8-1-1947

Effects of World War II on Ten Minnesota High School Districts of Similar Size and Character

J. Russell Simcox

EFFECTS OF WORLD WAR II ON TEN MINNESOTA HIGH SCHOOL DISTRICTS OF SIMILAR SIZE AND CHARACTER

A Thesis

Submitted to the Faculty of the Graduate Department

of the

University of North Dakota

by

J. Russell Simcox

In Partial Fulfillment of the Requirements for the

Degree of Master of Science in Education

August, 1947

This thesis, offered by J. Russell Simcox, as a partial fulfillment of the requirements for the degree of Master of Science in Education at the University of North Dakota, is hereby approved by the committee under whom the work has been done.

Erich Selke
Chairman

Elwyn B. Robinson

A. V. Overn

J. W. Breitwieser
Director of the Graduate Division

ACKNOWLEDGMENTS

The author wishes to express his grateful appreciation to Dr. Erich Selke for his encouragement, guidance, and help while this thesis was being written. He further acknowledges the splendid co-operation given him at the Minnesota Department of Education at Saint Paul.

J. R. S.

TABLE OF CONTENTS

Chapter

Chapter

LIST OF TABLES

LIST OF GRAPHS

Graph | Page

CHAPTER I

THE PROBLEM AND ITS SCOPE

Introduction

Probably never before in the history of public education in the United States have the schools and their problems received so much critical attention from the great mass of the American people as during the troubled years of the war and its aftermath. Magazines, the daily press, the Army, the Navy, the medical profession, the radio, and other powerful agencies of the public, suddenly became acutely aware of apparent needs in the schools. With the cause of democracy in bitter conflict with a deadly opposing totalitarian force hurling insults at what they termed a "decadent" democracy, the American public school, and its potentialities for perpetuating the democratic way of life and the rights of free men, was seriously scrutinized for any weaknesses and for the shortest avenues of improvement. That the Germans had made better use of their schools than we in inaugurating and developing a system of government could not be doubted. That the American school had fallen short of certain standards needed desperately in times of stress was also dreadfully apparent.

In the focus of public attention during the war years were several special problems which became more acute as

the war progressed. All of these are interrelated and must be treated in this way. Major problems and concomitant difficulties and developments were 1. School finance - a steady increase in instructional and maintenance costs; vexing problems of local taxation; and an inadequate system of state aids; 2. The teacher shortage and its attendant troubles; the necessity for hiring teachers on special permits and others who were in some way substandard; overloading of teachers' programs because of the shortage of competent instructors; 3. Curriculum variations; the elimination of special departments, as commercial, home economics, industrial arts, and agriculture; the emphasis on health and physical education; the stress on science, mathematics, and special subjects such as aeronautics; 4. Activities - Curtailing programs in athletics, music, and dramatics; emphasis on war time activities such as Victory Corps, stamp, bond, and salvage drives; activities in conjunction with the Red Cross and other organizations directly connected with the war effort; 5. Trends in pupil enrollment in the elementary and secondary fields; the practice of closing rural schools and transporting the pupils to town schools; the effects of the labor shortage on high school enrollment and attendance; the exodus of some families to industrial centers and its effect on school enrollments;

the effect of the demands of the Services on high school boys; 6. Problems of pupil discipline arising from war time conditions.

The Need for the Study

Most of the problems in the study are still extant in the aftermath of the war, and the solutions are not present even yet. There is a real need for some study to point out the problems and suggest some possible solutions.

The schools and their administrators have taken more than their just share of criticism in recent years from a public not aware of the need for changes in the educational system. Some of this criticism is certainly welcome and, where it is intelligent and constructive, valuable. But the conditions under which administrators worked during the war and the period immediately following were conditions beyond their control. The problems of maintaining nearly normal standards amidst the conditions outlined in the previous paragraph are not fully understood by the average layman. Nor, for that matter, are they completely understood by the average educator. This study is intended to trace the development of these problems, gauge their magnitude, and point out some ideas for their possible solution. It is hoped that it will help to clarify some misconceptions and will be especially useful to school administrators.

The Problem

The main purpose of this study was to determine the effects of World War II on a few selected Minnesota schools. In the belief that the problems facing the schools during the critical war years were those of degree rather than kind, an intensive study was made of ten Minnesota school districts of similar size and organization, supporting high schools, and located in the west central portion of the state.

The schools selected were Atwater, Belgrade, Brooten, Clara City, Grove City, Kerkhoven, Maynard, Murdock, New London, and Raymond. All of these are in independent school districts except Belgrade, which is a common school district. The largest school in 1945-46 was Atwater with a total enrollment of 320, and employing a teaching force of thirteen. In the same school year, Murdock showed the smallest enrollment with 183 pupils and a faculty of nine.

Many of the facts and figures necessary for evaluation of conditions in the ten schools were secured from school reports in the files of the Department of Education, Saint Paul, Minnesota, covering the seven school years from 1939 through 1946. Other information not appearing on the records, but important to the problem, was secured through personal conferences with the super-

intendents of the schools being studied.

Delimitations

Because of the intensiveness of the study it was impracticable to include more than ten schools. All of the schools were within a radius of forty miles of Kerkhoven, Minnesota, where the writer is superintendent of schools. The schools represented are in rural areas and are of like size. The writer is aware that the varied nature of different portions of Minnesota; the cutover land in the northern sections, the iron range region, the resort areas, the Lake Superior shipping ports, the canning industry cities of the south, the urban centers and, more particularly, the war industry centers like New Brighton and Anoka, pose some problems even in normal times which are quite different from those in rural areas. Yet, it is felt that the effects of the war on all public educational institutions within the state show enough similarity to warrant the value of a study such as this, even though it is limited to ten schools of one area. At least the problems considered in the study, except perhaps the effects of closed rural schools, are common to all Minnesota schools.

The problem was limited, too, to the study of conditions in the schools during the seven school years from 1939 through 1946. Some aspects of the study, particularly

those concerning finance, went no further than 1945. The reason for this was that records from the schools were not sufficiently complete at the time of writing for use in this thesis.

A further study of the same conditions showing the transition from the abnormal to the normal, when this occurs, would be invaluable. It could reveal some of the lessons learned from the war and serve as a guide for the future.

CHAPTER II

METHOD OF SOLUTION

Gathering the Materials

The intensive nature of the study did not lend itself well to the ordinary mail questionnaire method of seeking information. Facts and figures desired for the work required the examination of annual reports for the ten schools over a period of seven years, from 1939 through 1946. These could most conveniently be found in one place - the Department of Education in Saint Paul. Most of the materials used in the thesis on finance, curriculum, teacher and pupil personnel, and school activities were tabulated from the files at the Department.

However, there was some information required which could not be found even in such an exhaustive source as an annual school report. This was the more personal type of information: the experience narratives of the superintendents in the schools studied; their own opinions of the effects of the war on pupil discipline and school morale, trends in pupil behavior and possible causes, the effectiveness of war time teaching, the awakening of the public out of a pronounced apathy toward the schools, the beliefs that some permanent good

would come out of the lessons learned from the war, and some suggestions as to the ways that public schools may profit from past mistakes and reach more desirable goals. This information was gained through personal conferences with these superintendents. While it is true that mere personal opinions do not possess the authenticity of tested facts in any kind of study, yet it was felt that the superintendents on the public school scene were the most reliable source for this type of information. Moreover, the conferences helped to clear up certain points not evident from the reports to the Department of Education.

Finally, the works of others, as revealed in magazine articles and professional books, were studied for factual information, especially for purposes of comparison with the developments of the study.

The information garnered was classified and organized to form a comprehensive picture of what the war had done to public education in Minnesota, for better or for worse. Graphs and tables were constructed to reveal differences and similarities among the schools, and to show the changes during the years which the war brought.

Definitions

Eight of the ten schools included in the study used the six-year undivided plan of organization; that is,

grades 1-6 make up the elementary school, while grades 7-12 are organized as the secondary school. The remaining two schools, adopted the four-year high school plan during the war; Raymond, in 1942, and Murdock, in 1943. In this study, then, a high school student would be enrolled in grades seven through twelve in the former plan and in grades nine through twelve in the latter.

Independent school district. There are six members on the school board in a district of this type in Minnesota, each member serving for three years, with terms arranged so that two are elected at each annual meeting. Among the duties defined by law is that of levying taxes.[1]

Common school district. Three members comprise the school board in this type of district. Each member is elected for three years, with one being elected each year. The voters levy the taxes in this form of organization, and the powers of the board members are not so extensive as in an independent school district.[2]

Average daily attendance. This basis for determining Minnesota state school aids is found by dividing the total number of pupil days by the number of days school was in session.

---

1. Laws Relating to the Minnesota Public School System, p. 67; 125.08, Subdivision 5.
2. Ibid., p. 66; 125.07, Subdivision 1.

Per-pupil cost.

This term, as used in this work, designates the amount of money spent annually by the school district for each pupil, elementary and secondary, in school. Total costs include the total annual district expenditures, exclusive of debt service and capital outlay. Average daily attendance was used as the divisor.

CHAPTER III

TRENDS IN PUBLIC SCHOOL ENROLLMENTS DURING THE WAR YEARS

The Situation in 1939

The 1939-40 school year marked the close of a peacetime era between World Wars I and II during which enrollments in the elementary schools of Minnesota showed little change or a slight decrease. A study of Minnesota educational directories from 1928 to 1931 indicates the trend.[1] This study showed that 48 per cent of 361 districts maintaining graded and secondary schools reported no change in elementary enrollments or decreases of 1 per cent or more. Only 68 districts reported increases of more than 20 per cent in elementary school enrollments. This condition continued until the school year 1939-40 when 172,963 children were enrolled in the public elementary schools of Minnesota.[2] Up to 1930, elementary enrollments on a national scale had continued to increase despite a declining birth rate.[3] But from that time to 1939 both the birth rate and elementary enrollments declined.

In contrast, secondary schools in Minnesota, as in other parts of the nation, made a phenomenal increase be-

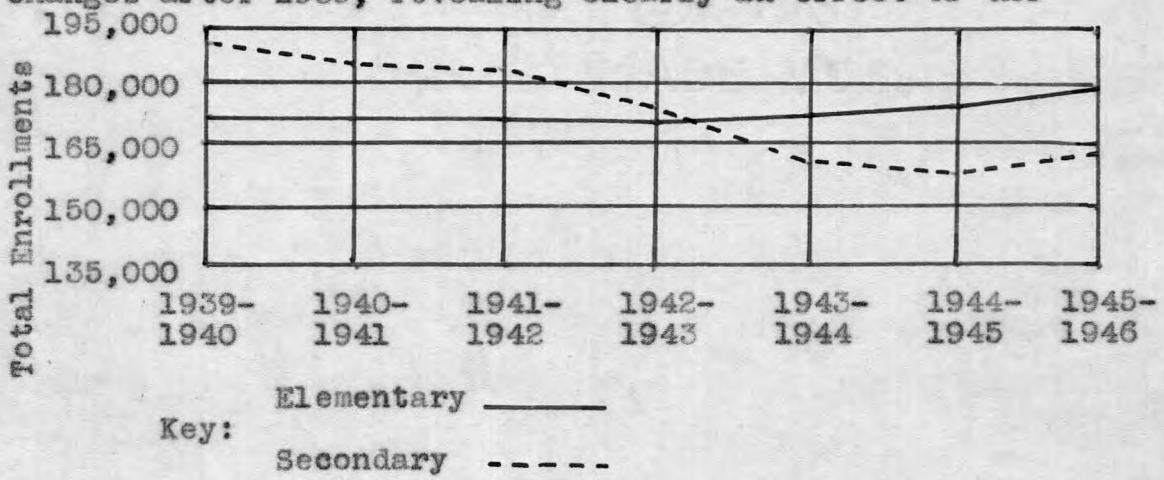
---

1. Roy G. Blakey, et al., Taxation in Minnesota, p. 435.
2. Minnesota Educational Directory, 1940-1941, p. 65.
3. The Encyclopedia Americana, Vol. 9, p. 613.

tween the wars. In 1930, the state's high school population had increased to 104,357, as compared to 45,938 in 1917.[1] This upward trend continued during the depression years of the 1930's until 1939, when the figure was 191,989,[2] representing the high point in Minnesota secondary enrollments prior to World War II.

Enrollments During the War Years

Enrollment trends in the ten schools of this study closely follow those of the state and nation during prewar years. And again, during the war years and the early aftermath, the trends in the ten schools and the state stayed closely together. But the trends showed marked changes after 1939, revealing clearly an effect of the

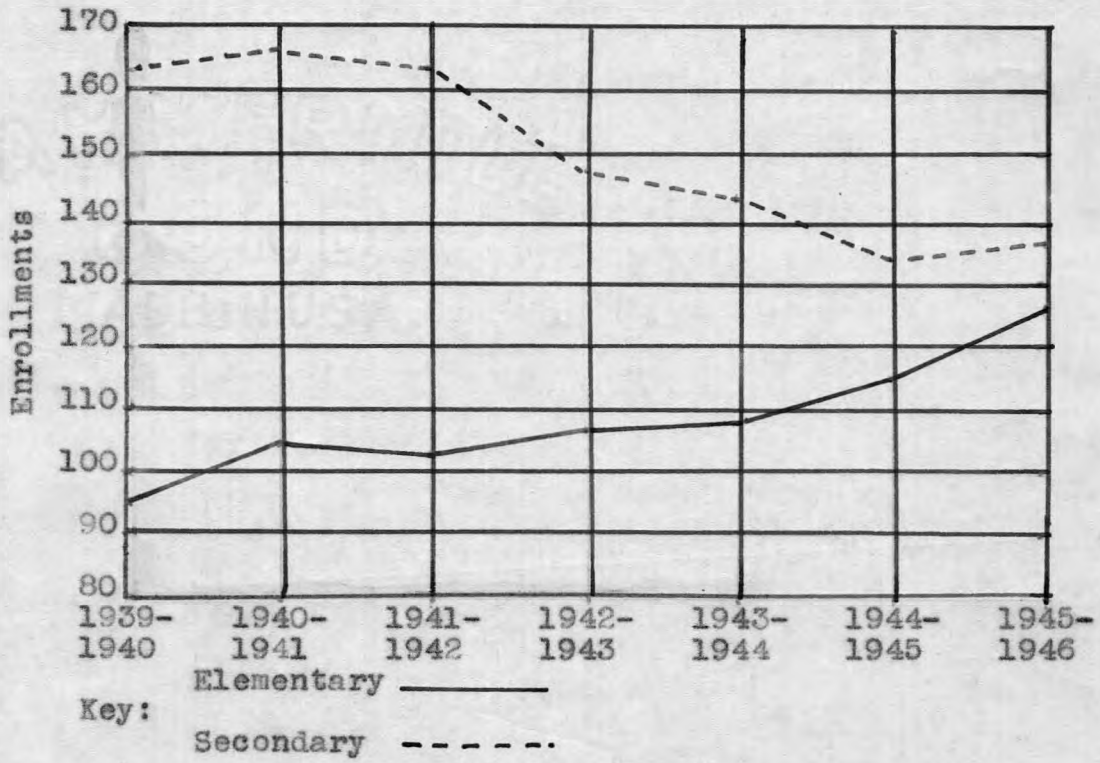


GRAPH 1. TOTAL ELEMENTARY AND SECONDARY ANNUAL ENROLLMENTS IN ALL MINNESOTA PUBLIC SCHOOLS DURING THE SCHOOL YEARS FROM 1939 THROUGH 1946

1. Blakey, op. cit., p. 436.
2. Minnesota Educational Directory, op. cit., p. 65.

war. Graph 1 reveals the fact that elementary enrollments in Minnesota showed slight gains from 1939 through 1946, in contrast with the losses shown before that time, while secondary enrollments fell off sharply, showing only a small rise in 1945-46.

