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A Survey of the Time Load of Teachers in Accrdited Schools of Eastern North Dakota

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A SURVEY OF THE TIME LOAD OF TEACHERS IN ACCREDITED SCHOOLS OF EASTERN NORTH DAKOTA

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This thesis, offered by Oswald Tufte as a partial fulfillment of the requirements for the Degree of Master of Science in Education, is hereby approved by the committee in charge of his work.

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TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

"The study of teacher load apparently has been much neglected since the thirties."[1] These words summarize in general terms the prevalent attitude of scientific students of education with respect to research in this field as it exists today. Nevertheless, several sporadic studies serving as many purposes, have been conducted of teacher load during the time in question; therefore, the general attitude of educators that teacher load research has been a neglected field in recent years apparently stems from the fact that such studies as have been conducted form no comprehensive program. Reliable data is regarded as limited.

Moreover, the work of the teacher in the American elementary and secondary schools is undergoing profound changes, both with respect to its quality and its character. And because of these changes, which a unanimity of opinion ascribes to the dynamicism of a scientific age, it appears that the reliability of a teacher-load survey such as this will be open to question within a short time. With respect to a time unit such as a half-century, it is possible that the changes to be made in curriculums, methods of teaching and even in objectives of education may exceed anything that has transpired up to 1950.

Nevertheless, knowledge of what the teacher is actually doing in these fields, how his time is spent and in what proportions, is of value to the student of education, the administrator and the teacher himself.

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[1] W.S. Munroe, Encyclopedia of Educational Research, Revised Edition, The Macmillan Company, New York, 1950, p. 1460.

The Problem

A great part of previous research in this field has been concerned with class size and numbers of classes. This survey belongs to another aspect of the subject and is concerned chiefly with the time element.

Decision to confine this survey to the time element was based upon the conviction held by many educators that "class size is basic both to costs and methods of instruction, yet research has been able to give no final answer as to the most effective or desirable size."[2] Personal factors, individual instruction and guidance are among the variables which are difficult to measure with such yardsticks, and further research to obtain knowledge of what class sizes are effective and desirable apparently requires development of a new mode of attack.

But all teachers put in time at their jobs. Some may accomplish more on a given day than others; some will do a good job and some a bad one. Yet these probabilities are always present and remain regardless of the basis of measurement. This survey is not concerned with these imponderables. A general statement of the problem may be put interrogatively: How much time does the teacher put in on his job in terms of hours per week?

This, of course, is general and specifics are manifestly required. They are required to show a total time load for a selected period; they are required to furnish clues as to the character of the load; they are required for the purpose of comparison between elementary

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[2] "The Teacher Looks at Teacher Load," Research Bulletin of the National Education Association, November, 1939, Vol. 17, pp. 223-270.

and secondary school teachers.

The objectives of this survey may, therefore, be stated in the form of the following questions:

1. How many hours do teachers put in on their jobs per week?
2. How is the time divided among the chief segments of that job?
3. What load differences exist between secondary and elementary teachers?

Delimitation of the Problem

In seeking information regarding teacher load, the questionnaire method was employed. All data sought were specifically limited to the week of February 20 to 25, 1950. The decision to use a selected calendar week was based on two reasons:

1. Unless a definite unit of time was chosen, teachers might attempt to strike an average of all weeks and so render the survey dependent upon subjective speculation.
2. The absence of a definite calendar week would invite whole faculties to choose weeks when school activity was at a high level, and it was felt that by this definite limitation to the week of February 20-25, activity in various schools would tend to strike an average.

Even with these requirements, it is obvious that the questionnaire method leaves something to be desired from the standpoint of scientific accuracy. The investigator is dependent upon the teacher, for he cannot be present to observe for himself. However, the same methods

have been employed by investigators continuously in surveys of this nature. To aid the teacher in recording his total time, likely time consuming activities were made the subject of specific queries, lest the subject omit them inadvertantly.

The questionnaires were sent to fully accredited schools in eastern North Dakota using the Red River as the eastern boundary and a hypothetical line drawn from north to south through Cooperstown, North Dakota, as the western boundary. Schools so listed in the North Dakota Directory as furnished by the State Department of Education were included. All questionnaires were mailed to the superintendents of these schools who were asked to distribute them to the teachers, collect them and return in a single package. Materials and postage for their return were provided.

Replies were received from teachers in thirty-one fully accredited schools. In some cases, whole faculties participated. In other cases, the number was less. The total number of questionnaires returned was two-hundred-eighty-nine from a total of six-hundred-thirty-six mailed out. Twelve questionnaires were not useable since information was either incomplete, or returned in such a manner that it could not be interpreted. Thus this survey is actually limited to reports from these thirty-one accredited schools in eastern North Dakota, comprising two-hundred and seventy-seven teachers.

Method of Procedure

Questionnaires covering the desired information are placed in the hands of the teachers by their respective superintendents. The superintendent either collected them himself or requested a principal to do so except in two instances where teachers chose to return the information directly, providing their own postage.

Upon receipt of the questionnaires, a list of the participating schools was made out, as shown in the appendix to this thesis. Information contained on the questionnaires was then transferred to 5x7 four-ply cards procured and cut at a printing shop. A master code card was made out, and the information entered on the cards followed the numbered pattern of the code. White cards were employed for women teachers, buff for men. Corners were cut from cards representing teachers in the grades, cards from high school teachers remaining untouched. This immediately divided the cards into four groups: 1. men teaching in high school; 2. women teaching in high school; 3. men teaching in the grades; 4. women teaching in the grades.

