	E. A.	0-59	1-60	2-61	3-62	4-63
Bellevue	Standard	E. A.	0-60	1-61	2-62	3-63	4-64
Bellevue	Standard	E. A.	0-61	1-62	2-63	3-64	4-65
Bellevue	Standard	E. A.	0-62	1-63	2-64	3-65	4-66
Bellevue	Standard	E. A.	0-63	1-64	2-65	3-66	4-67
Bellevue	Standard	E. A.	0-64	1-65	2-66	3-67	4-68
Bellevue	Standard	E. A.	0-65	1-66	2-67	3-68	4-69
Bellevue	Standard	E. A.	0-66	1-67	2-68	3-69	4-70
Bellevue	Standard	E. A.	0-67	1-68	2-69	3-70	4-71
Bellevue	Standard	E. A.	0-68	1-69	2-70	3-71	4-72
Bellevue	Standard	E. A.	0-69	1-70	2-71	3-72	4-73
Bellevue	Standard	E. A.	0-70	1-71	2-72	3-73	4-74
Bellevue	Standard	E. A.	0-71	1-72	2-73	3-74	4-75
Bellevue	Standard	E. A.	0-72	1-73	2-74	3-75	4-76
Bellevue	Standard	E. A.	0-73	1-74	2-75	3-76	4-77
Bellevue	Standard	E. A.	0-74	1-75	2-76	3-77	4-78
Bellevue	Standard	E. A.	0-75	1-76	2-77	3-78	4-79
Bellevue	Standard	E. A.	0-76	1-77	2-78	3-79	4-80
Bellevue	Standard	E. A.	0-77	1-78	2-79	3-80	4-81
Bellevue	Standard	E. A.	0-78	1-79	2-80	3-81	4-82
Bellevue	Standard	E. A.	0-79	1-80	2-81	3-82	4-83
Bellevue	Standard	E. A.	0-80	1-81	2-82	3-83	4-84
Bellevue	Standard	E. A.	0-81	1-82	2-83	3-84	4-85
Bellevue	Standard	E. A.	0-82	1-83	2-84	3-85	4-86
Bellevue	Standard	E. A.	0-83	1-84	2-85	3-86	4-87
Bellevue	Standard	E. A.	0-84	1-85	2-86	3-87	4-88
Bellevue	Standard	E. A.	0-85	1-86	2-87	3-88	4-89
Bellevue	Standard	E. A.	0-86	1-87	2-88	3-89	4-90
Bellevue	Standard	E. A.	0-87	1-88	2-89	3-90	4-91
Bellevue	Standard	E. A.	0-88	1-89	2-90	3-91	4-92
Bellevue	Standard	E. A.	0-89	1-90	2-91	3-92	4-93
Bellevue	Standard	E. A.	0-90	1-91	2-92	3-93	4-94
Bellevue	Standard	E. A.	0-91	1-92	2-93	3-94	4-95
Bellevue	Standard	E. A.	0-92	1-93	2-94	3-95	4-96
Bellevue	Standard	E. A.	0-93	1-94	2-95	3-96	4-97
Bellevue	Standard	E. A.	0-94	1-95	2-96	3-97	4-98
Bellevue	Standard	E. A.	0-95	1-96	2-97	3-98	4-99
Bellevue	Standard	E. A.	0-96	1-97	2-98	3-99	4-100
Bellevue	Standard	E. A.	0-97	1-98	2-99	3-100	4-101
Bellevue	Standard	E. A.	0-98	1-99	2-100	3-101	4-102
Bellevue	Standard	E. A.	0-99	1-100	2-101	3-102	4-103
Bellevue	Standard	E. A.	0-100	1-101	2-102	3-103	4-104
Bellevue	Standard	E. A.	0-101	1-102	2-103	3-104	4-105
Bellevue	Standard	E. A.	0-102	1-103	2-104	3-105	4-106
Bellevue	Standard	E. A.	0-103	1-104	2-105	3-106	4-107
Bellevue	Standard	E. A.	0-104	1-105	2-106	3-107	4-108
Bellevue	Standard	E. A.	0-105	1-106	2-107	3-108	4-109
Bellevue	Standard	E. A.	0-106	1-107	2-108	3-109	4-110
Bellevue	Standard	E. A.	0-107	1-108	2-109	3-110	4-111
Bellevue	Standard	E. A.	0-108	1-109	2-110	3-111	4-112
Bellevue	Standard	E. A.	0-109	1-110	2-111	3-112	4-113
Bellevue	Standard	E. A.	0-110	1-111	2-112	3-113	4-114
Bellevue	Standard	E. A.	0-111	1-112	2-113	3-114	4-115
Bellevue	Standard	E. A.	0-112	1-113	2-114	3-115	4-116
Bellevue	Standard	E. A.	0-113	1-114	2-115	3-116	4-117
Bellevue	Standard	E. A.	0-114	1-115	2-116	3-117	4-118
Bellevue	Standard	E. A.	0-115	1-116	2-117	3-118	4-119
Bellevue	Standard	E. A.	0-116	1-117	2-118	3-119	4-120
Bellevue	Standard	E. A.	0-117	1-118	2-119	3-120	4-121
Bellevue	Standard	E. A.	0-118	1-119	2-120	3-121	4-122
Bellevue	Standard	E. A.	0-119	1-120	2-121	3-122	4-123
Bellevue	Standard	E. A.	0-120	1-121	2-122	3-123	4-124
Bellevue	Standard	E. A.	0-121	1-122	2-123	3-124	4-125
Bellevue	Standard	E. A.	0-122	1-123	2-124	3-125	4-126
Bellevue	Standard	E. A.	0-123	1-124	2-125	3-126	4-127
Bellevue	Standard	E. A.	0-124	1-125	2-126	3-127	4-128
Bellevue	Standard	E. A.	0-125	1-126	2-127	3-128	4-129
Bellevue	Standard	E. A.	0-126	1-127	2-128	3-129	4-130
Bellevue	Standard	E. A.	0-127	1-128	2-129	3-130	4-131
Bellevue	Standard	E. A.	0-128	1-129	2-130	3-131	4-132
Bellevue	Standard	E. A.	0-129	1-130	2-131	3-132	4-133
Bellevue	Standard	E. A.	0-130	1-131	2-132	3-133	4-134
Bellevue	Standard	E. A.	0-131	1-132	2-133	3-134	4-135
Bellevue	Standard	E. A.	0-132	1-133	2-134	3-135	4-136
Bellevue	Standard	E. A.	0-133	1-134	2-135	3-136	4-137
Bellevue	Standard	E. A.	0-134	1-135	2-136	3-137	4-138
Bellevue	Standard	E. A.	0-135	1-136	2-137	3-138	4-139
Bellevue	Standard	E. A.	0-136	1-137	2-138	3-139	4-140
Bellevue	Standard	E. A.	0-137	1-138	2-139	3-140	4-141
Bellevue	Standard	E. A.	0-138	1-139	2-140	3-141	4-142
Bellevue	Standard	E. A.	0-139	1-140	2-141	3-142	4-143
Bellevue	Standard	E. A.	0-140	1-141	2-142	3-143	4-144
Bellevue	Standard	E. A.	0-141	1-142	2-143	3-144	4-145
Bellevue	Standard	E. A.	0-142	1-143	2-144	3-145	4-146
Bellevue	Standard	E. A.	0-143	1-144	2-145	3-146	4-147
Bellevue	Standard	E. A.	0-144	1-145	2-146	3-147	4-148
Bellevue	Standard	E. A.	0-145	1-146	2-147	3-148	4-149
Bellevue	Standard	E. A.	0-146	1-147	2-148	3-149	4-150
Bellevue	Standard	E. A.	0-147	1-148	2-149	3-150	4-151
Bellevue	Standard	E. A.	0-148	1-149	2-150	3-151	4-152
Bellevue	Standard	E. A.	0-149	1-150	2-151	3-152	4-153
Bellevue	Standard	E. A.	0-150	1-151	2-152	3-153	4-154
Bellevue	Standard	E. A.	0-151	1-152	2-153	3-154	4-155
Bellevue	Standard	E. A.	0-152	1-153	2-154	3-155	4-156
Bellevue	Standard	E. A.	0-153	1-154	2-155	3-156	4-157
Bellevue	Standard	E. A.	0-154	1-155	2-156	3-157	4-158
Bellevue	Standard	E. A.	0-155	1-156	2-157	3-158	4-159
Bellevue	Standard	E. A.	0-156	1-157	2-158	3-159	4-160
Bellevue	Standard	E. A.	0-157	1-158	2-159	3-160	4-161
Bellevue	Standard	E. A.	0-158	1-159	2-160	3-161	4-162
Bellevue	Standard	E. A.	0-159	1-160	2-161	3-162	4-163
Bellevue	Standard	E. A.	0-160	1-161	2-162	3-163	4-164
Bellevue	Standard	E. A.	0-161	1-162	2-163	3-164	4-165
Bellevue	Standard	E. A.	0-162	1-163	2-164	3-165	4-166
Bellevue	Standard	E. A.	0-163	1-164	2-165	3-166	4-167
Bellevue	Standard	E. A.	0-164	1-165	2-166	3-167	4-168
Bellevue	Standard	E. A.	0-165	1-166	2-167	3-168	4-169
Bellevue	Standard	E. A.	0-166	1-167	2-168	3-169	4-170
Bellevue	Standard	E. A.	0-167	1-168	2-169	3-170	4-171
Bellevue	Standard	E. A.	0-168	1-169	2-170	3-171	4-172
Bellevue	Standard	E. A.	0-169	1-170	2-171	3-172	4-173
Bellevue	Standard	E. A.	0-170	1-171	2-172	3-173	4-174
Bellevue	Standard	E. A.	0-171	1-172	2-173	3-174	4-175
Bellevue	Standard	E. A.	0-172	1-173	2-174	3-175	

than the standard mental ages for the corresponding grades.

These facts would indicate that the present mental ages of the Bellevue pupils is considerably below the typical pupils for the several grades and that their mental rate of development is also slower.

To answer the question asked in the beginning of this part of the chapter, the method used is to compare the average educational age with the average mental age. This is shown in Figure 15. It will be seen that both the average mental age and educational age of the pupils are below the standard educational age. With the exception of grades 4 and 5, the Bellevue educational age is either equal or exceeds the Bellevue mental age.

Based on the evidence obtained between the intelligence and achievement tests, all pupils would be classified as below standard.

* Standards used are based on National Test for Learning.

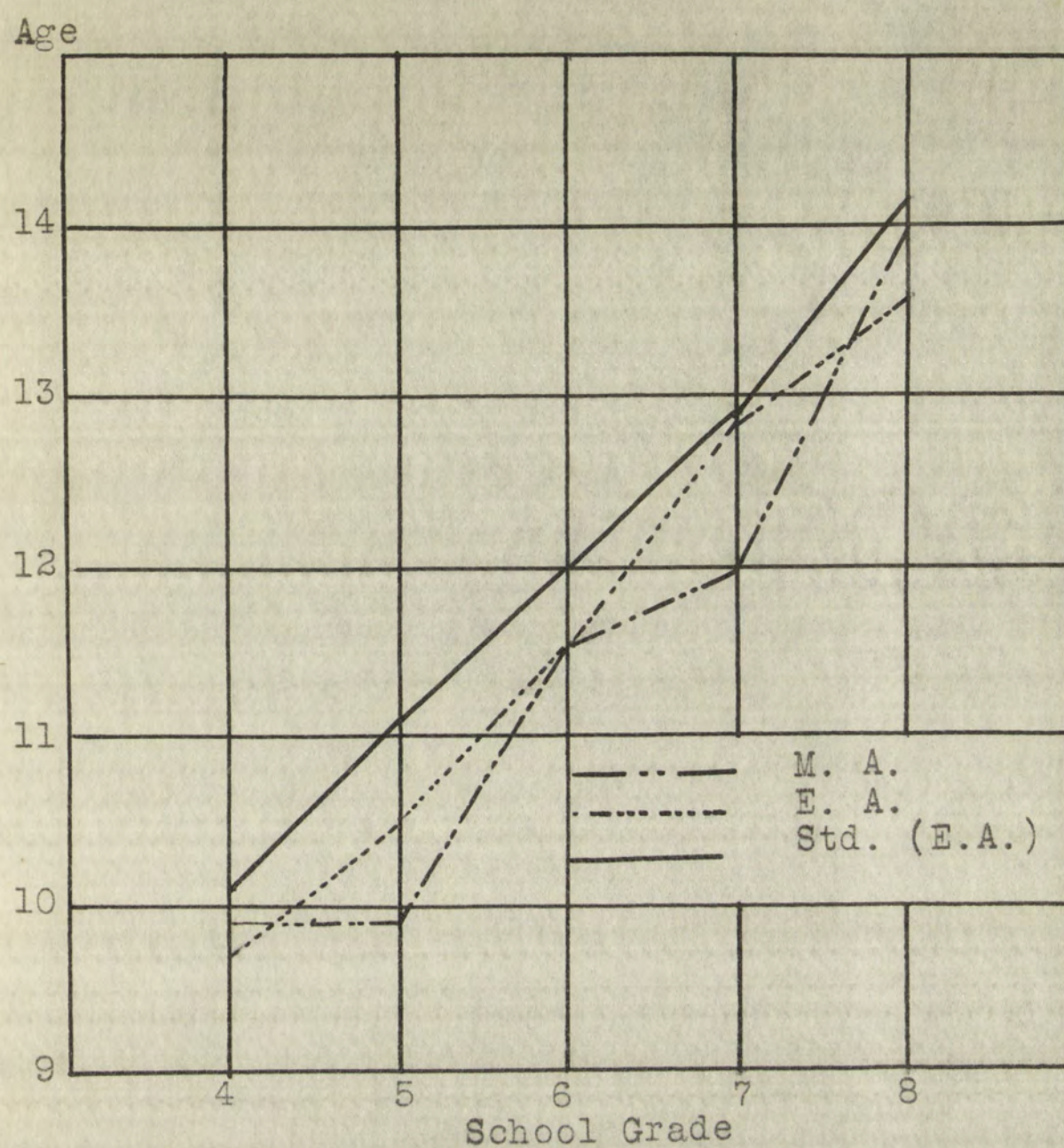


Figure 15. Median Mental and Educational Ages, Belen and Standard.

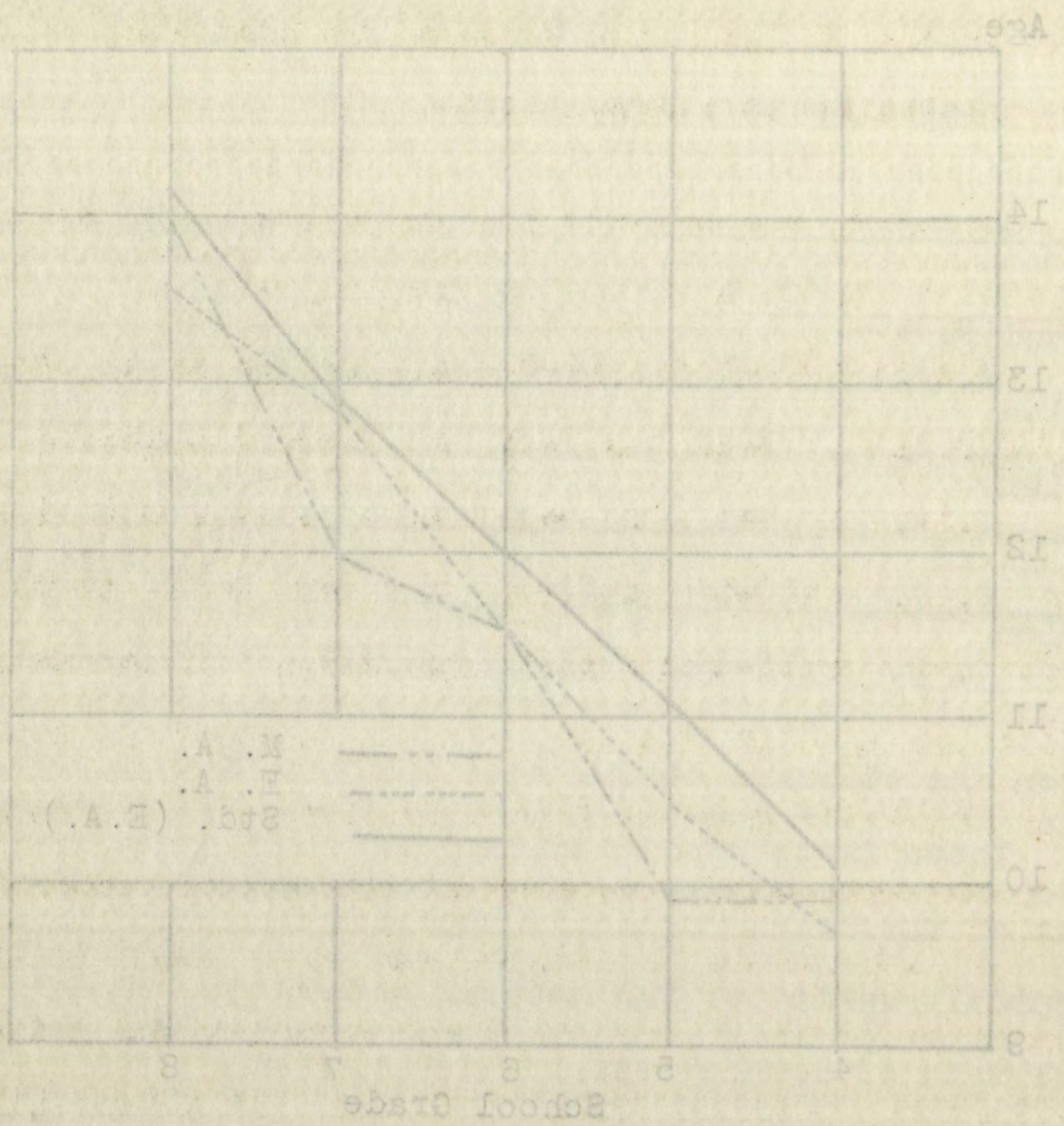


Figure 15. Median Mental and Educational Ages, Belen and Standard.

the pupils in the Belen Schools are achieving approximately in proportion to their ability.

Question 3. Are the pupils in the Belen Schools classified so as to work most effectively?