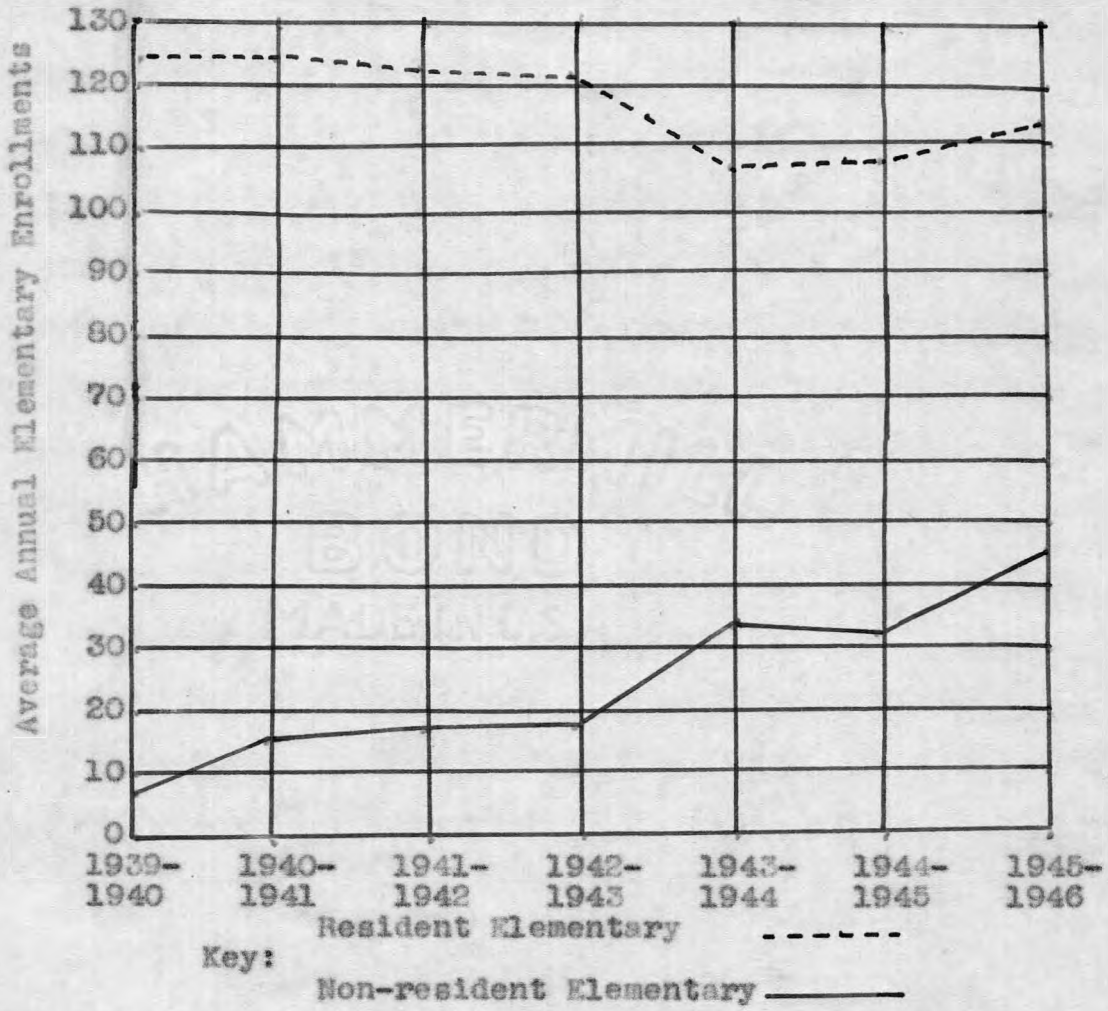
Elementary enrollments in the ten schools of the study showed a sharper rise than did the schools of the state as a whole, while secondary enrollments showed a



GRAPH 2. AVERAGE TOTAL ELEMENTARY AND SECONDARY ENROLLMENTS IN TEN MINNESOTA SCHOOL DISTRICTS DURING THE SCHOOL YEARS FROM 1939 THROUGH 1946

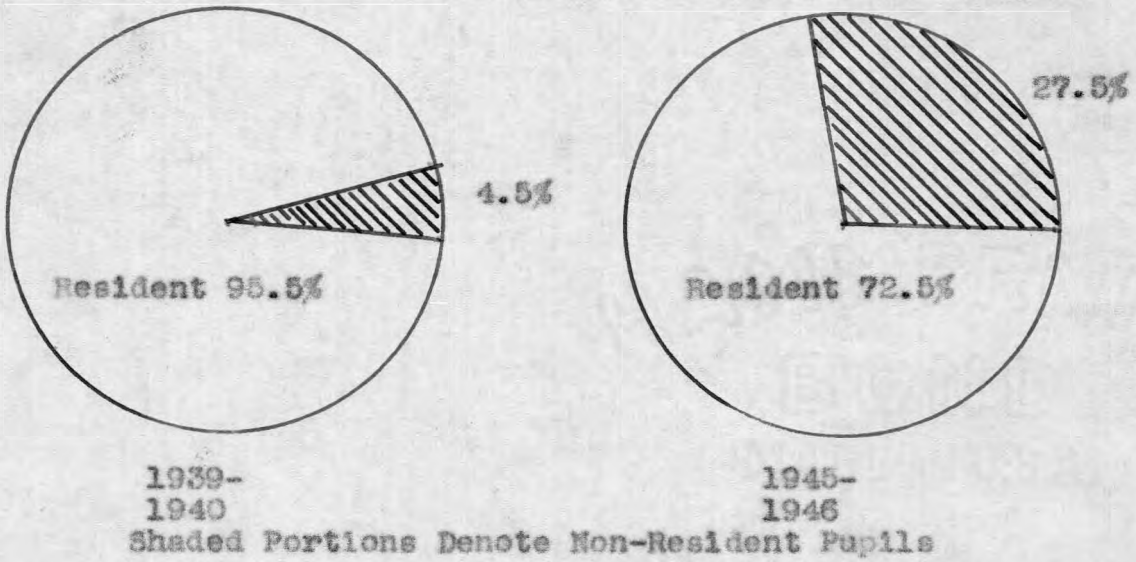
more pronounced decline, as indicated in Graph 2.

The most important reason for the increases in the enrollments of the elementary schools was the decided increase in the average number of non-resident elementary pupils enrolled in the ten schools, as shown in Graph 3.



GRAPH 3. AVERAGE TOTAL RESIDENT AND NON-RESIDENT ELEMENTARY ENROLLMENTS IN THE TEN SCHOOLS OF THE STUDY DURING THE SCHOOL YEARS FROM 1939 THROUGH 1946

The same graph shows a decline in the average number of resident elementary pupils. The extent of this increase in non-resident elementary school population as compared to the residents is revealed in Graph 4.



GRAPH 4. PER CENT OF TOTAL ENROLLMENT, RESIDENT AND NON-RESIDENT PUPILS IN TEN MINNESOTA SCHOOL DISTRICTS DURING THE SCHOOL YEARS 1939-40 AND 1945-46

Rural Closed School Districts

There are three main reasons why rural school boards have resisted temptations to close their schools and transport the elementary pupils of the district to a central school in town. These are:

1. Community pride - The rural schools had long been a center for community activities. It had for generations been a common place of interest for both young and old.

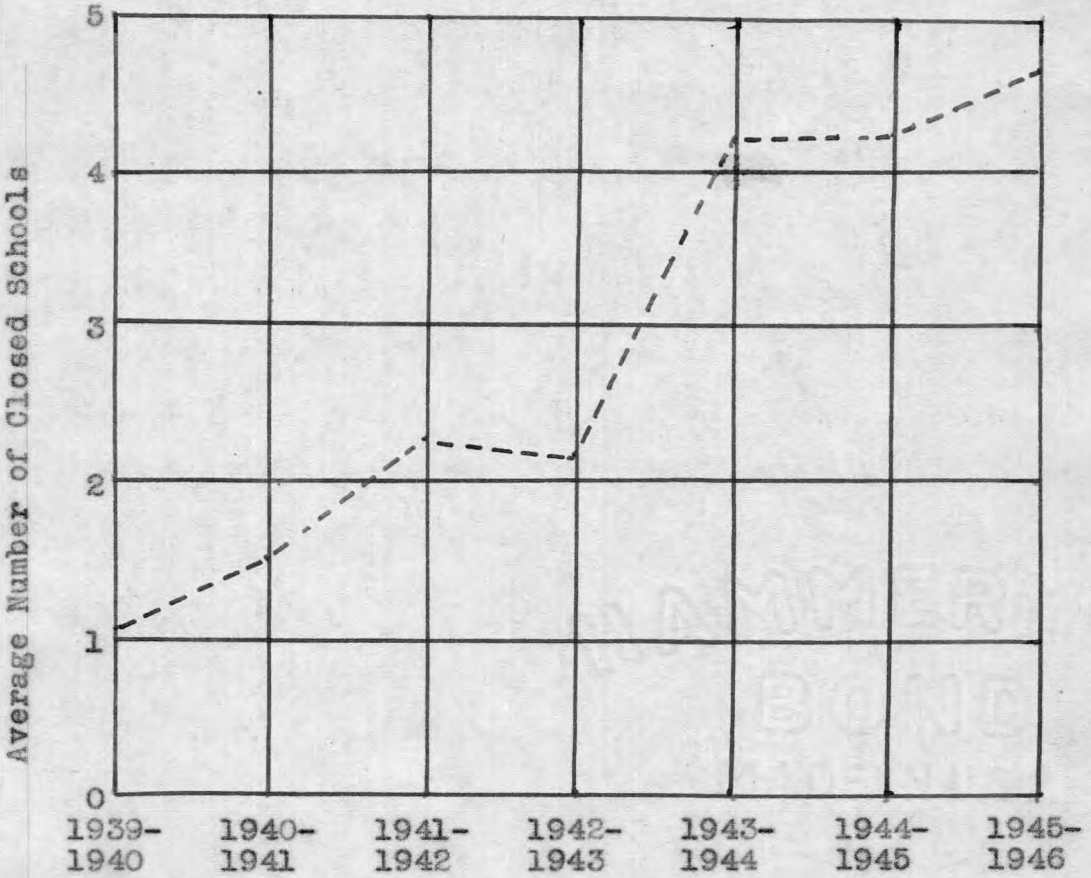
The rural people were quite understandably reluctant to give up this bond between them.

2. Keeping the pupils home - Family ties are usually strong in farming areas. The town school, located some distance away, would take the children away from home for a full day. Often it was necessary for them to travel by bus many miles to school, to return in the evening, after a tiring day, over the same route. Parents naturally were apprehensive for the safety and welfare of their children during the hours they were away from home.

3. There was no general agreement among rural folk that the elementary school in town offered a vastly superior mode of instruction to their own rural school, even though town school officials hearily ascribed to this belief.

That the war was very effective in wearing down resistance to town schools is indicated in Graph 5. Since average annual enrollments of resident elementary pupils, Graph 3, showed an actual decrease since 1939, the only reason for general enrollment increases during the period was the growing number of non-resident elementary pupils from rural districts where schools had closed. Graph 5 illustrates the fact that the ten schools of the study averaged only one closed-school district transporting pupils to the town school in 1939-40, while in 1945-46 the average number had increased to 4.6. The figures are

significant, for they reveal a definite effect of the war on elementary education.



GRAPH 5. AVERAGE NUMBER OF CLOSED SCHOOL DISTRICTS TRANSPORTING ELEMENTARY PUPILS TO TEN MINNESOTA TOWN SCHOOLS IN THE SCHOOL YEARS 1939-1946

Rural school boards were faced with some baffling problems following the outbreak of the war. The shortage of teachers became increasingly acute. It was impossible for all of Minnesota's rural schools to secure teachers, for there were not that many available. It became in-

creasingly evident that it was more economical to transport the pupils to town even at increasing tuition rates than to hire a teacher at $200 or more per month. This was especially true where the teacher-pupil ratio had been ten or less.

The Decrease in Resident Elementary Enrollments

The number of pupils enrolled in Minnesota's elementary schools showed slight gains from 1943 through 1946. Elementary school enrollments in the state had remained almost stationary from 1939 through 1942. These facts are shown in Graph 1. In the ten schools of the study, average elementary enrollments showed small decreases from 1939 through 1943, with a more abrupt drop in the 1943-44 school year, followed by a gradual rise through 1946.

The general decreases in resident elementary enrollments from 1939 through 1946, Graph 3, may be regarded as a continuation of the trends of pre-war years when smaller elementary enrollments were attributed largely to a declining birth rate. In Minnesota's small towns, some families had left for war industry centers during these years, but not in sufficient numbers to indicate a trend. Moreover, "war babies", even by 1946, had not yet put in their appearance at school.

High School Enrollments

Although high school enrollments showed decided decreases during the war, there was nothing to indicate that non-resident pupils were more the cause than the resident. Table I indicates only slight variations in the percentage of non-resident high school pupils enrolled from year to year, with no differences great enough to indicate a trend. Only nine schools were included in the averages, since figures for one school did not appear to be reliable. It is evident that the non-residents, largely from the farms, were just as diligent in attending high school as the resident pupils.

TABLE I

AVERAGE PER CENT OF TOTAL NUMBER OF NON-RESIDENT HIGH SCHOOL PUPILS ATTENDING SCHOOL IN NINE MINNESOTA SCHOOL DISTRICTS DURING THE SCHOOL YEARS FROM 1939 THROUGH 1946

School Year	Per Cent Non-Resident High School Pupils Grades 9-12
1939-40	59.2
1940-41	62.6
1941-42	61.7
1942-43	62.5
1943-44	59.7
1944-45	59.2
1945-46	58.7

Nevertheless, the downward trend in total secondary enrollments, including both resident and non-resident

pupils, was certainly in evidence, as Graph 2 points out. The reasons, though, are probably similar for both the residents and non-residents. They are:

1. The lure of war time jobs was too great a temptation for many boys and girls of high school age.

2. It was quite often necessary for young people to help on the farm or in some other business to replace those who entered the Services.

3. A considerable number of high school boys, and a smaller quota among the girls, went into the Services.

4. A smaller percentage of the students went to industrial centers with their parents who were engaged in war work.

In general, much of the prejudice against rural children attending school in town have proven only that in actual practice. Many of the objections from the rural people have been removed through the ironing out of misunderstandings. Conclusions are:

1. The war has not brought the final passing of the rural elementary school, though it has probably hastened its demise. Very probably a large percentage of the rural schools, closed during the war, will not re-open for instruction, even when more teachers are available.

2. Better transportation planning is shortening the routes, enabling smaller pupils to get to the town school

in less time.

3. Rural people are rapidly losing their isolation and are becoming more and more a part of the town center serving them. The town school is thus closer to them, an important factor in their everyday lives.

4. Town schools are making better efforts to care for non-resident elementary pupils while at school. Noon lunch programs are an important part of this improvement.

5. It is apparent that the materials and methods of instruction in a central school where there are better administrative and supervisory practices can offer much more for the education of a child than the rural school ever can.

CHAPTER IV

THE PROBLEM OF TEACHER PERSONNEL

Development of the Teacher Shortage

From the Pearl Harbor disaster in 1941 to January 1, 1947, Minnesota lost approximately sixteen thousand teachers from its public schools.[1] It is estimated that the Services claimed about a third of these.[2] The remainder found more gainful employment financially in other lines of work. The war industries attracted a large proportion of these teachers, while war time government jobs took many more.

To make matters worse, the enrollments in teacher training institutions took decided drops during the war years.[3] Adams reported that the total number of graduates qualifying for teacher's certificates in Minnesota teacher training institutions in 1939-40 was 792 two-year elementary graduates, 228 four-year elementary graduates, and 1300 four-year secondary graduates. In 1943-44, the number finishing two-year elementary courses had dropped

---

1. Strengthening Public Education in Minnesota, p. 9.
2. Ibid., p. 9.
3. F. R. Adams, et al., "A Comparison of the Number of Graduates of Minnesota Teacher Training Institutions for 1939-40, 1943-44, and 1946-47 Who Were or Will Be Qualified for a Teacher's Certificate", Minnesota Institutional Teacher Placement Association Research Committee, March, 1947.

to 353, a 50.9 per cent decrease, while the same year produced only 111 teachers in the four-year elementary classification and 605 four-year secondary graduates, drops of 51.3 per cent and 53.5 per cent, respectively, under the 1939-40 figures. It was difficult to interest young people in a profession which showed comparatively little financial return.

Though national and state educational associations, the press, the radio, and other public agencies, warned of the serious consequences of the increasing teacher shortage, the public remained generally apathetic. It was believed by many that teachers would return to the schools by the thousands as soon as the war was over. Some board members, even as early as the spring of 1945, expressed the short-sighted belief that "if we wait until August, there will be plenty of teachers." That this attitude revealed plain ignorance of the facts is attested by the existence of the same teacher shortage in 1946-47, grown more acute, and showing few signs of becoming better.

Emergency Certificates and Sub-Standard Teachers

As the teacher shortage grew, it became more necessary each year to recruit the older teachers to fill vacancies, both in the elementary and secondary schools. Many of these teachers had been out of the profession for long periods, but returned to teaching to aid in

the emergency.

A sizeable number of these teachers could not qualify in normal times, but were granted limited emergency certificates. By 1946-47 some 3500 temporary permits of this sort had been issued in Minnesota, with one teacher in six not holding even the minimum requirements for the job he held.[1] In the ten schools of the study, the situation was not quite so bad in 1946, with one teacher out of 14.3 in the elementary schools and one in 7.6 in the secondary schools not meeting legal requirements. There were no teachers before 1942-43 in the secondary departments of the ten schools who were holders of emergency certificates, and none before 1944-45 in the elementary schools.

There was no indication that inexperienced teachers were barred in any of the ten schools at any time previous to the war. In 1939-40, one in every four teachers in the elementary schools was without experience, while one in 3.3 teachers was inexperienced in the secondary schools. Though the war years showed some variations in the employment of teachers without experience, there were no indications of a general trend.

---

1. Unfinished Business, Minnesota's Needs in Higher Education, p. 4.

The fact that age superseded youth was more apparent. In 1939-40, one in 5.5 teachers in the elementary schools of the study had ten or more years of experience, while in 1945-46 there was one in 4.3. Secondary schools in 1939-40 had one teacher in 8.2 with ten or more years of experience, while in 1945-46 there was one in 5.5.

