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A Comparative Work-Program of Certain Schools in North Dakota Cities Having a High School Enrollment Between 160-300

Elmer C. Johnson

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A COMPARATIVE WORK-PROGRAM OF CERTAIN SCHOOLS IN
NORTH DAKOTA CITIES HAVING A HIGH SCHOOL
ENROLLMENT BETWEEN 160-300

A Thesis

Submitted to the Faculty of the Graduate School
of the
University of North Dakota

By

Elmer C. Johnson

In partial fulfillment of the Requirements

For the degree of

Master of Science in Education

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1938

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This Thesis, presented by Elmer C. Johnson in partial fulfillment of the requirements for the degree of Master of Science in Education, is hereby approved by the Committee of Instruction in charge of his work.

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CHAPTER I

INTRODUCTION

Motive for the study. Interest in the subject of a comparative survey of certain schools had arisen from the writer's first hand experience in just these schools. From time to time situations had arisen where knowledge of what your neighbor was doing would have been of inestimable value. As Dean J. V. Breitwieser admonished in one of his lectures in METHODS OF EDUCATIONAL RESEARCH, "Keep in touch with the opinions of others --it keeps you alive." A second motive for the study was to compare the educational offerings of one community with that of another of very nearly the same size.

Delimitation of the problem. The content of this study was limited to only those schools having a high school population of 160 to 300. This reached the schools ranging in size from about the twelfth largest to the thirtieth largest. This rather arbitrary division was decided upon because another similar study was underway for the twelve largest high schools of the state. No attempt was made to analyze the course of study, nor to judge the effectiveness of the methods of instruction, nor to evaluate the final product of the various schools.

The problem stated. This study aims to compare the present offerings of the school in its regular curriculum, the offerings in the so-called extra-curricular activities, community service, pupil guidance, and general offerings.

Source of Data. In order to secure the data for this study a very extensive questionnaire was submitted to the public schools which rank in size from the twelfth to thirtieth largest high schools as given in the North Dakota Education Directory.

A second source of data was the annual reports of these schools to the State Department of Public Instruction.

Some of the data was supplemented by conferences with administrative officers of two of the schools, and with conferences with Mr. S. T. Lillehaugen, State High School Inspector.

Scope of the Study. Eighteen schools were originally selected for this study. Such information as could be secured from the State Reports was examined and tabulated. Survey sheets were then sent to each of the schools, and fifteen schools returned sufficient information to be useable. This survey concerns the school year 1937-38.

Historical Background and Interpretation. The change in the aims and functions of the public school has brought about a fundamental evolution in the content and philosophy of educations.

Schools were originally founded for the purpose of giving instruction in religion and to give training for the ministry.

After many years an added function of the schools was preparation for all the professions. The high school was not a terminal but a preparatory school for the university. The influences that caused the revolutionary changes in the high school from college preparatory to a terminal school have not been mentioned here. The period of most rapid growth of the present-day high school has been since 1890. From 1890 to 1918 a high school was established for every day of the included years, and the pupils increased more than 700 per cent.¹ The United States Bureau of Education

¹D. C. Roberts and E. M. Draper, Extra-Class and Intramural Activities in High Schools, D. C. Heath Co., Chicago, 1928, p. 17.

tabulates this phenomenal growth in Table 1.²

Table 1
Growth Of High Schools In United States

Year	High Schools	Pupils	Teachers	Graduates
1890	2,526	202,000	9,120	22,000
1900	6,005	519,000	20,000	60,000
1910	10,203	917,000	40,000	112,000
1920	14,326	1,800,000	97,000	230,000
1924	14,827	2,538,381	133,395	362,231
1926	17,710	3,065,009	163,555	434,539
1930	22,237	4,399,422	213,306	591,719*
1934	23,614	5,669,156	227,727	806,510

*Statistical Abstract of the U. S., 1937, Vol. V, p. 105.

Since this survey deals with certain North Dakota schools, it is interesting to note the growth of public education in this state. These figures go back beyond the time of statehood, and reflect the rapid growth in population characteristic of the period.

Table 2
Growth of Public Education In North Dakota

Year	Enrollment In Elem. And Sec. Schools	No. Enrolled In High School	No. Of Teachers
1870-1871*	1,660		
1879-1880	13,718		
1889-1890	35,543		
1899-1900	77,689		
1906-1907	124,000		
1910**	139,802	4,579****	7,387
1920***	168,283	11,565	8,975
1930	169,277	20,045	8,856
1932	165,699	22,750	8,607
1934	160,699	23,035	8,175

*U. S. Commissioner of Education Report, 1908, Vol. 2, p. 390.

**Statistical Abstract of the U. S., 1934, p. 108.

***Statistical Abstract of the U. S., 1937, p. 108.

****State of North Dakota, Twenty-Ninth Annual Report, Director of Secondary Education, 1936, Table III, pages not numbered.

²U. S. Bureau of Education Bulletin, 1925, No. 40, p. 9; 1927, No. 33, p. 11.

The extent of the change in the high school from a college preparatory school to a non-preparatory school is strikingly indicated by Figure 1.³

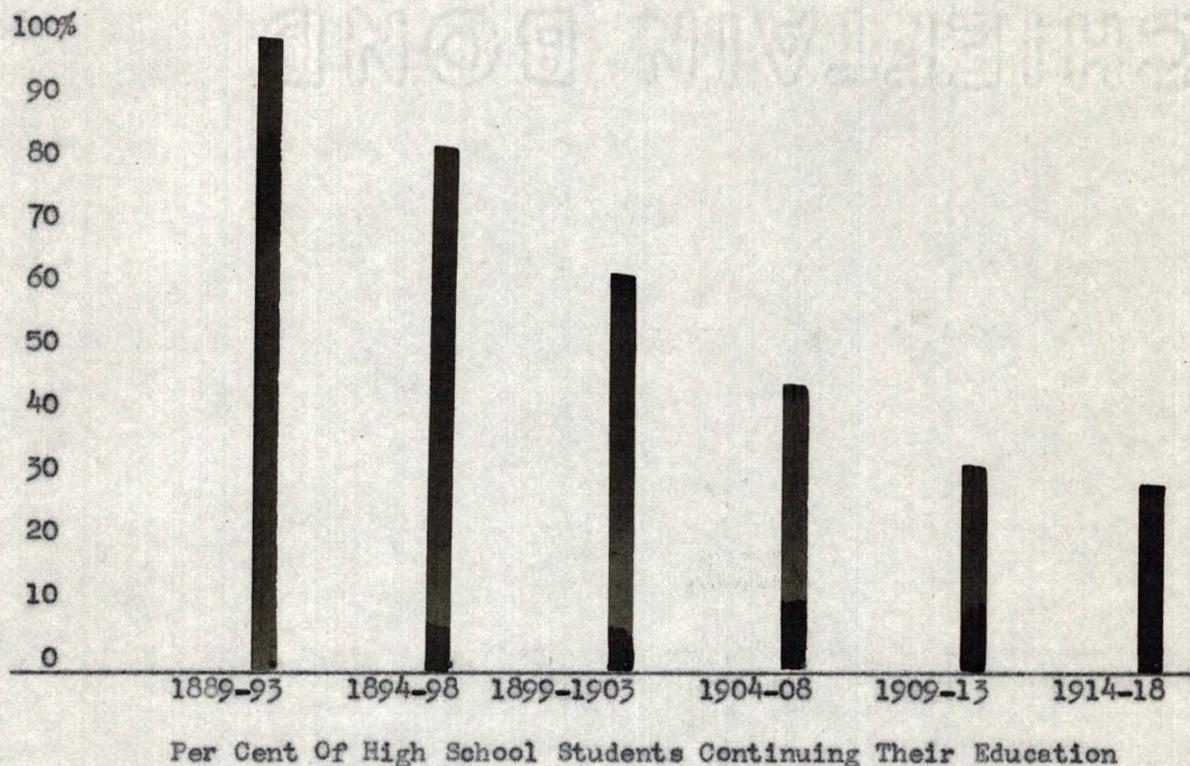


Figure 1.

The trend in North Dakota relative to the percentage of graduates continuing their education does not follow that shown in Figure 1. It was found by examining the reports of the Director of Secondary Education that there was a slight and gradual increase from 1921, the first year this data is available, until the high in 1932 when slightly more than one-half of the high school graduates continued their education. Since

³Leonard V. Koos, The Junior High School and College Entrance, School Review, September 1924, Vol. 32, p. 500.

1932, the per cent has remained relatively constant as is indicated in Table 3.⁴

Table 3
Per Cent of Graduates From First Class High
Schools Continuing Their Education

Year	Per Cent Of Graduates
1936	33
1935	32
1934	30.8
1933	35.4
1932	50.9
1931	40
1930	47
1929	47
1928	47
1927	N.R.
1926	N.R.
1925	45.7
1924	35.9
1923	34.0
1922	41.5
1921	40

These figures are astounding; and it is only by studying the new philosophy underlying our new high schools that we can understand how the rich and the poor, the bright and the dull, the accelerated and the retarded can be thrown together in one mill. This new philosophy is geared to the democratic ideals of America. The American people believe that the foundation of democracy must be built in the high schools where each individual may develop "the knowledge, interests, ideals, habits, and powers whereby he will find his place and use that place to shape both himself and society to ever nobler ideals."⁵

⁴State of North Dakota, Annual Reports of Director of Secondary Education, Dept. of Public Instruction, Bismarck.

⁵U. S. Bureau of Education Bulletin, 1918, No. 35, p. 9.

The evolution of our school curriculum is evidence of the changing philosophy. Elwood P. Cubberly gives us an interesting chart which is included here, showing this evolution from period to period:⁶

Table 4
Evolution of School Curriculum

1775	1825	1850	1875	1900
READING	READING*	READING	READING	READING*
Spelling	<u>Declamation</u>	DECLAMATION	Lit. Selections	LITERATURE*
Writing	SPELLING	SPELLING	SPELLING	<u>Spelling</u>
	<u>Writing</u>	WRITING	PENMANSHIP	<u>Writing*</u>
<u>Catechism</u>	<u>Good Behavior</u>	Manners	Conduct	ARITHMETIC
<u>Bible</u>	<u>Manners & Morals</u>	Conduct	PRIMARY ARITH.	
Arithmetic			ADV. ARITH.	ORAL LANGUAGE
	ARITHMETIC*	MENTAL ARITH.*		<u>Grammar</u>
	Bookkeeping	CIPHERING	<u>Oral Language*</u>	<u>Home Geog.</u>
	GRAMMAR		GRAMMAR	TEXT GEOGRAPHY
	Geography	Bookkeeping	Home Geog.*	Hist. Stories*
		Elem. Language	TEXT GEOGRAPHY	
	Sew. & Knitting	Grammar	U. S. HISTORY	TEXT HISTORY*
		<u>Geography</u>	<u>Constitution</u>	
		U. S. History		<u>Nature Study*</u>
		Obj. Lessons	Obj. Lessons*	Elem. Science
			Elem. Science	<u>Drawing*</u>
			Drawing*	<u>Music*</u>
			Music*	Play
			Phy. Exercises	Phy. Training*
				Sewing
				Cooking
				Manual Training

Capitals - Most important subjects

Italics - Subjects of medium importance

Roman - Least important subjects

* - New methods of teaching now employed

During these same years many factors were at work shaping the schools to better train its students in the theory and ideals of citizenship. These factors are:

⁶ Elwood P. Cubberly, An Introduction to the Study of Education and To Teaching, Houghton Mifflin Co., Chicago, 1925, p. 17.

1. Socialization - the teaching of individuals rather than subjects.
2. Recognition of individual differences - allowing each pupil to develop his greatest possibilities, and to allow him to render the greatest service to humanity.
3. Educational and vocational guidance - the developments of individuals along his interests and aptitudes, and possibilities.

Some one has defined this new education in these terms: The function of the school should be to teach the pupil to do better the things he is likely to do anyway. Dean Bolton uses the phrase "this is the life"⁷ which is commonly interpreted that school is a life in itself rather than preparation for life.

In the present survey an attempt has been made to find out to what extent certain medium sized schools functionally serve its students and its patrons. The offerings of a present day school is not exhausted by examining its curricular offerings alone. Just as important are the so-called extra-curricular offerings and the extent to which the students participate in this new community life. In this survey no attempt is made to evaluate the various practices. The purpose of this survey can be briefly stated again in this question "What does the school offer its students and community?"

This survey covers eighteen North Dakota high schools. The largest school studied has 293 high school students; the smallest 164. The very largest school is the Walsh County Agricultural School, a semi-vocational school at Park River. This was included in order to make a comparison with the traditional type of high school. Not many comparisons can be

⁷F. E. Bolton, Everyday Psychology for Teachers, C. Scribner and Sons, Chicago, 1923, p. 20.

made since only incomplete data was secured from this school. All schools with the exception of one is a first class high school. The one exception is St. Mary's Academy located at Bismarck, North Dakota. This school was likewise included because since it is about the same size as the others, a comparison might be drawn between it and the public school. The distribution of the high school population of the eighteen schools surveyed is shown by Table 5.