The secret of proper classification is to produce grade homogeneity. When a school has grouped together pupils of approximately the same educational status with the ability to progress at approximately the same rate, it has gone a long way toward securing homogeneity. In answering the third question of this chapter, we shall attempt to find out how far Belen has gone in regard to securing grade homogeneity.

The best single measure of the present educational status of a pupil is his educational age, which is his average achievement on a group of tests covering the principal school subjects. Figure 6 shows the facts for Belen with respect to the range in educational age of each entire grade group and of the middle fifty per cent of each group. It will be observed that there is a wide range between the pupil who is youngest and the pupil who is oldest in the same grade; and that there is great overlapping in the grades. Grade 4 has pupils whose present educational status is all the way from 8 years to 11.5 years; grade 5 has a range from 9 to 12.5 years; grade 6 has a range from a little more than 10 to 14.5 years; grade 7 a range of from 10.8 to 14.5 years and grade 8 has a range from 11.5

the pupils in the Helen School are relatively in proportion to their ability.

Question 3. Are the pupils in the Helen School classified so as to work most effectively?

The aspect of proper classification is to group pupils homogeneously. When a school has grouped pupils approximately the same educational status with the ability to progress at approximately the same rate, it has gone a long way toward securing homogeneity. In answering the third question of this chapter, we shall attempt to find out how far Helen has gone in regard to securing grade homogeneity.

The first simple measure of the present educational status of a pupil is his educational age, which is the achievement on a group of tests covering the principal school subjects. Figure 8 shows the facts for Helen with respect to the range in educational age of each entire grade group and of the middle fifty per cent of each group. It will be observed that there is a wide range between the pupils who is youngest and the pupil who is oldest in the same grade, and that there is great overlapping in the grades. Grade 4 has pupils whose present educational status is all the way from 5 years to 11.5 years; grade 5 has a range from 6 to 12.5 years; grade 6 has a range from 7 to 13.5 years; grade 7 a range from 8 to 14.5 years; grade 8 has a range from 9 to 15.5 years and grade 9 has a range from 10 to 16.5 years.

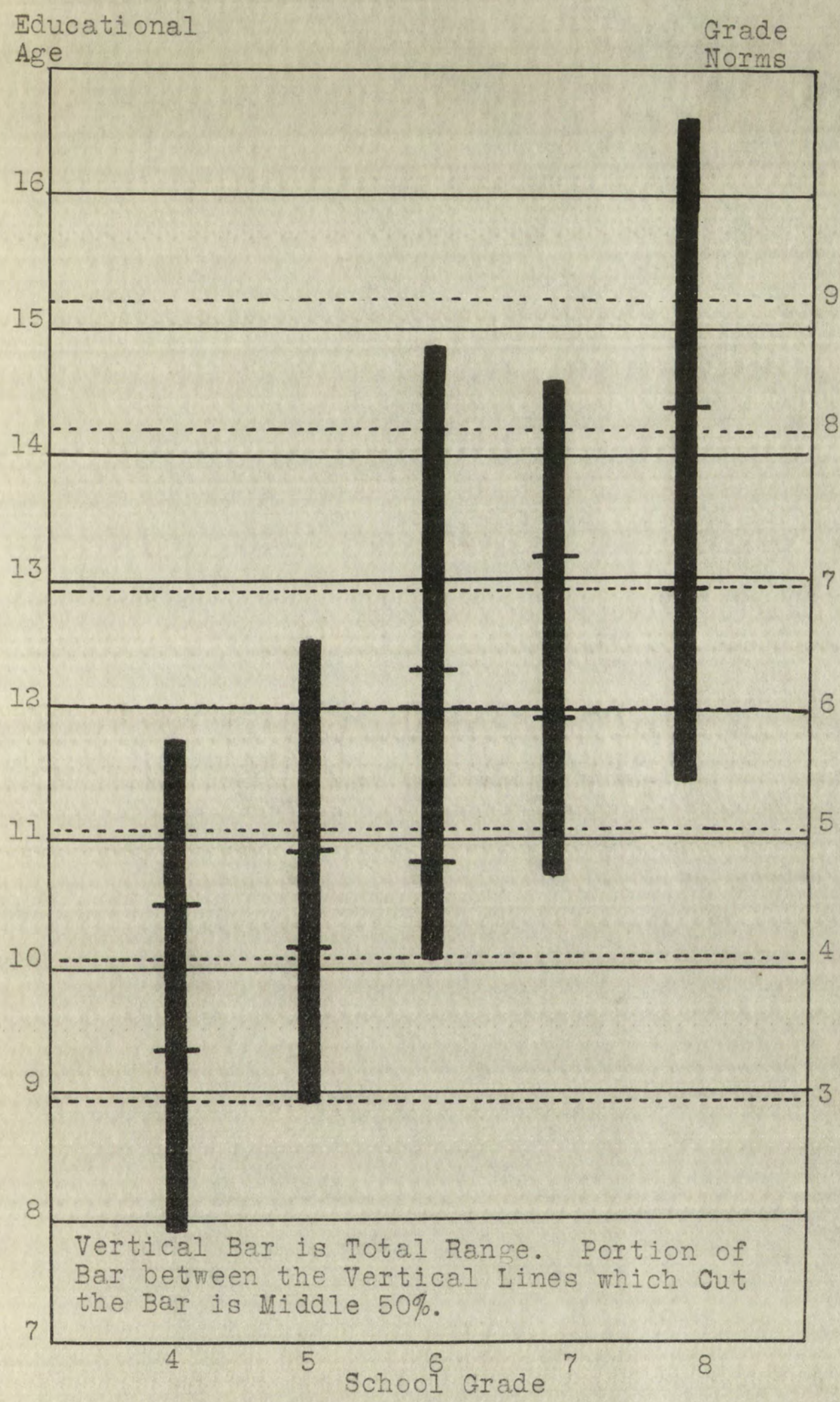


Figure 16. Grade Overlapping in Educational Age. Total Range and Range of Middle 50%.

Grade
Norms

Educational
Age

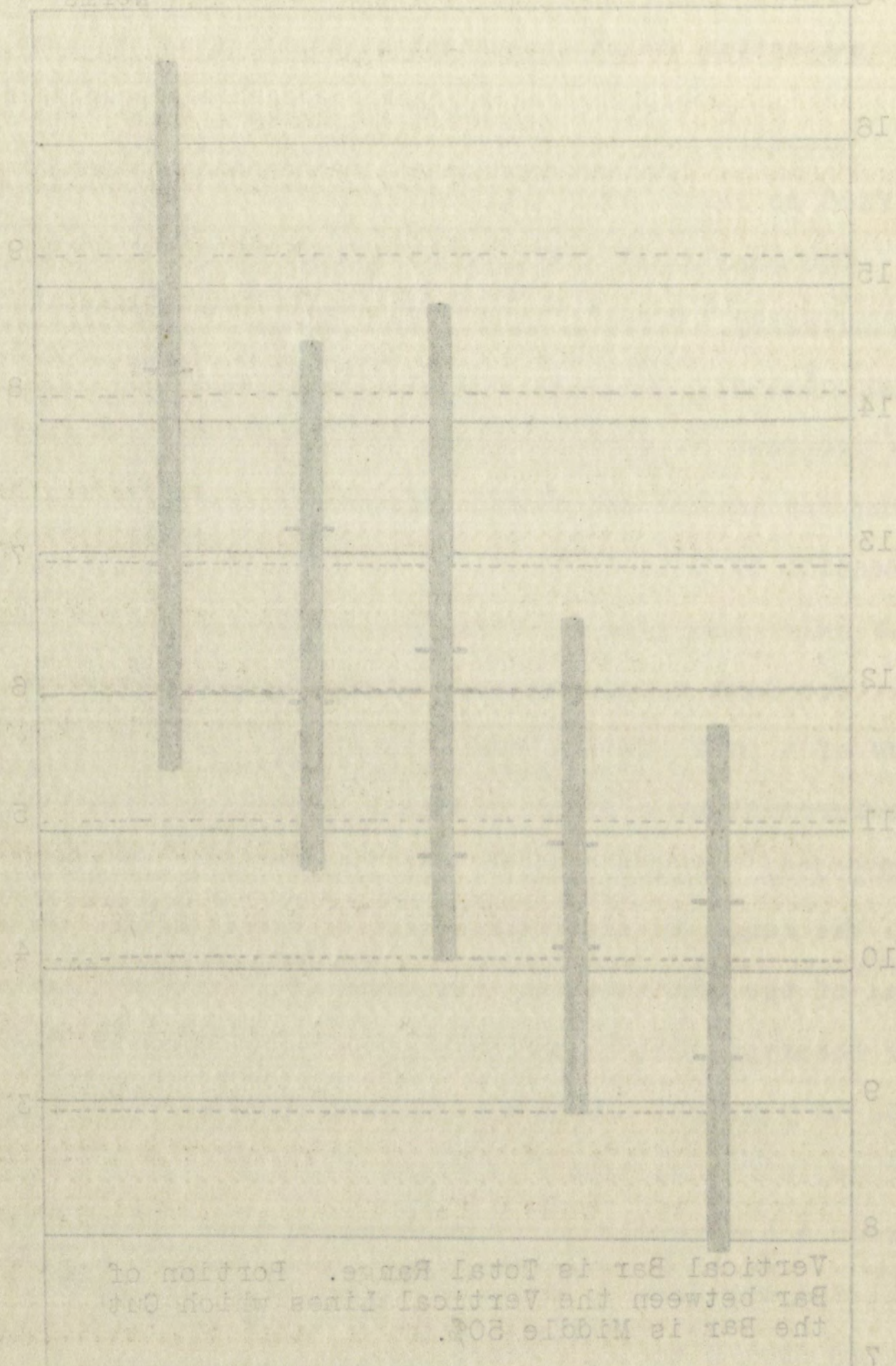


Figure 16. Grade Overlapping in Educational Age.
Total Range and Range of Middle 50%.

to 16.5 years. The dotted lines with numbers at the right indicate the grade norms for the various levels. The range of the middle fifty per cent of grade 4 is fairly well balanced on either side of the standard for grade 4; the middle fifty per cent of grade 5 is entirely below the standard for grade 5; the middle fifty per cent of grade 6 extends from a little less than the standard for grade 5, to somewhat above the standard for grade 6; the same for grade 7 extends from below grade 6 to above grade 7; and the middle fifty per cent of grade 8 extends from below grade 7 to above grade 8. In some instances we find pupils of the same attainment scattered over 2, 3, or 4 grades, and, in a given grade, we find pupils whose educational ages vary 3, 4, or 5 years.

The condition in some of the individual subjects is even worse than in the educational age as a whole. Figure 17 gives the facts for reading, Figure 18 gives the facts for arithmetic, and Figure 19 does the same thing for the language. Figure 17 shows, for example, that pupils whose reading achievement is that of ten-year-old children, are distributed from grade 4 to grade 8, and that pupils in grade 6 range from grade 3 ability to above grade 9 ability.

Figure 18 shows, for example, that eleven-year-old pupils are scattered all the way from grade 4 to 8, while grade 8 pupils have arithmetic ages ranging from below

to 18.5 years. The average age of the pupils in the
indicate the grade range from 12 to 18.5 years.
of the middle fifty percent of the pupils in the
balanced on either side of the middle fifty percent
middle fifty percent of the pupils in the
standard for grade 8; the middle fifty percent of the
6 extends from a 12.5 to 18.5 years range and the
5, to represent above the standard for grade 5; the range
for grade 7 extends from 12.5 to 18.5 years and the
and the middle fifty percent of the pupils in the
low grade 7 to above grade 8; the range for the
pupils of the same attainment as the pupils in the
grades, and, in a given year, the pupils in the
tional ages vary 3, 4, or 5 years.
The condition of the pupils in the
even worse than in the preceding year.
If given the facts for each year, the pupils
for arithmetic, and Figure 13 shows the results for
languages. Figure 14 shows the results for
reading achievement is that of the preceding year.
distributed from grade 4 to grade 8, and that the
grade 8 range from grade 4 to grade 8, and that the
Figure 15 shows the results for arithmetic and
pupils are scattered all over the range from 4 to 8
grade 8 pupils have attained the standard for grade 8.

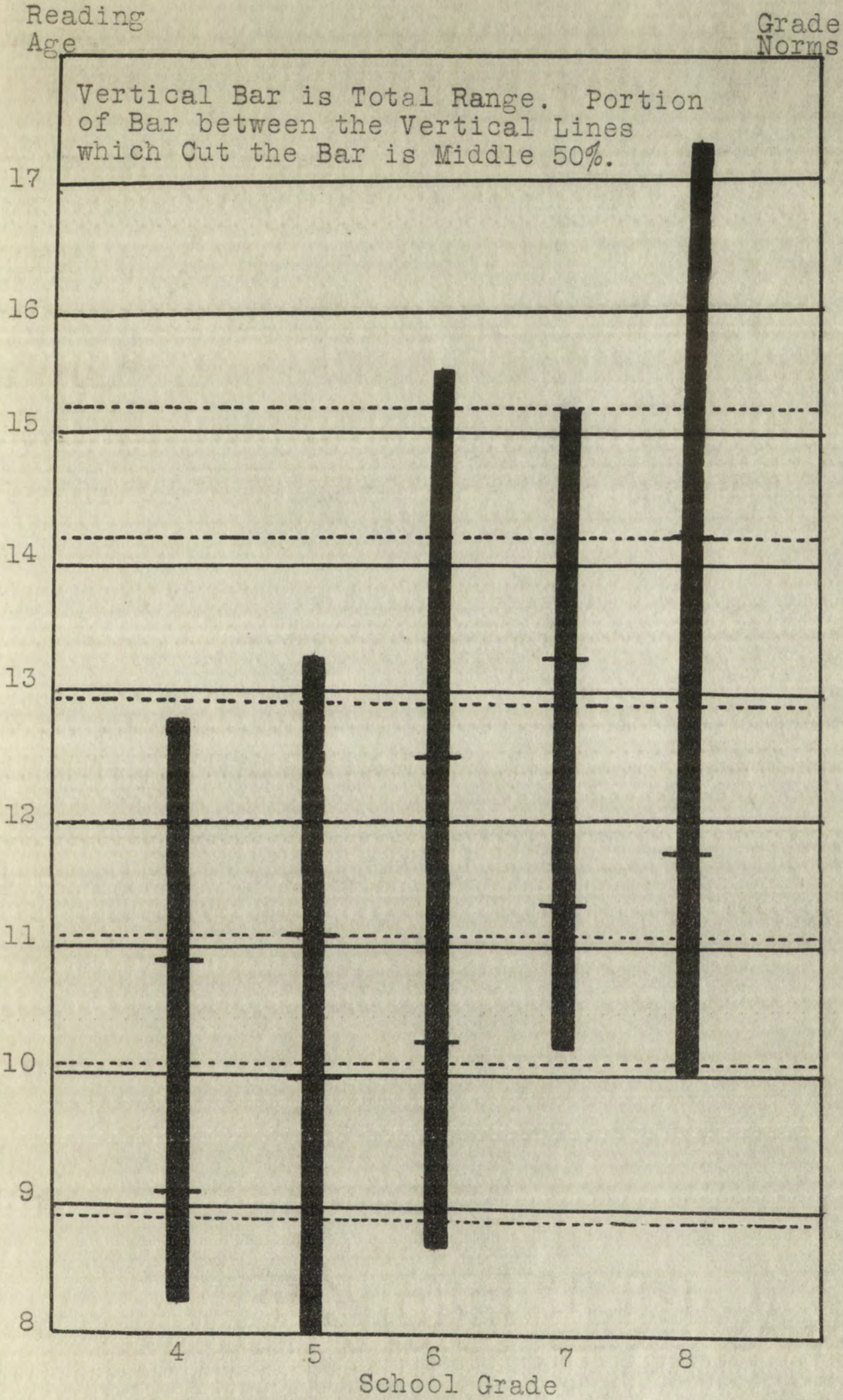


Figure 17. Grade Overlapping in Reading Age. Total Range and Range of Middle 50%.

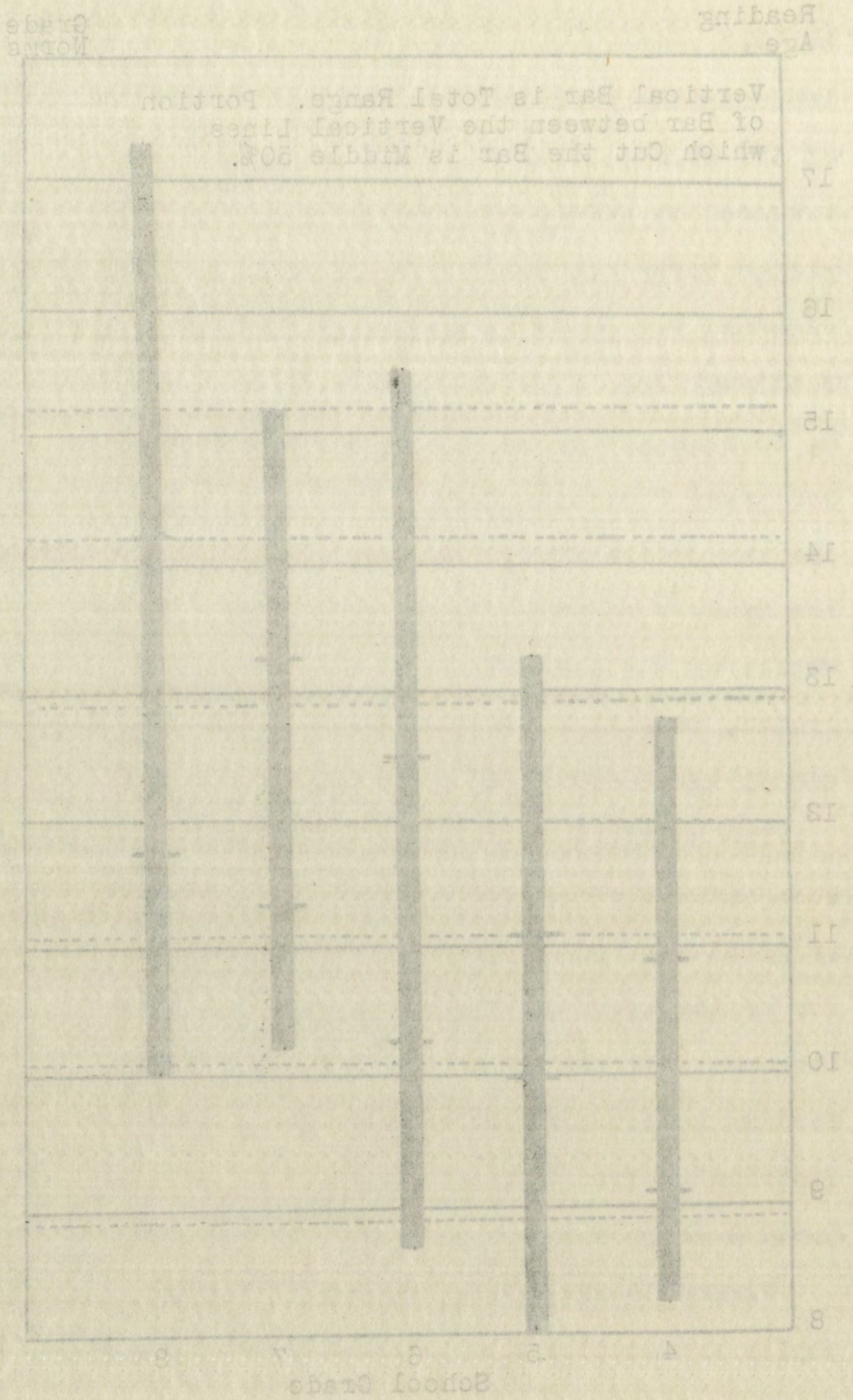


Figure 17. Grade Overlapping in Reading Age. Total Range and Range of Middle 50%.