The State Department of Education was reluctant to allow any deviations from certification standards, but with thousands leaving the teaching ranks in Minnesota, drastic measures were taken to aid in the crisis. The Department said in 1941:

> The supply of available qualified teachers in some fields is becoming exhausted. . . . If there reside in your community former teachers who have valid certificates and who would consider accepting teaching positions at this time, they should be informed of the present emergency situation.[1]

It is significant to note that the Department had not, as early as 1941, felt it was necessary to issue emergency certificates. A bulletin in 1943 from the Department shows the change in its attitude as the situation became more serious:

> After a number of consultations with the Attorney General's office, that office advised that the State Board of Education and it alone could issue emergency certificates under certain conditions for the various types of

---

1. H. E. Flynn, Commissioner of Education, Bulletin, Code IX-B-139, p. 2, December 19, 1941.

> teaching certificates and emergency permits in the state. . . . Limited Emergency Permits were authorized on January 11, 1943. This regulation authorized the granting of Limited Emergency Permits valid in high school, in graded elementary, and in ungraded elementary schools.[1]

A definite effect of the war was the decreasing percentage of male teachers on high school faculties. Table II indicates this trend toward fewer male teachers. Single

TABLE II

TOTAL NUMBER OF MALE AND FEMALE SECONDARY SCHOOL TEACHERS, EXCLUSIVE OF SUPERINTENDENTS, IN TEN MINNESOTA SCHOOLS FROM 1939 THROUGH 1946

School Years	M	F	Total	Percentage Male
1939-40	27	39	66	40.9
1940-41	30	38	68	44.1
1941-42	31	39	70	44.3
1942-43	17	47	64	26.6
1943-44	12	49	61	19.7
1944-45	10	52	62	16.0
1945-46	13	48	61	21.3

men teachers for high school work were extremely difficult to find from 1942 through 1946, though the latter year brought signs of improvement. A limited number of men considered physically unfit for the Services were available, but the demand for their services far exceeded

1. H. E. Flynn, Commissioner of Education, Bulletin, Code IX-B-159, p. 2, January 26, 1943.

the supply. Some married men with enough dependents to qualify for deferments could sometimes be induced to take teaching positions, but the growing housing shortage made it difficult for them to accept. The war industries, too, took many men from the teaching ranks with offers of much better pay.

Decline in the Quality of Teaching

The worth of a teacher in the class room is difficult to measure in a study of this kind, since criteria are usually lacking in the records. But it is an incontestable fact that sub-standard teachers generally produce poor work in the class room. Nine of ten superintendents whose schools were included in this study believed that teaching standards suffered as a result of the teacher shortage. Some of the explanations for the beliefs that teaching quality had declined were:

1. The difficulty in securing special teachers.

2. Smaller schools had to take whatever teachers they could obtain.

3. A lack of loyalty among teachers, due to a growing feeling of independence.

4. Older teachers had old ideas and outmoded presentation of materials.

5. Many teachers were interested in money and little else.

6. Teaching ability was definitely below standard.

7. An increasing number of teachers maintained their residences outside the communities in which they taught, driving to their jobs from larger towns every day. These teachers did not take sufficient time for their teaching duties.

8. A lack of professional sense among teachers. Codes of professional ethics were difficult to enforce among teachers who felt their positions were secure because of the shortage.

A more accurate measure of the decline of teaching ability in the class rooms during the emergency period would have been the results of achievement tests given before and during the war. None of the ten schools, however, had the necessary records to make such a measurement possible.

Upward Trends in Teachers' Salaries

Had the people of the state been more aware of the seriousness of the teacher shortage during the war, it is probable that so many teachers would not have left the profession. Teachers had always been notoriously underpaid in comparison with other professional groups with similar length of training.[1] It was a cause for concern to note the action of teachers striking throughout the nation.

---

1. Strengthening Public Education in Minnesota, op. cit., p. 9.

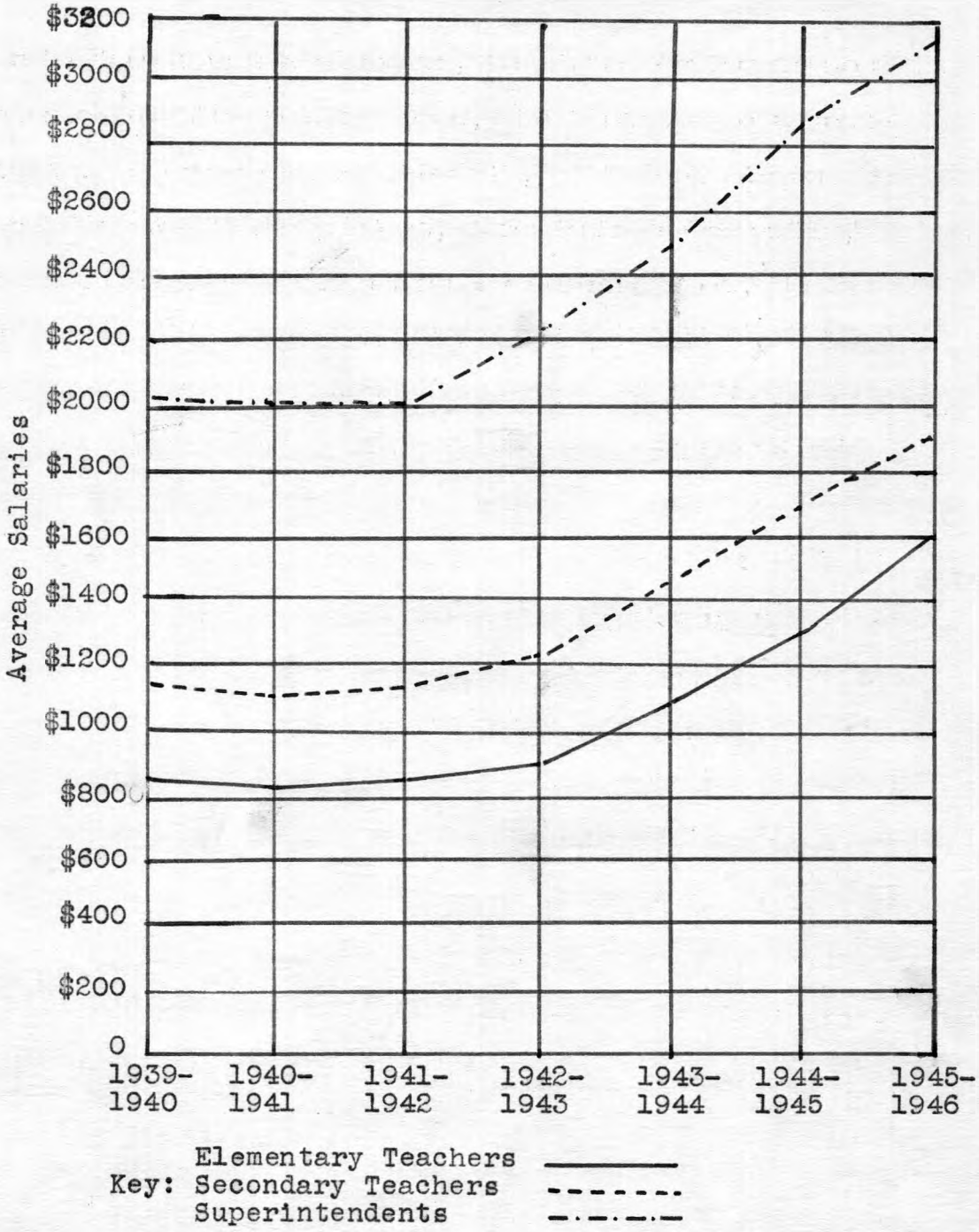
Englund[1] reported that popular indifference to educational matters was responsible for this type of direct action on the part of teachers. He believed that increases in salaries should not be under the guise of "cost of living", but that the public ought to be frank in adjusting teachers' pay "on a professional basis to attract and retain professional people in a professional job".

Although it is probably not true that the general public gradually adopted Mr. Englund's belief that teachers were intrinsically worth the salaries paid to them; nevertheless, salaries did make unprecedented increases during the war, and continued to rise after the war was over. Graph 6 shows the rises in average salaries for superintendents, elementary, and secondary teachers in the ten schools from 1939 through 1946. Superintendents' salaries rose approximately 60 per cent during this time, while secondary and elementary teachers showed approximate average rises of 62 per cent and 98 per cent respectively during the same period of time.

The main reason for the salary increases was, of course, the teacher shortage. It is significant that the first general rise occurred during the school year 1942-43, when the shortage first became acute. The rises thereafter

---

1. Walter E. Englund, "Crossroads and Highways", Minnesota Journal of Education, Vol. XXVII, No. 5 (January, 1947) p. 223.



GRAPH 6. AVERAGE SALARIES OF SUPERINTENDENTS, SECONDARY TEACHERS, AND ELEMENTARY TEACHERS IN TEN MINNESOTA SCHOOLS, FOR SEVEN CONSECUTIVE YEARS FROM 1939 TO 1946

were more pronounced, indicating a continuing and ever-growing shortage. It is important to note that the salaries of elementary teachers showed a sharper rise in 1945-46 than either of the other two groups, disclosing a more serious deficiency in that group at the time. Salary figures were not available at the time of writing to include the year 1946-47, but the upward trends were still in evidence, with indications of still sharper rises for the school year 1947-48.

The Shortage in Special Fields

Particularly short was the supply of teachers with special certificates, especially in the fields of agriculture, commerce, home economics, industrial arts, and music. Men with qualifications for principal were also difficult to find. And war time demands for better training in science, mathematics, and physical education made it possible for teachers of these subjects to command higher salaries than teachers in other fields.

It was found not practicable to make salary comparisons in science, mathematics, physical education, music, and industrial arts fields in this study. Quite frequently, as the teacher shortage became more serious, it was necessary to make the teaching of these subjects the work of the principal or the superintendent. Most of the schools included were forced to close their industrial arts departments. Significant comparisons, however, were made

in the salaries of principals, commercial teachers, and home economics teachers. Table III makes these comparisons in the three fields between the average salaries paid in 1939-40 and in 1945-46 and the average salaries of all secondary teachers for the same school years, showing a higher per cent of increase for teachers in special fields than for all teachers in the secondary schools.

TABLE III

COMPARISON OF AVERAGE SALARIES AND PER CENTS OF INCREASE FOR SECONDARY TEACHERS IN THREE SPECIAL FIELDS WITH THE AVERAGE SALARIES FOR ALL SECONDARY TEACHERS, EXCLUDING SUPERINTENDENTS, IN TEN MINNESOTA SCHOOLS FOR THE SCHOOL YEARS 1939-40 and 1945-46

Teaching Field	Av. Salary 1939-40	Av. Salary 1945-46	Per Cent of Increase
Principal	$1140.49	$2254.44	98.6
Commercial	969.75	1926.10	98.6
Home Economics	1040.63	1949.30	87.3
All Secondary Teachers	1140.00	1900.00	66.7

Clark[1] found the average teacher's salary nationally in 1940 was $1450, while in 1946 it was $1980, a rise of 36.6 per cent. The average of total elementary and second-

1. Harold F. Clark, "Teachers' Salaries and the Cost of Living", The School Executive, Vol. 66, No. 7 (March, 1947) p. 54.

ary salaries in the ten schools considered here showed $1490 in 1940 and $1755 in 1946, a rise of only 17.7 per cent. It is evident that the schools studied still did not keep pace with the schools of the nation in the matter of salaries, despite the fact that the increases noted seemed excessive to the average layman.

Teacher Tenure

With teaching jobs plentiful, it would be natural to assume that the turnover among teachers would be more rapid during the teacher shortage than before. The trend toward shorter tenure, as indicated in Table IV,

TABLE IV

TOTAL NUMBER OF ELEMENTARY AND SECONDARY TEACHERS WITH PER CENTS OF THOSE NEW TO THE SYSTEMS OF TEN MINNESOTA SCHOOLS FROM 1939-1946

School Year	Total Elementary Teachers	Per Cent New To System	Total Secondary Teachers	Per Cent New To System
1939-40	33	33.3	65	44.6
1940-41	32	25.0	68	28.0
1941-42	31	46.8	69	56.5
1942-43	29	48.3	64	62.5
1943-44	36	69.4	62	48.4
1944-45	35	40.0	62	54.8
1945-46	38	68.4	60	46.7

was pronounced in the elementary schools of the study, with an average of 33.3 per cent new to the systems in 1939-40, compared with 68.4 per cent in 1945-46. The high point in elementary teacher turnover was in 1943-44, with 69.4 per cent teaching in the schools for the

first time.

The trend was not so apparent in the secondary schools, with 44.6 per cent new teachers in 1939-40 and 46.7 per cent in 1945-46. The maximum was reached in 1942-43, with 62.5 per cent of the secondary teachers new to the systems.

There are several reasons why increasing teacher turnover did not precisely accompany the increasing teacher shortage. They are as follows:

1. Emergency permits and certificates qualified teachers for positions in particular places only, for the emergency period.

2. Salary rises were an inducement for teachers to remain for more than one year in a place.

3. The housing shortage made it difficult for some to change locations.

Teacher Subject Loads

There was no indication that teachers carried heavier subject loads during the teacher shortage in the secondary departments of the ten schools. Possibly the reason for this was that candidates for new positions were more discriminating than usual concerning the number of classes assigned to them. In 1939-40, the average load per teacher was 23.1 classes weekly. The high point during the war years was 26 in 1941-42. In 1945-46, the load was 23.6

classes per teacher each week. In a few instances superintendents taught as many as 25 classes per week, but generally their subject loads were no more burdensome than before the war.

Nor were elementary teachers encumbered with more classes during the emergency. The number of classes per teacher remained about the same, though the total number of elementary teachers in the ten schools increased from 33 in 1939-40 to 38 in 1945-46 to take care of the increased enrollments.

Teacher-Pupil Ratios

Table V shows an increase in average teacher-pupil

TABLE V

AVERAGE TEACHER-PUPIL RATIOS IN THE ELEMENTARY AND SECONDARY DEPARTMENTS OF TEN MINNESOTA SCHOOLS FROM 1939 THROUGH 1945

School Year	Average Teacher-Pupil Ratios	
	Elementary	Secondary
1939-40	29.1	22.3
1940-41	32.8	22.6
1941-42	32.3	22.5
1942-43	34.4	20.4
1943-44	31.7	20.6
1944-45	33.0	20.3

ratios for the elementary schools of the study, and a slight decrease for secondary schools. Both trends may be explained by the variations in school enrollments of elementary and secondary departments as described in Chapter III.

CHAPTER V

WAR EFFECTS ON MINNESOTA'S PUBLIC SCHOOL CURRICULUM

Curriculum problems in Minnesota during the war period were challenging, to say the least. Courses of study, adapted to meet the needs of a peace time era, were found to be outmoded almost overnight. Immediately after the declaration of war on the Axis powers in December, 1941, the schools began to adjust themselves to a "Schools at War" program. By the close of the first semester, in January, 1942, the need for curriculum changes more in line with the needs of a nation at war became apparent. Succeeding months brought emphasis to the character of these changes and definition to the details. This chapter will deal with the various adaptations in curriculum for the ten schools considered.

The Need for Adjustments in the Curriculum

In the spring of 1942, J. W. Studebaker, United States Commissioner of Education, indicated some of the important elements of curricular revision in the elementary and secondary schools of the nation. These were:

1. Greatly improved facilities for occupational information and guidance into critical services.
2. New emphases upon programs of physical fitness.
3. Re-emphases on high school mathematics and science.
   a. Revision of content to provide military illustrations and applications.
   b. New drive toward more complete mastery and

facility in transferring learning to practical situations.

4. Wide-spread introduction of pre-flight courses in aeronautics in high school.

5. Re-adjustment of the training of youth for citizenship in a democracy.

6. Provision of pre-induction training for the armed forces and preparatory training for civilian occupations and services.[1]

State school officers and executive secretaries of state teachers associations in the United States appointed a committee to draft a statement concerning the task of the schools in the nation. The main points set forth in the report of the committee follow:

> It is the belief of this committee that modification of school programs should provide opportunity for curricular, extra-curricular, health service, and community service programs in order that the student body may prepare itself to meet the demands of the armed forces, industry, and community service.[2]

The committee suggested curriculum programs to provide for:

1. Courses in arithmetic, algebra, geometry, general mathematics, and, in some cases, trigonometry, where many of the problems will be drawn from the fields of aviation, navigation, mechanized warfare, and industry.

2. Courses in industrial arts related to war needs and with special application to the operation of tools.

3. Courses in auto-mechanics often in co-operation with local garages and farmers, with particular emphasis on the repair and operation of trucks, tractors, and automobiles.

---

1. War Activities in Minnesota Schools, pp. 14-15.
2. Ibid., pp. 15-16.

4. More practical courses in cooking and sewing designed to assist in home living.

5. Courses in physics, particularly stressing the characteristics of mechanics, heat, radio, photography and electricity.

6. Teaching units giving increased emphasis on health in both the elementary and high schools.

7. Revised social-study courses to give a knowledge of war aims and issues.

8. Instruction that will give an appreciation of the implications of the global concept of the present war and post-war living.

The ten schools, their capacities limited for sudden changes in the curriculum, found themselves, from the outbreak of the war, with some trying problems. They had been bound legally and traditionally to courses of study set for them by the Department of Education years before. Now the Department insisted on changes in curriculum content, and concomitant public demands lent more insistance toward change, bringing problems to administrators which were difficult to solve. Increased demand for special types of subject content for quickly revised courses resulted in a meager supply of those qualified to teach the material. Table VI lists those subjects considered important to the war emergency in the ten schools from 1939 through 1946.

The State Department of Education's graduation requirements for years ten to twelve inclusive, besides the English and social science constants, included at

least one credit in science. In grade nine, one year of mathematics, either general mathematics or algebra,

TABLE VI

OFFERINGS IN SUBJECTS CONSIDERED IMPORTANT TO THE WAR EMERGENCY IN TEN MINNESOTA HIGH SCHOOLS FROM 1939 THROUGH 1946

Subjects Offered	Number of Schools Offering						
	1939-1940	1940-1941	1941-1942	1942-1943	1943-1944	1944-1945	1945 1946
Elementary Algebra or General Mathematics	10	10	8	9	9	10	9
Higher Algebra	1	3	1	3	6	4	5
Trigonometry	0	0	0	0	0	0	1
Plane Geometry	9	4	5	5	6	6	7
Solid Geometry	0	0	0	0	0	0	1
Aeronautics	0	0	0	1	1	0	0
Industrial Arts	5	6	5	4	2	0	1
Home Economics	7	7	8	8	9	8	8
Physical Education	10	10	10	10	10	10	10
General Science	10	10	10	10	10	10	10
Biology	9	7	10	10	10	10	10
Physics	7	3	7	4	5	4	5
Chemistry	3	7	3	7	4	5	4
Commercial Subjects	10	9	9	8	9	8	8
Agriculture	1	2	3	1	1	1	1

was usually a constant in Minnesota schools. Physical education was required at least through grade ten for both boys and girls, though it carried no credit toward graduation. General science was required in grades seven, eight, and nine, as was geography in grade seven. The other subjects listed in Table VI were electives.