In the process of transfer of information from questionnaire to cards, considerable addition was involved, since it was necessary to combine answers to obtain the desired totals. This, when it involved lengthy figures or large ones, was done on an adding machine. The completed cards carried the following information:

1. Total experience of the teacher in years.
2. Age (grouped).
3. Salary (grouped).

4. Number of classes per day.
5. Pupil hours per week.
6. Teaching time per week.
7. Preparation time.
8. Activities time.
9. Total for 6, 7 and 8 above in hours per week.

Frequency tables were then set up in sets of four corresponding to the four major divisions of teachers as outlined above, the tables furnishing figures for further assembly of statistical data.

The following tables were prepared from data appearing on the cards:

1. Frequency tables on teaching time (4).
2. Frequency tables on preparation time (4).
3. Frequency tables on activities time (4).
4. Frequency tables on total time consumption (4).
5. Frequency tables on pupil hours per week (4).
6. Frequency tables on experience.
7. Frequency tables on classes per day (4).
8. Frequency tables on ages.
9. Frequency tables on salaries.
10. A table showing the mean or average preparation time, activities time, teaching time and total time consumption per week at each level of teaching experience for men employed in high school.
11. The same for women teaching in high school.
12. The same for men teaching in the grades.

13. The same for women teaching in the grades.

14. A summary of the average teaching time load for all four categories in percentage terms.

CHAPTER 2

REVIEW OF LITERATURE

The value of any survey of teacher load partakes of the ultimate goal of all scientific inquiry in the field, namely, to find that load which enables the teacher to operate at peak efficiency while serving pupil needs to the maximum. However, it is doubtful whether teacher load investigations will provide their most valuable information for the educator unless and until they are conducted on a continuous and correlated basis. Myers has cautioned against unwarranted reliance on teacher load data now available:[3]

> Such objective data as we have appear to indicate that our studies of teacher load may not include sufficient range to show great differences. A range of 18 to 30 pupils per teacher may be comparable to a horse carrying 18 to 30 pounds, or 360 to 600 pounds. A teacher load below optimum may be a serious handicap to effective teaching as is one above optimum. The point at issue is that expert professional judgment, conditioned by personal experience, may properly determine how many pupils should be assigned teacher A in school B, but that scientific students of education should not lend their influence to the popular sentiment favoring small classes or large classes except as they have been demonstrated to be more effective. . for practical school organization and administration, even the Douglass formula may be found more trouble than it is worth. . . . if the educators have a prejudice for small classes, casual assumptions that they are desirable by otherwise careful scientific writers tend to strengthen the prejudice and give it the force of scientific authority.

Yet knowledge of teacher load has value to the profession as a whole; it enables comparisons and by them the status of education may

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[3] Charles E. Myers,"Measuring Teacher Load," Nation's Schools, April, 1940, Vol. 25, p. 64.

of assignment practices in various parts of the country.

In relation to time load, similar cautions are likewise necessary, especially with respect to the range of the study.

Douglass has produced significant interpretations of teacher load, applying his well-known formula for its measurement, chiefly on the basis of pupil-teacher ratios and numbers of classes.[4] It is clear, however, that teacher load cannot be divorced from time consumption. Assuming honesty and sincerity of intention, a teacher performs to capacity regardless of the numbers of students registered in his classes. Individual instruction and guidance, with all that they imply in modern educational effort, would appear to be the variable factor here; formal school hours are limited by the clock, and preparations for instruction remain substantially the same whatever the size of the classes, at least in those schools where curricula are organized along subject matter lines as is the case in North Dakota.

Time is the essence of life and therefore, of work; in the modern world more people are paid on a time basis than any other. Laborers, un-skilled and semi-skilled, craftsmen and trades all reckon the value of their work in terms of time. Even the professions, while employing fee schedules based on difficulty of performance, rely to a very great extent upon the time factor in valuating their work. Upon what basis are teachers paid? Is there recognition of teacher load in terms of time required to perform the services asked of teachers? Is there recognition of preparation and training for the job? Is there recognition of preparation and training for the job? Is there

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[4] Harl R. Douglass, Organization and Administration of Secondary Schools, Chapter 5, Ginn and Company, Boston, 1945.

recognition of the educational level at which a teacher performs, and if so, is this a valid policy? These questions lurk in the fringe of teacher load surveys.

Yet to realize greater benefits from an inquiry of this kind, it should, as was suggested earlier, be repeated with new angles of approach, and extended so that schools of all categories within the state come within the orbit of investigation. Indeed, complete and specific information on the time load of teachers may become a necessity to the profession should the time ever arrive when America decides, by congressional or other legislative actions, to maintain the status of education on a nationally equalized level.

Nor is this last an idle prospect. The American people have been taxed to support the income of the farmer; tariffs have been levied to the benefit of the manufacturer; public funds have been used to bulwark the income of the laborer and to subsidize private business; other professions have been permitted to set their own wage and fee scales. Through the government, the nation has for good or ill embarked on a course of economic aid to various groups. The pattern established, is it impossible to conceive of a government program designed to sustain equal opportunity for all American youth or to maintain teaching incomes in line with others rendering comparable service to society? Education is the fountain-head from whence all these others - doctors, lawyers, dentists, writers, manufacturers, farmers, laborers and tradesmen - acquired the knowledge and skills by which they command their prestige and by which they induce the benefits of government action.