Table 5

Distribution of High School Population
Of Eighteen Schools Surveyed

High School	No. Of Schools
160-175	5
176-200	4
201-225	6
226-250	2
251-275	0
275-300	1

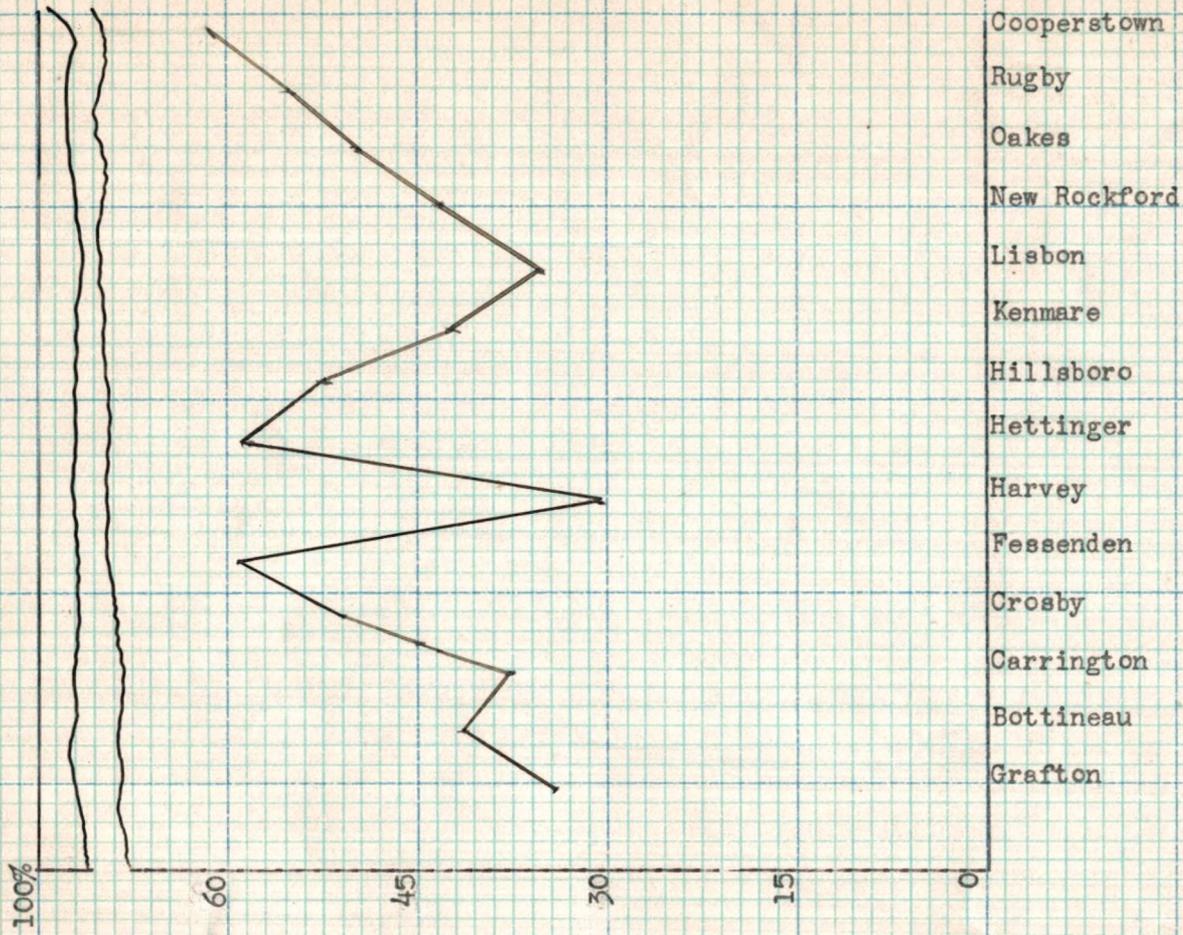
CHAPTER II

ENROLLMENT AND ORGANIZATION

Location. The North Dakota schools included under this survey are well scattered geographically. There are four schools in the northwest corner of the state, three in the southwest, three in the southeast, two in the northeast, and six schools in the central and east portion. Four schools are located in the Red River valley, and only one school is west of the Missouri river.

Source of Enrollment. In order to better interpret the activities and functions of these various schools, an examination should be made of the original source of the school population and what happens to them upon graduation from high school.

It was found that about forty-two per cent of the high school (grades 9-10-11-12) population are non-resident. That means that forty-two per cent of the pupils come from districts too small to maintain a high school. It very likely means that the largest per cent of the non-resident students are from the farms. To this group must be added the large number of resident pupils who actually live on the farm but who are members of a city school district. This means that high schools of the population range of this survey should be geared to a population fifty per cent rural. Figure 2 shows the range of the school population due to non-resident pupils to vary from a low of thirty and one-tenth per cent to a high of sixty-one and one-tenth per cent with a median of forty-two per cent.



Per Cent Of Non-Resident Students In The Various High Schools

Figure 2

In order to compare the offerings of schools it must be known also for what the school prepares its students. We have already seen how the public schools as a whole have changed from a one hundred per cent college-preparatory school to one preparing only about twenty-five per cent of its students for college. In order to find out what the schools which come under this survey do with their graduates a study was made of the number of students continuing their education. This group would include both college and trade school. It was found that there was a tremendous difference in the percentage of graduates continuing their education. One school sent seventy-seven per cent of its boys and girls to higher schools. In one school only six per cent of the girls continue, and in another only twelve and one-half per cent of the boys. The median for the boys was thirty and one-half per cent, the girls thirty-one and one-half per cent.

One reason for the wide variation in the percentage of students continuing their education is found in the Bottineau situation. Last year seventy-seven per cent of the graduates of Bottineau continued their education. The North Dakota School of Forestry is located at Bottineau. The same situation exists in other cities where institutions of higher education are located. The conclusion can perhaps be drawn that if opportunity is available students will continue their education for at least one year. Figure 2 shows this condition for each of the schools.

In considering only the students who attend institutions of higher learning, that is, excluding the commercial colleges, nurses training, and trade schools, we find that the median for boys is twenty-two and one-half

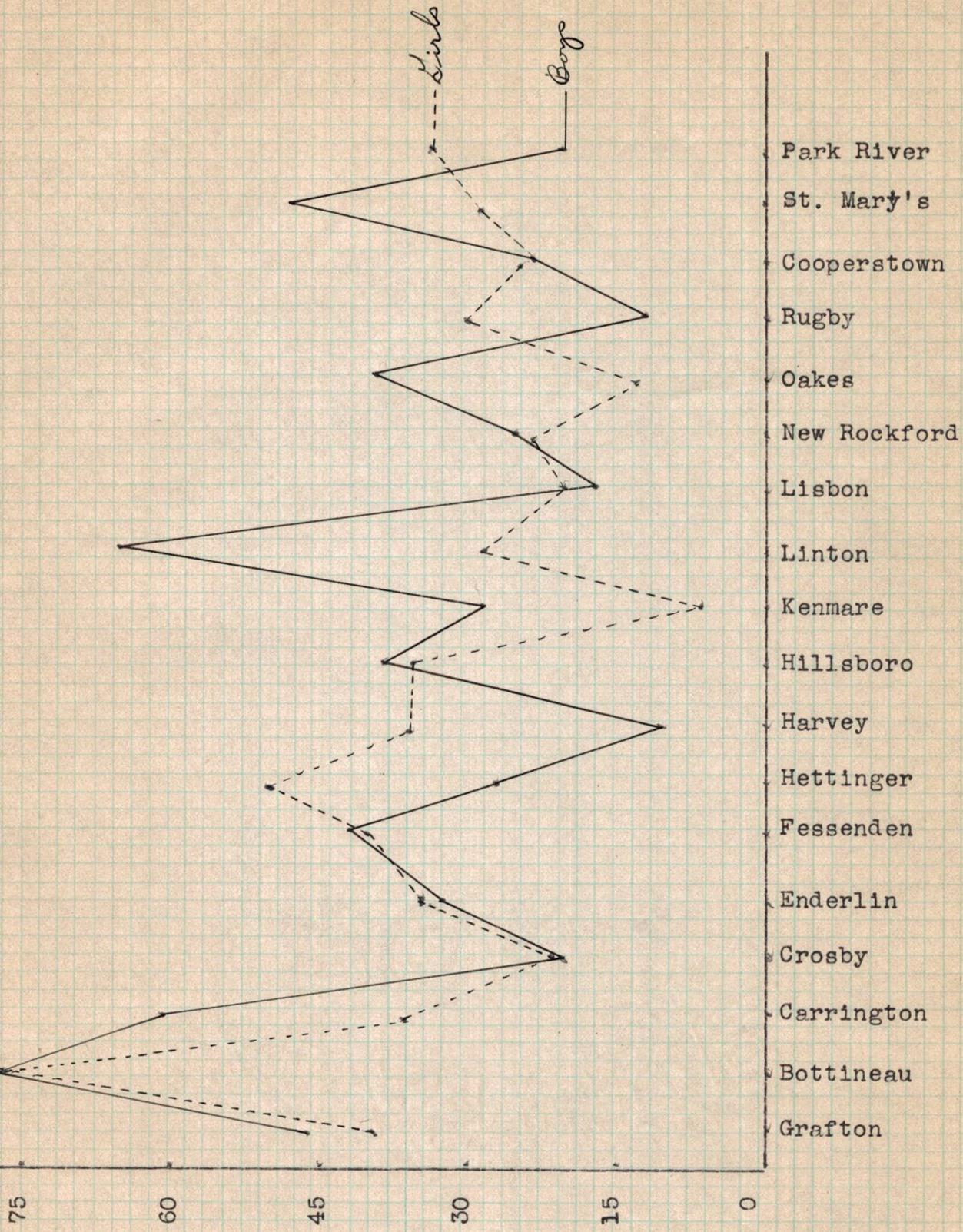


Fig. 3. Per Cent of Boys and Girls Continuing Their Education, Class 1936-37.

per cent, girls nineteen and one-half per cent. These facts are revealed in Figure 4. If a further segregation should be made between normal schools and universities we find that twenty-one per cent of the boys attend the universities and only nine and one-half per cent of the girls.

It is important in surveying the offerings of the schools to keep in mind these statistics relative to the number of students continuing their education.

Enrollment. It was noted that only one school, the Walsh County Agricultural School, enrolled more boys than girls in grades nine, ten, eleven, and twelve. Linton and Hillsboro each had one more girl than boy enrolled in these grades. It was found that forty-three and five-tenths per cent of the high school enrollment were boys and fifty-six and five-tenths per cent were girls. Now, the peculiar thing about this part of the investigation was that for the lower four years of these schools the boys outnumbered the girls fifty-two per cent to forty-eight per cent respectively. In fact, this situation was true for the first eight grades with the exception of the sixth grade where the girls outnumbered the boys forty-five and eight-tenths per cent to fifty-four and two-tenths per cent respectively. For the first eight grades the boys outnumbered the girls fifty-two per cent to forty-eight per cent. It will be seen from this and from an examination of Table 6 that some factor is operating in the upper grades of the school system to limit the enrollment of the boys. For some reason the boys are dropping out of school in larger numbers than the girls. It would have been tremendously worthwhile to compare the relative "drop-out" of boys in sys-

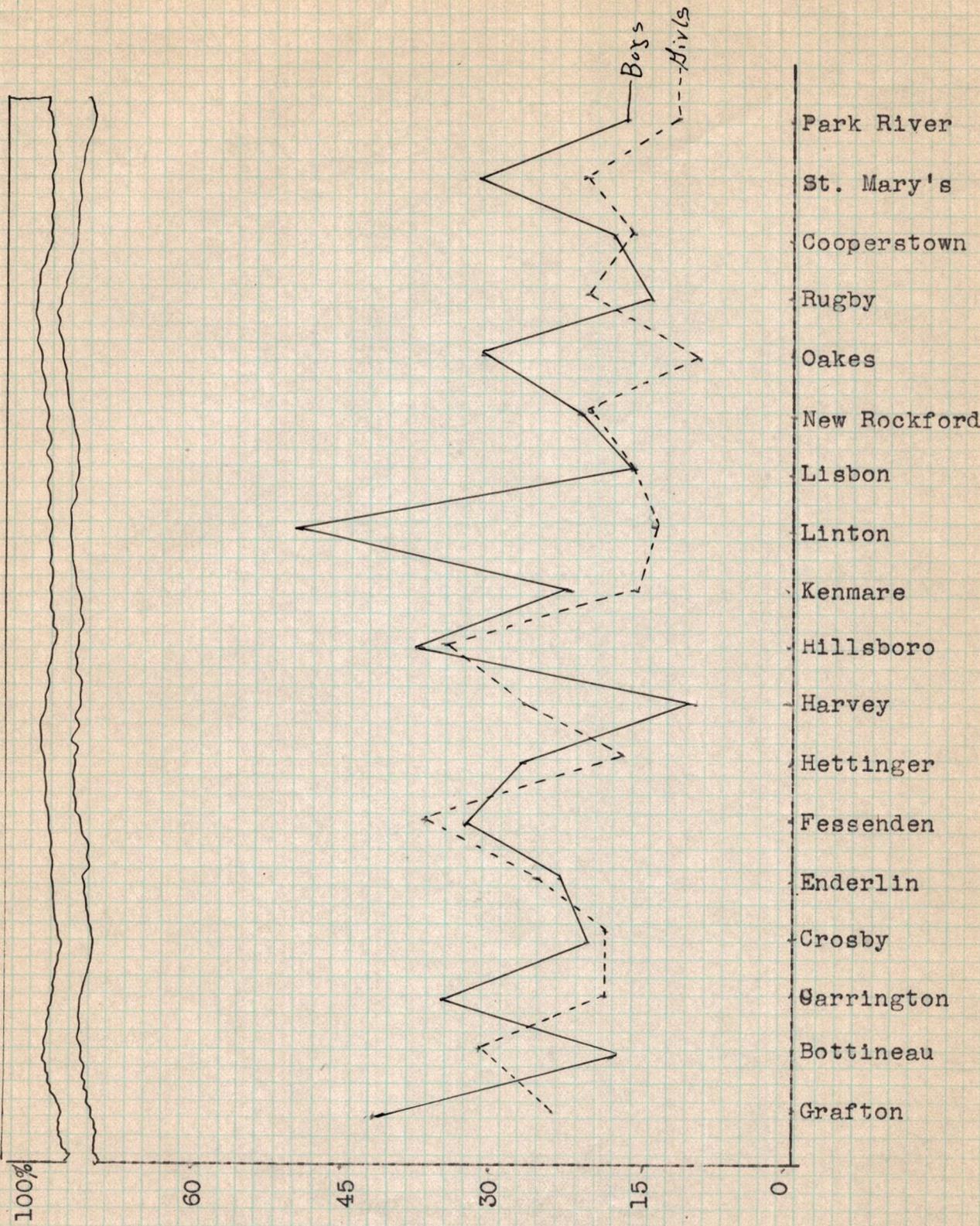


Fig. 4. Per Cent of Boys And Girls Attending Institutions of Higher Learning.

tems organized on an acceptable Junior High School plan with schools organized on the traditional plan, but the nature of the data make it impossible to investigate this phase.

Table 6
Comparative Enrollment Of Boys And Girls
In Certain Schools

Grade	Percentage Of Boys	Percentage Of Girls
1	54.6	45.4
2	52.3	47.7
3	50.4	49.6
4	50.0	50.0
5	52.0	48.0
6	45.8	54.2
7	51.0	49.0
8	52.4	47.6
9	46.9	53.1
10	44.0	56.0
11	40.4	59.6
12	40.6	59.4

Perhaps the answer to retaining the boys in high school is to be found in the organization and offering of the Walsh County Agricultural School. This school offers more opportunity for boys to take shop courses and commercial courses than any of the other schools. Another feature worthy of further investigation is the fact that the Walsh County Agricultural school does not open in the fall until about October first, about three weeks after most of the other schools. This gives an opportunity for the boys to do fall work on the farm without missing much school. Thirteen of the eighteen schools studied were members of the North Central Association. A total of 3,670 students were enrolled in grades, nine, ten,

eleven, and twelve of these schools, and 5,293 were enrolled in the first eight grades. Table 7 shows these and other important facts concerning these schools.