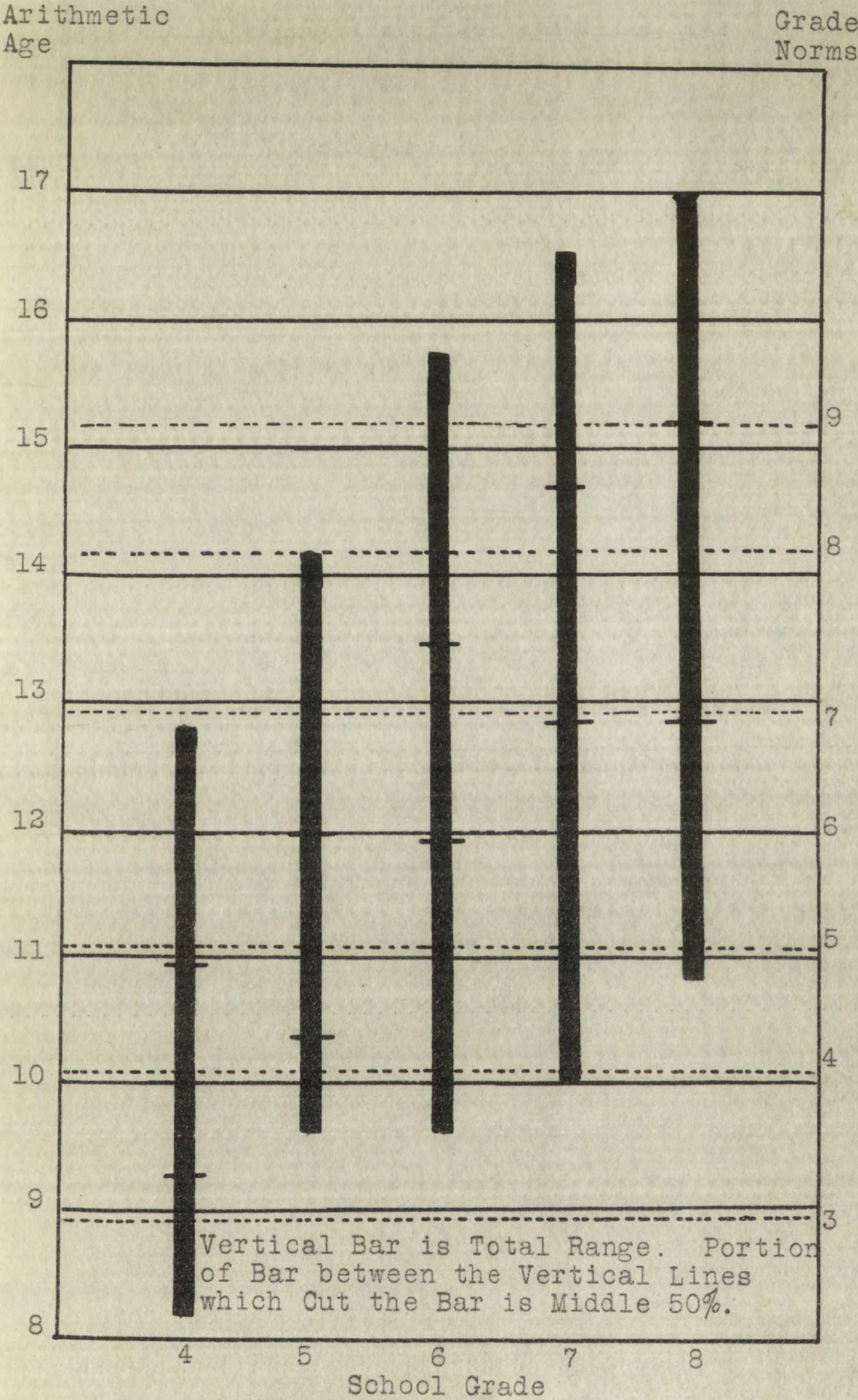


Figure 18. Grade Overlapping in Arithmetic Age. Total Range and Range of Middle 50%.

Arithmetic
Age

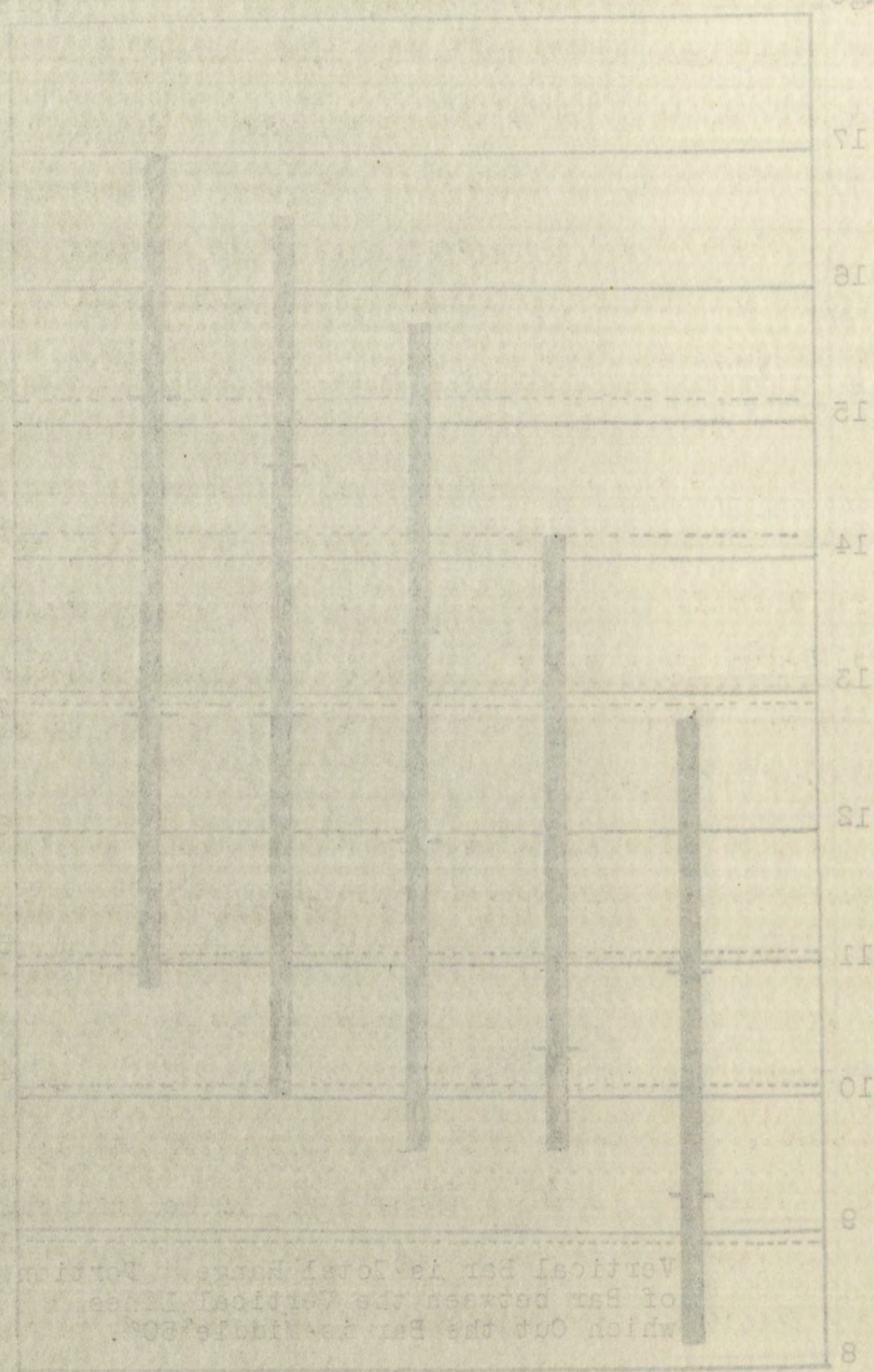


Figure 18. Grade Overlapping in Arithmetic Age.
Total Range and Range of Middle 50%.

grade 5 to considerably beyond grade 9.

The language situation as shown in Figure 19 is still worse. Grade 5 could exchange places with grade 4 and leave the language situation practically unchanged.

Figure 20 gives us some idea as to whether the Belen pupils are grouped together according to their capability of progressing at approximately the same rate. A glance at the figure which gives the range of mental ages for the various grades shows a great variance in mental ability within the same grade, and a great overlapping of grades in mental ability. For example, we find ten-year-old pupils scattered from grade 4 to grade 8. We find grade 7 pupils who range from less than 9 years of age to more than 17 years of age.

Figure 21 gives a picture of the grade overlapping in chronological age. While there exists quite a range within a given grade, yet the range in chronological age is not as great as the range in respect to other ages. This would indicate that pupils are probably assigned to the various grades in accordance with their chronological ages, rather than according to their educational or mental ages.

In view of the data just given, it is quite evident that the pupils in the Belen Schools are not classified so as to work most effectively.

Grade 5 to considerably beyond Grade 8.

The language situation as shown in Figure 19 is still

worse. Grade 5 could exchange places with Grade 4 and

leave the language situation practically unchanged.

Figure 20 gives an some idea as to whether the Helen

pupils are grouped together according to their capability

of progressing at approximately the same rate. A glance

at the figure which gives the range of mental ages for

the various grades shows a great variance in mental ability

within the same grade, and a great overlapping of grades in

mental ability. For example, we find ten-year-old pupils

scattered from Grade 4 to Grade 8. We find Grade 7 pu-

pils who range from less than 9 years of age to more than

14 years of age.

Figure 21 gives a picture of the grade overlapping in

chronological age. While there exists quite a range with-

in a given grade, yet the range in chronological age is not

as great as the range in respect to other ages. This would

indicate that pupils are probably assigned to the various

grades in accordance with their chronological ages, rather

than according to their educational or mental ages.

In view of the data just given, it is quite evident

that the pupils in the Helen Schools are not classified

as to work most effectively.

Language
Age

Grade
Norms

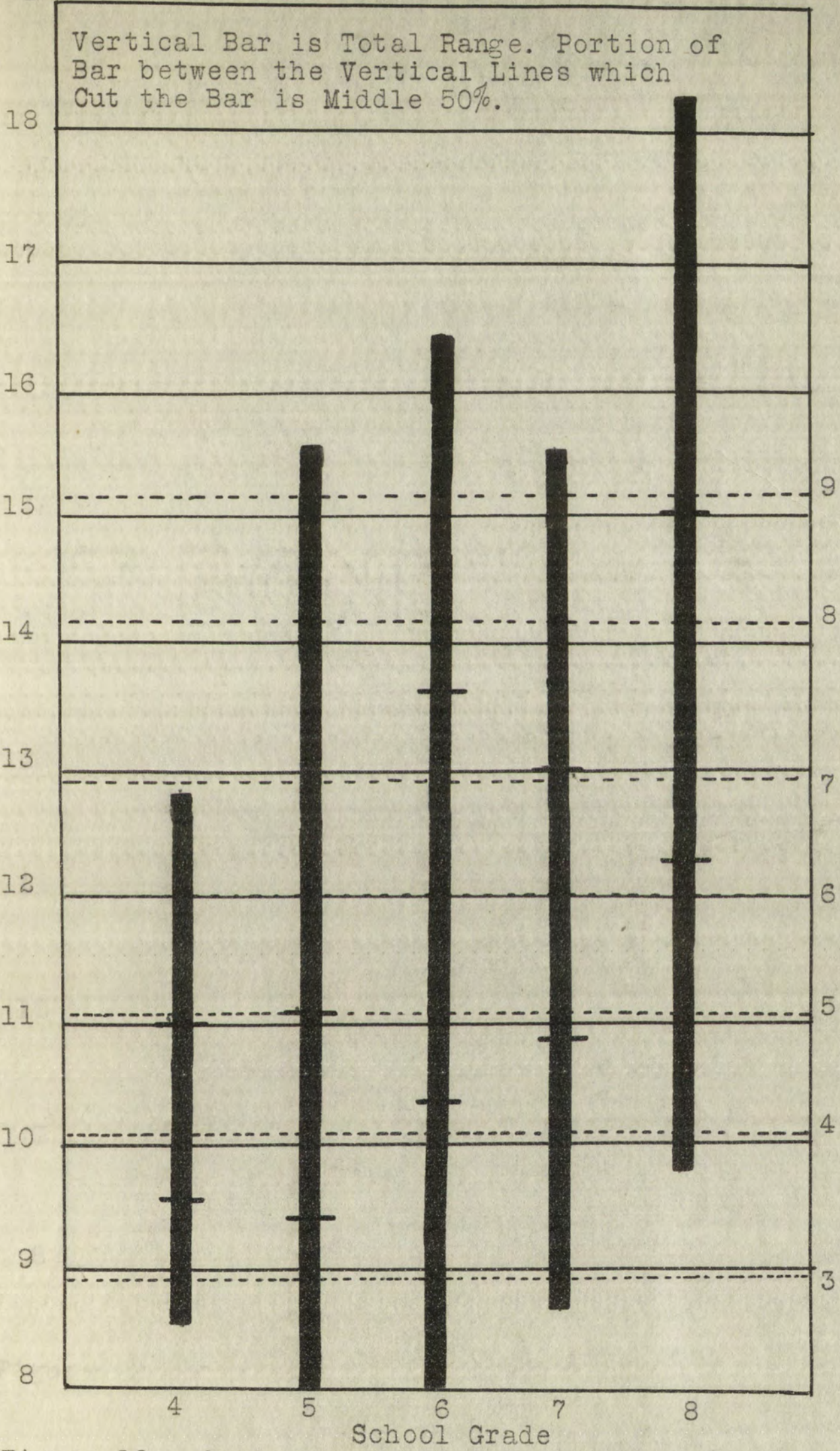


Figure 19. Grade Overlapping in Language Age.
Total Range and Range of Middle 50%.

Language Age

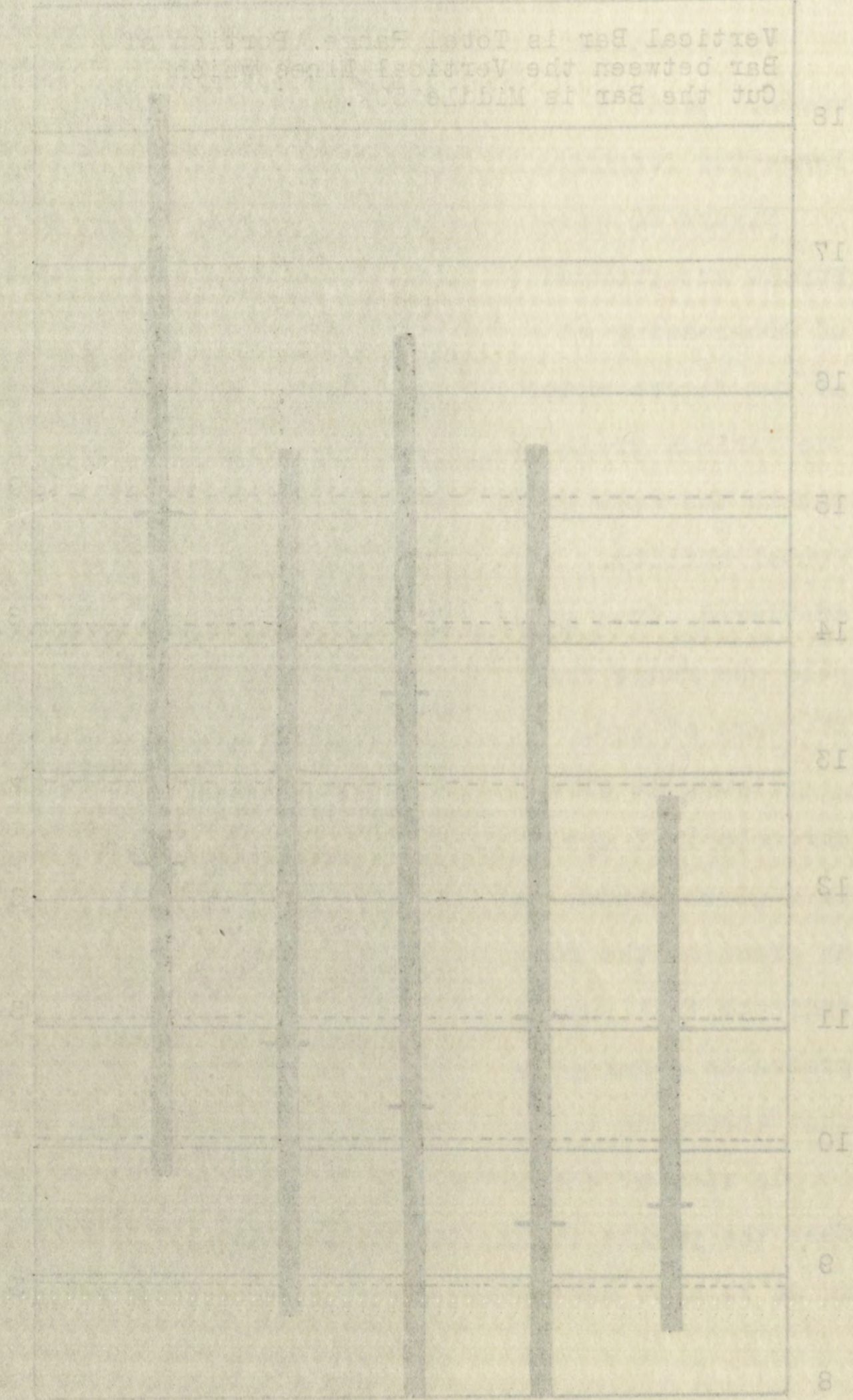


Figure 19. Grade Overlapping in Language Age. Total Range and Middle 50%.