Viewed candidly, it is therefore, possible that some such

program will eventually result in the field of education. Without going into the merits or demerits of federal aid, it is apparent that if and when that time arrives, it will be necessary for the profession to know what its hands are doing. Among other things, it will have to know the central tendencies of teacher time load in terms of hours per week for all categories and for all educational levels. It will not then be able to, and should not, equivocate. The answers must be ready.

Therefore, this survey, though dealing with a feature of educational effort which may become increasingly important, must be regarded as a very small effort in the direction indicated. An extensive research program carried on over a field as wide as the nation itself is the ultimate goal. Thus, this survey is not complete and timeless in itself; its significance, like others of its kind, is hardly more than momentary when viewed against the backdrop of possible future necessity; its largest conceivable contribution would seem to be stimulation of additional investigation along the same lines on a progressively wider front. Research dealing with an immutable law of nature is one thing, but when it touches upon a changing phenomenon is quite another.

Previous Surveys of Teacher Load

Though research dealing with teacher load, and in particular, time load, has been regarded by educational authorities as a neglected field, a revival of interest is shown in recent literature.

In 1936, when teacher load surveys were at a low ebb, Douglass and Taylor reported on a study of high school teaching loads in Montana, using "teacher load units," a device of their own creation wherein a load unit was theoretically equivalent to one class period per week, re-

quiring preparation, of forty-five minutes duration and including 20 pupils. They found that men carried the heaviest total load, but that women teachers had the heavier "instructional" load.[5] For their purposes, they divided all activity into "instructional load" and "cooperational load," the latter including all activity not related to teaching. Women made the highest score in the first, men in the latter.

In 1941 Frost developed a formula for measuring teaching load in terms of time, using a class composed of high school principals at Peabody Teachers College, Nashville, Tennessee.[6] Frost's formula was as follows:

$$TL - AH - PH - \frac{ELxPH}{30} - \frac{EGxPH}{16}$$

where TL equals clock hours of service per week, AH assigned hours, PH preparation hours, EL exceptional load and EG extra grades. He called 40 to 30 pupils in an elementary school grade a normal load and any number above or below these limits, exceptional load. For junior high school the limits were 35 to 25, and for high school, 30 to 20. Frost himself admitted, however, that derivation of the formula was based in part on subjective evaluation, and regarded its value chiefly as an instrument by which principals might get a quick comparison of teacher loads in their own schools, and "to give school board members and patrons a sympathetic understanding of the amount of work teachers are doing. Many seem to believe that teachers have nothing to do except meet classes a few hours a day for five days a week."

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[5] Harl R. Douglass and W. Taylor, "Light Loads and Heavy: Measurements in Montana High Schools," Nation's Schools, August, 1936, Vol. 18, pp. 35-37.
[6] Norman Frost, "What Teaching Load?," American School Board Journal, March, 1941, Vol. 102, pp. 43-45.

The San Diego Survey

The immediate use to which a large school system put a survey of teacher load is shown in a report made by Dailard and Jenkins on the results of such an investigation of the city schools of San Diego, California.[7]

As a cause for action, the authors declared:

> An excessively high pupil-teacher ratio and an overburdening teacher load may help to balance expenditures against income, but it may also serve to throw society out of balance.
>
> Overworked doctors must neglect some of their patients; if the teachers are overburdened, our children are the immediate losers and society suffers accordingly.

Conclusions reached as a result of the survey were these:

1. There was a considerable range in the time load of teachers in the system.
2. Curricular assignments were substantially equal.
3. The greatest inequalities existed in the curricular and extracurricular activities.
4. Teachers spending more time in extracurricular and co-curricular activities also spend more time on other aspects of their work, including preparations.
5. Class size was unrelated to time load.
6. Variations in time load were unrelated to classifications or experience.
7. The average work week for all teachers was found to be 43 hours.

The results of the survey were submitted to the San Diego board of education which took the following actions:

1. Established a 40 to 45 hour week for all teachers.
2. Employed additional teachers to make the above possible.
3. Added 30 classrooms to its emergency building program.

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[7] Ralph C. Dailard and Robert E. Jenkins, "Our Children Won!", The American School Board Journal, August, 1948, Vol. 117, pp. 23-24.

4. Established permanent load committees for each school in the system to continue study so that recommendations could be made from time to time for necessary adjustments.

Such specific and immediate results from a survey of teacher load approach the spectacular. Nevertheless, they illustrate vividly the use to which investigations of this nature may be put where the means and willingness to employ them exist.

A similar survey also brought action in an unnamed high school in Illinois.

The Trump Report[8]

Teachers in the high school in which this inquiry was made were found to work from 1,399 hours to 2,531 hours per week, with an average of 1,721 hours, amounting to a 48 hour week for the 36 weeks of school. In these figures, however, extra class hours were weighted by multiplying the number of such hours by a responsibility factor, ranging from 1.2 to .9.

As a result of these findings, recommendations were adopted as follows:

1. That the normal working year of teachers should not be in excess of 1,760 hours, or an equivalent of a 40 hour week for 44 weeks.
2. That the working year plus the required attendance at summer schools constitute a year around job.
3. That teaching loads be equalized to get most of the teachers under the 1,760 hour limit.
4. That teachers working over 1,760 hours receive additional remuneration.

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[8] J. L. Trump, "Teaching Load and Salary Differentials," The American School Board Journal, December, 1948, Vol. 117, pp. 17-18.

Boardman's Report[9]

In his article in the Encyclopedia of Educational Research, Charles W. Boardman cites an investigation embracing 2,058 teachers in 40 states, made in 1939, which showed the median number of class periods per week to be 30.8, or slightly more than six periods per day. This compares with five per day for teachers in member schools of the North Central Association. With respect to time load, Boardman says, "The typical teacher in the secondary schools spends 40 or more clock hours per week in classroom instruction and other activities related to teaching."