Table 7

Grade And High School Enrollments, And Number Of Teachers Employed, 1937-38

School	North Central	Class	Enrollment		Teachers	
			H. S.	Grades	H. S.	Grade
Bottineau	No	1	178	291	7	7
Carrington	Yes	1	193	350	7	8
Cooperstown	Yes	1	210	145	9	5
Crosby	Yes	1	227	277	10	6
Enderlin	Yes	1	175	313	9	8
Fessenden	No	1	163	162	7	4
Grafton	Yes	1	235	460	9	13
Harvey	Yes	1	182	378	7	10
Hettinger	Yes	1	170	202	8	8
Hillsboro	Yes	1	165	192	6	6
Kenmare	Yes	1	206	194	7	8
Linton	No	1	170	310	5	8
Lisbon	Yes	1	220	272	8	8
New Rockford	Yes	1	225	400	9	10
Oakes	Yes	1	228	217	7	7
Rugby	Yes	1	223	305	9	10
St. Mary's	No	1	200	625	7	13
Park River	No	1	308	-o-	14	0
Total			3,670	5,093	145	139

Organization of the Daily Program. Contrary to prevailing opinion, all high schools do not start school for the day at nine o'clock. This study revealed that five schools start earlier than this time. Two schools start as early as 8:15, one at 8:36, and two others at 8:55.

The time of starting school for the afternoon session varied from one o'clock to twenty minutes after one. The facts concerning these items are presented in Table 8.

Table 8

Time Of Day For Starting School Sessions

Hour	No. Of Schools
8:15 A. M.	2
8:36 "	1
8:55 "	2
9:00 "	10
1:00 P. M.	6
1:10 "	2
1:15 "	6
1:20 "	1

The time for dismissal of school for the day was very nearly uniform. All but two of the schools dismissed at 4:00 P. M. Of these two, one dismissed at 3:30 and the other at 3:36.

Length of the noon hour intermission varied by as much as thirty per cent. Five schools had an even sixty minutes for intermission, while two schools had as much as eighty minutes. Table 9 shows the current practices in this regard in the schools studied.

Table 9

Length Of The Noon Hour Intermissions

Length In Minutes	Number Of Schools
315	1
340	3
350	3
355	1
360	4
365	1
395	2

Length of Recitation Periods. It was a surprise to find that only four of the fifteen schools studied were operating on a basis of the hour-period. One school used the hour basis for two of its periods, and then switched to five 45-minute periods. The general practice in the remaining schools was eight 45-minute periods. One school was operating on seven 45-minute periods and was dismissing at 3:30 P. M.

Schools maintaining a Junior High School maintained the same period arrangement for both the Junior and Senior High Schools.

Junior High School. Eight of the fifteen schools surveyed were organized on the Junior High level. Four kinds of organization were found, namely, the 6-3-3, the 6-2-4, the 6-6, and the 8-4 plan. Table 10 shows the number of schools using each type of organization.

Table 10

Type Of Junior High School Organization

Type Of Organization	No. Of Schools
6-3-3	1
6-2-4	1
6-6	4
8-4	2

Summary:

1. Fifty-two per cent of the grade school enrollment were boys and forty-five per cent of the high school were boys.
2. Forty-two per cent of the high school enrollment were non-resident students.

3. The Walsh County Agricultural School at Park River was the only school enrolling more boys than girls. This suggests the type of curriculum offered may be a significant factor in retaining or losing boys during high school.

4. There was a sufficient variation in the length of school days as between certain schools to make a difference of seven weeks of school time for the year.

5. Only four schools were operating on the basis of hour periods. The general practice was eight 45-minute periods.

6. About one-half, eight out of fifteen, of the schools were organized on the Junior High School level.

7. About thirty per cent of the graduates of the class of 1937 continued their schooling.

8. About twenty per cent of the graduates of the class of 1937 attended colleges or universities. The other ten per cent attended business colleges, nurses training schools, trade schools, and the like.

CHAPTER III

SERVICES RENDERED THE COMMUNITY AND THE STUDENT

The public schools are units of community interest and endeavor; and have functions beyond the narrow limits of the term 'school.' An attempt was made in this survey to find out in what ways the schools were meeting this problem; and in what ways the schools were surrounding the children with events and situations which compose the newer ideas of the school curriculum.

The immediate limitations, of course, are the inadequate number of teachers, especially trained teachers, for services beyond the usual offerings. Much could be done if teachers were available and free from the daily teaching burden. A teacher should not be expected to put in a full day of teaching, and then spend the evenings in more work. Adjustments will have to be made if it is true, but once the need and the demand is established in the public mind a way will be found to provide the means. The Federal government stands ready to co-operate in some of these lines, especially in adult education and vocational extension courses. In many places the federal government through its adult extension organization offers work in Americanization or citizenship training classes, but since the number of immigrants has decreased there probably is little need in North Dakota for this type of work.

Services to Adults. Very few of the schools studied offered much to the community in the way of special services. Only three of the schools gave night school courses to adults, two of these three were Smith-Hughes extension courses and the third school offered a commercial course to twenty-five adults.

Pupil Services. In an effort to arrive at some estimate of the schools contribution to individual pupils aside from formal class work, an investigation was made along several lines.

It was found that only three schools do enough work in dental, medical, and optical work to warrant answering yes to this question. Only one school mentioned the county nurse as doing enough work in these three fields to warrant mentioning.

In the matter of pupil guidance only two schools are bold enough to dignify their guidance work as "formal." And even in those two schools no special teacher is responsible for guidance, but the work is done by the superintendent, principal, and teachers. Every school admitted doing informal guidance work, which is to be expected since it is inconceivable that a teacher should have daily contact with a group of youngsters without doing some guidance work.

In the matter of helping graduates secure positions, six of the schools give such help. No attempt was made in this study to determine the extent of such assistance. Six of the schools studied do check-up work on their graduates who attend institutions of higher learning.

The growth of play days has been so widespread during the past few years that it came as a surprise to the writer to find three schools not taking part in either a local or county-wide play day. Six of the schools take part in both a local and a county-wide day, five take part in only a county-wide event, and two take part in a local but not county-wide play day.

Table 11

Participation In Play Days

Type Of Playday	No. Of Schools
Local and County	6
Local Only	1
County Only	5
None	3

Recreational facilities for the school playground showed a great variation from school to school. As will be noticed in the following table, one school did not have any of the standard playground apparatus, while another had only a chinning bar. Contrast this with another school which had thirty-three pieces of apparatus including sixteen swings, two slides, eight teeters, one bar, four rings, and two trapezes. Table 12 reveals that swings and teeters account for two-thirds of all playground equipment. One important item not appearing in this table is the number of playground balls usually found popular in schools. It is very apparent that appropriate playground equipment is lacking in these schools.

Table 12

Playground Equipment In The Various Schools

Apparatus	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Total
Swings	0	16	4	6	4	3	1	2	0	4	4	0	4	6	0	54
Slides	0	2	1	0	2	1	1	2	0	0	0	2	2	0	0	13
Teeters	0	8	1	6	2	3	1	8	0	4	4	6	4	4	0	51
Merry-go-round	0	0	1	0	0	0	1	2	0	0	2	0	2	1	0	9
Bars	0	1	0	4	1	0	1	0	0	0	0	0	0	0	1	8
Rings	0	4	6	0	1	0	0	0	0	0	0	0	2	0	0	13
Trapeze	0	2	2	0	0	0	0	0	0	0	1	0	0	1	0	6
Chin Bar	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Giant Strides	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	3
Totals	1	35	15	17	11	9	6	14	0	8	11	8	14	12	2	159

Cumulative Records. One of the primary services that a school might render to a pupil who has spent eight to twelve years in the institution is an accurate and detailed cumulative record. These records could be of inestimable value to personnel workers, vocational advisers, and others for years to come. The various items that find their way into these records are shown by Table 13.

Table 13

Items Collected For the Pupils Cumulative Record

Name of Pupil	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Total		
Name of pupil	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	15		
Sex	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	15		
Date of birth	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	15		
Academic Record	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	15		
Notes on good and poor work		x	x	x				x				x	x			6		
Health Records		x						x	x		x	x				5		
Attendance and Tardy Record	x	x	x	x	x			x	x	x	x	x	x	x	x	14		
Reason for Excessive Tardiness and Absence		x						x				x				3		
Conduct or Citizenship Record	x	x		x				x	x	x		x			x	8		
Marked Interests and Abilities		x	x					x			x					4		
Gen'l. Attitude toward School		x	x	x				x		x						5		
Psychological Test Record	x	x		x			x	x		x	x	x	x	x	x	11		
Achievement Test Record		x		x			x	x			x		x	x		7		
Personality Trait Ratings			x				x	x		x						4		
Extra-Curricular Activities		x	x	x			x	x	x	x			x	x	x	10		
Out of School Clubs		x					x			x		x				4		
Religious Interests		x									x	x	x			4		
Employment		x								x						2		
Physical Record		x					x					x		x		4		
Use of Leisure																0		
Special Honors		x	x	x			x	x	x		x	x		x		9		
Totals		7	19	11	12		5	5	13	16	7	14	11	13	10	9	8	160

The only items collected by every institution were:

- (1) pupil's name
- (2) sex
- (3) date of birth
- (4) academic record

Another item collected by all but one school was the pupil's attendance and tardiness record. Other items of personal history collected by more than half the schools were:

- (1) psychological test record
- (2) extra-curricular record
- (3) special honors received
- (4) conduct or school citizenship record

It should be noted that two schools keep but very meager personnel records. All that is recorded on these records is the name, age, sex, marks earned, and special honors awarded. Dean Breitwieser, in his discussion on the New High School, has pointed out the great value and service that might accrue from better student personnel records; and that this will definitely be a function of the schools of tomorrow.²

A peculiar situation seems to exist in the use of information collected about the various students. Only five schools allow the students to see this information! It is conceivable that some of this information ought not be given a youngster without adequate explanation and preparation - but certainly if time and effort is expended in gathering all this material, dividends cannot be had by locking the findings in some filing cabinet or record book. Table 14 shows to some extent the use made of cumulative record data.

²J. V. Breitwieser, The New High School, School of Education Record, University of North Dakota, Vol. XXI, October 1935, p. 8.

Table 14

Use Made Of Pupils Cumulative Record

Available To	No. Of Schools	
	Yes	No
Teachers	15	0
Student	5	10
Parents	14	1

In regard to such important features of school life as instruction in manners and etiquette, how to study, and student self-government, we find little advancement beyond the "incidental" and "informal" levels. Only one school reported no attempt at development along these lines, two schools did not report, and the other twelve classified their work as correlated and informal. More work seems to be done in teaching how to study than in instructing in manners and etiquette. One school reported a special course in how to study for ninth graders. Another reported that each teacher was given a book on the subject with instructions to teach it in the classes. A third school reported setting aside one period in class for this study. It did not report whether this was one period per week or month, but the writer presumes it to be one period per year or semester.

Little advancement seems to have been made in so-called student government. Only three schools reported that they were organized on such a basis. Two others reported a partial-student government form.

Commencement Activities. Commencement week is usually regarded by professional writers as a splendid opportunity for developing pupil and community interest in the public school. These writers tell about the "new commencement program," and the State Department, in its Administrative Manual, sets up such a commencement schedule. Yet, this survey seems to

show that little change has taken place in this activity. The commencement week seems to be as uniform from school to school as uniformity is possible in our school system. Only one school reports not using an "outside" commencement speaker, and the writer knows of two schools that formerly used some other than the traditional type of program but that now are back to the "Commencement Speaker." One important reason given by administrative officers for continuing the "traditional" commencement program is that the public wants it that way. And after all, that is a good reason! For many communities "commencement" is the one opportunity of the year to bring in some good speaking talent, and thus have access to the culture of other communities. A second important reason is that commencement is for the graduate, and ought not to be by the graduates. Commencement, according to this reasoning, is the time for the student to be honored, recognized, and if possible, challenged by an inspirational and dynamic message. Table 15 shows the important features of Commencement Week.

Table 15

Features of Commencement Activities

Activity	No. Of Schools Using	
	Yes	No
Commencement Speaker	14	1
Baccalaureate	15	0
Class Night	13	2
Use Caps and Gowns	12	3
Rent Caps and Gowns	9	3
Own Caps and Gowns	3	9
Junior High or Eighth Grade Commencement	6	9

Table 15 shows that a majority of the schools were trying to bridge the gap between the grades and high school by not emphasizing it by means

of completion or graduation exercises. It will be shown in a later chapter that many students, especially boys, are dropping out of school about this time.

It was found that three-fourths of the schools use caps and gowns at commencement. Many critics cite this as another instance of high schools copying the colleges. But the practice can be justified on the basis of democracy.

Social Life. In this study an attempt was made to find out the extent of activities that contribute to a well-rounded social life, and to those activities that develop an individual in social grace.

Only three schools reported that no school dances were held during the school year; yet one of these schools held a Prom. Four schools reported that no school banquet of the Father-Son, Junior-Senior, or Athletic banquet type was held. One reporting school was rather emphatic in getting across the point that class parties, picnics, skip days, hobo days, and the like were not permitted by school board regulation. The writer can appreciate such a situation because he has worked and overcome an iron-clad rule of twenty-four years duration against school dances. Back in 1904 school dances were permitted in this particular school. One night, following a dance, the building was destroyed by fire. And to make it a good story, no insurance was carried on the building. In looking for an escape from its own negligence, the Board of Education passed a resolution (forever) outlawing school dances in the school building. It is very likely true that most restrictions of this kind date back to some incident which occurred because of lack of proper supervision or because of some other factor.

A comparatively recent innovation in a few schools and communities are special privilege days for seniors and other students. Sometimes these days are called "skip day," "hobo day," "senior day," "educational tour day," and the like. It was found that six of the fourteen schools responding to this question have these events.

The degree and the extent to which such events are supervised by the school officials is of utmost educational importance. Sometimes these days originate by some enterprising and daring class simply excusing itself from school for the day; and patronizing parents and friends make discipline by the school officials futile or impossible. The custom becomes established and is condoned by the public until some misfortune or accident occurs. The tragic and fatal accident at Rutland this year is an example.

There should be no place in our educational set-up for a genuine skip-day where certain students or classes absent themselves from school for the day or part of the day without permission and supervision. Under proper supervision and organization a "skip day" or any other day can be used to advantage by the school and community.

This study reveals that the schools are missing a wonderful opportunity by not using some form of a general "get-acquainted" party. Yet it is found that only four schools make use of this effective and simple device. Another valuable outlet that seems to be wasted is some form of noon-hour activity and supervision. Only two schools have some definite set-up to care for the tremendous amount of time spent on the school playground. The facts of these social-life activities as practiced by the schools in this survey can best be shown by Table 16.