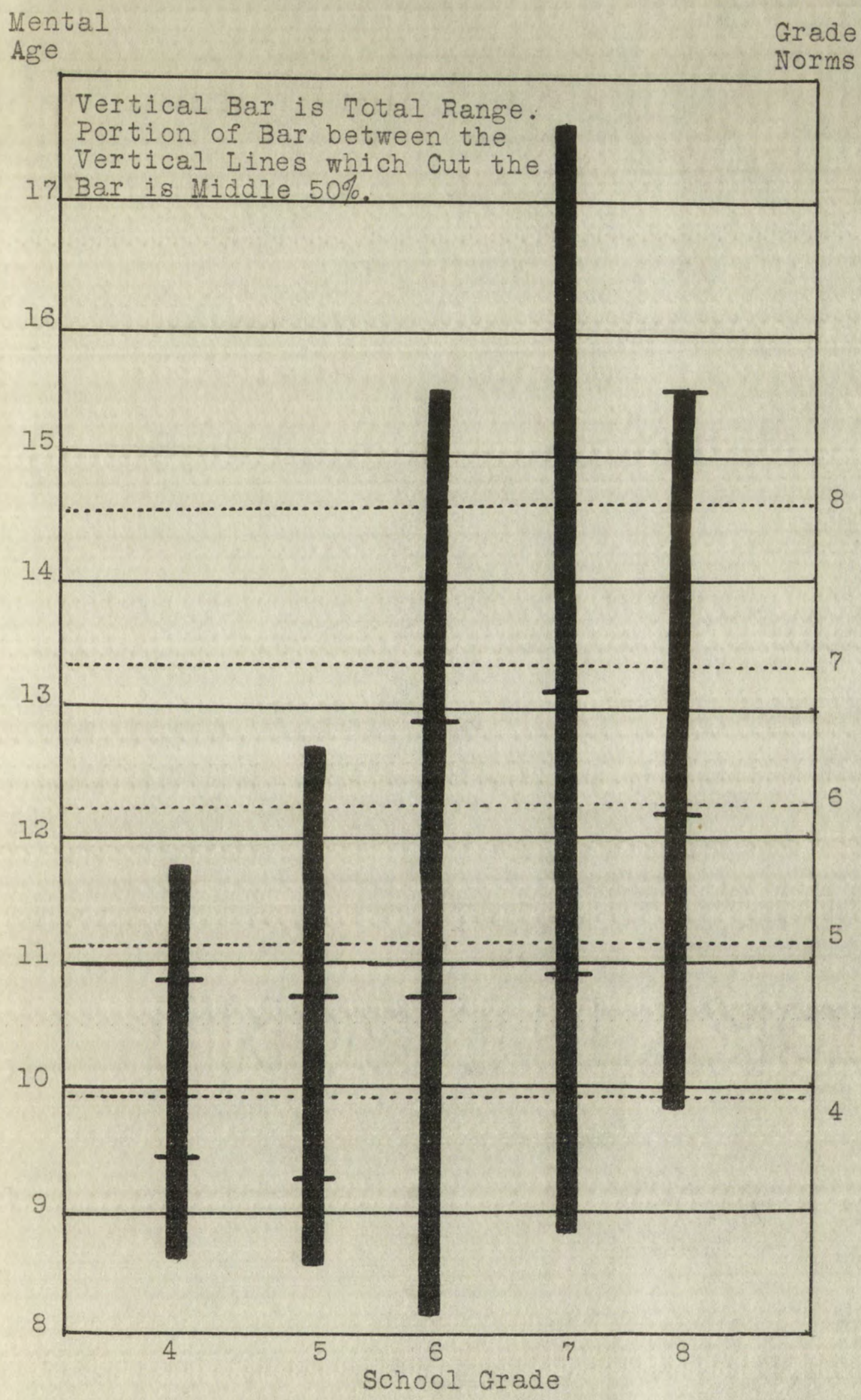


Figure 20. Grade Overlapping in Mental Age.
Total Range and Range of Middle 50%.

Grade
Norms

Mental
Age

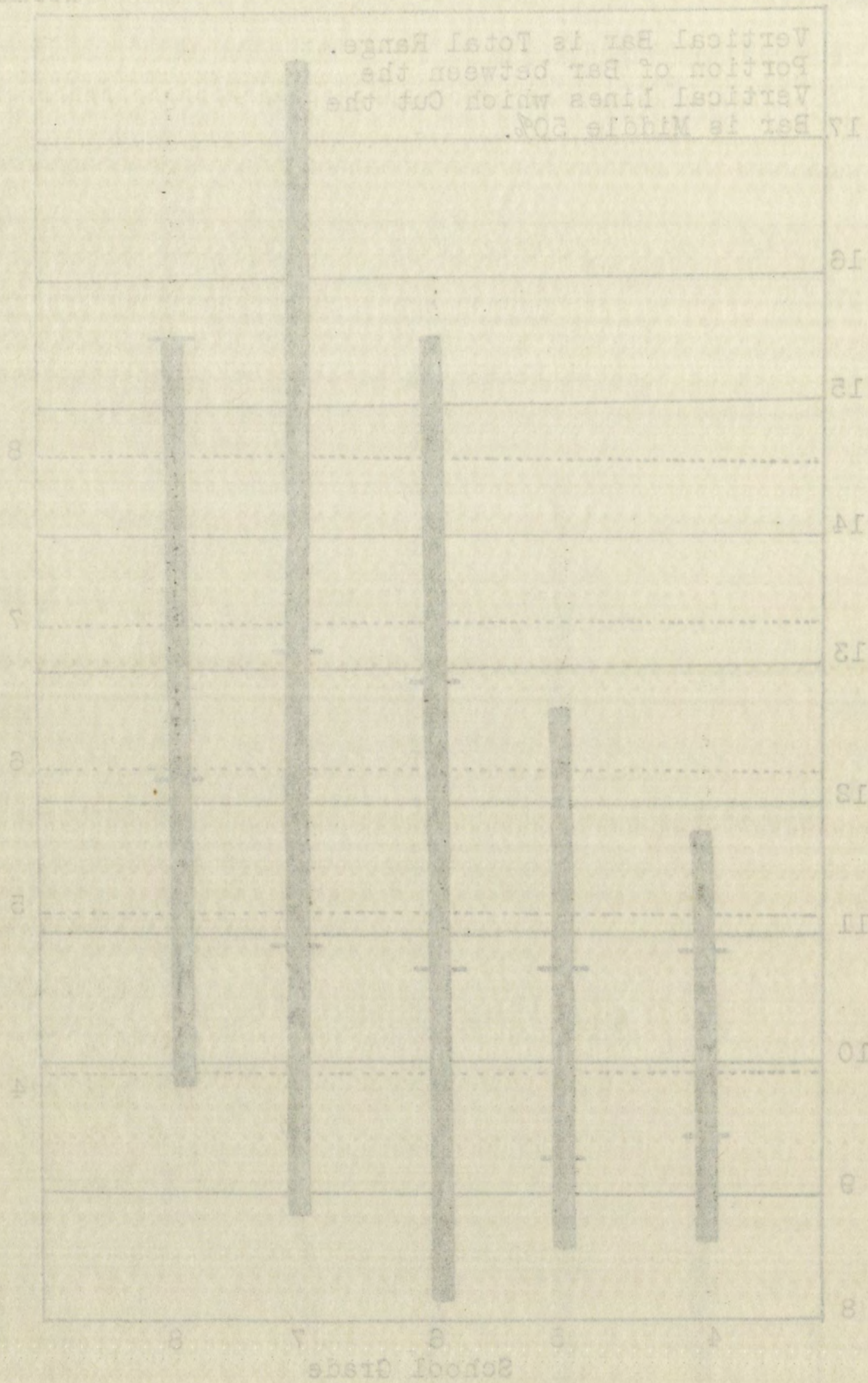


Figure 20. Grade Overlapping in Mental Age.
Total Range and Range of Middle 50%.

Chronological
Age

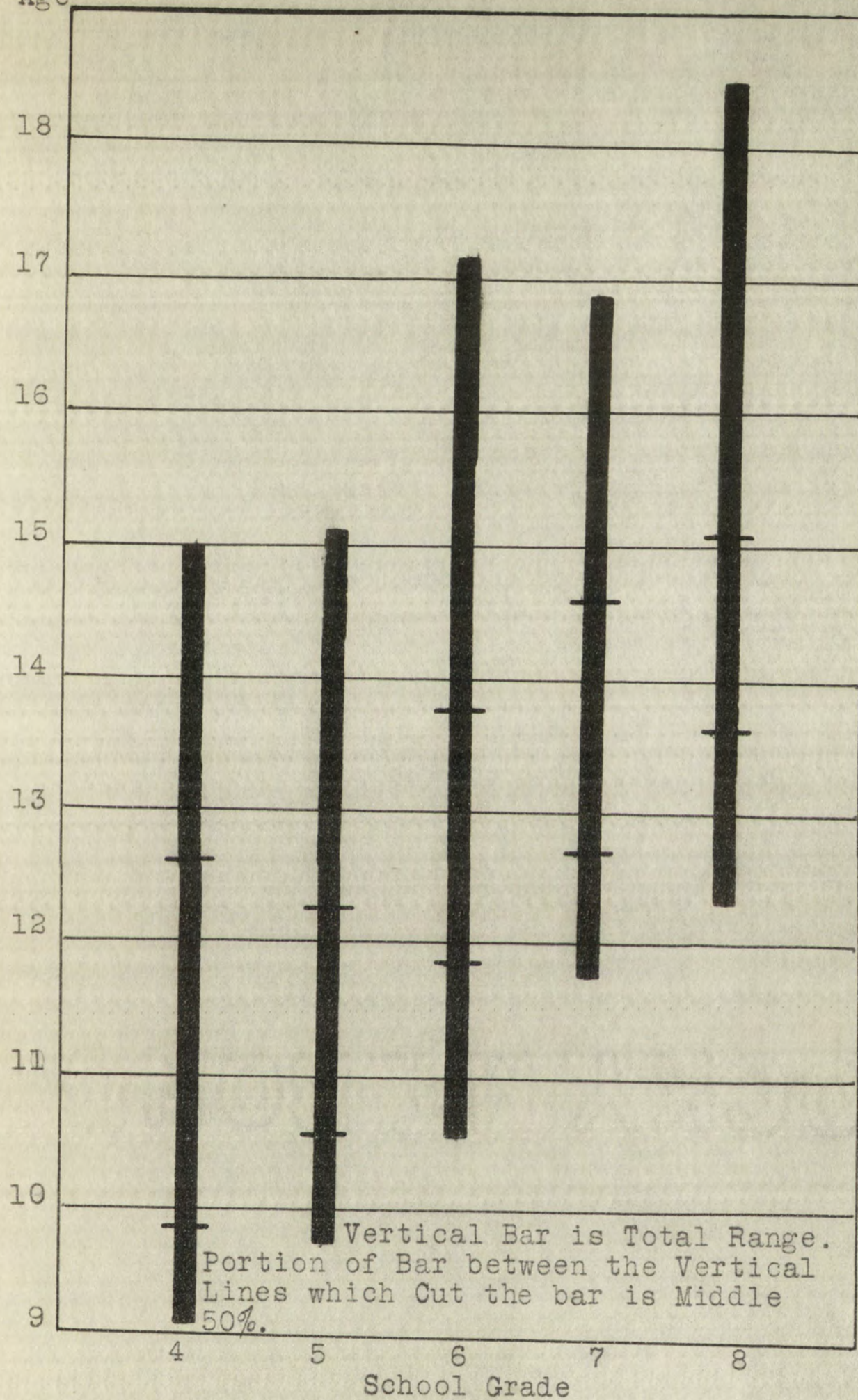


Figure 21. Grade Overlapping in Chronological Age.
Total Range and Range of Middle 50%.

Chronological Age

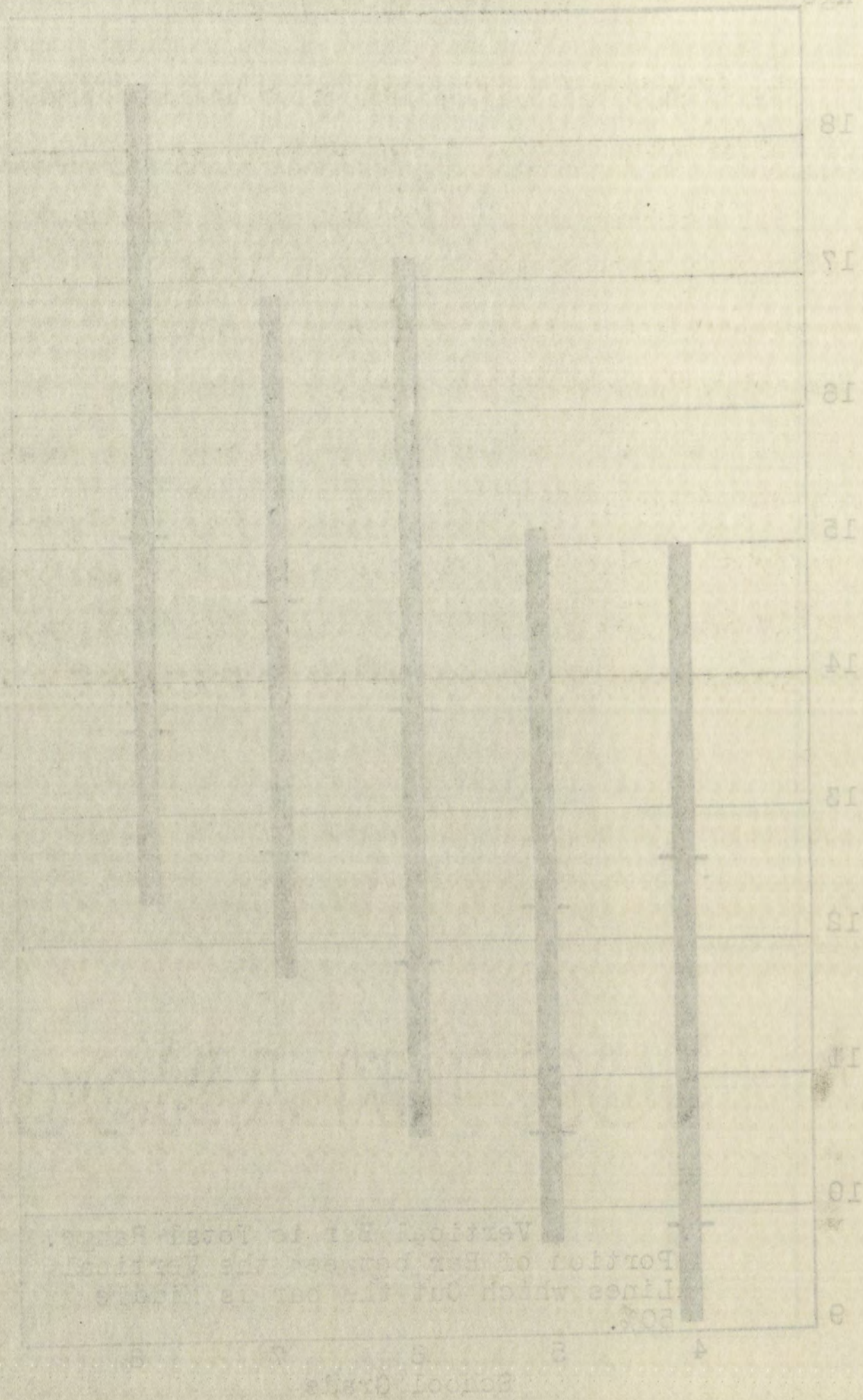


Figure 21. Grade Overlapping in Chronological Age
Total Range of Ages of Children

Summary and Conclusions

1. The Belen pupils are below the standard grade norms of achievement except in the subject of arithmetic.

2. As shown by the comparison of results of both intelligence and achievement tests, Belen pupils are achieving in proportion to their ability. This would indicate that the pupils are taught by efficient teachers.

3. Judged from the data available, the Belen pupils are not classified so as to work most effectively. The teachers' judgments as to the educational attainments of pupils have not resulted in a grouping into grades which are homogeneous with respect to educational age.

Summary and Conclusions

1. The Helen pupils are below the standard grade range of achievement except in the subject of arithmetic.
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CHAPTER VI

THE HIGH SCHOOL

Articulation Between the Elementary Grades and the High School

The administrative officials of Belen are doing a great deal toward bridging the gap between the elementary grades and the high school. Departmentalization of the work of the 7th and 8th grades has been adopted, and algebra, manual training, home economics, and book reports in connection with the study of reading and English, are introduced. Departmentalization accustoms the grade pupils to different teachers for different subjects and trains them to more independent study methods. The introduction of high school subjects in the 7th and 8th grades tends to link the elementary school with the high school.

Another phase of evidence that there is a high degree of articulation between the elementary grades and the high school is shown by Table XXIII. Out of 160 graduates over the past five years, 139 entered the Belen high school, and 11 entered other high schools. This makes a total of 93.75 per cent who did not end their school careers by finishing the first eight grades. Only 6.25 per cent failed to continue their work. Compared with the results

CHAPTER VI

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of a study by Ayres of 386 American cities,¹ in which he found that only 71.4 per cent of 8th grade graduates enter

Table XXIII

Giving the Distribution of the 8th Grade Graduates of the Belen Schools for the Past Five Years

What 8th Grade Graduates Did	Years					Total	Per Cent
	1924	1925	1926	1927	1928		
Went to Belen High School	23	25	21	25	45	139	86.87
Went to Other High Schools	4	3	0	2	2	11	6.88
Left School	5	1	1	2	1	10	6.25
Totals	32	29	22		48	160	100.

high school, Belen makes a wonderfully good showing. Belen exceeds the average of the 386 cities by 22.35 per cent.