Elaborating further, the author declares, "In addition to the time spent in classroom teaching, the median teacher spends 10.2 clock hours per week, or an average of two hours per school day, in other activities related to teaching; 39 per cent spend from 12 to more than 20 hours per week in such activities."

The Mickelson Thesis[10]

In 1943, Irwin T. Mickelson made a survey of the teachers' week in 19 small schools in Minnesota. His work is described in a master's thesis on file in the library of the University of North Dakota and reports on all activities of teachers during a given week, including private life and interests. Mickelson found the average teaching load of teachers in these schools to be 44.3 hours per week.

This is along the lines of this survey. The intention of

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9 W.S. Monroe, Encyclopedia of Educational Research, Revised Edition, The Macmillan Co., New York, 1950, pp. 1188-1189.

10 Irwin T. Mickelson, "The Average Day and Week of the Teacher," Unpublished Master's Thesis, University of North Dakota, July, 1943.

this inquiry from the beginning was to get at the time element, using as a basic premise the belief that time is fundamental in measuring load. This, it would seem, cannot be a false premise, for the whole civilized world has adopted the practice of providing remuneration on the basis of time. Perhaps this is because it is difficult to evaluate jobs, and the performance of them, when they occupy the same level. In our time, Industry has adopted the practice of paying employees of one level the same wage, irrespective of the quality of work performed. Teachers, by and large, have been paid in much the same manner, except that if an industrial employee work an extra hour, he will get an extra wage. In general terms, this extra recognition for extra hours is true of all types of work, and in some cases even the teachers come within the orbit of such procedure. A survey of schools in the New England States showed that extra pay for extra work was fairly common in that area with Massachusetts leading the way in this practice.[11] Some Massachusetts districts, it was reported, allowed as much as $2,900 in extra pay to teachers.

The Need For Further Study

As previously pointed out, teacher load is a changing thing by reason of an evolving curriculum and the impact of modern experience on the objective of education. Today teachers work longer hours than they did twenty, thirty or forty years ago. For many, the day's work has just begun when the traditional closing time of four o'clock in the afternoon arrives. The schools are slowly taking on responsibilities which were formerly regarded as the province of the home, more and more education in the elementary and secondary levels is concerning itself with the student

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[11] Weldon R. Knox, "Extra Pay for Extra Work," School Executive, December, 1949, Vol. 69, pp. 41-42.

rather than with subject matter.

If this process continues, and there seems to be no indication that it will not, the load of the teacher will be increased and his responsibilities magnified. To keep in touch with these developments, surveys will be necessary from time to time and, moreover, they should be conducted on a correlated basis. State universities throughout the nation might cooperate in encouraging such surveys at regular intervals, and through some committee or agency the results combined and interpreted for the benefit of the profession.

The tendency of the present age it to reduce the working loads of all groups except the teachers. Labor organizations, even now, talk of the 30 hour week. Many professional men often work no more than six hours a day, five days a week. Stores and business places are slowly moving in the direction of shorter hours, with banks and financial institutions following the pattern. Labor saving devices in the home accentuate the situation.

All of this tends to increase the leisure time of the nation, piling up a tremendous backlog of wants for those extra hours off. With respect to the student population, this development impinges directly on a cardinal principle of education, worthy use of leisure time. The schools, attempting to fulfill their accepted duty, seek to fill that leisure time for their students, knowing that if it is unworthily used, the seeds of society destruction lie in wait. This means, and has meant, that the teacher must work longer hours as the rest of the population moves steadily toward the shorter working week.

John Dewey's classic statement that "education is life

itself," points up its essential nature and is applicable here. Education of some sort, for good or ill, goes on without interruption. If youngsters work, play, sleep, eat and go to school not much can go wrong, but if the work and play are eliminated - the first by mechanical civilization, the second by parents who are themselves vainly striving to find something to do with their leisure time - everything can go wrong. The automatic oil furnace, the cracker-box home, the 30 foot lot on which it stands, the high-powered automobile, the radio, the juke box, the pin ball machine, the dance hall, the liquor store, the pool hall, the moving picture house and the divorce mill have created a vast front of jeopardy for American youth. As these influences grow more persistant, education for character and human virtue will become an increasingly heavier responsibility. There is no outlook at this time for the teacher but longer hours and heavier loads, unless and until time-load surveys prove the point and win acceptance for a general enlargement of the nation's teaching corps.

"Solution of the teaching load problem will be achieved with difficulty until the general public is made aware of the existence and consequences of excessive teaching loads. To create this awareness is, according to the teachers of this study, the joint obligation of administrators and teachers, working both individually and through their professional organizations." [12]

But these needs are broad, and belong to philosophy and to sociology as much as to education. More immediate and more pointed,

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[12] "The Teacher Looks at Teacher Load," Research Bulletin of the National Education Association, November, 1939, Vol. 17, pp. 261.

perhaps, is the need for studies which produce action of the type cited previously in the San Diego survey. Here a school board, accepting the objective result, acted for the benefit of school children and teachers alike.

Morrison's statement that "Service and not salary is the measure of success among professional men and women," [13] cannot be denied; nevertheless, an overloaded teaching corps in any given school or state cannot give the service so important to society, nor, in extreme cases, provide enough of it to satisfy the standards of the profession. This is not to assume that light time loads are desirable, but to point out the service which time-load surveys may continue to render education.