Table 16

Social Activities In The Various High Schools

School	Dances	Sch. Club Party	Club Parties	Prom	Car-nival	Banquets	Pic-nics	Senior Day	Skip Day	Hobo Day	Noon Hr. Ac-tivity	Get Ac- quainted Party
A	No	Yes	Yes	No	No	2	Yes	No	No	No	No	No
B	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes
C	Yes	No	No	Yes	No	No	Yes	No	Yes	No	No	No
D	Yes	No	Yes	Yes	No	2	No	No	No	No	No	Yes
E	Yes	Yes	No	Yes	No	Yes	No	No	Yes	No	No	No
F	Yes	Yes	Yes	Yes	No	2	Yes	No	Yes	No	Yes	Yes
G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes
H	Yes	NO	No	Yes	No	No	No	No	No	Yes	Yes	No
I	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No
J	Yes	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No
K	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
L	No report											
M	Yes	Yes	No	Yes	Yes	Yes	No	No	No	No	No	No
N	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No
O	No	Yes	Yes	No	No	Yes	Yes	No	No	No	Yes	No
Yes	11	10	9	12	5	11	8	1	4	3	3	4
No	3	4	5	2	9	2	6	13	10	11	11	10

Student Activity Tickets. The participation of a student body as spectators at the various school activities is an important problem. There are educational gains to be had even by a spectator, hence the devices used to insure student-spectator participation is important. Only four of the fifteen schools made the purchase of an activity ticket, good for everything the school sponsors, compulsory on the part of the student. The prices varied widely. One school charged only \$1.50, another \$3.00. A third school made it compulsory for the student to buy an activity ticket good for all athletics and music events, and the school paper. A fourth

school offered everything for \$1.60, but allowed the choice of purchase to be voluntary. It may be of interest to enumerate the benefits obtained in one school by the purchase of an activity ticket for \$1.50. These are the activities purchases:

4 football games
 11 basketball games
 2 class plays
 1 operetta
 6 Northwest Assemblies
 1 movie travelog
 all track events

Hand in hand with activity tickets goes the problem of finance of the extra-curricular activities. It would not properly belong to this study to examine the sources of revenue. But all that was attempted was to find out, if possible, what system was used in handling the moneys. It was found that all but two of the schools used a **central system** for the bookkeeping of school funds. In six of the schools the responsibility for the bookkeeping was left to the superintendent, four left the responsibility to the principal, one to the principal and a student treasurer, and one to a student. This survey found that the person responsible for the bookkeeping of the funds invariably signed the checks. A startling situation was found in regard to the auditing of these funds. Six of the thirteen schools report that no audits were made what-so-ever by any one. In one school a student was supposed to audit the books kept by the student treasurer and the superintendent. The effectiveness of a student auditor is practically nil, so that it can be said that seven of the thirteen schools reporting on this item did not have audits of these funds. In two schools the board of education and the superintendent audited the books, and in one school an outside accountant checked the books.

This is certainly a bad business procedure in view of the fact that the medium sized school banks about \$1,037.50 yearly³ in their extra-curricular funds.

Table 17
Responsibility In Handling School Funds

	Supt.	Prin.	Student	Student and Superintendent
Bookkeeping	6	4	2	1
Signing Checks	7	4	0	2

Table 18
Practice of Auditing School Books

By	Number Of Schools
Superintendent	1
Superintendent and Board of Education	2
Superintendent and student	1
Accountant	1
No one	7
President of Board of Education	1

Equipment Made Available to Students. The extent to which students avail themselves of the educational opportunities at hand is often determined by the ease with which necessary equipment may be had. Some students are handicapped because parents are unable to buy the required text-books for two, three, or even four weeks after school opens. In many cases young

³A. C. Roberts and E. M. Draper, Extraclass and Intramural Activities, D. C. Heath Co., Chicago, 1928, p. 445.

people have not elected a course in typing because of the rent charged for the use of the machines. Pupils with musical ability and inclination are sometimes excluded from band or orchestra work because of the financial requirement for instruments. Hence, it is proper for an educational survey to investigate the degree to which equipment is made available to students.

Commercial Equipment. Seventeen of the eighteen schools covered in this survey offer typewriting for credit. Lisbon is the exception. Of the fifteen schools reporting on the question, everyone charged rent for the use of the school typewriters. The range in typing rent is from \$1.00 per year to \$6.75 per year. The median rent is \$5.00 per year. It is easy to see how this typing fee might be a burden to some of the students especially when two or more of the same family would like to take the course.

The value of the commercial equipment varied widely from school to school. In one school a pupil may have ten times as much equipment available to him as another student in another school. The value and the per pupil value of the commercial arts equipment is set forth in Table 19.

Table 19

Value Of Commercial Arts Equipment In Certain Schools

School	Total Value	Per Pupil Value
Carrington	\$3,000	\$15.40
St. Mary's	2,175	11.30
Park River	2,120	7.23
New Rockford	2,000	9.30
Harvey	1,800	10.00
Cooperstown	1,525	10.00
Crosby	1,500	7.10
Hettinger	1,500	8.30
Grafton	1,250	5.30
Kenmare	1,200	5.80
Enderlin	1,200	6.30
Rugby	1,100	4.90
Oakes	850	3.80
Hillsboro	820	4.90
Linton	750	4.10
Fessenden	235	1.40
Bottineau	NR	NR

Science. It was interesting to note the relative amount of laboratory equipment available in each of the respective schools. In order to make a comparison on this point the total value of the science laboratory equipment was divided by the enrollment of the high school. It was found that the school with the most equipment has eight and one-half times as much per pupil as the school with the least. The median per pupil value of science laboratory equipment was \$7.25. Table 20 shows the value of the science equipment in the various schools:

Table 20

Value Of Natural Science Laboratory Equipment

School	Total Value	Per Pupil Value
Carrington	\$3300	\$17.00
Crosby	2700	10.75
Park River	2000	6.30
Rugby	2000	8.75
Hettinger	1675	9.25
Grafton	1600	6.70
Lisbon	1600	7.25
St. Mary's	1600	8.25
Oakes	1550	6.75
Bottineau	1500	8.70
Harvey	1500	8.35
New Rockford	1300	6.00
Linton	1225	6.75
Enderlin	1200	6.25
Cooperstown	1100	7.10
Hillsboro	1000	6.00
Fessenden	650	4.00
Kenmare	450	2.20

Of the fifteen schools reporting on this item only five make a charge for science laboratory rent; and two of these are deposits for breakage of equipment only. The three that actually charged rent collected amounts of 80¢, \$1.50 and \$1.50.

Home Economics Equipment. In comparing the value of the Home Economics equipment, it was found that in the nine schools offering credit in this field for the school year 1937-38, the low is \$790 and the high \$1,850. The median is \$1,635. The comparative values of the equipment is given as

Table 21

Value of Home Economics Equipment

School	Total Value	Per Pupil Value
Park River	\$1,800	\$6.31
Cooperstown	1,700	10.62
Carrington	1,700	8.76
Crosby	1,650	7.82
Oakes	1,635	7.24
Kenmare	1,000	4.85
Lisbon	1,000	4.60
New Rockford	1,000	4.61
Grafton	790	3.41

In comparing the per pupil value of the Home Economics equipment we find the range was \$3.40 to \$10.62 with a median of \$6.31.

Summary.

1. The practices regarding pupil guidance are nascent, and are not definitely organized.
2. Playground facilities are inadequate in about one half of the schools.
3. There is need for a more extensive cumulative record system.
4. Very little work is done in teaching students how to study, and about manners and etiquette.
5. Fourteen of the fifteen schools retain the traditional type of commencement program for high school, and a majority of the schools omit graduation exercises at the end of the eighth grade or Junior High.

6. There is a great diversity in the social activities of the various schools. Dancing is permitted in twelve of the fifteen schools. Picnics and special days like "skip day" are discouraged, and are found in a small minority of the schools.

7. Wonderful opportunities are wasted and lost by more schools not sponsoring noon hour activities, and get acquainted parties. Only three schools make definite plans and arrangements for the great amount of time spent by the pupils at school during noon hour.

8. Only four schools make support of school activities compulsory by purchase of an activity ticket.

9. Auditing of school funds should be improved.

10. Every school collects typewriter rent from its students. This practice has educational implications.

11. There is a wide variation in the amount of equipment that is available to students in the various departments. There is more equipment available per student in the natural sciences than in the other departments.

CHAPTER IV

TEACHER STATISTICS

The State Department of Public Instruction recommends that the pupil-teacher ratio be not more than twenty five to one,¹ and it is a violation of the standard if the pupil-teacher ratio exceed thirty to one. Since thirteen of these schools are North Central schools, it is well to compare them with the North Central standards also. Criterion eight contained in its pamphlet on policies² provides that the teaching load be not excessive, and that an average enrollment in the school in excess of thirty pupils per teacher is considered a violation of this standard.

Pupil-Teacher Ratios. An examination of Table 22 reveals several interesting practices and comparisons. Oakes was the only school to violate the standards by having a pupil-teacher ratio in excess of thirty. Twelve schools, however, exceeded the recommendations of the State Department in regard to this ratio; but the violation does not occur until the ratio exceeds thirty to one.

It was found that there was a variation of seventy-five per cent from the school with the lowest pupil-teacher ratio of twenty to the highest with thirty-five. In the elementary grades the variation was even greater, being close to one hundred per cent. The pupil-teacher ratios in the grades was consistently much higher than for high schools. The median ratio in the grades was thirty-four to one while in the high school it was twenty-six to one. The reason for this situation can hardly be due to the greater amount of supervision needed for high school students. It is probably the result

¹Administrative Manual and Course of Study for North Dakota High Schools, Department of Public Instruction, p. 14.

²Policies, Regulations and Criteria for the Approval of Secondary Schools, Bulletin of North Central Association of Schools and Colleges, April 7, 1938, p. 14.

of two factors, namely, the accrediting standards employed for secondary schools and the attempts to relieve the teacher of class room work to do co-curricular work. Oftentimes a co-curricular activity is a heavier load than one regular high school class, and those activities are not considered in computing the pupil-teacher ratio.

Table 22

Pupil-Teacher Ratios In Eighteen High Schools
And Elementary Schools

	High School	Ele- mentary
Oakes	35	30
Rugby	29	31
Linton	29	43
Kennare	28.8	22
Harvey	28	39
Lisbon	28	30.5
Hillsboro	27.5	34
Pessenden	27.0	37
Crosby	27.0	35
Carrington	26.1	42.3
Bottineau	26.0	32.0
Grafton	25.6	35.0
New Rockford	25.0	33
Park River	23	-
St. Mary's	23	43
Hettinger	22.4	29.3
Cooperstown	22.0	30
Enderlin	20.4	34.8

Size of Classes. An examination of Table 23 reveals many interesting practices. It was found that twenty-three and five-tenths per cent of the classes are larger than thirty, which is the standard set up by the State Department. In one school fifty-eight per cent of the classes exceed the standard of thirty. Another school had exactly fifty per cent of the classes exceeding the standard. No school was able to get along without exceeding the limit at least once; and forty-three per cent of the classes exceed the state recommendation of twenty-five pupils per class.

On the other extreme there were two schools in which 17% of the classes were smaller than ten pupils. Only three schools have no classes with less than ten pupils enrolled. On the whole the situation is very satisfactory, the median sized class ranges in size between 21-25 pupils.

Table 23

Size Of Classes

	Less Than 10	11-15	16-20	21-25	26-30	31-35	Above 36
	No. %	No. %	No. %	No. %	No. %	No. %	No. %
Grafton	2- 5	5-13	8-21	8-21	2- 5	9-24	4-16
Bottineau	2- 6.6	1- 3.3	8-26	11-36	7-23	0- 0	1- 6.6
Carrington	3-10	6-20	5-16.6	3-10	7-23	2- 6.6	6-20
Crosby	2- 4	3- 6.4	8-17	9-19	8-17	3- 6.4	14-30
Enderlin	2- 4.5	9-20	7-16	11-25	8-18	3- 6.5	4- 9
Fessenden	1- 3.3	1- 3.3	4-13	12-40	2- 6.6	3-10	7-23
Harvey	1- 3.2	2- 6.4	7-23	11-35	7-23	2- 6.4	1- 3.2
Hettinger	1- 3.6	5-18	4-14	0-0	8-28	7-25	3-11
Hillsboro	0- 0	3-12.5	3-12.5	3-12.5	3-12.5	1- 4	11-46
Kenmare	2- 6.2	2- 6.2	4-13	11-34	7-19	4-13	2- 6.2
Linton	2- 5.1	2- 5.1	5-13	11-29	9-23	4-10	6-15
Lisbon	0- 0	0- 0	3-10	10-33	12-40	3-10	2- 7
New Rockford	8-17	18-37	5-10	8-17	8-17	1- 2	0- 0
Oakes	2- 6.5	1- 3.2	1- 3.2	2-6.5	7-22	14-45	4-13
Rugby	1- 3	4-11.5	12-34	4-11.5	6-18	3- 7	5-14
Cooperstown	5-17.2	5-17.2	7-24	2-7	3-10	5-17.2	2- 7
St. Mary's	0- 0	3- 8	7-19	10-28	11-30	2- 5.5	3- 8
Park River	6-12	18-36	9-18	3-6	6-12	8-16	3- 6
Total	40- 6.2	88-12.2	107-16.8	129-20.2	123-19.3	72-11.3	78-12.2

Number of Classes and Pupils per Day. It is found that 64% of the teachers teach four to five classes per day. Figures show that a total of six, or 4% of all the teachers, meet more than six classes per day, an unusually heavy load. But all six teachers are in one system. This school has quite a different type of set-up than most schools. It is organized on the

basis of seven 50-minute periods with school opening for the day at 8:36 A. M. and dismissing at 3:36 P. M. This school also has the smallest pupil-teacher ratio in high school of all the schools studied.

Evidently the teacher load is not as heavy in this school as might be inferred from a first glance, and the data do not reveal the details of the set-up in this school. Another factor that might show this school as having six teachers meeting more than six classes per day is that in reporting this figures, supervision of study periods may have been counted as a class. These data were obtained from the annual reports; and it has come to the attention of the writer before that there is a misunderstanding among administrative officers as to whether supervision of study periods should be counted in reporting class sizes and pupil-load. The State Department might do well to clarify this point for the sake of uniformity. Table 24 shows, among other facts, that fifteen per cent of the teachers (counting principals but not superintendents) meet less than four classes per day.