Figure 22 shows the distribution of Belen's 8th grade graduates graphically.

Holding Power

Table XXIV shows the per cent that the high school enrollment is of the total enrollment for the past 6 years. It will be observed that the percentage of high school pupils has increased from year to year, except in the year ending in 1927. This apparent decrease is due to the fact

¹ Ayres, L. P., The Laggards in Our Schools.

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Table XXIII

Giving the Distribution of the 8th Grade Graduates of the Belen Schools for the Past Five Years

Years	Percent					Total
	1934	1935	1936	1937	1938	
Went to Belen High School	33	35	31	35	45	38.97
Went to Other High Schools	4	3	0	3	11	6.98
Left School	5	1	1	2	1	8.33
Totals	38	39	32	48	57	100

high school, Belen makes a wonderfully good showing. Belen exceeds the average of the 338 cities by 22.35 per cent.

Figure 23 shows the distribution of Belen's 8th grade

graduates graphically.

Holding Power

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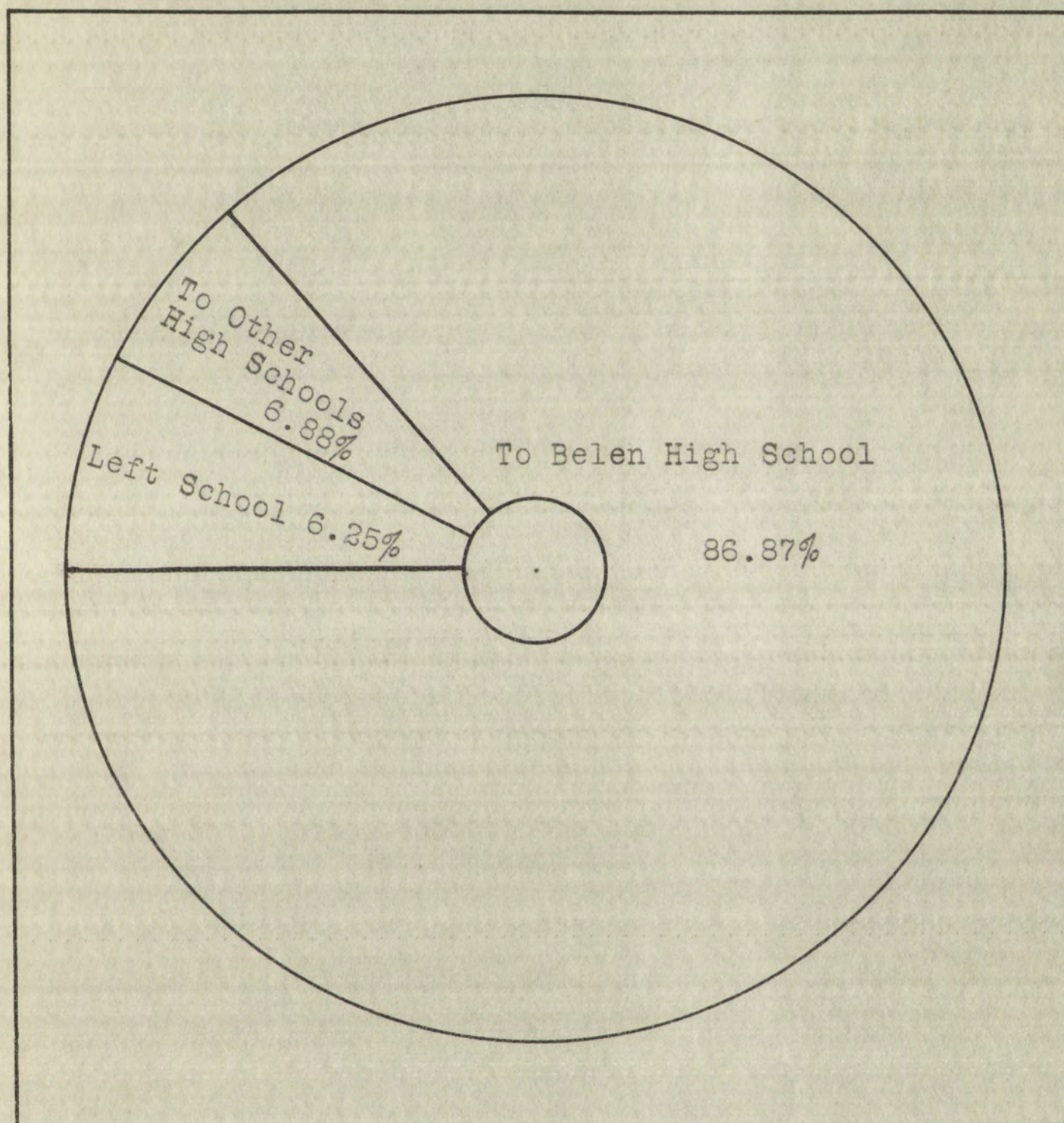


Figure 22. Showing What Became of the 8th Grade Graduates from the Belen Schools During the Past Five Years.

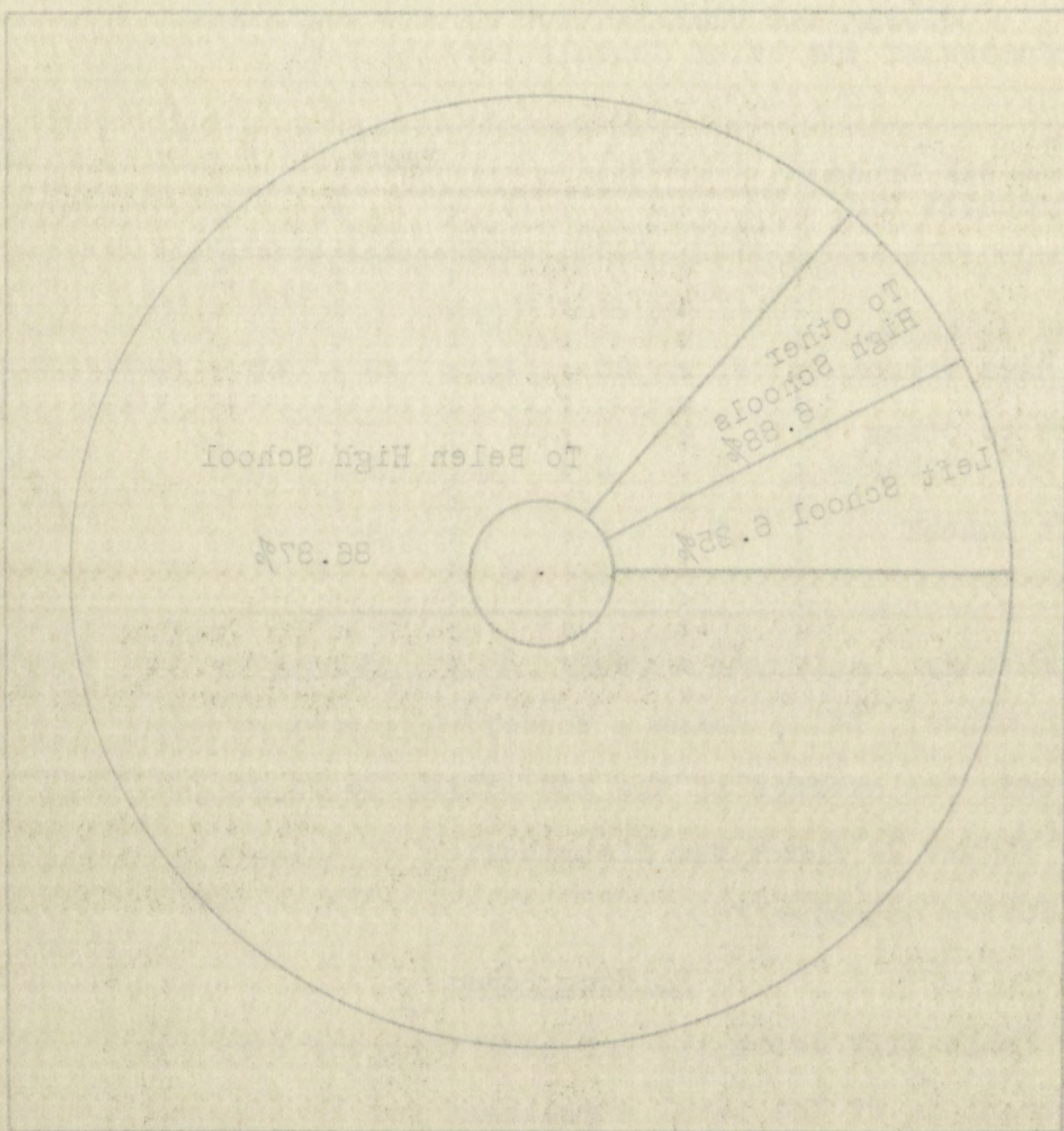


Figure 28. Showing What Became of the 8th Grade Graduates from the Belen Schools During the Past Five Years.

Table XXIV

Showing Total Enrollment of the Belen Elementary
and High Schools, and the Per Cent of Total
Enrollment Made Up of High School Pupils
for a Period of 6 Years

School Year: Ending	Enrollment			Per Cent High School Is Of Total Enrollment.
	High	Elemen- tary	Total	
1924	105	764	869	12
1925	163	809	972	16.7
1926	183	831	1014	18
1927	159	825	984	16.1
1928	170	629	799	21.2
1929	223	630	852	26

Table XXV

Showing the Relative Standing of 13 New Mexico
Towns in the Percentage of High School Pupils
in Total Enrollment of Elementary and High School Pupils¹

TOWN	Enrollment			Per Cent High School Is Of Total Enrollment.
	Elemen- tary	High School	Total	
1. Tucumcari	632	267	899	29.6
2. Carlsbad	525	208	733	28.3
3. Raton	966	352	1318	26.7
4. Farmington	451	158	609	25.9
5. Clayton	649	225	874	25.7
6. Tularosa	404	129	533	24.2
7. Artesia	624	194	818	23.7
8. Springer	322	93	415	22.4
9. BELEN	629	170	799	21.2
10. Alamogordo	711	179	890	20.
11. Deming	854	201	1055	19.
12. Lordsburg	457	86	543	15.8
13. Magdalena	343	55	398	13.8

¹ Computed from the annual reports of the superintendents of the towns below to the State Department of Education, 1927-1928.

Table XVII

Showing Total Enrollment of the Public Elementary and High Schools, and the Percentage of Total Enrollment in the Public Elementary and High Schools for a Period of 10 Years

School Year Ending	Enrollment		Total Enrollment in Public Elementary and High Schools
	Elementary	High	
1934	108	784	892
1935	103	809	912
1936	103	831	934
1937	159	888	1047
1938	170	888	1058
1939	323	830	1153

Table XVIII

Showing the Relative Standing of 13 Selected Towns in the Percentage of High School Pupils in Total Enrollment of Elementary and High Schools

TOWN	Enrollment		Percentage of High School Pupils in Total Enrollment
	Elementary	High	
1. Townsend	828	307	73.2
2. Carlsbad	828	308	73.2
3. Baton	988	333	74.8
4. Farmington	451	188	70.8
5. Clayton	849	275	75.7
6. Tipton	404	188	68.3
7. Artesia	824	184	81.9
8. Spring	333	82	80.1
9. BELL	628	170	78.7
10. Alamogordo	711	178	79.8
11. Deming	806	301	1068
12. Lordsburg	437	88	83.3
13. Magdalena	363	82	81.8

Computed from the annual reports of the various towns for the years 1934-1939.

that in 1927 a four-year high school was established at Los Lunas, a village 11 miles north, which drew pupils from Valencia, Peralta, and Los Lunas. The pupils from these villages had formerly attended the Belen High School.

Table XXV gives the relative standing of 13 New Mexico towns in the percentage of high school pupils in total enrollment of elementary and high school pupils. There are 8 schools in the list that have a higher percentage and 4 a lower percentage than Belen.

From the above tables and graph, it will be seen that the attracting and holding power of the Belen High School is very commendable.

Curriculum Offerings

The accepted aims of the courses of study in intermediate grades and high school should be to give preparation (a) for citizenship in a democracy; (b) for vocation or ability to make a worthy contribution to the world's work; (c) for avocation, or the socially profitable employment of leisure time. An examination of Table XXVI will show the various subjects offered in the school year 1928-1929. The courses offered that come under the heading of "a" (citizenship) are: History, Civics, and Sociology. The subjects which may be classified under "b" (vocational) are: Manual Training, Home Economics, and Commercial subjects. It is difficult to say

that in 1927 a four-year high school was established at Los Lunas, a village 11 miles north, which drew pupils from Valencia, Peralta, and Los Lunas. The pupils from these villages had formerly attended the Belen High School. Table XXV gives the relative standing of 15 New Mexico towns in the percentage of high school pupils in total enrollment of elementary and high school pupils. There are 8 schools in the list that have a higher percentage and a lower percentage than Belen.

From the above tables and graph, it will be seen that the existing and holding power of the Belen High School is very commendable.

Curriculum Offerings

The accepted aims of the courses of study in intermediate grades and high school should be to give preparation (a) for citizenship in a democracy; (b) for vocational or ability to make a worthy contribution to the world's work; (c) for avocation, or the socially profitable employment of leisure time. An examination of Table XXVI will show the various subjects offered in the school year 1928-1929. The courses offered that come under the heading of "a" (citizenship) are: History, Civics, and Sociology. The subjects which may be classified under "b" (vocational) are: Manual Training, Home Economics, and Commercial subjects. It is difficult to say

just which subjects are vocational and which ones are avocational, since an avocational subject may, for the apt pupil, become a vocational one. However, in the "c" (avocational) group, we may place the foreign languages.

The offerings in group "a" would seem to be adequate if properly administered. Belen is to be commended for offering the subjects in group "b" which she now offers. But in view of the fact that Belen is located in a promising agricultural district, it would seem advisable that she offer a thorough course in agriculture. Perhaps a Smith-Hughes course could be added, and thereby Belen would receive the benefit of the carefully made and supervised plans used in the Smith-Hughes courses. Also, she would receive special financial aid with such an arrangement. Since a great many of the people of Belen are employed in railroad work, it might be well to consider the introduction of machine shop work in the high school. The group "c" courses seem to be inadequate. Although not shown in the table cited above, some attention is given to music in the high school. Neither is physical education shown in the table, but Belen does pay attention to the physical well-being of her pupils. A full time physical instructor has charge of this work in the elementary and high schools. Addition of courses in Expression and Art would help to alleviate the weakness in the group "c" list.

just which subjects are vocational and which are not vocational, since an avocational subject may, for the time being, become a vocational one. However, in the vocational group, we may place the following subjects:

The offerings in group "a" would seem to be adequate and properly administered. Helen is to be commended for offering the subjects in group "b" which are not offered in the view of the fact that Helen is located in a residential neighborhood, it would seem advisable that the following thorough course in agriculture, French, Latin, and Spanish could be added, and thereby Helen would receive the benefit of the carefully made and supervised plans made in the Helen Hughes courses. Also, she would receive a well-rounded education with such an arrangement. Since a great many of the people of Helen are employed in national work, it seems well to consider the introduction of national work in the high school. The group "c" courses seem to be inadequate. Although not shown in the table cited above, every student is given to music in the high school. French is optional education shown in the table, but Helen does not receive to the physical well-being of her pupils. A full time physical instructor has charge of this work in the high school and high schools. Addition of courses in French, Latin, and Spanish would help to alleviate the weakness in the group "a" list.

Table XXVI

Sample Sheet Given Prospective Belen High
School Students in the Spring of 1928¹

SUBJECTS TO BE OFFERED DURING THE 1928-29 SESSION

Examine the subjects listed below and select the subjects you desire to include in your program for another year. Before you make a decision study the requirements for graduation given below. No subject listed among the electives will be offered unless there is sufficient demand for the course to justify the organization of a class.

Consult your parents concerning your program of studies.

	Required Subjects	Elective Subjects
9th Grade	English I Algebra I Spanish I	General Science Manual Training Home Economics
10th Grade	English II Plane Geometry Spanish II	History, Ancient & Medieval General Science Manual Training; Home Ec.
11th Grade	English III	Chemistry or Physics Modern History; Spanish III Shorthand; Typewriting Sociology and Economics Advanced Algebra and Solid Geometry; Home Economics
12th Grade	English IV United States History and United States Civics	Physics or Chemistry Bookkeeping Shorthand Typewriting Sociology and Economics Modern History Home Economics Spanish III Advanced Algebra and Solid Geometry

Requirements for graduation: English, 4 units; mathematics, 3 units; foreign language (Spanish), 2 units; science (chemistry, physics, or biology), 1 unit; history, 1 unit; elective, 6 units. All students electing to graduate must present two majors of three units each and three minors of two units each from any two or three groups of subjects not including English. Not more than four units of home economics, manual training, commercial work, etc., may be applied toward the sixteen units required for graduation.

This is an exact reproduction of sample sheet obtained from the Superintendent.

Table XXVI

Sample Sheet Given Prospective Bales High School Students in the Spring of 1938

SUBJECTS TO BE OFFERED DURING THE 1938-39 SESSION

Consult your parents concerning your program of studies. The subjects listed below and select the subjects you desire to include in your program for another year. Before you make a decision study the requirements for graduation given below. No subject listed among the electives will be offered unless there is sufficient demand for the course to justify the organization of a class.

Required Subjects	Elective Subjects
English I	General Science
Algebra I	Manual Training
Spanish I	Home Economics
English II	History, Ancient & Medieval
Plane Geometry	General Science
Spanish II	Manual Training, Home Ec.
English III	Chemistry or Physics
	Modern History, Spanish III
	Shorthand, Typewriting
	Sociology and Economics
	Advanced Algebra and Solid Geometry, Home Economics
English IV	Physics or Chemistry
United States History and	Bookkeeping
United States Civics	Shorthand
	Typewriting
	Sociology and Economics
	Modern History
	Home Economics
	Spanish III
	Advanced Algebra and Solid Geometry

Requirements for graduation: English, 4 units; Mathematics, 3 units; Foreign Language (Spanish), 3 units; Science (Chemistry, Physics, or Biology), 1 unit; History, 1 unit; Elective, 8 units. All students seeking to graduate must present two majors of three units each and three minors of two units each from any two or three groups of subjects not including English. Not more than four units of home economics, manual training, commercial work, etc., may be applied to the sixteen units required for graduation.