Curriculum Developments During the War Years.

Higher Algebra

This advanced course in algebra became more popular

each year during the war, as indicated in Table VI. There was a demand in the armed forces for more advanced mathematics in high school. Boys about to enter the Services were therefore interested in getting all the mathematics they could, as a part of their pre-induction training. The advanced course gave them a fine foundation for the more technical courses in the training schools, especially when the instructor included with the course some elements of trigonometry.

Trigonometry and Solid Geometry

Only one school offered a combined course in these two subjects, and this for only one year. Probably the lack of qualified teachers in most of the schools prevented more frequent offerings.

Plane Geometry

The University of Minnesota requires this subject as a pre-requisite for admission. Many students had taken the course previous to the war for this reason only. Hence, a place was reserved for it on most curricula. With increased emphasis on mathematics during the emergency period, the interest was not so purely academic. Boys, especially, demonstrated more interest, with a view toward geometry's possible value to them in the armed forces later on.

Pre-Flight Aeronautics

Although this subject was highly recommended, only one school, Belgrade, offered it to its students. Probably more schools would have offered the subject had there been qualified instructors. The text book usually employed was too technical for most instructors not trained in aeronautics, and its subject matter was too difficult for most high school boys. The popularity of the subject, largely for these reasons, waned soon after its inception.

Industrial Arts

The decline in the number of schools offering industrial arts, as shown in Table VI, does not indicate a falling off in popularity. The difficulty was in securing instructors. Men trained in this field were paid higher salaries in war industries than school boards felt they could afford to pay. The armed forces, too, took their share of industrial arts instructors.

Home Economics

Though instructors in this field were very difficult to find, most of the ten schools were able to keep their home economics departments in operation throughout the war years. It was pointed out earlier in this chapter that the teaching of home economics in the public high schools was considered important to the war effort. Its worth under competent instructors during the food crises is difficult to overestimate. Instructors were handicapped to some extent under the rationing system, but the

scarcity of food articles only enhanced the subject's value under proper teacher guidance.

Science

Most Minnesota schools had, prior to the war, listed general science for seventh, eighth, and ninth grade pupils as required subjects. Biology was considered a constant for tenth grade students, though not necessarily required for graduation. Chemistry and physics were usually alternated, with one being offered one year to eleventh and twelfth grade students, and the other the next. The study of science, with emphasis on scientific thinking, gained real impetus after war was declared. Material deemed necessary for the prosecution of the war, both in industry and on the battle fronts, supplemented ordinary text book material. Physics and chemistry, in particular, acquired new interest, especially for high school boys. Again, the need for competent instructors exceeded the supply. Instructors with scientific training were in demand for other positions and in the armed services. And the number graduating from the colleges each year with science majors or minors dwindled as the war went on. As a consequence, schools were hard pressed to keep up the standards expected of them in their science departments.

Agriculture

Although three schools out of the ten had by 1941

established agriculture departments, only one, Belgrade, managed to maintain its department throughout the war. The War Department was more generous in granting deferments to teachers of agriculture than to teachers in some other fields, but the number of replacements from the University of Minnesota Farm School approached the zero point during the war. As in home economics, the value of agriculture in the curriculum, as a trainer of students on the home front, was high.

Health and Physical Education

The necessity for a sound health and physical education program is most evident in time of war. Certainly, such a program is just as essential in peace time, but it is a well known fact that the American people often do not recognize the worth of an objective until periods of stress jolt them into a change in thinking. Though the medical profession had sounded few advance warnings as to the alarming state of the nation's health, the number of physical rejections among examinees for the armed services gave the public something to think about. And the schools were given a large share of the blame. No doubt, a considerable amount of this criticism was justified. Too often, the schools considered a physical education class as a necessary evil in the curriculum. Instructors paid little attention to the real value of such a course in

building up strength, stamina, poise, and proper health habits. The common method of disposing of class time by throwing a ball to the members of the group and "supervising" the play activities was, in large part, a waste of time.

The Department of Education had planned a more comprehensive program than that described above, but there was too little inclination among school people to carry out the objectives. In 1942, the Department outlined desirable procedures for protecting and improving health. Its various points follow:

1. Schools should urge or provide periodic health examinations for all pupils.

2. A preventive program should be established which would provide for immunization against smallpox and diphtheria. Likewise, periodic examinations for tuberculosis should be made.

3. Correction of remedial defects discovered by examination or inspection should be encouraged.

4. Vitalized and effective instruction for health should be encouraged.

5. Good nutrition should be emphasized in health education.

6. Safety education and how through avoidance of accidents we can increase our war effort is a vital phase of health education.

7. Acquaint the home and community with the health program of the school. Tie up the health program of the school with the total health program.

8. Enlist the interest of parents in health for their children.

9. Emphasize physical education for all pupils of

both sexes - grades one through twelve.

10. Develop an intramural program for boys and a G. A. A. program for girls.

11. Develop an interest among pupils in physical fitness. Calisthenics, tumbling, vigorous games, body-developing exercises and stunts, feats of strength, combat activities, and apparatus work are basic activities.

12. Make use of the Minnesota Physical Efficiency Test.

13. Develop a definite program and plan for physical education for your school.[1]

A more definite method of scheduling and planning a physical and health education program for Minnesota schools evolved in 1944. Four plans were offered as follows:[2]

1. Plan A. A one-year course in health education open to eleventh and twelfth grade students five hours a week as an elective, counting as one full credit toward graduation.

2. Plan B. A two-credit course required of all tenth, eleventh, and twelfth grade students, and offered five periods a week. In grades eleven and twelve it could be considered a fourth subject, but it was necessary to take it in addition to the usual four in the tenth grade.

---

1. Ibid., pp. 34-35.
2. Bulletin, State of Minnesota, Department of Education, Code XIV-B-74, p. 1, March 28, 1944.

3. Plan C. Health education was combined with physical education during any or all of the tenth, eleventh, and twelfth grades, from three to five periods a week, two of which had to be physical activity. This course carried no credit toward graduation.

4. Plan D. Special units of health education were taught in biology, social studies, and related subjects. Physical education was required through the tenth grade, with no credit toward graduation.

Most small Minnesota schools found it difficult or impossible to schedule five periods a week for health and physical education in grades seven through twelve because of limited teaching personnel and facilities. Only one of the ten schools, Brooten, managed to put Plan A into operation, and this for only one year. This school arranged for Plan B the following year. Atwater scheduled Plan B in 1944-45, but slipped to Plan D in 1945-46. Belgrade had Plan B in 1945-46. All of the rest of the schools found it impracticable or impossible to adopt any better than Plan D.

While it is true that interest was greatly increased in health and physical education during the war years, it was difficult to follow the counsel of the state supervisor. The difficulty in securing properly trained teachers was, if anything, more in evidence here than in other fields. In eight of the ten schools, the superin-

tendent became the boys' physical education instructor at some time during the war. In some instances, he was the only male member left on the faculty. In most cases, he did not have the necessary qualifications, and in all cases, he did not have sufficient time to do an acceptable job.

No change was involved in the physical education requirements for the elementary schools during the war, but more emphasis was placed on planning play activities than before. Again, it was difficult for teachers without the proper qualifications to maintain a high standard in elementary school physical education.

In 1946, the Department of Education published three new curriculum bulletins: Growing Up for Efficient Everyday Living, for grades 1-8; Individual and Community Health-Efficiency for Living, for the junior high school; and a more advanced course of the same title for the senior high school. The directions concerning the use of these courses suggest that the bulletins be used as instructor's text books. The material is undoubtedly compounded from lessons learned from administering physical education programs during the war.

The Social Studies

Listed under the social studies classification for Minnesota secondary schools by the Department of Education were world history for the tenth grade, Ameri-

can history for the eleventh, and introduction to social science for the twelfth grade, the last two being constants.[1] A course in citizenship, with emphasis on the local phases of the subject, for ninth grade pupils, began to replace the rather unpopular subject, business relations and occupations, in many Minnesota schools by 1942. But in 1945-46, none of the ten schools had adopted it, though eight of the ten superintendents expressed a desire for the change.

Though text book content in the social studies did not change much during the war, supplementary materials enlivened the courses by keeping the students abreast of current national and world affairs. The nature of the twelfth grade introduction to social science, coupled with greater student maturity, made the subject well adapted for the presentation of this type of material. Seven of the ten schools had the students of this subject subscribe to weekly magazines covering events of the day. The radio, daily newspapers, and news magazines helped to enrich discussion material.

The late President Franklin D. Roosevelt stated in 1942, "What the schools do may prove in the long run to be more decisive than any other factor in preserving

---

1. Manual for Graded Elementary and Secondary Schools, p. 52.

the form of government we cherish."[1] The President spoke out of respect for the potentialities of the public school as a molder of citizens capable of maintaining the American way of life. Social studies in the curriculum carried much of the task of teaching factual information necessary for building good citizenship, while the schools themselves were the agencies for putting democratic ideals into practice.

Geography

Formal instruction in this subject usually begins in the fourth grade in Minnesota elementary schools, and is continued on through the seventh grade. The most important change in subject matter during the war years was in concepts, from the national to the global. The global nature of the war itself was reason enough for the change, while the fact that the brothers and fathers of many of the children were fighting on world-wide battle fronts brought personal interest in the new material.

In the secondary schools, the course in economic geography had been offered by seven of the ten schools to tenth grade pupils at various times through the war period. By 1944-45 two of the schools had replaced this

---

1. Quoted in War Activities in Minnesota Schools, op. cit., p. 4.

subjects with world geography for eleventh and twelfth grade pupils. This subject stressed the global view point much more than the course in economic geography.

Audio-Visual Aids

In 1939-40, none of the schools of the study had motion picture equipment. By 1945-46, six schools had sound-on-film equipment and were using films for curriculum enrichment purposes. The other four schools had the equipment "on order".

Small schools in Minnesota had been slow, prior to the war, to realize the possibilities in the use of such materials. Probably the use of projectors, of both the motion picture and slide types, in service training camps, quickened the interest of administrators in the possibilities of such equipment. The interest in audio-visual aids grew rapidly during the war. But manufacturers of projectors, meeting first the needs of the armed services, could not begin to meet the demands of the public schools. As a consequence, many schools had to delay the introduction of audio-visual aids until equipment became available.

Guidance

Unfortunately, not much in the way of guidance, beyond the haphazard, had been developed in any of the ten schools. The war, however, with its accompanying problems of youth, tended to increase the interest of

the schools and the public in programs of guidance. In the curriculum prescribed by the State Department of Education was a course in orientation for ninth grade students which carried many possibilities for guidance, which, with a competent instructor, was valuable. In addition to this course, all of the ten schools had some sort of cumulative file for each pupil, containing anecdotal, testing, health, and other records intended to aid in the evaluation of each pupil. But guidance counsel, for the most part, tended to go no further than the informal "father to son" talks by the superintendent, the principal, or some other teacher.

In defense of the small schools, it may be said that guidance programs of the type operating in larger schools are probably impossible to achieve in the smaller schools. Guidance at that level is a full time job for a counsellor, an officer not included on small school faculties.

And yet, with intelligent planning and direction, an efficient guidance program, with all teachers responsible as consultants and directors, can be worked out for smaller schools.

Conclusions

These ten schools, for the most part, did a good job in adapting their curricula to war needs, in spite of handicaps noted throughout this chapter. In general,

the suggested changes in curricula were welcome to administrators and teachers alike. Most Minnesota courses of study had been outmoded for years. Here was a chance to eliminate some of the old material and present something more dynamic and up-to-date. Had the facilities and teaching personnel been adequate, the schools could have done better.

During the war, a program of curriculum revision research was being carried on under the guidance of the Department of Education. In 1946, a new bulletin entitled A Guide for Better Instruction in Minnesota Schools, was published by the Department. This is a guide and a philosophy, rather than a prescribed course, for construction of curricula to meet local needs in Minnesota schools. Administrators, teachers, and parents will need to study the new plan carefully before its concepts become a part of each Minnesota school system. But the educational philosophy embodying previously neglected principles of guidance and the care of individual differences, promises much for the future of Minnesota public education. It is probable that World War II hastened the inception of these new ideals.

CHAPTER VI

EFFECTS OF THE WAR ON SCHOOL ACTIVITIES

The Development of the Activity Program

Extra-curricular activities are of comparatively recent origin.[1] Two generations ago, they were few in number, and the practice of reserving at least a full period per school day for pupil activities would have been considered pure heresy. And yet today, educators are almost unanimous in their belief in the high importance of such activities in the whole education of the child. Certainly such activities can furnish experiences which the regular curriculum cannot supply; rich experiences, in which pupils come face to face with real life situations and have the opportunity to develop latent talents and factors of personality.

With the growing interest in activities apart from the curriculum there developed in some places the dangerous fallacy that a child should develop his learning talents by following only those learning aims which were of direct interest to him, a corruption of John Dewey's philosophy of "learning by doing". Without intelligent direction, programs of this sort could only result in

---

1. J. Erle Grinnell, Interpreting the Public Schools, p. 270.

educational chaos. That more programs did not suffer this fate is a tribute to administrators who were wise enough to see that the extra-curricular did not outrun the curricular.

Status of Regular Activities, 1939-46

By the school year 1939-40, when this study begins, activity programs had assumed vast proportions in most Minnesota public schools. The problem in many schools had become one of what to do with the curriculum to make way for the activities.

All of the schools of the study had developed six-year high schools by 1939. One of the conditions prerequisite to organization of this type, as recommended by the Department of Education, was the enrichment of the school offering through the addition of a variety of activities, suited to the locality, and dedicated to the varied interests of the entire secondary school population.[1] Each activity was to be given a definite place on the schedule, and was to be directed by a teacher with a special interest or ability in it.

With the encouragement of the Department, the six-year secondary school organization grew rapidly in popularity in schools where enrollments were not large enough

---

1. Manual for Graded Elementary and Secondary Schools, op. cit., p. 46.

to warrant separate junior and senior high schools. By 1939, there were 259 six-year high schools in Minnesota, as compared to 99 of the four-year type.[1]

Along with each reorganization came an influx of activities, the number growing year by year, as administrators found ways to fit them into the school program. Seven of the ten schools had, by 1939, included an activity period in the daily schedule. The length of this period varied from 45 to 60 minutes, depending on each school's policy in regard to the length of class periods. The activity period was usually last in the day's schedule, though the practice varied in a few instances - Kerkhoven placed it the first period in the afternoon during the school years 1945-46 and 1946-47. The three schools not employing the activity period scheduled pupil activities in vacant periods during the school day. It was found necessary in two instances to lengthen the school day by starting school at 8:30 A. M., to help take care of the expanding activity programs.

By 1943-44, the war began to show some definite effects on school activities in the ten schools of the study. Some of the most important of these follow:

Athletics - Though Minnesota high schools managed

---

1. Minnesota Educational Directory, 1940-1941, op. cit., p. 64.

to keep their district, regional, and state basketball tournaments in operation throughout the war years, yet athletics in most Minnesota high schools were drastically curtailed, and the ten schools were no exceptions. The reasons were:

1. The shortage of coaches.

2. Travel difficulties, due to war-time transportation restrictions.

3. Scarcity of athletic equipment.

4. Athletes left school for the armed forces.

5. Superintendents, who in some cases were obliged to do the coaching, did not feel that the time spent in coaching a full athletic program was justified. Important administrative duties, even more pressing because of the war, were ample justification.

Basketball was kept on the program for all of the ten schools, but schedules were limited to the playing of schools a short distance away, because of the difficulties in transportation. In 1939-40, seven schools had track, but only two of these retained it as an activity during the war years. Football was played by all of the ten schools prior to the war, but only five were able to continue with it through the emergency.

There was a slight increase of interest in intramural athletic activities during the war. Tumbling also

became more popular, as three of the schools had tumbling clubs. Girls' athletic associations, highly recommended by the state supervisor of physical education, also gained in popularity. Pep squads flourished as never before. According to the superintendents, there was no decrease in enthusiasm from the student body at athletic contests.

Dramatics - Soon after transportation restrictions went into effect, state contests in speech were discontinued. Without the contest stimulus, interest in declamation and oratory declined. Class plays, however, were as popular as ever, with even larger audiences, as money became more plentiful.

The all-school Christmas program, a tradition in many schools, also survived the war years.

Music - School bands, by 1939-40, had become well established in all of the ten schools. But by 1944-45 only three of these schools had bands which could be described as meeting pre-war standards. Orchestras, though not so common in these schools, suffered the same fate. Five schools maintained small instrumental groups, largely of the pep band type. The reason for the decline in instrumental music as a part of the activity programs of these schools were:

1. Lack of qualified directors.
2. Shortage, and rising costs, of instruments.

The practice of hiring one director to serve several schools in a vicinity did not prove satisfactory, principally because the task of developing and maintaining a school band has proven to be a full time job for a band man.