Table 24
Class Loads Per Teacher

Teaching Load	No. Of Teachers	Per Cent
Less than four classes per day	24	15
Four classes per day	38	27
Five classes per day	61	39
Six classes per day	25	16
More than six classes per day.	6	4

In comparing the teacher-pupil load, it was found that sixty-eight per cent of the teachers meet less than 141 pupils per day. The standard of the State Department of Public Instruction states the maximum teaching load should

not be in excess of 150 pupils per day. In two schools this situation is true for every teacher of the system. It may be significant to note also that twenty, or 13% of the teachers, meet more than 160 pupils per day and that these twenty teachers come from eight different schools. The facts of the teacher-pupil load are given in the table below.

Table 25

Teacher-Pupil Load

Teacher Meeting	No. Of Teachers	Per Cent
Less than 141 pupils per day	104	68
141 to 150 pupils per day	18	11
151 to 160 pupils per day	11	9
More than 160 pupils per day	20	13

Teacher Experience and Tenure. A startling fact was discovered in comparing the number of years of teaching experience of the grade teachers, women teachers in high school, men teachers and superintendents. It was found that the median number of years of experience for elementary teachers was 9.1 years while for women teachers in high school it was 4.9 years. The median for men teaching in high school was 6.6 years, and for the superintendents it was 12 $\frac{1}{2}$ years. The ranges and medians are shown in Table 26.

Table 26

Total Experience Of All

Teachers

	Range	Median
Elementary teachers	0-32 yr.	9.1 yr.
Women teachers in H. S.	0-31 yr.	4.9 yr.
Men teachers in H. S.	0-20 yr.	6.6 yr.
Superintendent	3-25 yr.	12.5 yr.

Only three teachers have a teaching service of more than 25 years and only 12 (including the three above) have teaching service beyond 20 years. This might throw a little light on the workings of the Teacher Retirement Fund. It was interesting to compare and check the length of services within the system. We were immediately impressed by the great migration and transition of the teaching force that takes place within the public schools every year. This problem is a study in itself and is mentioned here only as one of the important factors that must be considered in trying to understand the offerings of a school. Short tenures are not conducive to systematic discovery, use, and organization of the peculiar abilities of a school, a pupil, or even a community. It might explain why we are so slow in getting away from the traditional method of teaching subject matter rather than to teach the youngster. It might be expected that these schools, which are among the most desirable ones in the state, would not have this tenure problem as acutely as the public school system on the whole, but it is an acute problem even here.

It is quickly evident that a serious situation exists in these schools relative to tenure. When 27% of the superintendents, 48% of the men teachers, 40% of the women teachers, and 49.1% of the elementary school teachers are working on only their second year's tenure in that system, the time is ready for action of some type.

These findings are typical of the situation in all first class schools. Walters³ in a study conducted for all first class schools of

³John G. Walters, Teacher Tenure and Turnover in North Dakota, University of North Dakota, Unpublished Master's Thesis, 1937.

Table 27

Number Of Years Of Experience Within One System Of Superintendents, Men Teachers In High School, Women Teachers In High School, And Elementary Teachers

Years Of Experience	Superintendent		Men In High School		Women In High School		Elementary Teachers	
	No.	%	No.	%	No.	%	No.	%
0	3	16	20	30	24	40	36	32.7
1	2	11	11	16	16	26.6	18	16.4
2	1	5.5	13	19.4	5	8	11	10
3	0	0.0	2	3	2	3	10	9
4	4	22.0	5	7.5	2	3	6	5.4
5	1	5.5	2	3	1	1.5	3	2.7
6	2	11.0	3	4.5	3	4.7	7	6.3
7	1	5.5	1x	1.5	0	0.0	9	8.1
8	3	16.6	4x	6.0	1	1.5	4	3.6
9	0	0.0	2	3.0	0	0.0	4	3.6
10	0	0.0	1x	1.5	1	1.5	2	0.9
11-15	0	0.0	3	4.5	5	8.0	0	0.0
More than 15	1	5.5	0	0.0	0	0.0	2	0.9
Range	0 - 15		0 - 15		0 - 15		0 - 25	
Median	3.9 yrs.		2.1 yrs.		1.16 yrs.		2.1 yrs.	

North Dakota for the school year 1935-36 found that the average turnover of teachers and superintendents was twenty-six and one-tenth per cent and the average tenure of the teachers that moved was two and eight-tenths years or approximately three years. Mr. Walter's computed, that at this rate, it would take three and eight-tenths years for a hundred per cent turnover.

Mr. Walters found that ninety-one and eight-tenths of the resignations were attributed to a desire for better salary, and for professional promotion. It is difficult to see how these reasons would operate in the

schools under the present survey. These schools are close to the top as far as size, prestige, and location in modern cities are concerned. There is little chance of promotion from these schools to a large system as far as North Dakota is concerned. Mr. Walters found that the median salary of the teachers leaving the classified schools was \$816, including the salary of the principal and the superintendent.

For the same year there was only one of the eighteen survey schools that had as low a median salary as that found in Mr. Walters' study. The median salary for these schools for 1935-36 was \$1,012.00. Accordingly, it might be that there is some other reason or reasons for teacher turnover than desire for promotion and desire for better salary.

In a study of 723 Junior and Senior high schools in the United States Seyfert found that in teacher turnover the schools that enroll fewer than thirty students per grade may expect to have to fill one out of three positions annually. A school twice as large takes on one new teacher every five years. In schools with as many as 150 students per grade, one teacher in seven leaves each year, while for the largest schools the turnover is reduced to one in ten.⁴

It is quickly evident that a serious situation exists in these schools relative to tenure. When twenty-seven per cent of the superintendents, forty-eight per cent of the men teachers, forty per cent of the women teachers, and forty-nine and one-tenth per cent of the elementary school teachers are working on only their second year's tenure in that system, the time is ready for action of some type.

⁴Warren C. Seyfert, School Size and School Efficiency, Harvard Bulletin in Education, No. 19, p. 224.

Teacher Training. Of the 285 teachers and superintendents in the systems studied, it is found that 153, or a percentage of 59.2, have a bachelor's degree and that 11, or 4.6%, have a master's degree. In the schools under this survey there are 145 high school teachers and superintendents. This is 56.2% of the total number of teachers. There are 113 elementary school teachers making 43.8% of the total.

This survey found that not a single teacher in these schools has less than two years training beyond high school. A comparison was attempted between normal school training and university and college training but a difficulty was encountered in differentiating a normal school from a college. During the last few years many of the normal schools have changed their names to colleges. Accordingly, all teacher training beyond the high school has been grouped as college for the purpose of this survey. It is found, for example, that:

37.0% of the teachers have 2 years college training
 4.0% of the teachers have 3 years college training
 59.0% of the teachers have 4 years or more of college training.

Graduate Work. This survey finds that 22, or 8.5% of the teachers have done less than $\frac{1}{2}$ year of graduate work; that 20, or 7.8% have completed a year or less of graduate work; 2, or less than 1%, have completed 2 years of graduate work; and that 3, or a little more than 1%, have completed 3 years of graduate work. In all, 47, or 18.2% of all the teachers, or 30% of the degree teachers, have done some work on the graduate level.

Teachers Certificates. Only two kinds of teachers certificates are represented in the schools of this survey. There are 102 Second Grade Professional certificates and 156 First Grade Professional Certificates.

Summary:

1. Only one school has a pupil-teacher ratio in excess of thirty to one, but twenty-three and one-half per cent of the classes are larger than thirty.
2. The median pupil-teacher ratio in the grades was thirty-four to one - in high school it was twenty-six to one.
3. Fifteen per cent of the teachers meet less than four classes per day, and twenty per cent of the teachers meet six or more classes per day.
4. Sixty-eight per cent of the teachers meet less than 141 pupils per day. Thirteen per cent meet more than 160 per day.
5. Elementary school teachers have more experience than high school teachers. The median experience for women in the grades was nine and one-tenth years and for women in high school, four and nine-tenths years.
6. Only twelve, or five per cent, of the teachers have more than twenty years of teaching experience.
7. The number of men in high school exceeds the women fifty-eight per cent to forty-two per cent.
8. Nearly one-half of all teachers including the superintendents have been in the present position for less than two years.
9. About sixty per cent of all teachers have degrees, and about eighteen per cent of the teachers have done some graduate work.

CHAPTER V

ADEQUATENESS OF THE LIBRARY

The importance of the library unit in a modern school cannot be over-emphasized. The time has long since passed when a student's activity is confined to one text book. The reading appetite which has been developed and fostered in the grades for many years must be satisfied with a literature of wide appeal and range.

Number of Volumes in Libraries. One important criteria in comparing libraries is, of course, the number of volumes available. This standard must be interpreted in regard to recency, condition, and range of the books - all very difficult factors to determine. Many libraries are filled with old volumes which are neither suited to the age nor the appeal of the youth to be served. Often these volumes are retained in order to be able to pad the report to various agencies relative to a certain number of volumes. This survey revealed that the record systems in most libraries need improvement, and as the new library requirement of the State Department for trained librarians gets under way we may have a decided improvement. With these limitations in mind, let us examine by means of Figure 5 the number of volumes in the high school and elementary libraries.

It will be noticed again that there is a wide variation in facilities from school to school. The high school library with the largest number of volumes has 7.6 times as many as the one with the least. The range in volumes is from 600 to 4,595. The median number of volumes for the high school libraries surveyed is 1,687.

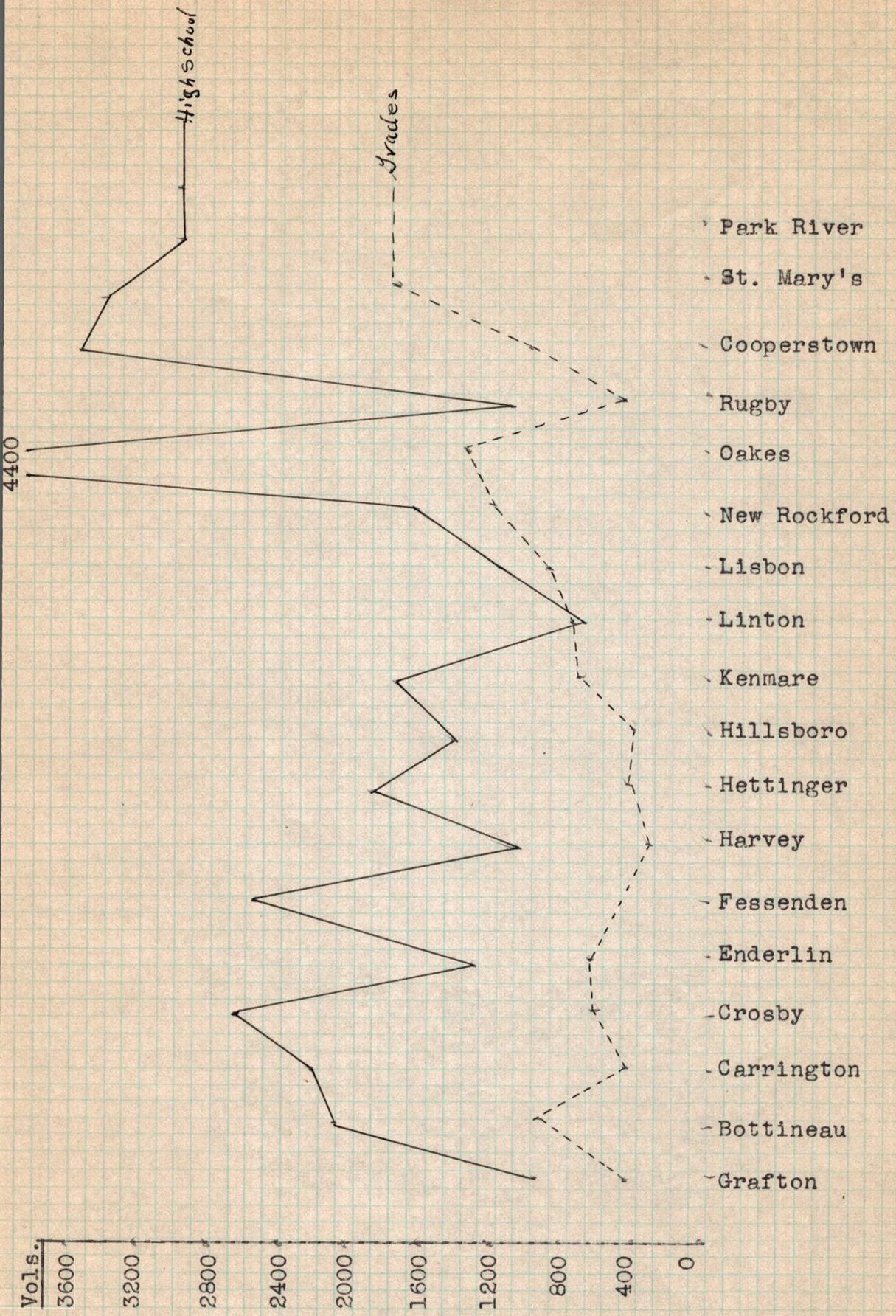


Fig. 5/ Comparison of Number of Volumes in School Libraries.

The library standard¹ as set up by the State Department provides that in high schools having an enrollment between 100 and 200 pupils, 1,000 volumes are required. If the enrollment is between 200 and 500, 1500 volumes are required. For the elementary school three books per pupil are required in the first three grades and four books per pupil for the others. The North Central standard merely specified that the number and kinds of library books be adequate.

In comparison with the state standard, it was found that four of the schools are below standard in respect to high school libraries. Six of the schools are below standard in the elementary school libraries.

The elementary school library shows the range in the number of volumes to be from 300 to 1,699 with a median of 680.

Per Pupil Expenditure for Libraries. In comparing the current expenditures for library purposes the survey finds again a tremendous variation from school to school. The per pupil expenditure for high school libraries is more than nine times as much in one school as it is in another. There was a range from \$0.23 to \$2.14, the median for high school library expenditures per pupil was \$0.94. These facts appear in Figure 6

In no school does the expenditure for the elementary school library exceed the expenditure for high school library, but in one school the per pupil cost for the elementary library exceeds that for the high school library. The survey reveals that in these particular schools the school that spends the most per pupil for elementary library spends about eight

¹Administrative Manual, op. cit., p. 10.