Exact reproduction of sample sheet obtained from the Superintendent.

Administration of the Curriculum

Table XXVI shows that in the ninth grade, three subjects are required; in the tenth grade, three are required; in the eleventh, only one is required, and in the twelfth, three are required.

The results of this plan of requirements and elections for the past four semesters is shown in Table XXVII. It will be seen, as is to be expected, that the highest percentages of pupils are found in the required subjects. Typing, General Science, and Home Economics, non-required subjects, have the highest percentages in their class. On the whole, there is quite a varied percentage of pupils taking the different subjects.

The inauguration of an advisory system might prove beneficial in helping the pupils in their choice of subjects. The teacher adviser might also function in other ways, some of which might be: keeping the scholarship record of the pupils assigned to her; give special counsel and help to pupils who are reported as doing poor work in their classes; and give assistance to her group when planning social functions.

Table XXVIII is a copy of the daily schedule of the Belen High School for the first semester of the present school year.

It is to be regretted that Belen has no definite printed courses of study for the high school. It would be a splendid

Administrative and Statistical

Table XXVI shows that in the first semester, 1917-18,

are required; in the second semester, 1918-19, only one is required, and in the third semester, 1919-20, none is required.

The results of this plan of registration are shown in Table XXVII for the past four semesters. It is seen, as is to be expected, that the highest percentages of pupils are found in the required subjects, Typing, General Science, and Home Economics, and that the lowest percentages are found in the elective subjects. As a whole, there is quite a marked difference in the percentages of pupils taking the different subjects.

The inauguration of an advisory system was made necessary in helping the pupils to select their courses of study. The teacher adviser also has been of great help in the selection of which might be: keeping the relationship between the pupils assigned to her; give special counsel and help to pupils who are reported as doing poor work in their classes; and give assistance to get extra work done in the school.

Table XXVIII is a copy of the data regarding the High School for the first semester of the present school year. It is to be regretted that data for the second semester is not yet available. It will be seen that the course of study for the high school is well

Table XXVII

Showing Number of Pupils Taking Various Subjects
for Four Semesters and the Per Cent That the
Number Taking Each Subject Is of the Total
Number of Subjects Taught

Subjects	:1927+1928:		:1928+1929:		:Total :of :4 Sems:	:Per Cent that Total :for Each Subject Is :of Grand Total
	:1st :Sem.:	:2nd :Sem:	:1st :Sem.:	:2nd :Sem.:		
U. S. History	: 33 :	:	: 30 :	:	: 63 :	2.1
English IV	: 34 :	: 32 :	: 31 :	: 29 :	: 126 :	4.2
A. & M. History	: 35 :	: 29 :	: 27 :	: 21 :	: 112 :	3.7
English II	: 44 :	: 40 :	: 56 :	: 54 :	: 194 :	6.5
Manual Training	: 18 :	: 17 :	: 34 :	: 32 :	: 101 :	3.3
Chemistry	: 20 :	: 19 :	: 24 :	: 18 :	: 81 :	2.7
General Science	: 37 :	: 32 :	: 35 :	: 35 :	: 139 :	4.6
Spanish I	: 66 :	: 61 :	: 100 :	: 93 :	: 320 :	10.7
Spanish II	: 35 :	: 32 :	: 57 :	: 54 :	: 178 :	5.9
Algebra I	: 69 :	: 63 :	: 96 :	: 92 :	: 320 :	10.7
Physics	: 16 :	: 14 :	:	:	: 30 :	1.
Geometry	: 42 :	: 39 :	: 60 :	: 55 :	: 196 :	6.5
English I	: 65 :	: 59 :	: 94 :	: 92 :	: 310 :	10.4
English III	: 30 :	: 29 :	: 33 :	: 27 :	: 119 :	4.
Junior Shorthand	: 14 :	: 12 :	: 23 :	: 20 :	: 69 :	2.3
Senior Shorthand	: 16 :	: 15 :	: 7 :	: 7 :	: 45 :	1.5
Bookkeeping	: 34 :	: 33 :	:	:	: 67 :	2.2
Typing	: 35 :	: 34 :	: 53 :	: 50 :	: 172 :	5.7
Home Economics(9)	: 23 :	: 23 :	: 47 :	: 44 :	: 137 :	4.6
Home Econo-	:	:	:	:	:	:
mics 11 & 12	: 14 :	: 12 :	: 10 :	: 8 :	: 44 :	1.4
Modern History	:	:	: 9 :	: 9 :	: 18 :	.6
Biology	:	:	: 35 :	: 32 :	: 67 :	2.2
Community Civics	:	:	:	: 11 :	: 11 :	.3
U. S. Civics	:	:	:	: 27 :	: 27 :	.9
Commercial Law	:	:	: 16 :	: 13 :	: 29 :	.9
Grand Total	:	:	:	:	: 2975 :	:

Table XXVII

Showing Number of Pupils Taking Various Subjects for Four Semesters and the Per Cent That the Number Taking Each Subject is of the Total Number of Subjects Taught

Subjects	1st Sem.	2nd Sem.	3rd Sem.	4th Sem.	Total	Per Cent of Total
U. S. History	35	30	35	35	135	3.4
English IV	34	38	31	39	142	3.6
A. & M. History	35	39	37	31	142	3.6
English II	44	40	38	34	156	3.9
Manual Training	18	17	34	33	102	2.6
Chemistry	30	18	34	18	100	2.6
General Science	37	33	38	38	146	3.7
Spanish I	38	61	100	93	392	10.0
Spanish II	35	33	37	34	139	3.5
Algebra I	38	63	98	93	392	10.0
Physics	18	14	14	30	76	1.9
Geometry	43	39	60	38	180	4.6
English I	65	69	64	92	310	7.9
English III	30	39	33	37	139	3.5
Junior Shorthand	14	13	23	30	80	2.0
Senior Shorthand	18	15	7	7	47	1.2
Bookkeeping	34	33	33	37	137	3.5
Typing	38	36	33	30	137	3.5
Home Economics (9)	33	33	47	44	157	4.0
Home Econo-						
also I & II	14	13	10	8	44	1.1
Modern History			9	9	18	.5
Biology			38	33	71	1.8
Community Civics			11	11	22	.6
U. S. Civics			37	37	74	1.9
Commercial Law			18	18	36	.9
Grand Total					2875	

Table XXVIII

Daily Schedule of Classes of the Belen High School, First Semester, 1928-1929.¹

9:00 to 9:45	Allen	Abell	Butler	Collins	Herring	Huffman	Perry	Murrell
	Span. II	Home. Ec.	Modern History	Typing	U.S. Hist.	Man. Tr.	Algebra IB	
9:45 to 10:30	Span. I	Home. Ec.	9 & 10	Com. Law		Man. Tr.	Study Hall	Physiology
10:30 to 11:15		Home. Ec.	Eng. III	Shorthand	Eng. II	Man. Tr.	Algebra	Study Hall
11:15 to 12:00	Span. II	Home Ec.	11 & 12	Study Hall	Shorthand	Eng. IV	Man. Tr.	Geometry
12:00 to 1:00	Span. I	Home Ec.	Eng. I	Shorthand	Eng. II	Chemistry	Geometry	Community Civics
1:00 to 1:45		Home Ec.	11 & 12					
1:45 to 2:30	Span. I	Home Ec.	Eng. IB	Typing	Study Hall	Chemistry Lab.		Biology Lab.
2:30 to 3:15		Home Ec.	8	Eng. I	Typing	A & M Hist.	Man. Tr.	Algebra
3:15 to 3:45	Study Hall						8	Biology

¹ A duplicate of copy furnished by Superintendent.

project for the superintendent and teachers to undertake the planning and making of a course of study as a cooperative enterprise.

Table XXIX gives some idea of what the Belen pupils do after they graduate from the Belen High School. This dis-

Table XXIX

Giving the Distribution of the High School
Graduates of the Belen Schools for the Past
Four Years

What High School Graduates Did	Years				Total	Per Cent
	1925	1926	1927	1928		
Went to College	7	5	9	6	27	28.72
Left School	3	3	8	9	23	24.47
Went to Business College	2	2	3	1	8	8.51
Entered Teaching	5	7	10	14	36	38.30
Totals	17	17	30	30	94	100.

tribution should be of aid in determining the content of the curriculum and in making the various courses of study. It will be observed that more graduates go directly into teaching than into any other line of activity listed. However, this is likely a temporary condition, since educational requirements of teachers are rapidly becoming higher.

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Table XXIX gives some idea of what the Helen pupils do after they graduate from the Helen High School. This dis-

Table XXIX

Giving the Distribution of the Helen School Graduates of the Helen Schools for the Past Four Years

What High School Graduates Did	Years				Total	Per Cent
	1935-1936	1936-1937	1937-1938	1938-1939		
Went to College	7	5	9	8	37	38.78
Left School	3	3	8	9	33	34.47
Went to Business College	2	2	3	1	8	8.51
Entered Teaching	5	7	10	14	36	38.20
Totals	17	17	30	30	94	100

tribution should be of aid in determining the content of the curriculum and in making the various courses of study. It will be observed that more graduates go directly into teaching than into any other line of activity listed. However, this is likely a temporary condition, since educational requirements of teachers are rapidly becoming higher.

Summary and Conclusions

1. The following conditions are evidence that Belen has proper articulation between the elementary school and the high school: (1) departmentalization of 7th and 8th grade work; (2) introduction of high school subjects in the 7th and 8th grades; and (3) the fact that 93.75 per cent of 8th grade graduates in the past five years went to high school.

2. The holding power of the Belen High School is commendable and steadily on the increase.

3. The offerings in the "citizenship" group of offerings in the high school seem adequate.

4. Additions should be made to the "vocational" group. Agriculture and Machine Shop work have been suggested in the body of this report.

5. Addition of Expression and Art courses would strengthen the work in the "avocational" group of offerings.

6. The inauguration of a teacher advisory system, wherein each teacher of the high school would be responsible for the progress in general of the group assigned her, is well worth considering.

7. Since Belen has no definite printed courses of study, it is suggested that the superintendent and teachers cooperatively plan and make courses of study.

Summary and Conclusions

1. The following conditions are evidence that Helen has proper articulation between the elementary school and the high school: (1) departmentalization of 7th and 8th grade work; (2) introduction of high school subjects in the 7th and 8th grades; and (3) the fact that 85.7% per cent of 8th grade graduates in the past five years went to high school.
2. The holding power of the Helen High School is considerable and steadily on the increase.
3. The offerings in the "civitanian" group of offerings in the high school seem adequate.
4. Additions should be made to the "vocational" group. Agriculture and Machine Shop work have been suggested in the body of this report.
5. Addition of Expression and Art courses would strengthen the work in the "vocational" group of offerings.
6. The inauguration of a teacher advisory system, wherein each teacher of the high school would be responsible for the progress in general of the group assigned her, is well worth considering.
7. Since Helen has no definite printed courses of study, it is suggested that the superintendent and teachers cooperatively plan and make courses of study.

CHAPTER VII

COSTS AND BUSINESS MANAGEMENT

Costs

Belen's income for education is derived mainly from the state, county, and district. Her expenditures for the past four years have ranged from approximately \$51,000 to \$54,000.

Belen has three main school buildings, with additional units of the high school plant to maintain, and has approximately 900 children to educate with this amount of money.

Table XXX shows Belen's place, among 9 towns of New Mexico in respect to per capita cost of education. The range for the towns is from \$13.52 spent by Tucumcari to \$56.74 spent by Farmington. Belen occupies approximately a median position, spending \$19.82 for each man, woman, or child in the town.

Figure 23 shows the per capita cost of education for the 9 towns graphically.

Figuring costs from the standpoint of all those who are legally entitled to attend school, Belen does not hold a very favorable place.

CHAPTER VII

COSTS AND BUSINESS MANAGEMENT

Costs

Belen's income for education is derived mainly from the state, county, and district. Her expenditures for the past four years have ranged from approximately \$51,000 to \$64,000.

Belen has three main school buildings, with additional units of the high school plant to maintain, and has approximately 900 children to educate with this amount of money.

Table XIX shows Belen's place, among 9 towns of New Mexico in respect to per capita cost of education. The range for the towns is from \$15.58 spent by Tucuman to \$38.74 spent by Farmington. Belen occupies approximately a median position, spending \$19.82 for each man, woman, or child in the town.

Figure 23 shows the per capita cost of education for the 9 towns graphically.

Fixing costs from the standpoint of all those who are legally entitled to attend school, Belen does not hold a very favorable place.

Table XXX

Per Capita Cost of Education in 9
New Mexico Towns¹

Town	Per Capita Cost
1. Farmington	\$56.74
2. Artesia	56.13
3. Clayton	27.00
4. Tularosa	20.71
5. Deming	20.38
6. BELEN	19.82
7. Raton	18.53
8. Alamogordo	13.95
9. Tucumcari	13.52
Average, 9 towns, \$27.42 Median, 9 towns, \$20.38	

Table XXXI shows the range in cost of schools per person 5 to 21 years of age to be from \$34.14 spent by Alamogordo to \$111.49 spent by Artesia. Belen spends \$36.92. Only two towns in the list spend less than Belen. The average for the 9 towns is \$54.41. Belen is \$17.49 below the average.

¹ Computed from the annual reports of the superintendents of the towns below to the State Department of Education, 1927-1928, and New Mexico State Business Directory, 1928.

Table XXX

Per Capita Cost of Education in 9 New Mexico Towns

Town	Per Capita Cost
1. Farmington	\$58.74
2. Artesia	\$5.18
3. Clayton	\$7.03
4. Tucuman	\$0.71
5. Bernal	\$0.38
6. Belen	\$2.82
7. Raton	\$6.53
8. Alamosa	\$1.98
9. Tucuman	\$1.55

Average, 9 towns, \$37.43 Median, 9 towns, \$50.58

Table XXX shows the range in cost of schools per person 5 to 21 years of age to be from \$54.41 spent by Alamosa to \$11.48 spent by Artesia. Belen spends \$38.92. Only two towns in the list spend less than Belen. The average for the 9 towns is \$37.43. Belen is \$17.63 below the average.

Computed from the annual reports of the Superintendent of the State Department of Education, 1937-1938, and New Mexico State Business Directory, 1938.

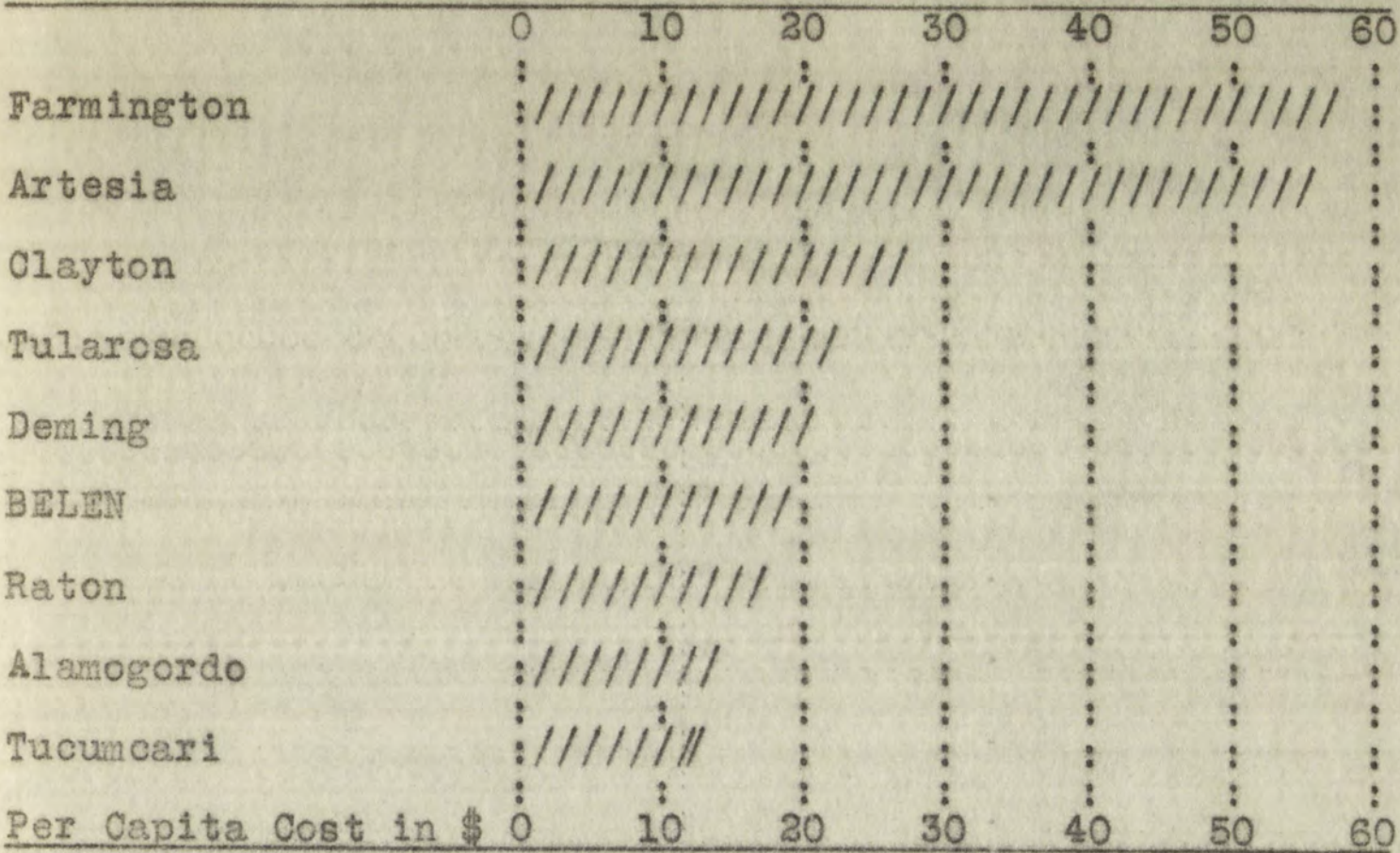


Figure 23. Per Capita Cost of Education in 9 New Mexico Towns.