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[13] R. H. Morrison, "Teaching Is A Profession," NEA Journal, March, 1950, Vol. 39, pp. 202-203.

CHAPTER 3

INTERPRETATION OF RESULTS

In making a survey of teacher time load it was necessary not only to secure information on the total time involved for each teacher during the selected week, but also to obtain information on the major divisions of that time. For this purpose, teachers were asked to report figures for their actual time spent in classes, hereafter called teaching time; time spent in preparation for the conduct of classes, hereafter called preparation time; and time spent in all other activities incidental to their postion in the school, hereafter designated activity time.

Thus three broad divisions were laid out within the first objective of this survey. They were regarded as fundamental. The teacher's basic reason for being is, of course, teaching; but he cannot teach unless he spends time in preparation. And he cannot be a part of a school system unless he accepts responsibility for activity demanded or inherent in the nature of its organization. The results of teaching must be measured and reported. Conduct of the school as an entity requires that he cooperate with other members of the faculty in operation and supervision, that he accept a share in the conduct of cocurricular and extracurricular activities, that he participate in many functions where the interests of the school and the community come together.

These require time and as such they are a part of his duty, a part of his load as a teacher. He may appear before the Parent-Teachers Association and speak on a designated topic; he may be required to travel hundreds of miles with a student group, spending many hours with responsibility for the safety and well-being of students in his charge; he may

handle publicity and public relations work; he may attend educational conferences or represent the school at district organizations of various kinds. In short, he may serve many hours per week in capacities that have little to do with teaching.

Teaching Time

Table 1 shows the teaching time reported by 277 teachers for the

Table 1

Teaching Time of Men and Women
In Elementary and Secondary Schools

Hours Per Week	Men		Women		
	High School	Elementary	High School	Elementary	Total
38.1-40.0	1		1		2
36.1-38.0					
34.1-36.0			1		1
32.1-34.0		1			1
30.1-32.0				2	2
28.1-30.0	3		3	9	15
26.1-28.0	2	2	3	21	28
24.1-26.0	14	3	9	23	49
22.1-24.0	13	1	4	20	38
20.1-22.0	7		2	8	17
18.1-20.0	15		17	13	45
16.1-18.0	13		17	5	35
14.1-16.0	12	1	6	4	23
12.1-14.0	6		3		9
10.1-12.0	3		1		4
8.1-10.0	5		2		7
6.1- 8.0					
4.1- 6.0	1				1
Total	95	8	69	105	277
Average	18.5	24.3	19.9	23.8	21.

week of February 20 to 25 of this year. Ninety-five men teaching in high school reported a range of five to 40 hours of teaching time during that week. The median time is 19.2 hours spent in classes while the mean or

arithmetic average is 18.5 hours.

For the same week women teaching in high school reported a range of eight to 40 hours with a median of 18.7 hours and a mean of 19.9. Based on the mean, women in the secondary schools, therefore, teach an average of one hour and twenty-four minutes more per week than do men.

With respect to men teaching in the grades no reliable figures could be realized for the reason that the number of men reporting in this survey was too small and the sampling could not be considered sufficient. However, the number of men actually teaching in the grades is apparently very small by comparison with the other groups. For the sake of interest, figures were carried out for this group.

The eight men teachers in the elementary schools had a range of 15 to 33 hours of teaching time with a median of 25. The mean is 24.3 hours. Women teaching in the grades, numbering 105 in this survey, ranged from 14 to 30 hours per week with a median of 24.3 hours and a mean of 23.8.

Table 1 shows that there is a great variation in the teaching time of teachers at both levels, the greatest range being in the secondary schools, and that elementary teachers spend more time in classwork than do high school teachers. In passing, it may be noted that six teachers reported teaching time of more than 30 hours, the formal school week.

The average teaching time for the whole group is 21 hours per week, the mean for both groups of men teachers being below this figure and the women's groups above.

Preparation Time

The time wich teachers spent during the selected week of this

survey in preparing for classes is shown in table 2. Teachers were

TABLE 2

Preparation Time of Men and Women
In Elementary and Secondary Schools

Hours Per Week	Men		Women		
	High School	Elementary	High School	Elementary	Total
20.1-22.0				3	3
18.1-20.0			2	4	6
16.1-18.0	1		2		3
14.1-16.0	9	1	7	8	25
12.1-14.0	1	1	3	6	11
10.1-12.0	7	1	5	11	24
8.1-10.0	23	3	20	24	70
6.1-8.0	14	1	5	22	42
4.1-6.0	20		10	23	53
2.1-4.0	14	1	7	2	24
0.1-2.0	6		8	1	15
Total	95	8	69	104	276
Average	6.6	10.8	7.9	9.9	8.3

asked to keep a record of the time spent for this purpose, and all but one of the two-hundred seventy-seven teachers answered with a specific figure.

This table is notable in the fact that regardless of the sex of the teacher, or the educational level of teaching, the highest frequency in all groups is the same, eight to 10 hours. This is the mode for each of the four divisions.

Further, calculation of the mean preparation time for each of the four groups indicates that women in general spend more time preparing for their classes than men do. For men teaching in high school, the mean was 6.6 hours per week while for women it was 7.9 hours, an approximate difference of one hour and eighteen minutes. But, as was shown in table 1, women teach on an average one hour and twenty-four minutes more

per week than do men, and this in itself would require some additional preparation. The median time for men is 7.1 hours per week, for women, 8.5 hours.