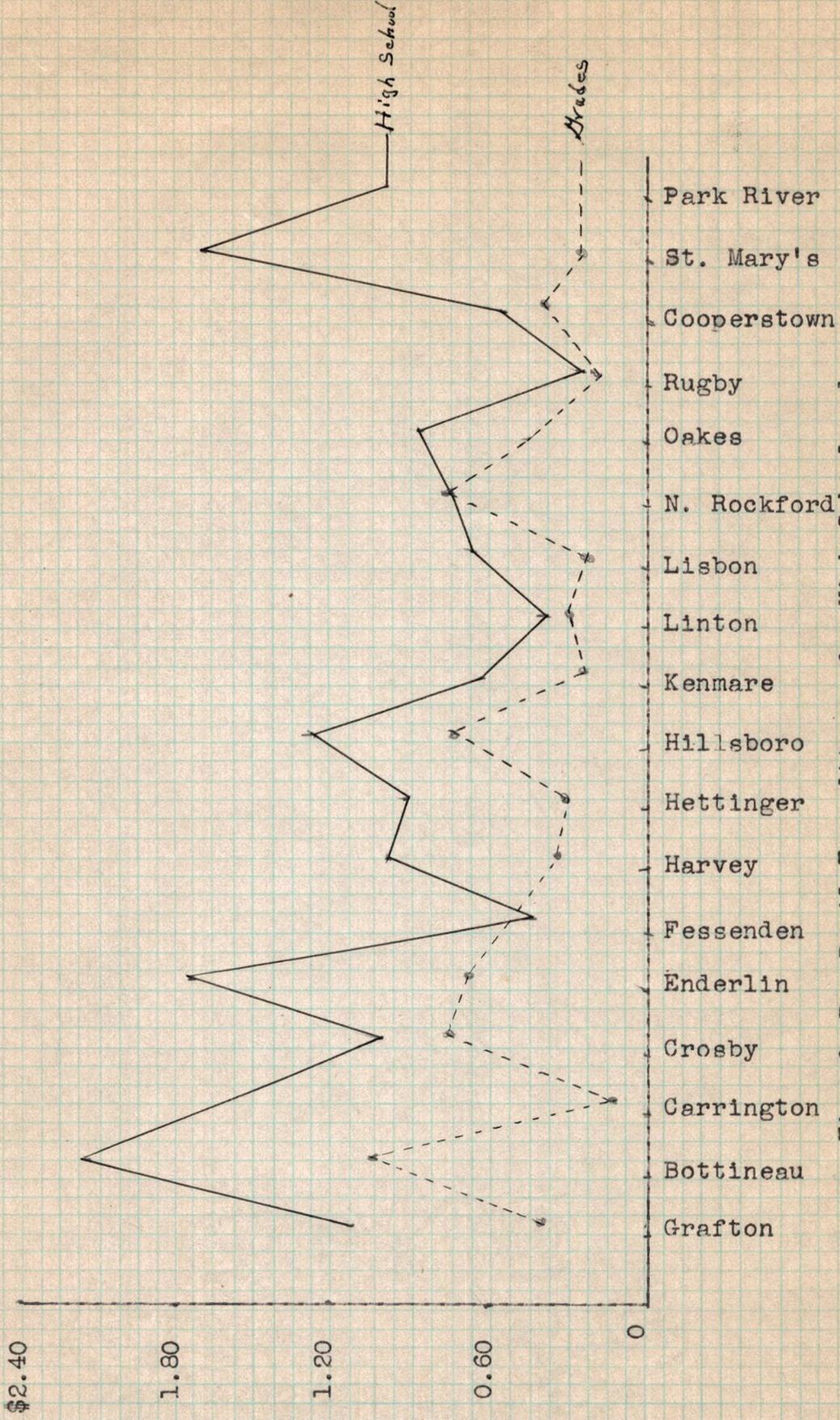


Fig. 6. Per Pupil Expenditures for High School and Grade School Libraries.

times as much as does the least. The range is from 14¢ per grade pupil to \$1.12 per grade pupil. The median is \$0.34 $\frac{1}{2}$. The ratio of expenditures for the elementary library to the high school library is roughly 1 : 3. It should also be noted that the Grafton school has a definite working agreement with the public library, and contributes \$400.00 per year to the support of the public library.

Volumes In Each Classification. It was while trying to collect data on the number of volumes under each classification of the Dewey Decimal System that the need for a better library accounting system was most manifest. Four of the ten schools which did report on this item stated that their figures were estimates only; and in checking some of the other figures that were submitted from so-called records it was found that they did not agree with the total number of volumes as submitted in the Annual Reports. In spite of these unreliabilities, the figures are given here in Table 28 anyway because they do represent a first attempt and probably the only such compilation at the present time.

Magazines And Periodicals. Current periodicals and newspapers are essential for wide reading and up-to-the-minute information on current problems. There is so much good and so much bad in the periodical field that it will pay good dividends to study this problem carefully. From the limited number of schools reached in this survey, it would be inaccurate to draw any conclusions. But it may be interesting and informative to consider even these limited findings.

Table 28

Number Of Volumes Under Each Classification Of The Dewey Decimal System

School	General Works	Philosophy	Religion	Sociology	Philology	Natural Science	Useful Arts	Fine Arts	Literature	History	Total
A	3,000*	2	2	110	1	80	180	5	150	160	Rec.
B	108	65	10	45	25	125	65	40	301	345	?
C	100	-	-	50	355	128	50	10	192	100	?
D	Not available.										
E	24	3	2	18	5	23	18	2	819	153	Rec.
F	200	20	5	100	10	100	25	25	400	200	Est.
G	Not available.										
H	350	25	20	185	120	166	100	128	280	360	Rec.
I	108	24	35	100	50	125	100	25	900	150	Est.
J	250	36	250	320	40	150	25	10	800	800	Rec.
K	5	30	30	120	47	117	80	14	1240	442	Est.
L	Not available.										
M	Not available.										
N	Not available.										
O	3,500*	2	2	15	2	30	10	8	40	60	Est.
Tot.											
Median	152	25	20	100	33	125	65	12	350	180	

*Includes fiction.

It is found that the largest number of magazines and newspapers subscribed to by any of these schools is eighteen. The smallest number is eight. The median is 10.

The State Department requires that every high school library must be supplied with at least one good daily newspaper and four good magazines. An examination of the data and Table 29 revealed that every school more than satisfies this standard.

The problem confronting the administrative officer of a school is the one of selecting about ten magazines and a newspaper out of the hundreds possible or out of the forty-eight found in these survey schools.

Table 29

Magazines And Periodicals Found In Certain Schools

		Mentioned By Two Schools	Mentioned By One School
One daily paper	100%	Fortune	American Home
Two daily papers	36	Woman's Home Companion	Better Homes Delineator
Readers Digest	72	Pathfinder	Better Homes and Gardens
Time	54	Parents Magazine	Country Gentlemen
National Geographic	54	Current History	Weekly News Review
Popular Science	54	School Activities	Red Book
Scholastic	54	Life	Forward
American Magazine	45	Home Arts	Liberty
News Week	36		Collier's
American Boy	36		McCall's
New York Times	27		Pictorial Review
Popular Mechanics	27		School Musician
Hygeia	27		Scouting
Ladies Home Journal	27		Catholic Digest
Saturday Evening Post	27		Wisdom
Farm Journals	27		American Legion
Good Housekeeping	27		Etude
American Observer	27		American Girl
Literary Digest	27		
Scientific American	27		
Nature	27		

Certainly the philosophy of the school must be examined first and then to select such magazines as contribute to this general aim.

In examining Table 29 one may well wonder why all schools do not include the first five magazines rather than to wonder why they are found in more than one-half of the schools surveyed. In fact there are few of the magazines in the first group, magazines found in more than 25% of the schools studied, that would not stand close scrutiny and challenge.

In the second group, however, one might well question the advisability of including in a limited budget a magazine like Fortune. It is the writer's opinion that \$10.00 could better be invested in two or three lower

priced magazines than in one expensive one. It is also a matter of personal opinion as to whether Life should be included on a high school reading table. Some of its material has been subjected to too much criticism to be accepted without care and forethought.

The third list is conspicuous by the fact that the magazines are found in only one of the schools.

Training Of Librarian. The North-Central Association requires that the school librarian be trained in library methods, and sets the standard at eight semester hours of approved library training. Only four schools equal or exceed this minimum North Central requirement, and six other schools have a librarian with six hours or more of library training. In three schools the librarian has no special training for this important position. The median for the librarian in these schools is six semester hours.

Traveling Library. It was found by this survey that only three schools make use of the facilities of the Traveling Library Commission to supplement its own library offerings. Here is a possibility for enrichment and service that schools seem to be neglecting.

Readers' Guide and Files. To get the greatest service out of the periodicals of a library it is necessary to provide complete files of the important magazines. This survey found that exactly one-half of the schools keep files of magazines. The extent of such files was not determined. It was also found that all schools with one exception which do keep files also have a copy of the Readers' Guide to Periodicals. One school reports keeping an up-to-date Readers' Guide but that it does not keep a file of its magazines. The utility of this practice is difficult to understand.

Textbooks. Textbooks are not a part of the library set-up, but a consideration of a few problems in this connection may be useful. An attempt was made to discover the recency of text books in the various schools. The schools were asked to list the number of complete texts in actual use in both the high school and the grades. The responses to this question are tabulated in Table 30.

It is apparent from this table that the common criticism leveled against schools about changing textbooks too frequently is without foundation as far as these schools are concerned. This criticism was so prevalent in North Dakota a few years ago that a State Law was passed prohibiting changes in textbooks oftener than every five years. Here we have a group of schools which might well be considered representative having 44.7% of its text books more than five yearsold. And these are text books now in use. It is here found that 16% of the textbooks are ten years old or older. Maybe the law should have been made to outlaw old texts rather than restrict (if it does anything) the adoption of new ones!

How Text Books are Secured. The securing of text books is an important consideration whenever educational opportunities are compared. It is obvious that certain students are more handicapped in schools requiring the individual pupil to purchase the books than in a school furnishing such services free of charge. The following table (Table 31) shows the current practices among the schools survey in this important field.

In the schools reporting, the same set-up for securing texts was used in the elementary grades as in the high school.

Table 30

Recency of Textbooks In Various Elementary And High Schools

	37	36	35	34	33	32	31	30	29	28	Before 28	Tot.
A*	1	2	0	3	3	3	0	2	0	1	3	18
B	All since fire of 1932.											
C	No report.											
D	18	16	17	11	11	13	16	7	4	9	12	134
E*	5	8	10	4	3	8	3	5	3	1	2	52
F*	3	4	4	3	0	1	1	1	0	3	2	22
G	All since fire of 1934.											
H	No report.											
I	No report.											
J	1	5	14	19	17	11	12	9	8	3	20	119
K	No report.											
L	No report.											
M	No report.											
N*	3	2	5	0	1	0	0	1	0	2	2	16
O*	4	5	3	6	8	0	1	3	1	2	0	33
Tot.	35	42	53	46	43	36	33	28	16	21	41	394
%	8.9	10.6	13.5	11.8	10.9	9.1	8.4	7.1	4.0	5.3	10.8	

Table 31

How Pupils Secure Their Textbooks

By	Number Of Schools
Purchases from the school	4
Purchases from private store	1
Renting from the school	6
Free from the school	3
Schools not reporting	1

The amount of rent charged for the use of books varied from \$3.00 to \$5.00; the average being \$3.66

It seemed odd that even one school should allow a private party to handle school text books at the usual profit but such is the case. Investigation disclosed that a standard mark-up of $33\frac{1}{3}\%$ was made by two druggists selling the text books in this city. The writer made a study of this problem in 1934. At that time there were twelve schools in the state getting their text books through local dealers. Grafton was on this old list, but it has evidently gotten away from the practice since Grafton is not the school reporting this procedure.

Who Selects Text Books. Out of eleven schools answering this question only one gave this responsibility to the teacher. In six of the eleven schools the superintendent assumes sole responsibility; and in the other four the superintendent and the teacher share the responsibility.

Summary.

1. There is a wide variation in library facilities.
2. The largest library is more than seven times as large as the smallest.
3. Five of the high school and six of the grade school libraries are below the state standard.
4. The range in per-pupil expenditure for school libraries varied from a low of \$0.23 to a high of \$2.14, with a median of \$0.94.
5. The record system is inadequate in regard to the number of volumes under each classification of the Dewey Decimal System.
6. Literature and General Works are the classification with the largest number of volumes with medians of 350 and 150 respectively. Fine

Arts and Religion are the classifications with the least number of books with medians of 12 and twenty respectively.

7. Every school exceeded the state standard relative to number of magazines and periodicals.

8. Only four schools equal or exceed the North Central requirements of eight semester hours of training for the librarian, and three schools have librarians without any special training.

9. Only three schools make use of the facilities of the State Traveling Library.

10. Nearly one-half of the text books are more than five years old, and that 16% of the books are more than ten years old.

11. Four schools sell the text books to the pupils, six schools rent the books to the pupils, one school furnishes all the books free, and in one school the books are purchased by the pupils through private stores.

CHAPTER VI

THE PROGRAM OF STUDIES

The terms "Course of Study," "Program of Study," and "Curriculum" have until recently been used interchangeably by laymen as well as educational writers. Today a clear-cut distinction is made between the course of study and the curriculum. In this study the following definitions have been used.

A Program of Studies "includes all of the studies offered in a given school."¹

A Curriculum "is the sum total of the conscious events which compose a child's life and from which he learns. It is a series of experiences."²

The Course of Study is a suggested guide to teachers.³

It is not the proper function of this study to attempt an evaluation of the subjects included in the program of studies. The selection of subjects is so indubitably bound up in the aims and functions of the school that a consideration of them is of value. According to Koos⁴ the aims are essentially these:

- (1) The civic-social-moral responsibilities.
- (2) Recreational and aesthetic participation and appreciation.
- (3) Occupational efficiency.
- (4) Health

The functions are:

¹Walter S. Monroe and Oscar E. Weber, The High School, New York, DoubleDay, Doran & Co., 1928, p. 189.

²J. K. Norton and M. A. Norton, Foundations of Curriculum Building, Ginn & Co., 1936, p. 548.

³Ibid., p. 548.

⁴Leonard V. Koos, The American Secondary School, Ginn & Co., 1927, p. 366.

- (5) Achieving a democratic secondary education.
- (6) Recognizing individual differences.
- (7) Exploration and guidance.
- (8) Recognizing adolescent nature of pupils.
- (9) Imparting knowledge and skills in the fundamental processes.
- (10) Fostering transfer of training."

In the eighteen schools studied, a wide variation is found in the number of units of work offered; a slight variation in the number of units required for graduation; and a marked variation in the particular subjects required.

It was found that five of the schools require seventeen units of credit including physical education for graduation while thirteen schools require sixteen units including physical education for graduation.

Constants. For the school year 1937-38, the State Department required the following subjects for graduation:

English	3 units
U. S. History	1 unit
European History	1 "
Prob. of Democracy	1 "
Natural Science	2 units
(one must be Gen. Science)	
Physical Education	<u>1</u> unit
	11 units

In the eighteen schools, twelve of them (66 2/3%) require an additional unit in English. Another school requires three and one-half units in English, and the remaining five (27%) require only the minimum of three years of English for graduation.