Table XXXI

Cost of Schools per Person 5 to 21 Years
Old (Cost per Census Child) in 9 New Mexico Towns¹

Town	Cost
1. Artesia	\$111.49
2. Clayton	75.01
3. Raton	58.07
4. Deming.	56.40
5. Tularosa	47.38
6. Farmington	42.72
7. BELEN	36.92
8. Tucumcari	36.61
9. Alamogordo	34.14
Average, 9 towns,	\$54.41
Median, 9 towns,	\$47.38

¹Computed from the annual reports of the superintendents of the towns below to the State Department of Education, 1927-1928.

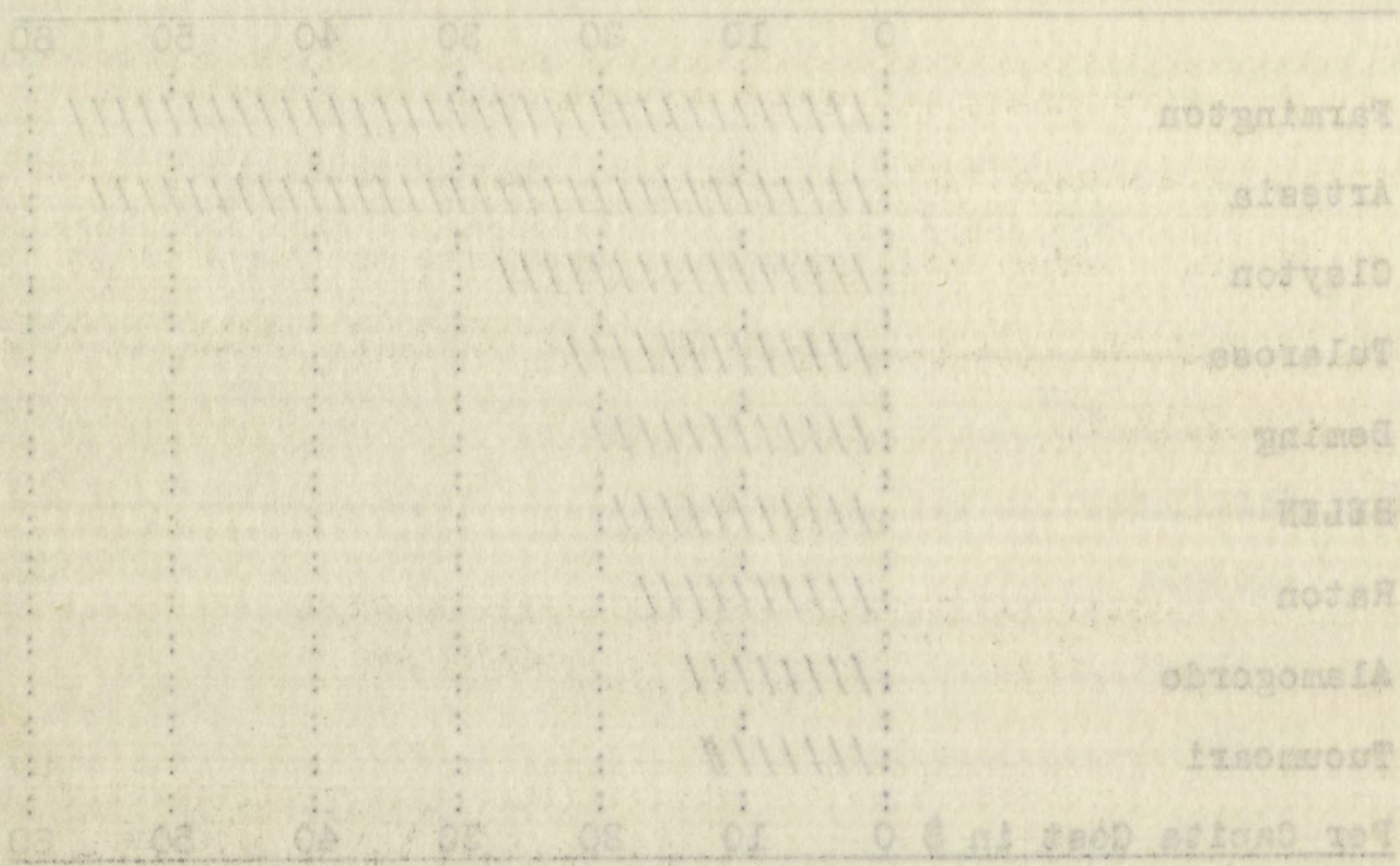


Figure 25. Per Capita Cost of Education in 9 New Mexico Towns.

Table XII

Cost of Schools per Person 5 to 21 Years Old (Cost per Census Child) in 9 New Mexico Towns¹

Town	Cost
1. Attleboro	41.48
2. Clayton	35.07
3. Raton	33.07
4. Berlin	38.90
5. Tolland	47.38
6. Farmington	42.71
7. Alamosa	37.98
8. Thornton	32.01
9. Alamosa	34.14

Average, 9 towns, \$34.41; Median, 9 towns, \$37.38

¹ Computed from the annual reports of the Superintendent of the State Department of Education, 1937-1938.

In considering the total amount spent for education in terms of average daily attendance, Belen occupies a median position. Table XXXII gives a comparison of the 9 towns in this respect. Alamogordo spends only \$56.23, while Artesia spends \$175.70

Table XXXII

Cost of Schools per Child in Average
Daily Attendance in 9 towns in
New Mexico¹

Town	Cost per Child in Average Daily Attendance
1. Artesia	\$175.70
2. Clayton	107.69
3. Raton	105.39
4. Farmington	90.34
5. BELEN	78.93
6. Deming	72.80
7. Tucumcari	67.30
8. Tularosa	63.17
9. Alamogordo	56.23
Average, 9 towns, \$90.93	Median, 9 towns, \$78.93

Table XXXIII shows the amount of real wealth behind each dollar spent for education in 7 New Mexico towns. It will be seen that Belen has \$54 back of every dollar she

¹ Computed from the annual reports of the superintendents of the towns below to the State Department of Education 1927-1928.

In considering the total amount spent for education in terms of average daily attendance, Baton Rouge occupies a median position. Table XXXII gives a comparison of the 9 towns in this respect. Alamogordo spends only \$23.33, while Artesia spends \$45.70.

Table XXXII

Cost of Schools per Child in Average Daily Attendance in 9 towns in New Mexico

Town	Cost per Child in Average Daily Attendance
1. Artesia	\$45.70
2. Clayton	\$37.69
3. Baton Rouge	\$36.39
4. Farmington	\$34.54
5. Elgin	\$28.33
6. Deming	\$28.83
7. Tucuman	\$27.20
8. Tularosa	\$23.17
9. Alamogordo	\$23.33
Average, 9 towns	\$33.53
Median, 9 towns	\$28.33

Table XXXIII shows the amount of real estate behind each dollar spent for education in 9 New Mexico towns. It will be seen that Baton Rouge has the best of every dollar the

Computed from the annual reports of the Commissioner of the State Department of Education, 1927-1928.

Table XXXIII

Showing the Amount of Real Wealth Behing Each
Dollar Spent for Education in 7 New Mexico Schools¹

Town	Amount
1. Deming	\$109.
2. Raton	81.
3. Alamogordo	78.
4. Tularosa	70.
5. BELEN	54.
6. Artesia	48.
7. Clayton	47.
Average, 7 towns, 69.	Median, 7 towns, 70.

spends for education. The range in amounts is from \$109 for Deming to \$47 for Clayton.

Distribution of Belen's School Expenditures

Table XXXIV shows the distribution of Belen's school expenditures over a four-year period. It will be seen that the amount of outlay has increased rather steadily from year to year except for 1926-1927, when there was a decided increase. This is accounted for by the fact that in that year \$14,500 was spent for capital outlay. The steady increase is as it should be since the population

¹ Computed from the annual reports of the superintendents of the towns below to the State Department of Education 1927-1928, and the estimated "Real Wealth" column of Table IV.

Table XXIII

Showing the Amount of Real Estate Being Taxed
Dollars Spent for Education in Y Nav Mexico School

Town	Amount
1. Deming	\$108.
2. Raton	51.
3. Alamogordo	78.
4. Tularosa	70.
5. Belen	54.
6. Artesia	43.
7. Clayton	47.
Average, Y towns	68.
Median, Y towns	70.

spends for education. The range is amount \$47 from \$108
for Deming to \$47 for Clayton.

Distribution of Belen's School Expenditures

Table XXIV shows the distribution of Belen's school
expenditures over a four-year period. It will be seen
that the amount of outlay has increased rather steadily
from year to year except for 1932-1937, when there was a
decided increase. This is accounted for by the fact that
in that year \$14,500 was spent for capital outlay. The
steady increase is as it should be since the population

¹ Computed from the annual reports of the superintendent
of the towns below to the State Department of Education
1937-1938, and the estimated "Real Estate" column of
Table IV.

Table XXXIV

Showing the Distribution Over a Four Year Period
of Belen's School Expenditures¹

Year	: Adminis- : trative: : Expense:	: Mainten- : ance	: Direct : Charge	: Capital: : Outlay:	: Debt : : Retire- : ment	: Total
34-1935:	\$300.00:	\$47,445.58:	\$1965.42:	None	\$2,000	\$51,711.00
35-1936:	392.73:	46,476.94:	3292.66:	None	2,000	52,162.33
36-1937:	518.39:	48,363.60:	4325.00:	14,500:	None	67,706.99
37-1938:	529.98:	48,127.20:	4210.58:	None	2,000	54,867.76

of the town and the enrollment of the schools are on the increase.

Figure 24 shows the per cent of total school expenditures devoted to the maintenance of the high school as compared with the per cent of total school attendance at the high schools for 6 New Mexico towns. It will be seen that Tucumcari spends a little more than 50% of her total amount spent for education, for maintenance of the high school, while her high school attendance is a little less than 30% of the total school enrollment. Tularosa spends approximately 45% of her school money for maintenance of the high school, with the attendance of high school students at approximately 25%. Deming devotes approximately 44% of her school money to the high school

¹ Thanks are due Superintendent Gill for the information given below.

Table XXIV

Showing the Distribution Over a Four Year Period
of Belter's School Expenditures

Year	Administrative	Maintenance	Direct	Capital	Reserve	Total
Expenditures	Expenditures	Expenditures	Expenditures	Expenditures	Expenditures	Expenditures
1884-1885	\$300.00	\$47,448.58	\$1985.48	None	\$2,000	\$51,711.00
1885-1886	328.75	48,476.94	3382.68	None	3,000	53,188.35
1886-1887	518.39	48,363.60	4235.00	14,500	None	67,708.99
1887-1888	528.98	48,127.30	4310.53	None	2,000	54,867.78

of the town and the enrollment of the schools are on the increase.

Figure 24 shows the per cent of total school expenditures devoted to the maintenance of the high school as compared with the per cent of total school attendance at the high schools for 5 New Mexico towns. It will be seen that Tucumaneri spends a little more than 30% of her total amount spent for education, for maintenance of the high school, while her high school attendance is a little less than 30% of the total school enrollment. Tucumaneri spends approximately 45% of her school money for maintenance of the high school, with the attendance of high school students at approximately 35%. Tucumaneri devotes approximately 55% of her school money to the high school. Thanks are due Superintendent Gill for the information given below.

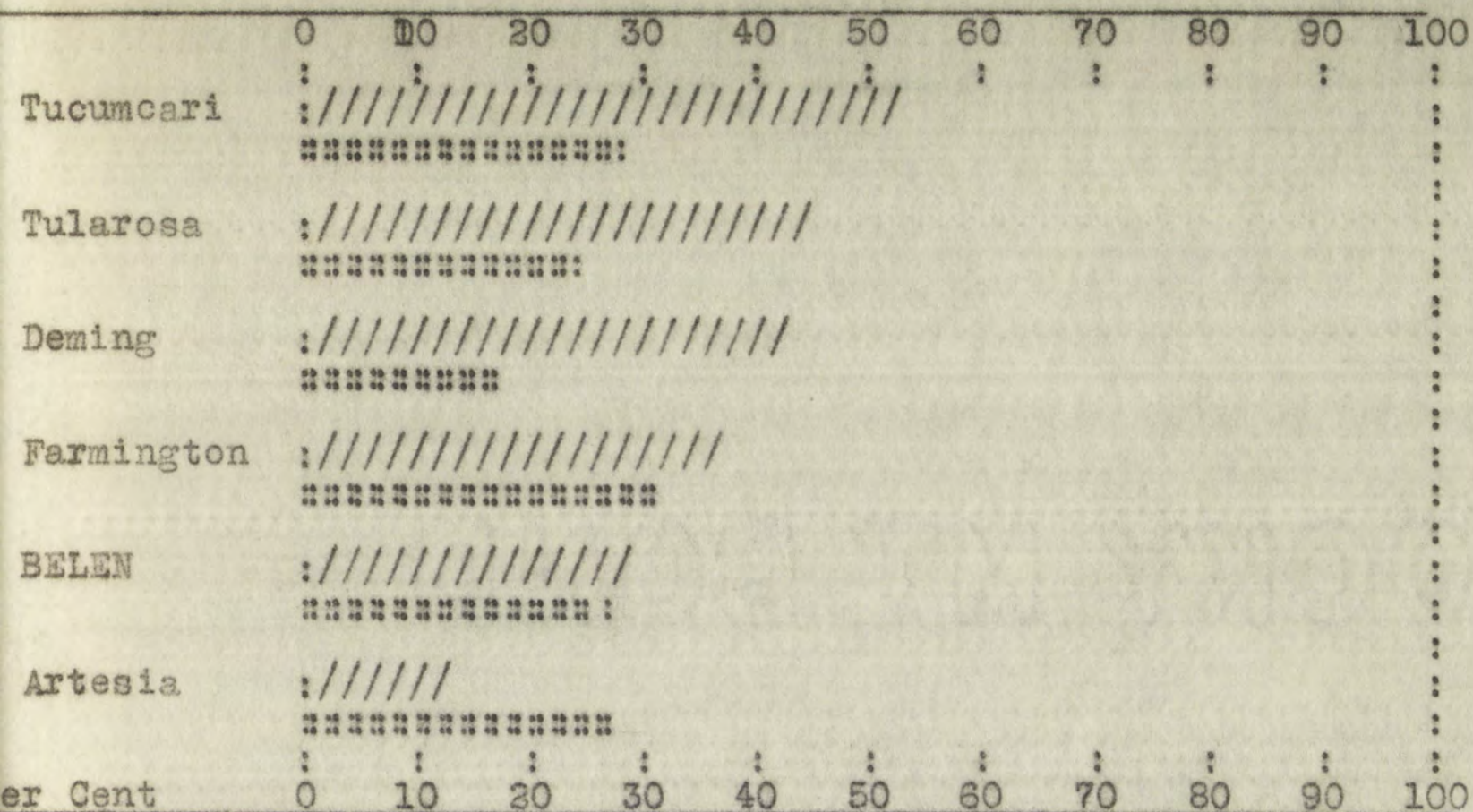


Figure 24. Showing the Per Cent of Total School Expenditures Devoted to Maintenance of the High School as Compared with the Per Cent of Total School Attendance at High School.¹
(Wide bar indicates expenditures; narrow, or colon bar, attendance.)

while the attendance at high school is approximately 17% of the total attendance. The corresponding figures for Farmington are approximately 43%, and 17%; for Belen, approximately 30% and 22%; and for Artesia, approximately 14% and 25%.

Definitely accepted standards in regard to just how much money should be spent on maintenance of the high school in comparison to the amount spent on the elementary

¹ Computed from the annual reports of the superintendents of the towns listed to the State Department of Education, 1927-1928.

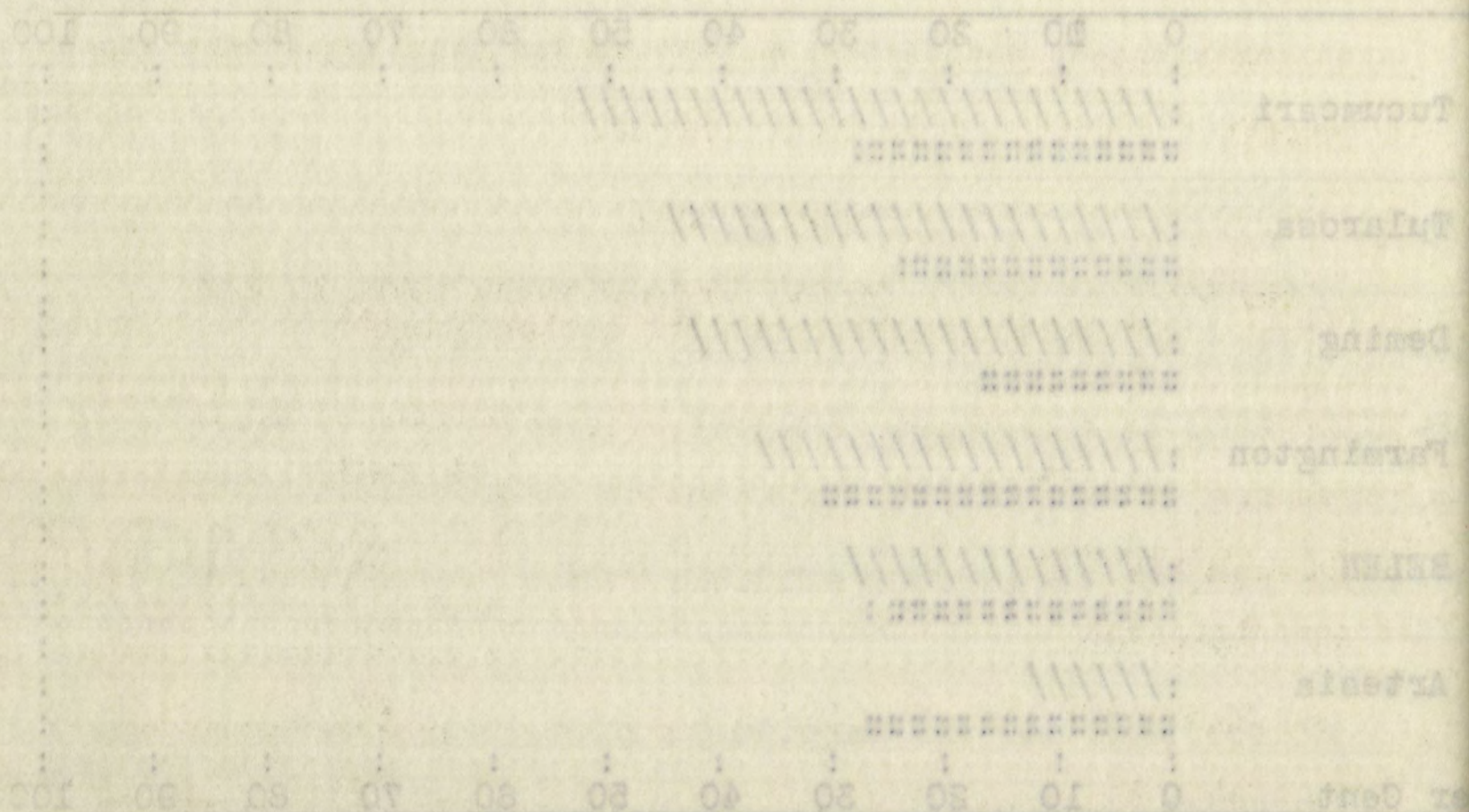


Figure 84. Showing the Per Cent of Total School Expenditures Devoted to Maintenance of the High School as Compared with the Per Cent of Total School Attendance at High School. (Wide bar indicates expenditure; narrow, or color bar, attendance.)

while the attendance at high school is approximately 17% of the total attendance. The corresponding figures for Farmington are approximately 45% and 17% for Berlin, approximately 30% and 23% and for Arden, approximately 14% and 35%. Definitely accepted standards in regard to just how much money should be spent on maintenance of the high school in comparison to the amount spent on the elementary school is computed from the annual reports of the superintendent of the towns listed to the State Department of Education, 1927-1935.

schools are lacking. However, from the above comparisons, it would seem that Belen is not to be criticized for her position in regard to this matter.