The greatest range in preparation time occurs at the elementary level. Women teachers here reported a variation from zero to 22 hours. However, since the survey was limited to a specific week, it was to be expected that great ranges would be revealed, so that measures of dispersion are probably not of any great moment. The mean preparation time for women teachers in the elementary schools is 9.9 while for the eight men who reported it is 10.8. The respective medians were 8.4 and 9.2.

Thus the figures indicate that teachers in the elementary schools not only spend more time teaching than those who operate on the high school level, but also spend more time in preparing for their classwork.

A further glance at the table shows that a few teachers spend more time preparing for classes than others do in teaching their classes. This points out the great variations in teaching assignments which have long been known to exist in the schools.

Activities Time

Under this heading is listed all the teacher's time load not concerned with preparation for, or actual teaching of, classes. Some significant comparisons are possible from an examination of table 3. Among men teaching in high school, the activities time for the week under investigation varied from one to 60 hours. Moreover, the dispersion of activities time is shown to be far greater in high school than in the elementary schools with all measures of central tendency running much higher.

Table 3

Activity Time of Men and Women
In Elementary and Secondary Schools

Hours Per Week	Men		Women		
	High School	Elementary	High School	Elementary	Total
58.1-60.0	1				1
56.1-58.0	1				1
54.1-56.0					
52.1-54.0					
50.1-52.0	1				1
48.1-50.0	1				1
46.1-48.0	1		2		3
44.1-46.0	1				1
42.1-44.0		1			1
40.1-42.0					
38.1-40.0					
36.1-38.0	2		1		3
34.1-36.0	3		1		4
32.1-34.0	4		2	1	7
30.1-32.0	7		1	1	9
28.1-30.0	2			3	5
26.1-28.0	2		3	1	6
24.1-26.0	6	1	4		11
22.1-24.0	7		2		9
20.1-22.0	6	2	3	9	20
18.1-20.0	3	1	5	2	11
16.1-18.0	9	1	5	3	18
14.1-16.0	11		3	3	17
12.1-14.0	6	1	8	8	23
10.1-12.0	7		7	7	21
8.1-10.0	3		10	7	20
6.1- 8.0	7		4	12	23
4.1- 6.0	1		3	16	20
2.1- 4.0	2	1	4	18	25
0.1- 2.0	1		1	13	15
Total	95	8	69	104	276
Average	20.7	21.2	15.7	11.6	16.1

The median activities time for men in high school is 18.6 hours, for women, 13.5. With respect to the elementary schools, it is 20.5 hours for men and 6.9 hours for women.

If the mean, or arithmetical average is used, men teachers in the secondary schools post a figure of 20.7 hours per week, their women colleagues 15.7; in the grades the average for men was 21.2 and for women, 11.6.

These figures, taken with the data given in tables 1 and 2 seem to indicate that men carry the greatest burden in activities time in consequence of the fact that they have a somewhat lighter preparation and teaching load. And since their mean activities time is higher than their teaching time, it strongly suggests that men are hired in the schools for what activities they can supervise rather than for what they can teach.

The mean teaching time of women, regardless of whether they teach in high school or grades, is higher than their average for any other time consuming portion of their load; but in the case of the men this is not true at any level. The greatest single time consuming factor of men in the educational field has nothing to do with classroom teaching.

The figures of table 3 also suggest that the presence of men in the elementary schools is closely linked with co-curricular activities, since there is such a wide divergence in time devoted to this phase of school work when men and women are concerned.

Men in the elementary schools showed a mean activities time of 21.2 hours while women reached only 11.6. The median for these two groups is 20.5 and 6.9, indicating that relatively few women teachers are heavily engaged with activities time.

Total Time Consumption

Under this heading teachers participating in the survey listed their total time load, and subsequent assembly of their reports is given in table 4.

The great range of working hours per week is easily apparent and is perhaps the most striking feature of the table, though as pointed out before, great dispersions were expected in view of the fact that the survey was limited to a specific week. It should, therefore, be reiterated that the intention throughout this effort was aimed at central tendencies rather than dispersions. However, the fluctuating nature of educational endeavor is shown by the figures; in the same week on teacher put in as few as eighteen hours while another reached eighty.

Another significant revelation is the fact that women show lower modes, medians and means in the frequency table than do men. Though as shown in tables 1 and 2 men prepare and teach less than women, their greater attention to activities brings their average total time consumption per week above that of women.

The figures belie the popular conception of a short working week for teachers. Neither the arithmetical means nor the medians of any of the four groups of teachers fall below the standard forty hour week. Moreover, though the formal school week consists of approximately six hours a day for a five-day week, no man teaching either in high school or elementary schools failed to put in more than thirty hours.

The average time consumption per week for the four groups is as follows:

Men in high schools 45.9 hours

Men in elementary schools	56.3 hours.
Women in high schools	43.5 hours.
Women in elementary schools	45.3 hours.

On the basis of these figures it seems evident that the practice of paying women teachers in the elementary schools less than those who teach in high school is unjustified from the standpoint of time load. In this survey the average time load per week of women in the elementary schools - 165 of them participating - is within two-thirds of an hour of the time load of men teaching in high school and the latter almost invariably enjoy the highest salaries. In fact, women teachers in the elementary schools carry a greater average time load than do women teaching in high school, both groups having supplied their own figures. However, fairness requires that it be pointed out that the medians of the two groups reverse this position, 44.3 to 41.2 hours.

As may been seen from the table, the frequencies tend to form a normal distribution curve, and the assumption is that if a sufficiently large number of cases could have been included in the survey, the curve would approach normality.