It is also of interest to note that additional science courses as graduation requirements are slow of introduction. The State Department has urged the teaching of more sciences in high school, and has given weight to this suggestion by requiring two years of science for graduation. This survey reveals that only one school, Enderlin, requires more than the state minimum in science, the requirement being three years of science for graduation. In four schools biology is specified as the other required unit in natural science.

In the field of history not a single school has exceeded the minimum state requirement of one unit of American History and one unit of European History.

In the social science field three schools require an additional unit of credit in addition to the minimum state requirement for graduation. This other social science unit is a course in citizenship given in the ninth grade.

There are also other constants required in the various schools. It is found that algebra is required in eight schools, junior business training in three schools, a second year of mathematics in two schools, a foreign language in one school and religion in one. It should be pointed out that the parochial school, St. Mary's of Bismarck, is the school that requires the year of religion and the one year of foreign language as graduation requirements.

Range of Subjects. There is a significant variation in the total number of units of work offered in the various schools. It is found that a

student in one school may have 50% greater choice of subjects than a student in another school. The range in units of work offered is from a low of $20\frac{1}{2}$ credits to a high of thirty-one units with a median of $24\frac{1}{2}$ units. These figures are not increased appreciably by alternation of subjects since there is little evidence that this practice is followed. Physics and chemistry are two subjects usually alternated yet we find six schools offering both these subjects in the same year with a median enrollment of twenty-four in chemistry and fifteen in physics. In Table 32 are listed the schools and the number of units of work each offered in 1937-38.

Table 32

Number of Units of Work Offered in 1937-38

School	Units
Crosby	31
Park River	30
Grafton	29
Cooperstown	$27\frac{1}{2}$
Oakes	27
Linton	26
Carrington	$25\frac{1}{2}$
New Rockford	$25\frac{1}{2}$
Rugby	25
St. Mary's	24
Lisbon	23
Kenmare	$22\frac{1}{2}$
Hettinger	22
Fessenden	22
Enderlin	$21\frac{1}{2}$
Hillsboro	21
Harvey	$20\frac{1}{2}$
Bottineau	$20\frac{1}{2}$

It was found that in these eighteen schools there was a total of sixty-three different subjects offered in at least eight distinct fields. Several of the subjects although having different names given to them are

essentially the same. For example, Economic Geography and High School Geography are much alike and may be grouped under the same general heading. After grouping the subjects in this fashion there were still fifty-two different offerings in the nine fields. Ten subjects were named or offered in but one school.

Five subjects were found to be offered in every school. They are: English I, II, III, and IV, U. S. History, and General Science. There were six subjects offered in all but one of the schools. In other words, seventeen of the eighteen schools offer work in biology, present day problems, elementary algebra, plane geometry, and typing.

Table 33 shows the different subjects being offered in the various schools grouped under eight fields; it shows the number of schools offering this subject, the total student enrollment, and the percentage of the students enrolled. The percentage of students enrolled is obtained by dividing the number of students enrolled in the subject by the number of students in the grade in which it is usually offered:

Table 33

Per Cent And Number Of Students Enrolled in Various Subjects in 1937-1938

Subjects	No. Of Schools Offering	No. Of Students Enrolled	Year Usually Offered	Percentage Of Students Enrolled*
<u>English:</u>				
English I	18	1,025	1	100%
English II	18	945	2	100
English III	18	785	3	100
English IV	10	657	4	81
Newsriting	6	117	4	13
Speech	6	117	4	13
Business English	2	48	4	6
H. S. Grammar	1	20	4	2½

Table 33 (Continued)

	No. Of Schools Offering	No. Of Students Enrolled	Year Usually Offered	Percentage Of Students Enrolled
<u>Science:</u>				
General Science	18	946	1	100
Biology	17	794	2	84
Chemistry	14	381	3-4	48
Physics	10	179	3-4	22
Phys. & Hygiene	3	82	3-4	
Physical Geography	3			9
<u>Social Science:</u>				
Pres. Day Prob.	17	758	4	95
Citizenship	10	354	1	32
Inter. Relations	5	90	4	9
Sociology	1	31	4	3.9
<u>History:</u>				
U. S. History	18	802	3-4	100
World History	14	739	2-3	77
Modern World History	4	193	2-3	21
Early World History	1	48	2-3	2
<u>Mathematics:</u>				
Elementary Algebra	17	910	1	91
Plane Geometry	17	417	2	22
Advanced Algebra	3	38	3	5 $\frac{1}{2}$
Solid Geometry	2	20	3	2 $\frac{1}{4}$
General Mathematics	4	47	1	5 $\frac{1}{2}$
Commercial Arithmetic	10	212	2-3-4	24
Trigonometry	2	9	3	1
<u>Foreign Languages:</u>				
Latin I	11	213	2	21
Latin II	7	113	3	13
German I	1	21	2	2.2
German II	1	37	3	4.6

Table 33 (Continued)

	No. Of Schools Offering	No. Of Students Enrolled	Year Usually Offered	Percentage Of Students Enrolled*
<u>Commercial:</u>				
Typing	17	685	2-3-4	86
Advanced Typing	16	297	3-4	37
Bookkeeping	13	368	2-3-4	46.2
Junior Business Training	16	612	1	58.6
Shorthand I	16	98	2-3-4	40
Shorthand II	8	368	3-4	12
Commercial Law	12		3-4	45
<u>Vocational:</u>				
Smith-Hughes Agriculture	7	241	1-2-3-4	25
Home Economics I	7	250	1-2	26
Home Economics II	7	160	2-3	20
<u>Not Classified:</u>				
Psychology	13	373	3-4	46
Economic Geography	9	251	2-3-4	32
Music	15	1,357	All	?
Mechanical Drawing	4	54	3-4	6.6
Home Problems for Boys	1	17	2-3-4	2.1
Bible Study	3	219	2-3-4	23
Woodworking	1	46	All	?
Salesmanship	1	15	2-3-4	19
Shop	1	54	All	?
General Agriculture	2	77	2-3	10
Mental Hygiene	1	?	?	?
Co-Operative Marketing	1	?	?	?

*This percentage was determined by dividing the number of students enrolled in the subject by total enrollment in the year the subjects are usually offered.

Several interesting features are apparent from an examination of this data. Physics is not as popular a subject as chemistry. Although there are more than twice as many students enrolled in chemistry as in

physics, chemistry is offered in only four more schools. One significant reason for this, undoubtedly, is the greater number of girls than boys, and it is known that physics with its relation to machines does not appeal to girls as it does to boys. In the classes concerned there are 40% more girls than there are boys.

Mathematics, especially algebra, remains a puzzling problem. Koos⁵ pointed out as far back as 1932 the decline in the enrollment in mathematics. It is a commonly known fact that school administrators are dissatisfied with the present set-up and content of algebra. Yet, 91% of the freshmen students are enrolled in this subject. The writer expected to find a larger number of schools and a greater percentage of students enrolled in General Mathematics than is the case. Only four schools enroll forty-seven students in this course. Very likely the college entrance requirements are reflected in this enrollment.

Geometry seems to retain a good footing in these schools. Seventeen of the eighteen schools offer this subject with an enrollment of 417 students. About 22% of the students in the year in which it is offered thus take work in Plane Geometry.

Advanced Algebra, Solid Geometry, and Trigonometry are offered in 3, 2, and 2 schools respectively with a total enrollment of sixty-seven students.

Foreign languages have practically disappeared with the exception of Latin. The only school to offer a different language is St. Mary's of

⁵ Leonard V. Koos, The American Secondary School, Ginn & Co., 1927, p. 358.

Bismarck. Here two years of German are required for graduation. St. Mary's is, of course, a Catholic parochial school and has aims and functions different from the public schools.

Latin I is offered in eleven different schools with a total enrollment of 213 students; or about 21% of the students in the year in which it is offered are enrolled in Latin.

The emphasis being placed upon high schools for "the preparation of the individual as a prospective worker and producer"⁶ - the economic-vocational aim of Inglis, - is manifest in the offerings in the commercial field. Seventeen schools offer work in Typing I, sixteen in Typing II, and thirteen in Bookkeeping. It was surprising to find sixteen schools enrolling 318 students in Shorthand I and eight schools enrolling ninety-eight students in Shorthand II. Commercial Law is a popular course being offered in twelve schools to 368 students. Junior Business Training is a rather recent addition to the program of work yet we find sixteen schools with an enrollment of 612 students in this subject.

Vocational Smith-Hughes Agriculture and Home Economic courses could well be offered in every one of these schools. It has already been shown that forty-two per cent of the high school enrollment comes directly from rural areas or farms; and since only thirty per cent of the students continue their education beyond high school, it means most students return to the farm. From this viewpoint alone, the vocational courses are justified in the program of studies. It is found that seven schools offer these two courses with an enrollment of 241 in Smith-Hughes Agriculture, 250 in

⁶Alexander Inglis, Principles of Secondary Education, Houghton Mifflin Co., 1918, p. 368.

Home Economics I and 160 in Home Economics II. It is difficult to compute the percent of enrollment in Vocational Agriculture because of the peculiar overlapping or alternation of these courses. It was found that 26% of the student enrollment in the sophomore class, or a better comparison is 50% of the girls in this class, are enrolled in Home Economics I. A slightly smaller percentage is enrolled in the advanced course, Home Economics II.

In the subjects listed as not classified are found several interesting offerings, and some of these may be the forerunners to a general trend. For example, no statistics could be found relative to the prevalence of psychology in high schools. It is noteworthy that thirteen of the eighteen schools in this survey offer this subject to 373 students. It means that approximately forty-six per cent of the high school come in contact with this subject. New Rockford offers a variation to the general psychology course. This school offers what it terms a course in mental hygiene. The implications of these practices are important and may be a trend. This subject is evidently flourishing even though it is of such recency that it suffers from super-imposition from above. Psychology originally appeared in colleges. Its text-books and viewpoint even in the high school is of the college level type. What is needed for this subject is a text on the high school level dealing with experiences of the age-groups found in that field. There are many high school psychology books but none are entirely acceptable in the viewpoint of many high school teachers of psychology.

Another interesting and new course is one called Home Economics for Boys; and which is offered in one of these schools to seventeen boys under the name "Home Problems for Boys." The Vocational Department of Home

Table 34

Schools Which Added And Dropped Subjects In 1937-1938

School	Subjects Added	Subjects Dropped
Grafton	Psychology Economic Geography Commercial Law	-0-
Bottineau	Commercial Law Psychology	Solid Geometry Industrial Arts
Carrington	-0-	-0-
Crosby	-0-	-0-
Enderlin	-0-	-0-
Fessenden	Bookkeeping Shorthand	German I German II
Harvey	-0-	-0-
Hettinger	Shorthand General Agriculture	Public Speaking
Hillsboro	-0-	-0-
Kenmare	Junior Busi. Train.	-0-
Linton	-0-	-0-
Lisbon	-0-	-0-
New Rockford	Co-Op. Marketing	-0-
Oakes	-0-	-0-
Rugby	Commercial Law General Math.	-0-
Cooperstown	Applied Art Shorthand	-0-
St. Mary's	Junior Busi. Train. World History German Mech. Drawing	Commercial Law Salesmanship Advanced Mathematics Ancient History Modern History
Park River	Journalism Salesmanship International Relations	-0-

Economics at Fargo reports that seven schools in North Dakota offer courses similar to this one. Whether this is just a passing fad, or whether it will remain in the high schools is a matter for speculation, and can be answered only by time.

It is interesting to note the subjects added or dropped in the various schools during the school year 1937-38. A total of twenty-three subjects were added and only seven were dropped. This means that offerings to the students have been increased. Table 34 lists the subjects added and dropped with the name of the school.

Table 35

Subjects Added And Dropped And The Net Change in Eighteen Schools In 1937-38

Subject	No. Of Schools Adding	No. Of Schools Dropping	Net Change
Shorthand	3	0	3
Commercial Law	3	1	2
Junior Business Training	2	0	2
Psychology	2	0	2
Economic Geography	1	0	1
Bookkeeping	1	0	1
Co-Operative Marketing	1	0	1
General Mathematics	1	0	1
Applied Art	1	0	1
World History	1	0	1
Mechanical Drawing	1	0	1
General Agriculture	1	0	1
Journalism	1	0	1
International Relations	1	0	1
Speech	1	1	0
German	1	1	0
Salesmanship	1	1	0
Advanced Mathematics	0	1	-1
Modern History	0	1	-1
Ancient History	0	1	-1
Solid Geometry	0	1	-1
Industrial Arts	0	1	-1
Total	23	9	14

It will be seen in Table 35 that Shorthand was added in three schools; that Commercial Law was added in three schools and dropped in another; and so on for other subjects.

Correspondence Study. Five schools of the fifteen responding on this item enrolled forty students in the correspondence courses. Twenty-three of these forty students came from two schools, and nine from another. There seems to be no subject more in demand for correspondence work than any other since these forty students enrolled in eleven different courses. The subjects enrolled in and the number of students enrolled are shown in Table 36.

Table 36

Enrollment And Choice Of Subjects For Correspondence Work

Subject	No. Of Different Schools	No. Of Students Enrolled
Mathematics	1	5
Diesel	1	1
Art	1	1
World History	2	2
English IV	2	5
English III	3	3
English I	2	2
English II	2	2
Journalism	1	1
Junior Busi. Training	1	2
Speech	1	1
Business Arithmetic	1	2
Bookkeeping	1	1
Geometry	2	7
Present Day Problems	1	1
U. S. History	1	1
Not Indicated	2	3

A partial examination of the field of literature relative to high school correspondence courses reveals the following purposes to be served by such courses:⁷

1. Elimination of many small classes.
2. Enrich offerings of the smaller high schools.
3. To help high schools meet the demand for vocational and technical training.
4. To serve as a means for providing post high school education.
5. To extend high school to persons who stopped short of high school graduation.
6. To extend high school education to persons living in sparsely settled areas.
7. To provide means of recognizing individual differences.
8. To facilitate instruction of persons who are crippled, invalided, or otherwise unable to attend school.
9. To provide a means of adult education.

The enrichment of the offerings of the smaller school and assisting the school to meet the demand for vocational and technical training are the only considerations of importance in this study. None of the high schools surveyed are large enough to offer all the lines of study likely to be demanded by the students. The offerings of the State Department of Correspondence Study should be encouraged and made available to an extent not now possible. Such courses as Service Station Operator, Diesel Engineering, Show Card Writing has great appeal to certain of our students and may assist them in settling on a vocation. Schools as large and diversified as the Benton-Harbor, Michigan, school find it advantageous to use correspondence courses.⁸

Evidently the schools concerned in this survey did not make use of

⁷Walter H. Gaumnitz, High School Instruction By Mail, U. S. Bureau of Education, Bulletin No. 13, 1933, p. 1-2.