School Service Groups - In this category was the Student Council, an organization which had found a place on only one of the ten schools' programs in 1939-40. By 1945-46, seven schools had councils. There was a tendency during the war period to place more control of activities into the hands of the students. Probably the lack of faculty members with the time or abilities to handle the activities was the reason for this. The organization of the council was about the same in each school. Representatives were elected from the classes, with the president usually a senior. Some of their accomplishments were:

1. Sponsoring programs for observance of special events, such as American Education Week.
2. Planning for assembly programs.
3. Aiding in the development of school spirit.
4. Organization of school parties.
5. Suggesting to the faculty ways of improving the school.
6. Supervision of some school activities.

The Health Council, organized on about the same plan as the Student Council, found inception in three of the ten schools during the war. With the health of all students a paramount object, this council stood for:

1. Enforcement of school health regulations.
2. More attention to physical education activities.
3. Better posture and other health habits.
4. Higher nutritional standards.

It fostered health poster and essay contests, and assembly programs calling attention to better health habits.

Publications - The war apparently had little effect on the publication of school papers. The nine schools publishing papers in 1939-40 still had them in 1945-46.

But the popularity of school annuals declined. Eight of the schools had published year books before the war at intervals varying from four to six years. But only four schools issued annuals during the war years. The shortage of photographic materials and the high cost of publication were partially responsible for the decline.

Essay and Poster Contests - The war seemed to increase the interest among students in contests of this sort. In fact, the number of agencies offering prizes for such contests became so great as to constitute something of a nuisance. To combat exploitation of high school student time by commercial agencies, the Minnesota

Association of Secondary School Principals in 1946 appointed a committee to consider the problem. This committee deliberated on the intentions of companies sponsoring contests for high school students. A list of contests considered worthy of participation by the students is sent to each school at the beginning of each year. This practice tends to eliminate the undesirable features connected with contest work. Of course, many of the contests, such as those dealing with patriotism, health, and conservation, conducted by sponsors without profit motive, were entirely unobjectionable. But for some reason, not entirely clear, the war period brought an influx of contest materials into the high schools, the ulterior aims of which were plainly to advertise a commercial cause or product.

Hobby Clubs - These clubs were formed for the purpose of promoting individual interests. Typical were camera, handicraft, and stamp collecting clubs. The war did not seem to affect the number of these clubs on school programs, but the tendency was toward greater student direction.

War Service Activities

Although war conditions tended to eliminate some of the activities of the schools and greatly curtail the operation of others, it was the belief of all the super-

intendents of the schools in this study that students were kept busier at school during the emergency than before. The reason was that certain activities directly or indirectly connected with the task of winning the war were introduced into the schools soon after America entered the conflict. Table VII lists those war service

TABLE VII

FREQUENCY OF WAR SERVICE ACTIVITY OFFERINGS IN THE TEN SCHOOLS FROM 1939 THROUGH 1946

Activity	Number of Schools Offering						
	1939-1940	1940-1941	1941-1942	1942-1943	1943-1944	1944-1945	1945-1946
Victory Corps	0	0	0	0	1	1	0
Bond and Stamp Drives	0	0	3	6	10	10	2
Paper Salvage	0	0	0	0	6	7	1
Scrap Metal Salvage	0	0	3	9	7	6	1
Clothing Collections	0	0	0	0	10	10	0
Junior Red Cross	8	9	10	10	10	10	10

activities which were a part of the programs of the ten schools and indicates their frequency during the emergency period.

The rapid growth of war service student activities is shown in Table VII to have had its beginnings in 1941-42, soon after war was declared. Many other activities of the same type were instituted in larger Minnesota schools, but the ten schools were scarcely equipped to

handle more than they did. As it was, their contributions were noteworthy. The activities listed are explained as follows:

Victory Corps - Since only one school, Maynard, had this activity during the war emergency, a full discussion of its aims and accomplishments has no place here. The Victory Corps, which was designed to take care of all school war service activities, was somewhat intricate in its organization. Most schools of the size of the ten here considered found other means of administering these activities more practical.

Bond and Stamp Drives - The school, as a central agency in each community, performed a real war service job in promoting bond and stamp drives among the students. In December, 1941, soon after the attack at Pearl Harbor, the Department of Education said:

> No greater opportunity has ever presented itself for sharing in the defense of the country than through organization for the purchase of Defense Bonds and Stamps. . . . Every school, small or large, is urged to plan a program broad enough to include without coercion all of the children. . . . The Defense Plan puts people to work for the Nation, develops systematic and individual thrift, and helps the country to prosecute the war.[1]

In September, 1944, the Department reported that Minnesota's school children had invested nearly seven

---

1. H. E. Flynn, Commissioner of Education, Bulletin, Code IX-B-139, op. cit., p. 1.

million dollars in war bonds and stamps during the school year, 1943-44, representing a per-pupil investment for the year of $9.75.[1]

The usual procedure in the ten schools was to make an interclass contest out of the bond and stamp sales. One day was designated out of each week for the sales, and a cumulative record was kept in graph form to show what the classes were doing.

Paper and Scrap Salvage - The need for these vital war materials grew greater as the war years passed. To the credit of the school children of America is the fact that scrap materials from the homes, the by ways, and the junk piles of every community, collected through their efforts, helped build the tools and the weapons for winning the war.

Paper drives did not begin in the ten schools until 1943, when the paper shortage became acute.

It will be noticed that all ten schools are not listed as participants in salvage campaigns. This does not mean that they had no part in the drives, for all of them did, either within their own organization or in conjunction with community groups.

Clothing Collections - The schools were not called

---

1. Dean M. Schweickhard, Commissioner of Education, Bulletin, Code IX-B-179, p. 3. September 1, 1944.

on for help in collecting clothes for needy people until 1943, when the national drive for the purpose began. All ten of the schools participated actively in this worthy enterprise during the school years 1943-44 and 1944-45.

Junior Red Cross - Though most schools had always participated in Red Cross activities, the war, with its great need for contributions in money and services, brought more enthusiastic memberships in the organization. From 1941 through 1946 all of the ten schools had active membership in the Junior Red Cross. In seven of the ten schools, high school girls aided in preparing bandages.

Conclusions

Though participation in war service tasks meant much extra work for teachers and pupils, most entered the spirit of each enterprise with the enthusiasm of anything but the "decadent democracy" which Hitler described. Educators had just reason to be proud of the contributions of the schools toward the winning of the war.

CHAPTER VII

EFFECTS OF THE WAR ON SCHOOL MORALE AND STUDENT DISCIPLINE

The Development of a New Philosophy

In the two decades preceding World War II, the public schools of America underwent at least one revolutionary change, viz., the old type of autocratic discipline broke down. Not only was this change evident in the school, but also in the home, the church, and other social institutions. Moreover, the tyranny which once permeated government and business, vocations and avocations, social classes and cultural ideals, disappeared almost as completely as serfdom, slavery, restricted suffrage, and child labor. Gone for the most part was the old-fashioned autocratic schoolmaster whose very word was law, and whose methods of enforcing discipline were reminiscent of the medieval Inquisition. A new heritage has been built up for American youth with the acquisition of rights, privileges, responsibilities, and self respect. It is strange that in America it took so long for the public school, the supposed developer of citizens of democracy, to adopt democratic procedures within itself.

Of course, many thinking people frowned upon the

new-found freedom within the public school. Quite naturally, they were disturbed. Their questions were about as follows: What will be the effect on society if parental, church, and school discipline are relaxed? How will the youth of the nation learn respect for law and order under such a regime? Can we not blame the rising tide of juvenile delinquency on such laxity? The seriousness of such questions has been, and still is, a challenge to modern educators.

Notwithstanding the doubts of many in the ultimate effects of the new order, it still needs to be demonstrated that today's youth are less well-controlled than were the youth of fifty years ago, Their conduct in the last great conflict proves that they can still profit by discipline of the rigorous type when needed.

Too many schools have abandoned the "beneficent tyranny" of other years and have substituted little to take its place, resulting in a situation somewhat chaotic. Yet, where socialized methods of instruction, enriched programs of study, and development of student initiative through activities have come into the schools, under intelligent administration, students have become more responsive to leadership. Of course, discipline problems continue to exist in such schools, but their solutions can be made a more vital element in the moral

education of youth than was possible under the old autocratic system.[1]

Conferences with the superintendents in the ten schools led to the belief that all of the schools had made good advancement toward the development of the modern view point within their systems. Until the outbreak of the war, the educational outlook in these schools was bright. More socialization and democratic procedures were gradually infiltrating into the schools. Though the nation had just come through a great business depression which left its mark on the schools, particularly where budget slicing was a common procedure, school morale appeared to have reached an all-time high.

The War and Its Impact on School Morale

And then came the war, and with it some profound effects on school morale. Students were made to feel that their school was a training ground for a more active share in the task of winning the war. All agencies in some way connected with the war realized the importance of the public school as a potential trainer of personnel for the "all out" task of beating the enemy. In various ways they worked on the minds of the students, impressing on them the magnitude of the task which lay before them.

---

1. Walter Robinson Smith, Constructive School Discipline, p. 9.

Quite typical of advice to students is the following:

> The War has turned your school upside down. To get the maximum benefit from your work in class, you will have to adjust to the rapid and complete change that is occurring.
>
> The first thing every student must realize in laying his plans for the future is that the reason why he is going to school today is different from that in peacetime. The usual purpose of education is to prepare people to cope intelligently with the problems of life. Today its main purpose is to train men and women to be more efficient and intelligent warriors and war workers!
>
> Your big job as an American now is to help Uncle Sam win the war. After you reach the age of eighteen, you will have no reason to be in school unless you are preparing yourself directly for some war job.[1]

Scarcely a day passed in the life of a typical high school student during the critical years of the war that he was not affected in some way by the conditions around him. The radio and the newspapers constantly worked on the minds of American youth with propaganda designed for building young people into more useful aids in winning the conflict. Other forms of literature available for student reading were of the advertising type, proclaiming the relative advantages of the Army, the Navy, the Marines, the Air Corps, and other branches of the Service. Commercial agencies engaged in war production publicized the salaries they were paying.

---

1. Lyle M. Spencer and Robert K. Burns, Youth Goes to War, p. 132.

Government offices appealed for clerical help. And in the home community, constant requests for help, as the labor shortage grew, could not escape the attention of every high school pupil.

While most thinking people, and the government itself, advised high school students to stay in school, the other influences brought conflict to student minds.

> Whether you are a boy or a girl, it is almost certain that you will be required to have a war job soon after you reach eighteen. You are in school now, rather than in the armed forces or at work, only because Uncle Sam believes that you will be a more useful worker after you have had more training. You are on loan to your school until you are prepared for a war job.[1]

Certainly it is not surprising that these youthful minds became confused. Nor is it any wonder that problems of school morale and student discipline developed during the war years.

The Ten Schools and Their Morale Problems

In conferences with the superintendents of the ten schools, it was revealed that all believed the problem of school morale was a difficult one during the war years. Eight of the ten superintendents believed that discipline problems were more numerous and difficult of solution during the war period. Table VIII summarizes the opinions of eight superintendents regarding

---

1. Lyle M. Spencer and Robert K. Burns, Youth Goes to War, p. 34.

the causes of the disciplinary troubles. That conditions varied locally is indicated in the opinions, though why

TABLE VIII

CAUSES OF DISCIPLINARY TROUBLES IN EIGHT MINNESOTA SCHOOLS DURING WORLD WAR II, ACCORDING TO OPINIONS OF THE SUPERINTENDENTS

Causes of Discipline Problems	Number of Schools
1. War hysteria at home	3
2. War hysteria among pupils	1
3. Ineffective teachers	5
4. Curriculum not up to standard	3
5. Lack of effective activity program	3
6. Work outside of school was distracting	6
7. More money among pupils	1
8. Disinterested or too tolerant attitude of parents reflected in students	4
9. A "don't care" attitude among senior high school boys about to enter Service	3

this should be true in communities so nearly alike is difficult to explain.

As Table VIII indicates, more superintendents believed that work outside the schools and ineffective teaching were more the causes of disciplinary problems than any of the others considered. It is interesting to note, too, that four superintendents believed that parents had become too tolerant of the actions of their children, particularly

those about to enter Service. Table IX shows the grade groups in which superintendents believed there was the most difficulty.

TABLE IX

GROUPS WHICH CAUSED GREATEST DISCIPLINE PROBLEMS DURING THE WAR PERIOD IN EIGHT MINNESOTA SCHOOLS ACCORDING TO OPINIONS OF THE SUPERINTENDENTS

Grades	Number of Schools	
	Girls	Boys
7	3	5
8	3	5
9	4	6
10	3	6
11	4	6
12	4	6

The conferences led quite inevitably to discussions of the nature of the discipline problems in the schools, and Table X indicates the superintendents' beliefs regarding the problems. Though officials in larger schools had complained of moral laxity between sexes among high school pupils, this did not appear to be a problem in the schools here considered, according to the superintendents. The superintendents found it difficult to classify their disciplinary problems. General unruliness occurred most frequently in the tabulations. This, of course, could cover myriads of small disciplinary troubles tending to disrupt the smooth running of the school.

TABLE X

NATURE OF DISCIPLINARY TROUBLES BROUGHT ON BY THE WAR IN EIGHT MINNESOTA SCHOOLS ACCORDING TO THE SUPERINTENDENTS

Types of Disciplinary Problems	Number of Schools
1. General Unruliness	6
2. Truancy	5
3. Tardiness	3
4. Excessive Absences	2
5. Vandalism	2
6. Drinking	1
7. Stealing	1

Improvement in School Morale in the War's Aftermath

There was general agreement among the superintendents that school morale improved greatly soon after the war was over. By 1946-47, the following improvements were noted:

1. Worries about service in the armed forces were largely over.

2. Returning service men and women were enthusiastic in their attitude toward a high school education. Their influence on high school pupils was in general good.

3. The future seemed more secure, and the advantages of at least a high school education became more apparent.

4. More men teachers on faculties aided morale among high school boys.

5. War hysteria vanished.

6. Activity programs had nearly resumed their former status.

7. The labor situation was not so serious. Pupils felt they could conscientiously remain in school.

Conclusions

Certainly there was a real problem in school morale in the ten schools during the war period. The war years were a difficult time for the students in the ten high schools, and brought trying experiences for both parents and teachers. The rapidly changing conditions of war, and the variety of orders and recommendations from federal and state offices, subject to change almost overnight, brought confusion and often despair to those connected with the schools. Quite possibly the strain under which administrators worked during the emergency tended to color the opinions cited in this chapter. It is probable, too, that the strain of abnormal conditions brought weariness and concomitant irritability to teachers, thus tending to increase the problem of morale.

But the versatility and adaptability of the American public school was again demonstrated, as it had been many times before. The problems of school morale and

discipline did not prove insurmountable. The schools, in spite of great handicaps, carried their part of the war's burden with equanimity. And finally, in the aftermath, the schools proved their ability to cast off the "slings and arrows of outrageous fortune" and point the way toward a greater future.

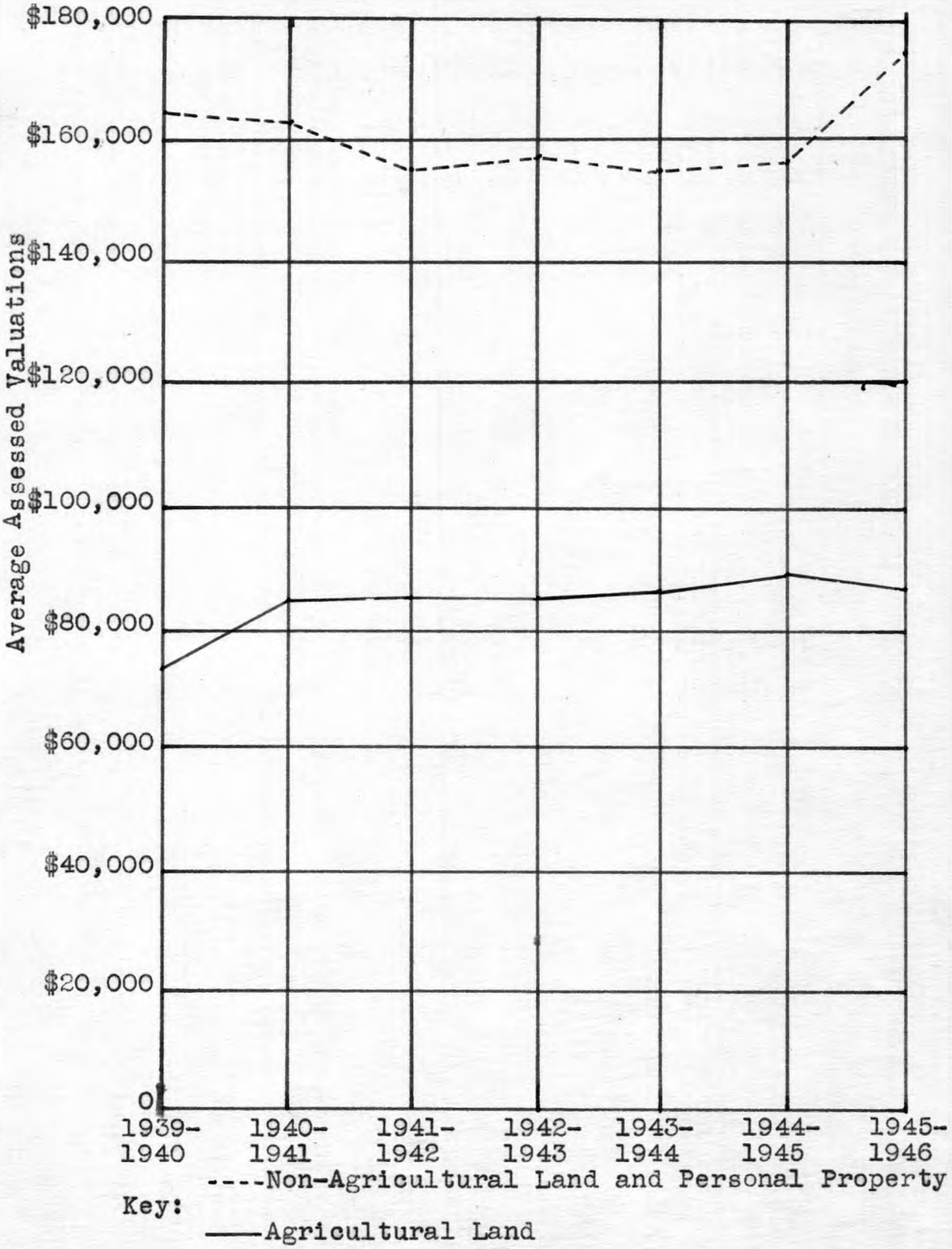
CHAPTER VIII

RISING SCHOOL COSTS

The Problem of Taxation

The problems of taxation, school support, and school administration are inextricably interwoven. Any modification of the practices in any one of these fields is likely to demand alteration of the other two. Hence, this chapter and the one following, dealing with problems of school administration during the war, are grouped together.