Assuming a normal distribution in each of the four groups and employing the formula for calculation of the standard deviation, it is revealed that:

S. D. for men in high schools equals 10.04.
S. D. for men in elementary schools is 5.47
S. D. for women in high school is 5.00
S. D. for women in elementary schools is 9.22.

Table 4

Total Time Consumption of
Elementary and Secondary Schools

Hours Per Week	Men		Women		
	High School	Elementary	High School	Elementary	Total
78.1-80.0	1	1	1		3
76.1-78.0	1				1
74.1-76.0					
72.1-74.0					
70.1-72.0	3		1		4
68.1-70.0	1			2	3
66.1-68.0	2		1	1	4
64.1-66.0	1				1
62.1-64.0	1			1	2
60.1-62.0	2		1	1	4
58.1-60.0	3			1	4
56.1-58.0	2			5	7
54.1-56.0	8	3	6	3	20
52.1-54.0	4	1	5	2	12
50.1-52.0	6		3	6	15
48.1-50.0	9	1	6	2	18
46.1-48.0	9		5	6	20
44.1-46.0	6	1	6	10	23
42.1-44.0	6		5	9	20
40.1-42.0	7		6	8	21
38.1-40.0	8	1	7	14	30
36.1-38.0	7		5	11	23
34.1-36.0	6		3	9	18
32.1-34.0	2		3	4	9
30.1-32.0			1	2	3
28.1-30.0			2	6	8
26.1-28.0				1	1
24.1-26.0			1		1
22.1-24.0				1	1
20.1-22.0					
18.1-20.0			1		1
Total	95	8	69	105	277
Average	45.9	56.3	43.5	45.3	45.4

If it is further assumed that the S. D. in each case may be applied to a normal curve with the established means, 68 per cent of the men who teach in high school carry a time load from approximately 36 to 56 hours per week; the same percentage of men in elementary school from 51 to 61 hours; women in high school from 38.5 to 48.5 hours; and women in elementary schools from 36 to 54.5 hours.

These figures are perhaps not too significant, but do tend to illustrate that time loads of teachers are more uniform in the case of men who teach in the elementary schools and women who teach in high school. The largest deviations apply to the other two groups.

While average time load of the men working in the elementary schools was by far the highest, it was uniformily high in comparison with the others, while of the remaining three large groups, women in high school show less dispersion in the matter of hours worked per week than their colleagues in either grades or high school.

The average working week for the whole number of teachers participating in the survey is 45.4 hours, six minutes over the average for women in the elementary schools and one hour and fifty-four minutes above the average for women in the high school.

Table 5

Pupil Hours Per Week for Men and Women
In Elementary and Secondary Schools

Hours Per Week	Men		Women		
	High School	Elementary	High School	Elementary	Total
1151-1200				1	1
1101-1150					
1051-1100					
1001-1050				1	1
951-1000					
901- 950				2	2
851- 900	1		2	3	6
801- 850	1		1	4	6
751- 800				2	2
701- 750	1	1	4	3	9
651- 700	1	2	1	4	8
601- 650	3	3		7	13
551- 600	6		2	6	14
501- 550	8	1	7	9	25
451- 500	13		8	19	40
401- 450	13	1	11	13	38
351- 400	14		13	9	36
301- 350	12		9	10	31
251- 300	6		6	2	14
201- 250	11		3	6	20
151- 200	3		2	1	6
101- 150	2			1	3
Total	95	8	69	103	275
Average	406	627	438	502	456.4

The use of pupil hours per week has ample precedent. In table 5 the figures indicate a wide range for the 277 teachers of this survey. A high school teacher reported the lowest pupil hours total for the week studied, 120, while a grade school teacher returned the highest, 1015.

The mean of each of the four groups is as follows:

Men in high school	406
Men in elementary school	627
Women in high school	438
Women in elementary school	502

Since the number of men teaching in elementary school who participated in this survey is relatively small, the figures for this group may be disregarded. But with respect to the other three groups, the results bear out the indications provided by previous figures relative to teaching time load, i. e. men in high school bear the lightest load while women in the grades carry the heaviest. Moreover, as may be seen from the table, the inspectional mode of both groups of high school teachers is the same while that of women in the elementary schools is 100 hours higher.

The average for the entire group is 456.4 pupil hours and in this case the high school teachers show means for both men and women that are below this figure. The heavier pupil-hour per week load is definitely in the elementary school.

Classes Per Day

Table 6 shows what other figures heretofore given have indicated,

Table 6

Classes Per Day for Men and Women
Teaching in Elementary and Secondary Schools

Classes Per Day	Men		Women		Total
	High School	Elementary	High School	Elementary	
20				1	1
19				1	1
18					
17					
16				1	1
15				1	1
14				6	6
13				6	6
12				4	4
11				4	4
10		1		7	8
X					
9			1	12	13
8	1		2	29	32
7	7	3	6	25	41
6	9	1	11	3	24
5	27		15	2	44
4	33	2	28	1	64
3	15	1	3		19
2	2				2
1			1		1
Total	94	8	67	103	272
Average	4.5	6	4.9	9.1	6.4

that women are teaching more than men, both in high school and in the grades. However, comparisons between high school and elementary teachers in this connection are of doubtful value since in most cases the class systems used are widely different.

The average class period in the elementary schools is shorter than its high school counterpart, hence numbers of classes per day show a marked increase below the high school level. The median number for women teaching in the elementary schools is 7.7 while for men in the high school it is 3.91, indicating the divergence between class numbers at the two levels.

The wide range of classes in the elementary schools is also noteworthy, running from four to 20. Classes of 10 and 15 minutes were reported in numerous instances, particularly in those schools where elementary teachers were required to teach more than one grade in the same room, and cases such as these account for the upper limits of the range.