⁸The Benton Harbor Plan - An Economy Measure in American School Board Journal, 86: p. 20-21, April 1933.

correspondence courses to any marked extent for any of the nine reasons given above. About one-third of the courses taken by correspondence were offered right in the home high school. Certainly there is no indication from a study of Table 36 that vocational guidance or technical training is being advanced by correspondence courses in these particular schools.

There is a suspicion that these schools are using the correspondence courses for the purpose of allowing "flunkers" to make up the work without repeating the class work.

Summary.

1. Two-thirds of the schools required one unit of English in addition to the state requirement.
2. Only one school required more work in science than is required by the state.
3. No school required additional work in history.
4. Algebra is retained as a requirement in eight schools. All but one school offered work in algebra and that school offered general mathematics. About 91% of the students studied algebra at one time or another.
5. The range in subject offerings was from twenty units to thirty units.
6. Plane geometry was offered in seventeen of the eighteen schools, but only about twenty-two per cent of the students were ever enrolled in the subject.
7. Foreign languages have virtually disappeared with the exception of Latin. Latin I was taught in eleven schools and about twenty-one per

cent of the school population come in contact with the subject while in high school.

8. There was a wide offering in the commercial field especially in typing where eighty-six per cent of the students come in contact with the subject.

9. Shorthand was offered in sixteen schools, and about forty per cent of the students come in contact with this subject.

10. Vocational Smith-Hughes and Home Economics was offered to seven schools, and about twenty-five per cent of the students come in contact with this course.

11. Twenty-three subjects were added to the program of studies in 1937-38, and seven were dropped.

12. Correspondence courses were not being offered to any large extent, and the majority of the courses which were offered were duplications of present offerings.

CHAPTER VII

THE CO-CURRICULAR PROGRAM

The so-called extra-curricular activities have existed in some form just about as long as we have had the traditional subjects.¹ The changing concept of education from period to period has resulted in changes of emphasis from one activity to another. But the important thing about it is that these added features to the regular subjects is an integral part of the program of studies of any school, and should be treated as such.

There is much significance in the name or label which is attached to an activity. There is a psychological implication in the term extra-curricular. The students, the parents, and even the teachers are likely to view these offerings as something "extra" simply because they are termed extra-curricular when in reality they are a permanent and integral part of the school offerings. To correct this psychological handicap the term co-curricular, meaning in conjunction with the regular curriculum, will be used henceforth in this survey in place of extra-curricular.

For the purposes of this study the co-curricular offerings have been grouped under the following heads: Athletics, Music, Dramatics, Declamations, Journalism and Clubs. That there is an inter-relationship between the curricular offerings and the co-curricular is shown by the fact that credit toward graduation is given in every school for work in music, and that the physical education requirement is satisfied by participation in major sports. One school issues credit for Boy Scout Work. A boy earns

¹Elwood P. Cubberly, The History of Education, Houghton Mifflin Co., 1920, p. 30.

one-half of credit upon becoming a Star Scout, and another half credit upon attaining the rank of Eagle.

It would be of value to examine further the practices used in these schools relative to giving credit in physical education by participation in athletics. The major sports (football, basketball, and track) are available to a student for only a fractional part of a school year. The question arises now as to whether a student who participates in football for about nine weeks, satisfies the physical education requirement for the full year, or whether the student must transfer to the regular physical education classes. In one school the practice is to give one-fourth unit of credit for participation in two major sports. The answer to this question is not material to this study, but it would be of interest.

In order to determine the extent to which the students participated in the co-curricular activities, the schools were asked to give the number of boys and girls taking part in each activity. The percent of the student body taking part in each offering was computed and this percent was used as one index and basis of comparison. This is shown in Table 37.

It was expected that more of the schools would offer encouragement to such activities as golf, tennis, hockey, debate and subject clubs. These are activities that can be sponsored to advantage without intra-school competition; but this may be its very weakness. In order to make a so-called good showing or record, schools have worked on the assumption that winning a competitive event from the neighboring school whether it be athletics, music, or declamation, is success. Only when contests and festi-

Table 37

Per Cent Of Students Participating In The Various Co-Curricular Activities*

Co-Curricular Activities	No. Of Schools Offering To:		Per Cent Of Students Taking Part:		
	Boys	Girls	Boys	Girls	Total
Football	14	0	31%	0%	13%
Basketball	14	8	64	18	40
Track	11	4	10	1.7	5.3
Baseball	2	0	3	0	1
Tennis	1	1	T**	T	T
Golf	3	1	T	T	T
Boxing	2	0	T	0	T
Wrestling	0	0	0	0	0
Hockey	0	0	0	0	0
Kittenball	7	7	20	17	18
Orchestra		3	T	T	T
Band		12	12	9	11
Glee Club	10	12	10	18	15
Chorus		9	-	-	6.3
Other Music		5	T	T	T
Class & School Play		13	-	-	10
Debate		0	0	0	0
Public Speaking		3	T	T	T
Declamation		11	-	-	5
School Paper		11	-	-	5
School Annual		5	-	-	20
Home Ec. Club		7	-	-	7
Vocational Agriculture		6	-	-	6
Latin		2	-	-	T
Scholarship		2	-	-	T
Dramatics		3	-	-	2
Peop Squad		13	-	-	11
Lettermen		7	-	-	6½

*Only fourteen schools reported on this item.

**T - less than 1%.

vals are organized are these events offered in some of the schools. Refer-
ences will be made to Table 37 a little later in the chapter.

Table 38

Co-Curricular Offerings In Fifteen High Schools

School	Football	Basketball	Track	Other Athletics	Orchestra	Band	Glee Club	Chorus	Lettermen	Drama	Debate	Declamation	School Paper	Annual	F. F. A.	Home Economics	Pep Squad	Honor	Subject Clubs	Total No. Activities
A	Y	Y	Y	1	N	Y	Y	Y	Y	2	0	2	Y	N	Y	Y	Y	Y	0	15
B	Y	Y	Y	1	N	Y	Y	Y	Y	2	0	1	Y	Y	0	Y	Y	0	0	14
C	Y	Y	Y	2	Y	Y	Y	N	0	1	0	1	Y	N	0	0	Y	0	0	11
D	Y	Y	Y	2	Y	Y	Y	Y	Y	1	0	1	Y	N	Y	Y	Y	0	0	15
E	Y	Y	N	0	N	Y	Y	N	0	1	0	0	0	0	0	0	Y	0	0	6
F	Y	Y	Y	2	Y	Y	Y	Y	Y	1	0	2	Y	Y	Y	Y	Y	0	0	16
G	Y	Y	N	1	N	Y	M	N	0	1	0	0	Y	Y	0	0	Y	0	0	9
H	Y	Y	Y	2	N	Y	Y	Y	0	0	0	1	0	Y	0	Y	0	0	0	10
I	Y	Y	Y	2	Y	Y	N	N	0	1	0	2	N	N	0	0	Y	0	0	10
J	Y	Y	N	1	N	Y	Y	Y	0	1	0	0	Y	Y	0	0	Y	0	1	9
K	Y	Y	Y	2	N	Y	Y	Y	0	3	0	1	Y	N	Y	Y	0	0	0	12
L	Y	Y	(No report on the rest of the items.)																	
M	Y	Y	Y	1	N	Y	Y	Y	Y	1	0	1	Y	N	Y	Y	Y	0	0	13
N	Y	Y	Y	1	N	Y	Y	Y	0	1	0	2	Y	N	0	0	Y	0	1	12
O	Y	Y	Y	2	N	Y	Y	Y	Y	2	0	1	Y	N	Y	Y	Y	Y	0	15
M = 12																				
Yes	14	14	11	13	4	14	12	9	6	13	0	11	11	5	6	8	12	2	2	
No	0	0	3	1	10	0	2	3	8	1	0	3	3	9	8	6	2	12	0	

Table 38 shows the co-curricular offerings in each of the fourteen schools responding to this phase of the survey. Whenever a comparison is attempted in the co-curricular activities the question of classification and grouping arises. Miss Buchman in her thesis² on school clubs used twenty groupings. She grouped all the athletics under one head; and differentiated the offerings in the subject matter clubs as Latin Clubs, Science Clubs, etc. In this survey, each athletic activity was counted separately, and the subject-matter clubs grouped under this one heading. This was done because there were so few subject-matter clubs, and so many activities under the athletic head.

Table 38 does not show a paucity but rather a good balance of offerings in the co-curricular field. With the exception of the one school which offers only six types of activities, there is a wide offering in most of the schools. It was found that the median number of activities offered in these schools was twelve. This agrees with the findings of Maris M. Proffitt's study of the club offerings in 883 public schools.³ She found that the average number of clubs per school was twelve. She emphasized the fact that the per cent that club membership is of school enrollment varies inversely with the size of the school. All the schools included in the present survey would be grouped in the smaller enrollment division of her survey. Accordingly, a high percentage of student participation in the co-curricular offerings might be expected in these survey schools, but such is hardly the case. It was found that twelve of the twenty-eight activities had less than three per cent of the students enrolled in all of them. It was found

²Dorothy M. Buchman, School Clubs in the North Dakota Classified High Schools. Unpublished Master's Thesis, University of North Dakota, 1937.

³Maris M. Proffitt, High School Clubs, U. S. Bureau of Education Bulletin, 1934. No. 18, p. 58.

that fifty-one per cent of student activity in the co-curricular field was spent directly on athletics or on activities closely associated with it such as pep clubs. Twenty per cent of the co-curricular activity is devoted to music, eight per cent to vocational clubs, six per cent on class and school plays and four per cent to journalism. It was found that the average number of activities engaged in by each student is 1.6 per student.

A common criticism leveled against the co-curricular program is that the same students take part in all the activities and that many students do not take part in any. Whether this criticism would be valid for these survey schools was not determined; but very likely it is true because of the emphasis on such few activities. It is common knowledge that in the smaller schools the good athlete in one sport is also the good athlete in other sports. In music the same situation exists. It is to be expected that the member of the school orchestra is also a member of the school band; and the glee club member is also found in the school chorus. The solution to the problem is to be found not in multiplying the number of clubs existing, but to encourage wider participation in existing groups. There are many problems interrelated right here, and it is beyond the province of this survey to treat them.

It has been pointed out in this survey and many others that athletics are over-emphasized in comparison with other activities. That athletics is more firmly entrenched and the recipient of financial blessings not bestowed on its nearest rival, music, is strikingly shown by the following facts. It was found that in the fifteen schools reporting on this portion of the sur-

vey four of the schools furnished all the athletic equipment including shoes to the students participating, and that eleven of the schools furnished everything except the shoes. Contrast this with the orchestra and band set-up where not a single school furnished everything, where in eight schools the students must furnish everything, where five schools furnish some of the instruments such as the drums and the larger bass horns, where one school allows its students to rent the instruments at \$1.00 per month, and in one school where the student may loan instruments from the city band organization.

Summary:

1. The greatest student participation in co-curricular activities was found in athletics, fifty-one per cent of co-curricular participation is in athletics.
2. Music, with glee club and band work leading, was second.
3. The degree of student participation in co-curricular activities was small.
4. The average number of co-curricular activities was found to be twelve.
5. The average number of activities per student was 1.6.
6. Practically all athletic equipment is furnished free to participants while practically no music equipment is furnished the student.

CHAPTER VIII

GENERAL SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This survey has attempted to discover the situations and problems as they exist in certain relatively large schools of North Dakota. Any survey that attempts a cross section of the typical high school must necessarily be extensive. An intensive study has already been made of many of the problems of this size school; and throughout this survey several suggestions were made for the need of more study on other phases and problems.

Each chapter contains a definite summary which should be consulted, and while the findings will not be repeated here to any large extent, yet a few major ones will be re-enumerated for emphasis and possible recommendations.

Since the condition was found that approximately one half of the population of these schools was rural, and since less than one third of the graduates continue their education, the view -point, aim, and function of the school should be re-directed to include the needs of this rural group. It was in the high school where first the number of girls exceeded the number of boys. The boys are evidently not being retained in high school to the extent that girls are.

In the high school there was also found to be a great increase in enrollment due to the influx of the rural pupils who had completed the grade work in country schools. It would seem, though it remains for some other study to prove it definitely, that it is especially the rural boy

who is dropping out of school at an early age. Undoubtedly there are many factors that are responsible for this situation, but one important one is the lack of organization of the school to meet the needs and problems of rural youth.

The personnel records in most of the schools are inadequate and meager. At the end of high school there ought to be more data available concerning the pupil and his problems, adjustments, aptitudes, and outlooks. This recommendation can be satisfied to a large extent by the present administrative set-up, although to be really effective the recommendations of Dean Breitwieser¹ must be followed.

The pupil-teacher ratio in the elementary school exceeds by one-third the pupil-teacher ratio in the high school. There are educational implications in this set-up. Disregarding time spent in co-curricular activities, a teacher should be able to meet more high school pupils per day than elementary pupils. Stated differently the pupil-teacher ratios in the elementary school should be lower than in the high school. The reason, of course, for this reversal is the influence of accrediting standards. Perhaps there should be more standards for elementary schools.

An interesting fact was that the number of years of experience of the elementary teachers was nearly twice as great as for high school teachers.

An item of considerable importance when interpreted in relation to the Teacher Retirement Fund was the fact that only five per cent of the

¹ J. V. Breitwieser, op. cit., p. 10.

teachers have more than twenty years of experience.

One of the most striking and significant facts uncovered by this survey was the condition relative to teacher turnover. Schools and education can hardly be professionalized when about fifty per cent of the teachers, including superintendents, change schools every two years. A partial solution may be better salaries, but there is evidently more to this migration than one or two simple elements.

The libraries in these schools are inadequate in most instances. The amount of money spent per pupil for libraries is insufficient. The North Dakota youngster is naturally handicapped, compared with youngsters in the large cities, as far as variety of experiences is concerned. The nearest substitute to experience itself is to read about it. By surrounding the pupils with interesting books and materials, and by judicious stimulation from the teachers, the reading habit can be cultivated. The first noticeable effect would probably be in the enlargement of the pupil's vocabulary.

There is a need for an adaptation of materials for the peculiar needs of the North Dakota rural students. The entire offerings, curricular and co-curricular, of these schools should be re-examined in the light of the terminal function apparent in these schools - schools that serve a population fifty per cent rural and which sends less than one third of its pupils to higher institutions. Preference should be given to the offerings which meet the needs of the greatest number of students, and not to the educational outlook of a limited number.