In judging the effects of the war on the ten schools, most critics felt they were best qualified in the field of finance, particularly the part most directly concerning them, the real estate and personal property tax. They watched with growing alarm while increasing school costs sent tax rates on their properties soaring. It is not surprising, though, that the rates advanced so rapidly. Graph 7 shows the lack of any definite rising trend in average assessed valuations during the war period in eight of the ten school districts. Because figures from two of the schools, as listed in annual reports to the Department of Education, were far out of line with the figures for prior and ensuing years, they were judged unreliable and were not used in the comparisons. Valuations in Minnesota communities, largely determined by



GRAPH 7. AVERAGE ASSESSED VALUATIONS IN EIGHT MINNESOTA SCHOOL DISTRICTS DURING THE SCHOOL YEARS FROM 1939 THROUGH 1946

local assessors, have a tendency to remain nearly the same from year to year, especially where little building has been in progress.

Though the law requires that local assessors place valuations on property at what it would bring in case of a free sale between a willing buyer and a willing seller, neither of whom is forced to make the transaction,[1] it is obvious, from Graph 7, that the intent of the law was not carried out in the communities of this study. This is a weakness in the Minnesota tax structure which particularly shows itself in times of stress. Many taxpayers, in their criticism of rising taxes for the support of schools, considered only the growing tax rates on their properties, based on an antiquated stationary assessment system which failed to take into account the actual increases in property values. It is a known fact that actual valuations increased as much as one hundred per cent or more during the emergency period. Misconceptions arose because the critics of high taxes saw only the rising rates and not the foundation on which these rates were determined. Perhaps the solution for the assessment problem would be to make the job of property appraisal a state responsibility, with professional assessors qualified to make

---

1. Blakey, op. cit., pp. 172-173.

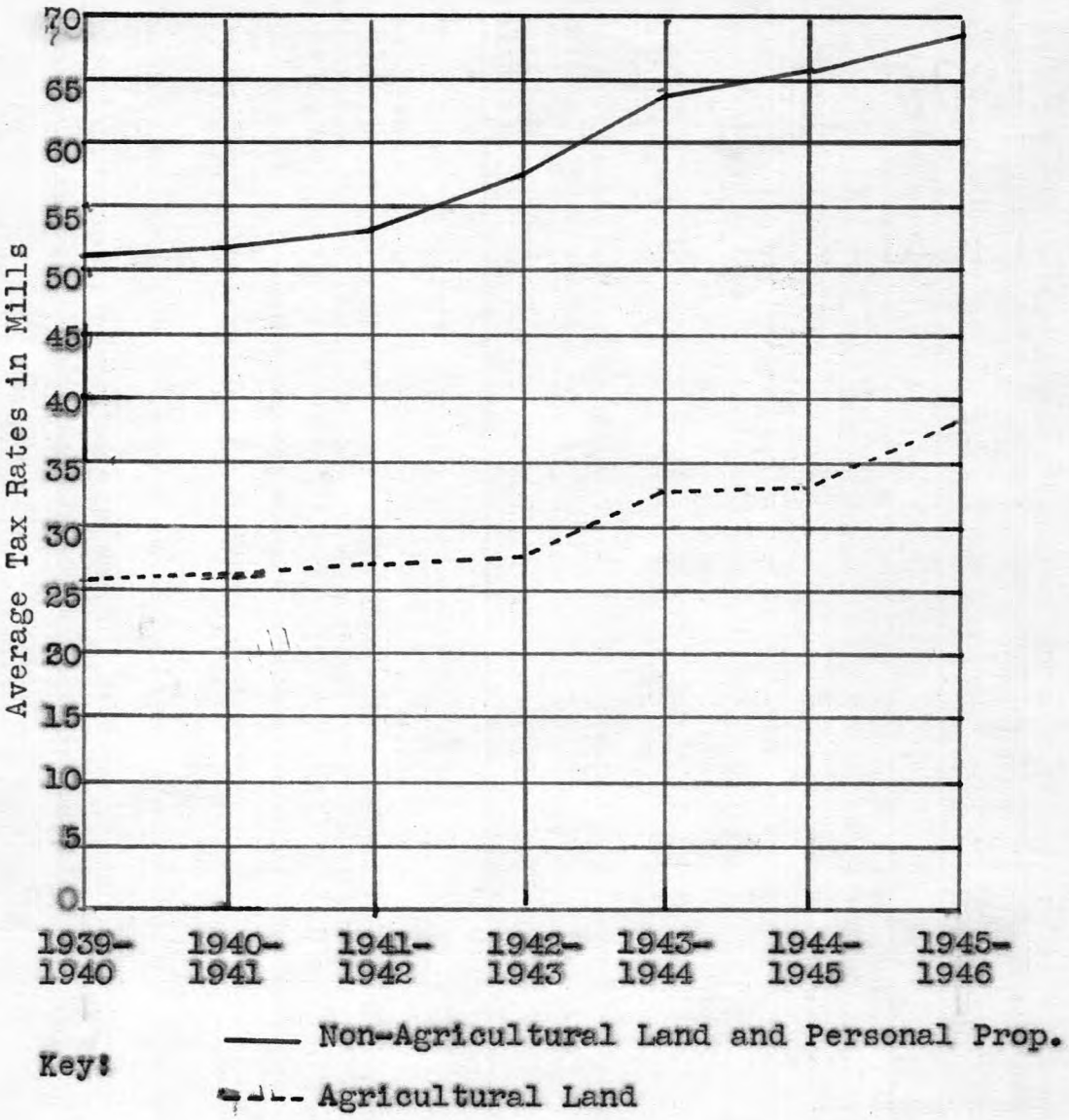
accurate estimates of valuations, and who would not be swayed by local pressure, as present local assessors often are.

TABLE XI

TOTAL TAX LEVIES FOR SCHOOL PURPOSES ON AGRICULTURAL AND NON-AGRICULTURAL LAND AND PERSONAL PROPERTY IN TEN MINNESOTA SCHOOL DISTRICTS FOR THREE SEPARATE YEARS DURING THE WAR PERIOD

School District	Levies for School Purposes			Per Cent of Increase, 1945-46 over 1939-40
	1939-40	1941-42	1945-46	
Atwater	$7285.52	$7666.08	$11482.15	57.6
Belgrade	6807.24	7205.20	9862.80	44.9
Brooten	9069.30	9193.32	13214.00	45.7
Clara City	15273.83	16851.69	18370.72	20.3
Grove City	8409.27	8101.31	9586.59	14.0
Kerkhoven	14008.00	15991.52	26697.75	90.6
Maynard	10267.67	9258.92	13267.19	29.2
Murdock	------	13611.44	21274.23	---
New London	------	6506.06	11591.54	---
Raymond	7542.29	9321.42	11841.38	57.0

It is true, however, that the real estate and personal property taxes for the support of schools in small Minnesota communities do, especially during emergency periods, impose a considerable burden on the taxpayer. Average tax rates in the ten school districts, Graph 8, show extremely rapid rises from 1939 through 1946. In 1939-40, the total rate in mills for school purposes was 32.4 at Atwater, the lowest rate of the ten districts. Murdock was the highest in the same year with a rate of 69.1 mills. In 1945-46, Atwater was still the lowest



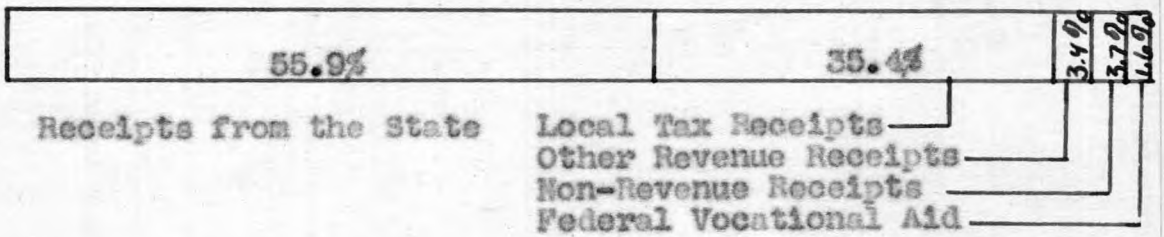
GRAPH 8. AVERAGE TAX RATES FOR TEN MINNESOTA SCHOOL DISTRICTS DURING SEVEN CONSECUTIVE SCHOOL YEARS FROM 1939 THROUGH 1946

with 45.5 mills, while Kerkhoven was the highest with a rate of 114 mills.

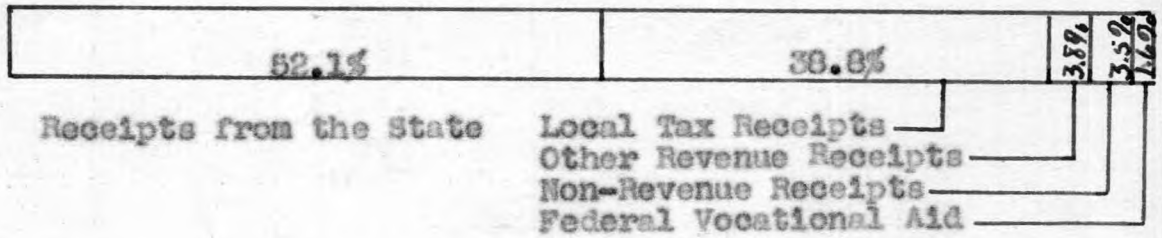
More indicative of the actual amounts raised locally for school purposes from taxation are the figures cited in Table XI, for three years during the war period. In the percentages of increase from 1939 to 1946, in the same table, it is interesting to note the wide variations among the schools, from a 14 per cent increase at Grove City to a 90.6 per cent increase at Kerkhoven. Figures for Murdock appeared to be unreliable for the year 1939-40, while New London made no financial report to the state in the same year.

Sources of School Revenue

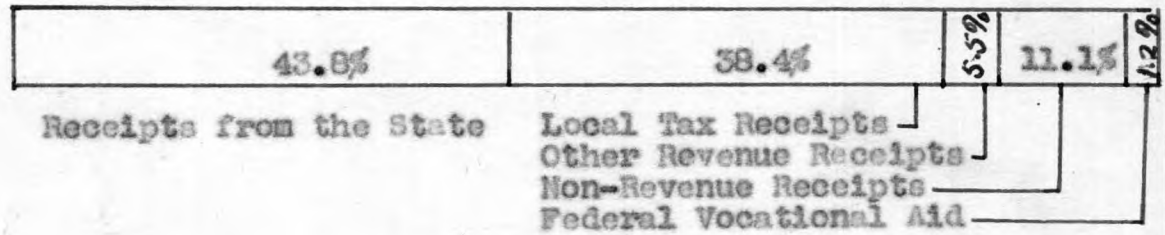
That the state did not meet its share of rising costs is indicated in Graph 9, which shows the sources of receipts in the ten schools for the three school years 1939-40, 1941-42, and 1944-45. The percentage of receipts from the state compared with that of all receipts in the ten schools shows a drop from 55.9 per cent in 1939-40 to 43.8 per cent in 1944-45. This fact indicates a lack of adaptability to changing conditions in the Minnesota school aid system. Though the legislature appropriated enough money to pay most of the aids in full, whereas some aids had formerly been pro-rated at as low as 36 per cent, the system still did not possess enough flexibility to supply the necessary funds to meet the emergency. The state did



School Year 1939-1940
Total Receipts $216,929.06



School Year 1941-1942
Total Receipts $222,275.16



School Year 1944-45
Total Receipts $301,728.38

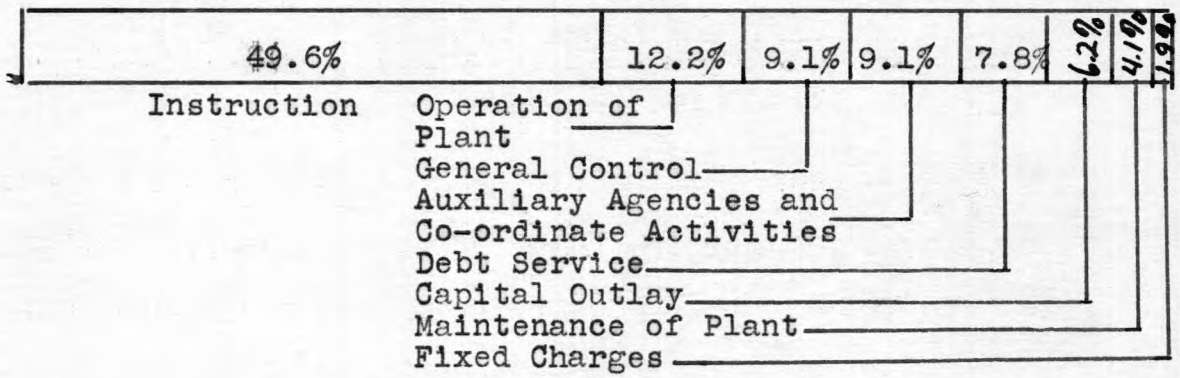
GRAPH 9. COMPARISONS IN TOTAL RECEIPTS, ARRANGED BY CLASSIFICATION, FOR THREE SEPARATE YEARS DURING WORLD WAR II, IN NINE MINNESOTA SCHOOL DISTRICTS

advance an additional aid for the biennium 1944-1946 for deficiency, but the amounts received by the ten schools averaged little more than $2500 annually for each school, a very small portion of the necessary receipts.

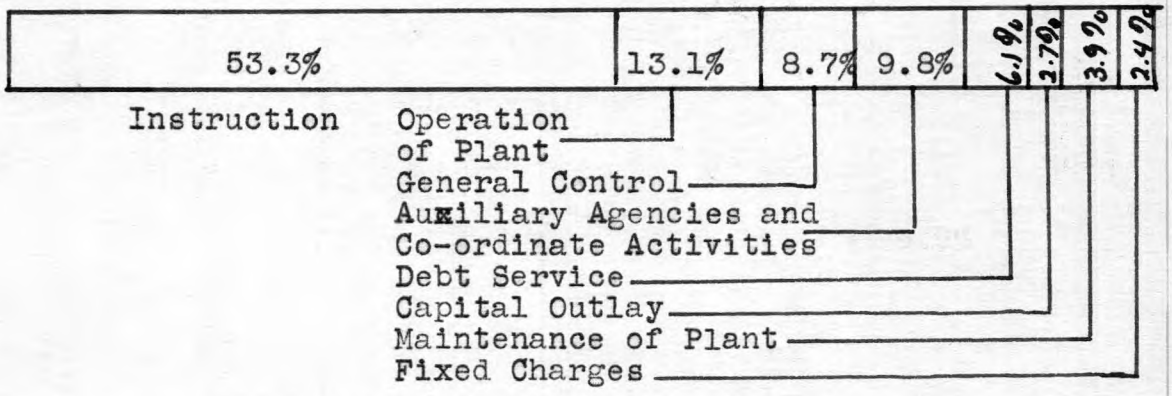
On the other hand, local tax receipts rose from 35.4 per cent of the total to 38.4 per cent. The greatest increase in receipts, however, came in the non-revenue classification which includes non-resident elementary school tuition and transportation for all school pupils. Where districts did not maintain their own bus systems, transportation was not a factor. Increased tuition rates, greater non-resident elementary enrollments, and advancing transportation rates made up the bulk of the increase in this classification.