Table XXXV

Per Cent of Total School Expenditures Used to Pay
for Instruction in 9 New Mexico Towns¹

Town	Per Cent
1. Alamogordo	79
2. Tularosa	77
3. Tucumcari	77
4. Deming	73
5. BELEN	67
6. Raton	61
7. Farmington	59
8. Clayton	47
9. Artesia	28
Average, 9 towns, 63. Median, 9 towns, 67.	

Table XXXV gives the per cent of total school expenditures used to pay for instruction in 9 New Mexico towns.

Figure 25 shows the same data graphically. It will be observed that the range in per cent is from 79 to 28. Belen occupies a median position, devoting 67% of total expenditures to payment for instruction. The per-

¹Computed from the annual reports of the superintendents of the towns below to the State Department of Education 1927-1928.

schools are lacking. However, from the above comparisons, it would seem that Belen is not to be excluded for her position in regard to this matter.

Table XXXV

Per Cent of Total School Expenditures Used to Pay for Instruction in 9 New Mexico Towns

Town	Per Cent
1. Alamogordo	79
2. Tularosa	77
3. Tucuman	77
4. Deming	73
5. Belen	67
6. Raton	61
7. Terrellton	59
8. Clayton	47
9. Artesia	38
Average, 9 towns, 63.	
Median, 9 towns, 67.	

Table XXXV gives the per cent of total school expenditures used to pay for instruction in 9 New Mexico towns. Figure 35 shows the same data graphically. It will be observed that the range in per cent is from 38 to 79. Belen occupies a median position, devoting 67% of

total expenditures to payment for instruction. The figures are computed from the annual reports of the Superintendent of the State Department of Education for the years 1927-1928.

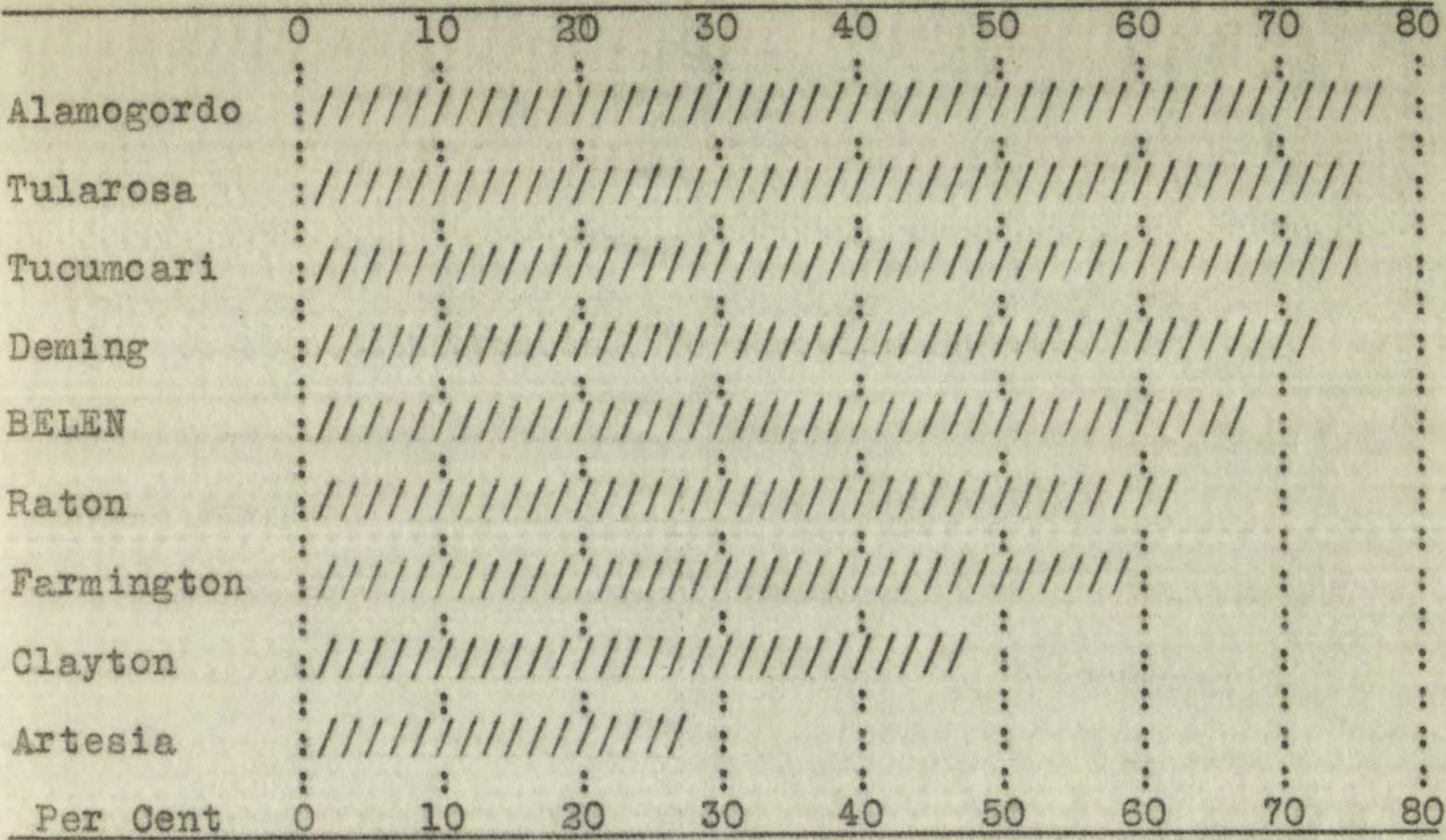


Figure 25. Per Cent of Total School Expenditures Used to Pay for Instruction in 9 New Mexico Towns.

centage for Belen is approximately the same as for the California high schools in 1925.¹ The lower the overhead costs in a school system, the higher will be the amount left to pay for instruction. Belen seems to be keeping overhead costs reasonably well in hand.

Bookkeeping and Cost Accounting

The minutes of the Board for the year 1923 show that a resolution was passed to make the superintendent the purchasing agent. Since that time the superintendent has acted in that capacity. He approves all orders for sup-

¹Nanninga, S.P., "Costs and Offerings of California High Schools in Relation to Size, 1925."

plies. He maintains a file for bills and regular monthly forms furnished by the state budget auditor. However, vouchers are not kept. The superintendent keeps a per pupil cost of operation. It might be well to expand this phase of accounting. A well prepared budget is made out each year. The outlay for the year is carefully maintained in accordance with this budget. The books of the Board are audited by the state auditor about every two years. It is to be regretted that there are no adequate storage spaces for books and supplies. Provision should be made for adequate and sanitary storage facilities.

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in accordance with this budget. The books of the Board

are audited by the state auditor about every two years.

It is to be regretted that there are no adequate storage

spaces for books and supplies. Provision should be made

for adequate and sanitary storage facilities.

Summary and Conclusions

1. In the year 1927-1928, Belen spent \$19.82 for each man, woman, or child in the town. The average for 9 New Mexico towns compared was \$27.42.
2. The cost of Belen Schools per person 5 to 21 years of age was \$36.92. The average of the towns compared was \$54.41.
3. The cost of Belen Schools per child in average daily attendance was \$78.92. The average for the towns compared was \$90.83.
4. Belen's expenditures for education have increased from year to year as the population of the town and the school enrollment have increased. This is as it should be.
5. Belen seems to be distributing her expenditures in an equitable way between the elementary and the high school.
6. In per cent of total school expenditures used to pay for instruction, Belen occupies a median position in comparison with 8 other New Mexico towns.
7. The superintendent of schools is authorized by the Board of Education to be "purchasing agent." As has been recommended elsewhere in this report, the superintendent should be furnished more clerical assistance.
8. A carefully prepared budget is made each year.

Summary and Conclusions

1. In the year 1937-1938, Belen spent \$19.85 for each man, woman, or child in the town. The average for New Mexico towns compared was \$27.43.
2. The cost of Belen Schools per person 5 to 21 years of age was \$36.92. The average of the towns compared was \$54.41.
3. The cost of Belen Schools per child in average daily attendance was \$78.92. The average for the towns compared was \$90.85.
4. Belen's expenditures for education have increased from year to year as the population of the town and the school enrollment have increased. This is as it should be.
5. Belen seems to be distributing her expenditures in an equitable way between the elementary and the high school.
6. In per cent of total school expenditures used to pay for instruction, Belen occupies a median position in comparison with 8 other New Mexico towns.
7. The superintendent of schools is authorized by the Board of Education to be "purchasing agent." As has been recommended elsewhere in this report, the superintendent should be furnished more clerical assistance.
8. A carefully prepared budget is made each year.

9. Adequate storage facilities for books and school supplies should be provided.

8. Adequate storage facilities for books and school

supplies should be provided.

CHAPTER VIII

GENERAL SUMMARY AND CONCLUSIONS

The following is a brief statement of the conclusions reached in this survey:

1. Since the population of Belen is largely Spanish-American, much stress should be placed on the acquisition of ability to use the English language.
2. Since Belen is a growing town, she must erect buildings, purchase equipment, develop classroom and special room facilities, and organize her teaching and supervision forces with this rapid growth in mind.
3. Belen spends a relatively high proportion of its income on education. This shows good management and indicates that the people of the district want and will support a strong constructive educational policy.
4. The practice of the board of education of allowing the superintendent to nominate all teachers is in accord with the best educational principles.
5. The superintendent should be allowed to nominate all janitors.
6. It is recommended that a high school principal be added to the staff in order that the superintendent may

CHAPTER VIII

GENERAL SUMMARY AND CONCLUSIONS

The following is a brief summary of the results reached in this survey:

1. Since the population of Belen is largely Mexican, such stress should be placed on the teaching of English to use the English language.

2. Since Belen is a growing town, the school buildings, purchase equipment, library, classroom, special room facilities, and other necessary and supervisor forces with this rapid growth in mind.

3. Belen spends a relatively large proportion of its income on education. This shows good management and indicates that the people of the district want and will support a strong constructive educational effort.

4. The practice of the board of education in appointing the superintendent to nomination is in accord with the best educational practices.

5. The superintendent should be allowed to appoint all teachers.

6. It is recommended that a high school be added to the staff in order that the superintendent

have more time to discharge his proper duties.

7. The hiring of a full time secretary for the office of the superintendent would be an economical procedure.

8. The Belen Schools are adequately staffed with teachers in comparison with other New Mexico towns.

9. The average amount of training of both the elementary and the high school teachers is a little above the accepted standard.

10. When judged by salaries paid in other towns of New Mexico, Belen's salaries are up to standard.

11. The average rating of the Belen school buildings on the Strayer-Engelhardt score card is approximately 50 per cent.

12. Since none of the buildings are fireproof, fire-protection equipment should receive immediate attention.

13. Better washing and bathing facilities are recommended for the elementary schools.

14. The Belen elementary pupils, grades 4 to 8 inclusive, are below the standard grade norms of achievement in the main school subjects except in arithmetic.

15. As shown by the comparison of results of both intelligence and achievement tests, Belen pupils are achieving in proportion to their ability.

16. Belen seems to have proper articulation between the elementary school and the high school.

- have more time to discharge his proper duties.
7. The hiring of a full time secretary for the office of the superintendent would be an economical procedure.
8. The Helen Schools are adequately staffed with teachers in comparison with other New Mexico towns.
9. The average amount of training of both the elementary and the high school teachers is a little above the accepted standard.
10. When judged by salaries paid in other towns of New Mexico, Helen's salaries are up to standard.
11. The average rating of the Helen school buildings on the Strayer-Engelhardt score card is approximately 80 per cent.
12. Since none of the buildings are fireproof, fire-protection equipment should receive immediate attention.
13. Better washing and bathing facilities are recommended for the elementary schools.
14. The Helen elementary pupils, grades 4 to 8 inclusive, are below the standard grade norms of achievement in the main school subjects except in arithmetic.
15. As shown by the comparison of results of both intelligence and achievement tests, Helen pupils are achieving in proportion to their ability.
16. Helen seems to have proper attention between the elementary school and the high school.

17. Since Belen has no definite printed courses of study for the high school, it is suggested that the superintendent and teachers cooperatively plan and make courses of study.

18. Belen's expenditures for education have increased from year to year as the population of the town and the school enrollment have increased. This is as it should be.

19. A carefully prepared budget is made each year.

20. Adequate storage facilities for books and school supplies should be provided.

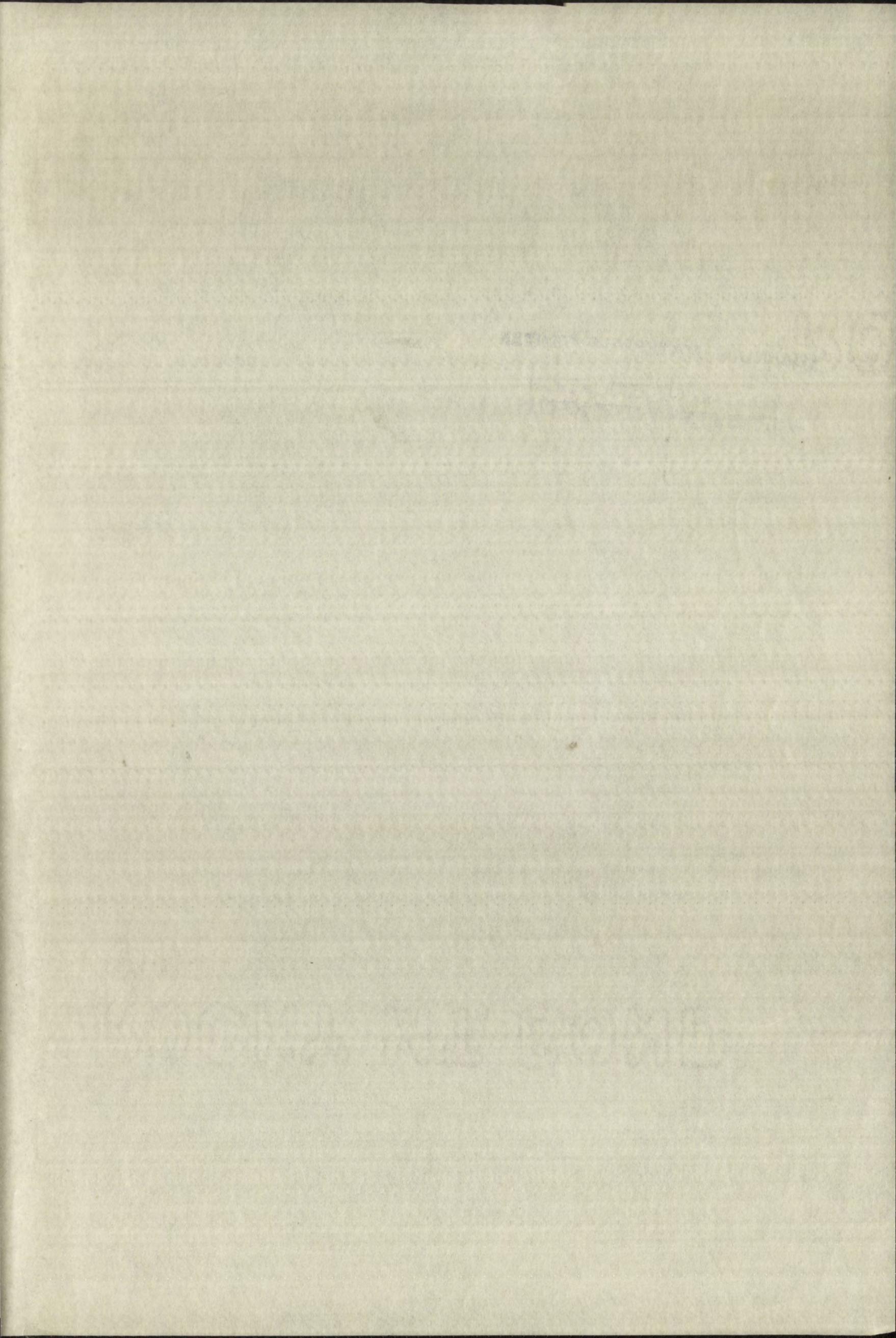
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18. Belen's expenditures for education have increased from year to year as the population of the town and the school enrollment have increased. This is as it should be.
19. A carefully prepared budget is made each year.
20. Adequate storage facilities for books and school supplies should be provided.

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