School Expenditures During the War

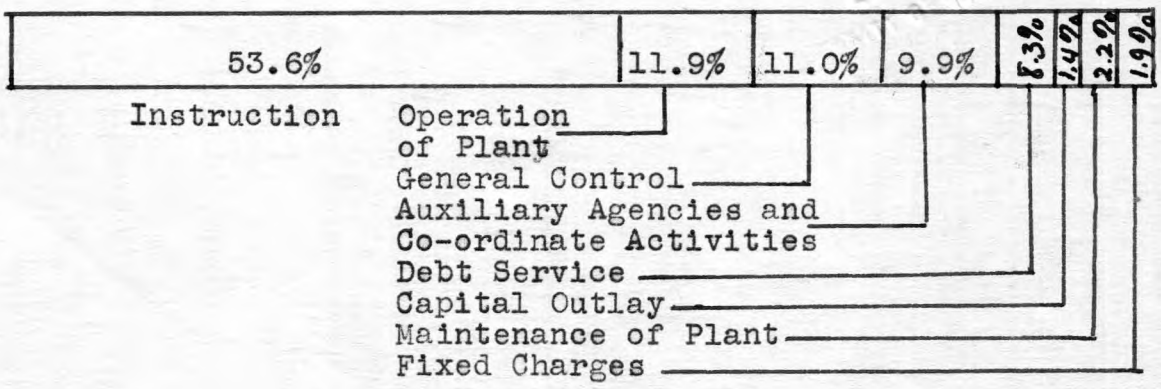
In passing judgment on the economics of a school system, the average taxpayer is apt to examine first the cost of instruction, usually the largest single item among school expenditures. During the war, many believed that increased instructional costs, largely teachers' salaries, sent the per cents of total expenditures in this classification to unprecedented heights. That this belief was a misconception is revealed in Graph 10, at least in the schools of this study (one school was omitted in the totals because of questionable figures). In 1939-40,



School Year 1939-1940
Total Expenditures $214,215.44



School Year 1941-1942
Total Expenditures $211,249.85



School Year 1944-1945
Total Expenditures $273,052.04

GRAPH 10. PERCENTAGE COMPARISONS IN TOTAL EXPENDITURES IN THREE SEPARATE SCHOOL YEARS DURING WORLD WAR II, IN NINE MINNESOTA SCHOOLS

49.6 per cent of all expenditures in the nine schools considered went for instruction, while in 1944-45 instruction was 53.6 per cent of the total, a rise of only four per cent during the emergency period.

Among other classifications of expenditures, capital outlay showed the greatest change. In 1939-40, capital outlay expenditures were 6.2 per cent of the total in the nine schools, while in 1944-45 this classification showed 1.4 per cent of all expenditures, a drop of 4.8 per cent. Included in capital outlay are expenditures for land, improving buildings, and new equipment. Construction or alteration work of any kind was nearly at a standstill during the emergency because of labor and material shortages. Equipment, too, became more difficult to get as supplies became scarce. The schools had no alternative but to wait for more normal times to purchase needs of this sort; hence, the drop in expenditures for capital outlay.

Meeting the Financial Crisis

Public schools in America were developed as local institutions. As long as the greater portion of support for these schools was local, the control of the schools was also largely local. With more state financial support, more state control is usually the case. Before the war, more than half the total receipts in Minnesota schools came from local sources. In 1936, 67.5 per cent of all

revenue and non-revenue receipts for Minnesota's public schools still came from local sources.[1]

But, as the public schools of the state began to accumulate more extensive areas out of which they drew their students, larger plants, more faculty members, greater diversification of courses, better equipment, and larger transportation systems became necessary. The money for the support of these larger schools brought added taxes and more complaints from the taxpayers of the high school districts. Of course, the cost of educating pupils from outside the home district was never intended to be borne by the taxpayers of the central school district. But actually, the income from the attendance of these pupils did not come up to the costs of their educations. The reasons for this situation were:

1. Administrators and school boards had been overzealous in building up their school enrollments, despite the fact that non-resident pupils were not bringing in the income necessary to pay their costs to the central districts.

a. Two schools in this study were, in 1946, charging a mere $45 per year for non-resident

---

1. Paul R. Mort and Walter C. Reusser, Public School Finance, p. 84.

elementary tuition, at a time when per-pupil costs at this level were over three times this amount.

b. In 1945, income on high school pupils, (grades 9 through 12) exclusive of transportation, was limited by law to the following income from the state: $63 for tuition; $10 from the income tax fund; and approximately $11 for apportionment - a total of $84. The median per-pupil cost in the ten secondary schools of this study was $143.59 in 1945. The amount received for each secondary school pupil was only 51.9 per cent of what was needed to meet the median per-pupil secondary cost in these schools.

2. The state law was not flexible in regard to high school tuition. Besides the fact that the tuition offered by the state was not sufficient, it was not legal for a district to charge extra tuition for these pupils.

3. Once high school areas were established, it was the duty of the district maintaining the high school to enroll all pupils qualified to attend high school and residing within the high school area, despite the fact that the costs of educating them were not being met, either by the state or the home district.

The difference between receipts from non-resident elementary and secondary pupils and the actual costs of

educating them in the central district was borne by the taxpayers in the central school district. A considerable portion of the increased tax levies in the ten schools, as shown in Table XI, was the result of the conditions just described. It is evident that those taxpayers in the ten high school districts who were aware of these conditions had just reason for complaint.

There is no indication that school costs will greatly decline in the years ahead.[1] Further expansion of school facilities is predicted in each of the ten school districts, and personnel costs show promise of remaining at comparatively high levels for some years to come.

Per-Pupil Costs

Table XII traces the increases in per-pupil costs in the elementary and secondary departments of the ten schools from 1939 through 1945. Since secondary per-pupil costs were determined at 1.5 times elementary per-pupil costs, the percentage of increase is the same at each level. The wide variation in per cents of increase during the war years, from 17.5 per cent at Atwater to 94 per cent at Kerkhoven are worthy of study. The variations are illustrated in Graph 11, indicating greater

---

1. Arnold E. Joyal, "The Review of Educational Research," The Phi Delta Kappan, Vol. XXVIII (May, 1947) p. 363.

spreads each year during the war, among lowest, median, and highest per-pupil costs in the elementary and secondary

TABLE XII

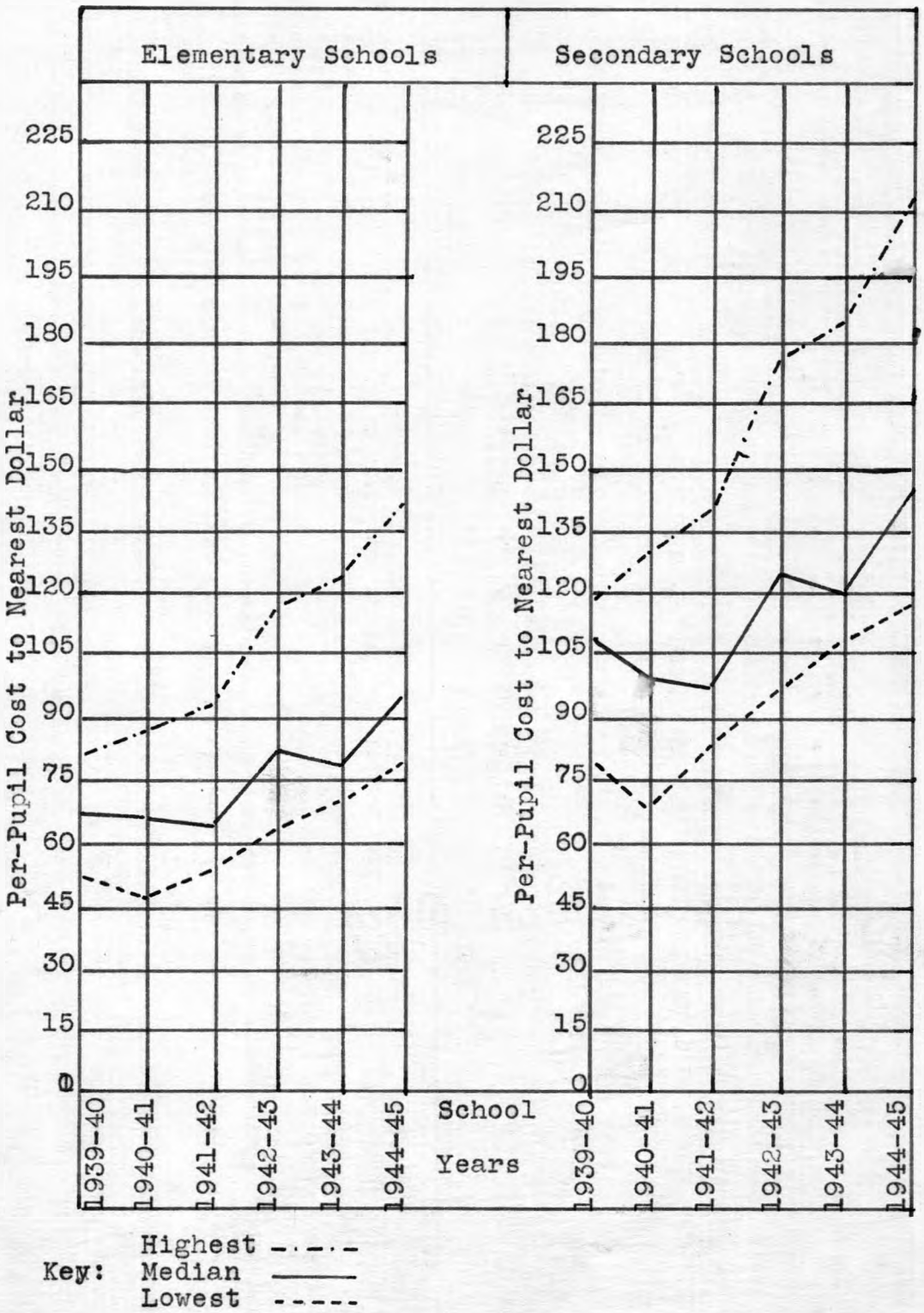
PER-PUPIL COSTS IN ELEMENTARY AND SECONDARY SCHOOLS DURING THE SCHOOL YEARS 1939-40 AND 1944-45

School	1939-40 Per-Pupil Costs		1944-45 Per-Pupil Costs		Per Cent of Increase
	El.	Sec.	El.	Sec.	
Atwater	$68.35	$102.53	$80.34	$120.51	17.5
Belgrade	72.89	109.34	124.48	186.72	70.8
Brooten	63.06	94.59	99.02	148.53	57.0
Clara City	68.08	102.12	81.07	121.61	19.1
Grove City	54.39	80.08	78.70	118.05	47.4
Kerkhoven	68.65	102.98	133.18	199.77	94.0
Maynard	74.25	111.38	95.47	143.21	28.6
Murdock	80.72	120.08	144.62	216.93	79.2
New London	83.53	80.30	88.67	133.01	65.6
Raymond	56.34	84.51	95.98	143.97	70.4
Median Cost Per Pupil	68.22	102.35	95.73	143.59	40.3

departments of the ten schools. The general rises are understandable enough in view of the increased costs, but the reasons for the greater differences between the schools as the years passed required more study.

Teacher Pupil Ratios

In an effort to determine the reasons for the wide



GRAPH 11. MEDIANS AND EXTREMES IN PER-PUPIL COSTS IN TEN MINNESOTA SCHOOLS DURING THE SCHOOL YEARS 1939-45

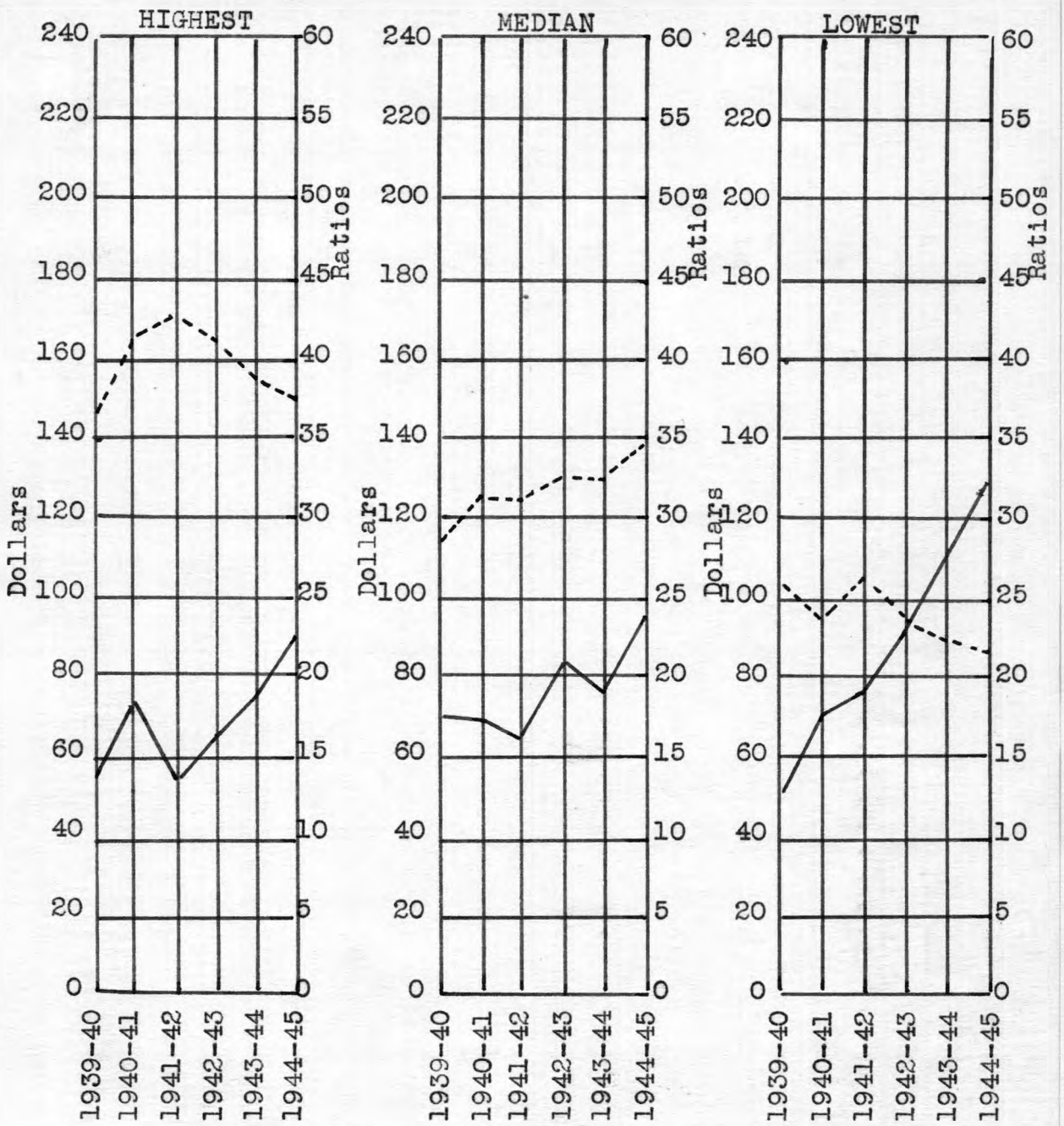
variations noted in Graph 11, a study was made of teacher-pupil ratios in the ten schools. In Table XIII, these ratios are given for the elementary level in the ten schools, for the school years 1939-40, 1941-42 and 1944-45.

TABLE XIII

TEACHER-PUPIL RATIOS, BASED ON AVERAGE DAILY ATTENDANCE, IN THE ELEMENTARY DEPARTMENTS OF TEN MINNESOTA SCHOOLS DURING THREE SEPARATE YEARS OF WORLD WAR II

School	School Years		
	1939-1940	1941-1942	1944-1945
Atwater	26.3	27.5	34.7
Belgrade	29.0	28.3	36.0
Brooten	33.0	38.7	34.8
Clara City	29.0	32.0	36.3
Grove City	26.0	32.5	28.7
Kerkhoven	26.5	25.3	21.5
Maynard	27.0	40.3	38.7
Murdock	30.0	30.0	30.8
New London	36.7	43.0	35.3
Raymond	27.0	25.3	33.3
Average	29.05	32.3	33.01

The variations in teacher-pupil ratios among the schools were just as striking as were the per-pupil costs of Graph 11, but the increases during the war period were not so evident. A comparison was then made in Graph 12 between per pupil costs and teacher-pupil ratios in the elementary schools of the study. Highest, median, and lowest figures were used in the comparison for the six



GRAPH 12. COMPARISON OF ANNUAL HIGHEST. MEDIAN, AND LOWEST TEACHER-PUPIL RATIOS AMONG THE TEN ELEMENTARY SCHOOLS OF THE STUDY WITH PER-PUPIL COSTS IN THE SAME SCHOOLS DURING THE SCHOOL YEARS FROM 1939-1945

school years from 1939 through 1945. It is evident from the comparison that lower teacher-pupil ratios led almost inevitably to higher per-pupil costs in the ten schools. This comparison explains, partially, at least, the wide variations among the ten schools in per-pupil costs.

A Department of Education ruling states that the enrollment in an elementary classroom shall not exceed 35 pupils.[1] The State Commissioner's recommendation, however, is for no more than 25 pupils per elementary classroom. That some of the elementary schools in the ten districts exceeded 35 pupils was shown in Graph 12 and Table XIII. Only one school, Kerkhoven, showed a tendency to go below the Commissioner's recommendation of 25 pupils per elementary classroom (Table XIII). It is important to note here that Kerkhoven's elementary per-pupil costs in 1944-45 were among the highest of the ten schools. Either for economy, or possibly because of the teacher shortage, most schools tended to exceed the number of pupils per teacher recommended by the Commissioner.

A Cumbersome and Inadequate School Aid System

---

1. Manual for Graded Elementary and Secondary Schools, op. cit., p. 35.

Minnesota, in 1946, had an exceedingly intricate and cumbersome school aid system. With the passing years, the aids had grown to some forty in number,[1] many of which had outgrown their original purposes. The following aids were received by the ten schools in 1946:

Classification Aid

1. Six-year elementary school (eight schools).
2. Six-year undivided high school (eight schools).
3. Eight-year elementary school (Murdock and Raymond).
4. Four-year high school (Murdock and Raymond).

Special Departments

1. Agriculture (one school).
2. Industrial arts (one school).
3. Home economics (eight schools).
4. Commercial (six schools).

Transportation

1. Consolidated school.
2. Isolated pupil (one school).

Other Aids

1. Non-resident high school tuition.
2. School library aid.
3. Supplemental aid.
4. Apportionment.

---

1. Strengthening Public Education in Minnesota, op. cit., p. 3.

5. Deficiency and additional aids.

The inadequacies of the state aid laws became more evident during the war as school costs mounted and the state was unable, because of legal restrictions, to meet its share. The state school aid system had grown so unwieldy that nothing short of a revolutionary change could improve the situation. Legislative interim committees had for years been working on a solution for the state aid problem, but their proposals were defeated three successive times in the legislature. In 1947, a much simplified state aid system was passed by the legislature. A detailed discussion of the new law would be out of place here. But the fact that its provisions tend to equalize the tax burden between common and independent school districts will be of great aid in solving the financial plight of districts maintaining high schools. Moreover, the new law takes into account the actual costs of educating public school pupils, whereas the old law did not consider this important educational yard stick at all. Finally, more state aid will be forthcoming for each of the ten districts; estimated increases over present receipts from the state ranging from $3,500 to $11,000.

Federal Aid to Schools

Receipts from the federal government in the ten

school districts were negligible during the war years. As indicated in Graph 9, only 1.6 per cent of all receipts in these districts came from federal sources. In 1944-45, the percentage had declined slightly to 1.2. Trends in thinking among educators today seem to discount the old fears that more federal aid would inevitably bring more federal control. Other projects, such as the federally financed school lunch program, appear to have escaped the undesirable features of federal control, since the state distributes the funds to the schools. Possibly the states could use similar methods of dispensation of federal monies for broader purposes than the school lunch program.

CHAPTER IX

ADMINISTRATIVE PROBLEMS AND PRACTICES

The problems wrought by the war, as explained in previous chapters, were largely the problems of the school superintendent in each of the ten schools. To him fell the task of trying to adjust the school system to war time conditions. In the face of restrictions, shortages of personnel and materials, and troublesome problems of finance, his was a difficult task.

The Shortage of Materials

After the outbreak of the war, the purchase of many materials became impossible for most schools. Particularly was this true of items mechanical or metallic such as floor maintenance machines, electric motors and switches, heating and plumbing equipment and accessories, motion picture equipment, and typewriters. The paper shortage did not seriously affect any of the ten schools, though the shortage was predicted by supply salesmen as early as 1943. Their warnings prompted the superintendents to stock large supplies of paper. By 1946-47, paper supplies in the schools were short on some items, and the shortage was becoming a problem.

Another noticeable effect of the war on school supplies was the decline in quality, despite rising prices. School scissors, for example, were made from

poor materials and were often faultily constructed. Athletic supplies were also scarce and sub-standard in quality. Basketballs and footballs were inexpertly constructed of inferior materials. A large percentage of the better athletic and physical education equipment went to war training camps.

The Shortage of Labor

With W. P. A. out of business by 1942, building projects came to a stop in the ten districts. Four districts were forced to postpone building construction plans. And with skilled workmen finding lucrative jobs on war construction projects, almost all refinishing and redecorating plans were dropped. The situation called for wise conservation of school property for at least the duration.

Increase in Clerical Work in the Superintendent's Office

Clara City, Kerkhoven, and Maynard had full-time office clerical help during the war years, while the remaining seven schools either had no such help or were making rather cursory use of high school girls in the office. N. Y. A. went out with the war's advent, a loss of help to the superintendent at a time when it was most needed. Most of the clerical work thus fell to the superintendents in the seven schools mentioned, in spite of the bad economics of paying a man a superintendent's salary to spend a large part of his time

doing work of this nature. Work of the strictly clerical type was consuming increasingly more of the superintendent's time even before the war started. A growing number of records and forms became necessary for an expanding and more diversified program. All this remained after the war began, but the increasing number of reports to state and federal agencies occasioned by emergency conditions and the necessity for more correspondence, brought despair to superintendents, especially those without clerical help. According to the admissions of seven of the superintendents, many necessary administrative details were not properly cared for because of lack of time.

War Rationing Registrations

Schools in general were proud of the contribution they made to the war effort in handling the ration registrations. The schools with their central locations and their personnel were perhaps better situated to take care of the work than any other group or organization. Yet, the registrations added to the already crowded administrative programs of the superintendents.

Transportation Difficulties

All of the schools of the study had established rather extensive transportation systems prior to the war. Without transportation facilities, the school systems built up in these rural areas would have completely

collapsed. Yet, a "transportation as usual" program was as impossible as a program of "business as usual".[1] Normal bus replacements could not be made, nor could many repair parts and tires be easily secured. It was therefore the duty of administrators and school boards to see that the buses were conserved in the best possible condition for the duration. To make this difficult was the fact that many bus drivers were lost to the Services and to industrial plants at a time when good drivers were sorely needed.

In order to conserve on equipment and supplies necessary for the maintenance of a transportation system, the schools were ordered to revise their transportation routes to eliminate any unnecessary mileage or excessive stopping. Further, the buses were to be used only for transporting children to and from school, unless officials were granted permission to carry workers to and from essential jobs.[2] This eliminated the use of school buses for any trips necessary for extra-curricular activities. The reorganization and supervision of the transportation system was largely the work of the superintendent. Eight of the ten school districts owned their own school buses, placing more responsibility in the hands of the superintendent.

---

1. School Transportation in Wartime, Foreword, p. iv.
2. Ibid., p. 4

That transportation conservation regulations in the ten districts worked rather well is established by the fact that all were able to keep their buses in operation without replacement throughout the war period, despite the fact that much of the equipment was several years old when the war started. Further, the enforcement of safety regulations kept the schools free of transportation accidents, with no school reporting a passenger even slightly injured while being transported.

School Lunch Program

Only three of the schools had noon lunch programs in 1939-40, but by 1946-47 eight schools were operating such programs under the federal reimbursement plan instituted in 1943. The other two schools had not organized lunch programs because of lack of space. Since nutrition is recognized as of paramount importance, noon lunches are a necessity in schools where the percentage of non-resident pupils is high. The clerical work connected with the program is somewhat complicated and should not be the work of the superintendent.

Conclusions

A discussion of each of a long list of administrative duties put into the hands of superintendents during the war emergency period would be a repetition of the problems set forth in previous chapters. The educational crisis brought about by war conditions; the problems of

teacher and pupil personnel, war time counseling, finance, curriculum and student activities, student transportation, equipment, extra record keeping, enlarged correspondence, were all problems of the administrator.

Finally, it was the superintendent's job to help maintain at least certain basic minimum educational standards. He needed to watch that extremes caused by war demands did not spoil the effectiveness of the system; that a balance was maintained "between curricular and extra-curricular activities, between the academic and the practical, and between the popular demand and that which has stood the test of time".[1]

---

1. Dean M. Schweickhard, Commissioner of Education, in Manual for Graded Elementary and Secondary Schools, op. cit., p. iii.

CHAPTER X

CONCLUSIONS AND RECOMMENDATIONS

Educational progress has throughout its history been influenced by social, political, and economic upheavals, such as wars, which demand adjustment and adaptation to new conditions.[1] Total war means the enlistment of men, women, and children at home as well as on the war fronts, and the schools carried much of the home front load. This study has attempted to explain the crises facing ten Minnesota schools of similar size and character during the war period, and to show how these schools adapted, or failed to adapt themselves, to war time conditions. That they succeeded admirably in some respects is to their credit; the fact that they failed dismally in other respects is not necessarily to their total discredit, since they were to a large extent victims of circumstance created by tradition, inflexible statutes, and an apathetic public.

Out of the war came many revelations of the weaknesses of public education. This chapter will point out a few of these weaknesses and attempt to show how they may be removed.

---

1. Dr. I. L. Kandel, "Education Today", The School Executive, Vol. 66, No. 2 (October, 1946) p. 52.

Weaknesses of the Teaching Profession

The ten superintendents unanimously agreed that the status of teachers before and during the war was scarcely on the level of a profession. They were agreed, too, that the teacher shortage would not have reached such great dimensions, had the salaries and the social status of the teachers been commensurate with a profession requiring similar length of time for training. Further, the superintendents agreed that the business of teaching never can reach the level of a profession until better people can be attracted to teach through the promise of a better way of life than that experienced heretofore; that better tenure rights would lead to more security, and not place the teacher at the mercy of the whims and capriciousness so often common in a community. Finally, the superintendents believed that higher educational standards for teachers are desperately needed, and that this improvement alone could eliminate many undesirable teachers from the ranks.

Need for Reorganization of Districts

Eight of the ten superintendents believed that larger administrative units were necessary; that with larger schools, the ideal of equal educational opportunity for rural youth could more closely be approached. None of the superintendents believed that a county plan, with the danger of politics, should be adopted. But all

agreed that there was no need for the existence of all ten of the high schools considered; that the number could perhaps be cut to six by the combination of smaller high schools. The superintendents also believed that many neighboring common school districts could sensibly be consolidated with independent districts for more effective autonomy and more equitable distribution of taxes.

The Lack of Proper Guidance Programs

The weaknesses of pupil guidance in the ten schools were discussed in Chapter V. The absence of effective guidance programs was brought out in bold relief during the war period, when pupils needed help more than ever before. But guidance requires much time and study if it is to be effective, and proper personnel and facilities for its administration and supervision were lacking in all of the ten schools. With larger schools and enlarged teaching personnel, at least a part-time guidance director could be engaged for handling this important work more efficiently.

A Static Curriculum

The war revealed some shortcomings in Minnesota's school curricula. Though some adaptation of subject matter to war time conditions was practiced, curricula in the ten schools remained substantially the same, or, in some respects, lost ground, as special vocational subjects were dropped for want of teachers.

There was little opportunity for a pupil to advance at his own rate in any of the schools studied, and not much chance to develop special aptitudes. Subject matter was still largely prescribed by the state, with little provision for adaptation to changing conditions or differing localities. The curriculum was static and stereotyped. A newer philosophy was on the way at the war's end, however, with provisions and recommendations for the construction of courses of study by local teachers to meet local conditions.

Much was said about the inability of the schools to meet the standards of instruction maintained by the armed forces. That the conditions in training camps and in the public schools were so diverse that no accurate comparison can be made is obvious. Concerning this, Chambers wrote as follows:

> The armed services had authority extending even to matters of life and death over their trainees for twenty-four hours a day and for seven days a week. They could dictate when the trainee should work, eat, sleep, study, exercise, and play. Neither colleges nor public schools in civil life, with the possible exception of a few boarding schools, have such authority over their students.
>
> The wartime armed services knew exactly what the trainee must learn, and he was forced to pursue that objective as rapidly as possible, to the exclusion of all others. Civilian schools in time of peace can hardly have equally narrow and equally clear aims.
>
> The compelling urgency of the wartime situation gave the armed services a considerable advantage in motivation of their trainees - an advantage which civilian schools can scarcely hope to equal in time of peace. In many cases the armed services

> instruction was directly linked to the individual motive of self-preservation. Such stark drives as this are not ordinarily present in peacetime classrooms.[1]

At the present time, Minnesota has the unenviable record of ranking forty-seventh among the states in the number of sixteen and seventeen year old farm boys attending high school.[2] One reason why farm boys have not been attracted to high school is the unattractiveness of the curriculum to them. It was shown in Chapter V, Table VI, that in 1939-40 one school out of the ten in this study offered vocational agriculture. The number of schools offering it increased to three in 1941-42, but only one school was able to maintain its agriculture department throughout the war. The situation was only slightly better in industrial arts, with six schools offering in 1940-41, but in 1944-45 none of the schools had the subject; the reason being an almost total lack of qualified teachers. This situation, present in the ten schools, was probably general throughout the state. The lack of agriculture and industrial arts departments in Minnesota high schools may have had much to do with the state's bad record of high school attendance among farm youth. Since farm youth include approximately half of all

---

1. M. M. Chambers, "Four Steps to Improve U. S. Education", The School Executive, Vol. 66, No. 9 (May, 1947) p. 46.
2. Strengthening Public Education in Minnesota, op. cit., p. 10.

Minnesota's youth,[1] the situation is serious.

Lack of Opportunities for Higher Education

One of the inequalities of educational opportunity most evident in Minnesota is the lack of public junior colleges available for attendance of a large proportion of the state's high school graduates. Only thirteen existed in Minnesota in 1941,[2] and not one was close enough to any of the ten high schools for their graduates to attend. Certainly, if educational opportunities are to approach the ideal of equality, there must be more junior colleges, geographically situated so that attendance by high school graduates all over the state would be easier. It is too bad that the geographical accident of birthplace is determining, in many cases, a young boy or girl's chances of going to college.

Financial Inequalities

The figures in Chapter VIII demonstrated the penalties a taxpayer in Minnesota must pay to live in a particular community, even though educational facilities may be no better in one place than in another. Though the state has attempted to remove some of these inequalities by offering a bonus in the way of supplemental aid for each district levying 30 mills or more for maintenance,

---

1. Unfinished Business, op. cit., p. 3.
2. Report of the Interim Committee on Education, p. 97. Report to the Fifty-Second Minnesota Legislature, January, 1941.

there was still no differentiation between a district paying the required 30 mills and another paying 100 mills or higher. Obviously, a district with a high assessed valuation should, other things being equal, be more able to pay a higher share of educational costs than one with a low valuation. Recognizing this fact, the state aid bill passed by the 1947 legislature bases equalization aid on assessed valuation per resident pupil in average daily attendance, so that a district with a low valuation would receive more aid per pupil than a district with a higher valuation per pupil. This is fundamentally a step in the right direction.

Lack of Understanding Between the Home and the School

The public has been brought to task several times in this thesis, particularly for short-sighted thinking. Perhaps more understanding would come from closer relationships between the home and the school. Some methods for securing this closer relationship are:

1. Encourage parents to visit the school more frequently.

2. Stress the need of frequent conferences between parents and teachers.

3. More frequent visits to the homes of pupils.

4. Stress public meetings explaining the school's program.

5. Make the school a community center.

6. Popularize each phase of the school's program through better publicity.

7. Be sensitive to the educational needs of the community.

8. Aim to raise the social status of the teachers in the community.

9. Build the school into an institution in which the community may be proud.

Training for Democratic Living

Finally, and most important of all, the schools need to be aware at all times of the ultimate aim of public education - the training of youth for an effective part in American life. If a young person has not acquired the necessary attributes for such a part from his home and school training by the time he graduates, his public school education has been a failure.

No easy task is this, and no mere books or classroom discussion will equip a student properly for democratic living. Again, the close home-school relationship must be employed in guiding the young person through a maze of misconceptions and misapprehensions. To realize this biggest aim, the schools must approximate model democracies in themselves where justice, fair dealing, equality, truth, and all the other attributes of true democracy are practiced.

No rules can be laid down for the consummation of this ideal, for each school has its own problems, and each individual must be raised to desirable standards through different methods. Thus, the ultimate aim of educating for citizenship is a challenge and a duty for each community and its public school system.

BIBLIOGRAPHY

Books

Blakey, Roy G., et al., Taxation in Minnesota. University of Minnesota Press, Minneapolis, 1932.

Grinnell, J. Erle, Interpreting the Public Schools. McGraw-Hill Book Company, New York, 1942.

Mort, Paul R. and Walter C. Reusser, Public School Finance. McGraw-Hill Book Company, New York, 1941.

Newsom, N. William and George E. Walk, Form and Standards for Thesis Writing, International Textbook Company, Scranton, Pennsylvania, 1944.

Smith, Walter Robinson, Constructive School Discipline. American Book Company, New York, 1936.

Spencer, Lyle M. and Robert K. Burns, Youth Goes to War. Science Research Associates, Chicago, 1943.

Encyclopedia

Alvey, Edward Jr., "Education, the Development of the Office of School Superintendent", The Encyclopedia Americana, Vol. 9, pp. 605-615.

Government and Civic Publications

Report of the Interim Committee on Education. Report to the Fifty-Second Minnesota Legislature, January, 1941.

School Transportation in Wartime. Traffic Engineering and Safety Department, American Automobile Association, Washington, D. C., 1942.

War Activities in Minnesota Schools. Minnesota Office of Civilian Defense, October, 1942.

Magazines

Chambers, M. M., "Four Steps to Improve U. S. Education", The School Executive, Vol. 66, No. 9 (May, 1947) p. 46.

Clark, Harold F., "Teachers' Salaries and the Cost of Living", The School Executive, Vol. 66, No. 7 (March, 1947) p. 54.

Englund, Walter E., "Crossroads and Highways", Minnesota Journal of Education, Vol. XXVII, No. 5 (January, 1947) p. 223.

Joyal, Arnold E., "The Review of Educational Research", The Phi Delta Kappan, Vol. XXVIII (May, 1947) p. 363.

Kandel, Dr. I. L., "Education Today", The School Executive, Vol. 66, No. 2 (October, 1946) p. 52.

Minnesota Department of Education Publications

Laws Relating to the Minnesota Public School System. Minnesota State Department of Education, Saint Paul, 1946.

Minnesota Educational Directory, 1940-41. State of Minnesota Department of Education, Saint Paul, 1940.

Manual for Graded Elementary and Secondary Schools. State of Minnesota Department of Education, Saint Paul, August, 1945.

Pamphlets and Brochures

Strengthening Public Education in Minnesota. Brochure, Edited by Minnesota Council of School Executives, et. al., December 9, 1946.

Unfinished Business, Minnesota's Needs in Higher Education. Pamphlet, Edited by Statewide Committee on Higher Education, 1947.