The average number of classes per day with which women teaching in the grades meet is 9.1; men teaching in the elementary schools meet with only 4.9 classes per day, indicating that men are for the most part employed in the upper grades where forms of organization similar to the high school often prevail. The average for men teaching in high school is 4.5, and for women, 4.9.

The mean for the entire group is 6.4, but this probably has little meaning since it represents a combination of two levels of teaching organized on different bases. However, the high school averages compare favorably with what is felt to be general through the nation. Douglas says:

> In the interests of effective teaching, care should be taken that the instructor is not asked to meet an excessive number of classes daily. The teaching load in the high schools and upper elementary schools of the United States has been uniformly too high. During the past quarter-century the average teaching load in the high school measured in terms of sections taught has diminished from approximately six to approximately five daily. Yet this reduction has been compensated for by the increased responsibility for the extracurricular program of the school, by the

need of more careful attention to greater individual differences in high school pupils, and by the greater size of sections owing to the increase in size of high schools and the growing conviction that larger classes may be taught as effectively as smaller ones. In England, France and Germany - in spite of the fact that in these countries extracurricular activities require much less time of instructors and the traditional subject matter is well crystallized, is almost reduced to formula and requires very little reorganization - the secondary school teacher is rarely responsible for more than four classes daily.[14]

This coincides with a report made by Boardman who cites a 1939 survey in which 2,058 secondary schools participated. The median number of class periods per day was slightly over six. He also points out that annual reports of the North Central Association have a shown a median of five classes per day.[15]

Statistical Summary

The effect of experience on the studied aspects of time load is presented in tables 7, 8, 9 and 10. Study of these tables reveals that within the limitations of this investigation there is little or no correlation between experience and time load. The total hours per week for each group set in frequency tables of experience shows no tendency to assume a curve, decrease or increase. All tables are based on the mean.

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[14] Harl R. Douglass, Organization and Administration of Secondary Schools, p. 108, Ginn and Company, Boston, 1945.

[15] W. S. Monroe, Encyclopedia of Educational Research, Revised Edition, p. 1188, The Macmillan Company, New York, 1950.

Table 7

Time Load and Experience
For Men Teaching in High School

Years of Experience	Teaching	Preparation	Activities	Total Per Week
33-34	5	3	32	40
31-32	15	5		20
29-30	15	5	30	50
27-28	25	5.5	7.5	38
25-26	20.3	2.7	28.3	51.3
23-24	16.7	8.2	16.	40.9
21-22	17	6.2	24.2	47.4
19-20	19.6	7	33.7	60.3
17-18	22.1	6.3	16.5	44.9
15-16	19	4	12.7	35.7
13-14	15	7	16.5	38.5
11-12	20.8	7.8	14.2	42.8
9-10	21.7	7.4	19.4	48.5
7- 8	20.1	7.3	23.5	50.9
5- 6	19.3	10.3	17.1	46.7
3- 4	21	9	16.4	46.4
1- 2	19	9.4	24.	52.4
Average	18,54	16.63	20.75	45.92

The above also appears to be true of teaching time and activities time. While great variations are manifested, there is no reliable tendency shown on which to base any conclusion except that no correlation exists.

With respect to preparation time a slight reduction may be detected in the high school groups, particularly in the case of the men, but in no case is it possible to show any consistant decrease in time spent in preparing for classes as the years of experience mount. Moreover, the tendency for men to assume supervisory capacities as their experience increase tends to lighten their teaching load and this in turn

Table 8

Time Load and Experience
For Men Teaching in Elementary School

Years of Experience	Teaching	Preparation	Activities	Total Per Week
19-20	15	15	25	55
17-18				
15-16				
13-14				
11-12				
9-10				
7- 8				
5- 6	28	9	12.5	49.5
3-4	29.5	10.5	32	72.
1- 2	28.4	8.7	15.2	48.7
Average	24.3	10.8	21.2	56.3

to be reflected in the amount of time required for preparation.

The figures given in these tables are all averages for the respective frequencies. The implication of these results is simply that experience does not reduce time load, nor does it materially affect the amount of time teachers spend in preparation.

Table 9

Time Load and Experience
For Women Teaching in High School

Years of Experience	Teaching	Preparation	Activities	Total Per Week
39-40	22	6.2	10.2	38.4
37-38	20	0.	14.	34.
35-36	25	3.	10.	38.
33-34	17	9.	4.	30.
31-32	18	2.5	20.	40.5
29-30	25	15.	9.	49.
27-28	19	6.6	16.	41.6
25-26	17.6	6.4	24.	48.
23-24	16.6	13.5	32.	62.1
21-22	21.3	9.	15.	45.3
19-20	16.3	7.3	21.7	45.3
17-18	20.	5.	9.	34.
15-16	23.7	8.3	17.3	49.3
13-14				
11-12	19.5	8.5	17.8	45.8
9-10	19	11.5	12.	42.5
7- 8	21.5	10.	15.5	47.
5- 6	16.2	10.	23.	49.2
3- 4	20.7	8.	12.6	41.3
1- 2	21.1	9.9	15.1	46.1
Average	19.9	7.9	15.7	43.5

Table 10

Time Load and Experience for
Women Teaching in Elementary Schools

Years of Experience	Teaching	Preparation	Activities	Total Per Week
35-36	21.8	10.5	13	45.3
33-34				
31-32	22.5	6	22	50.5
29-30	25	5	12	42
27-28	20.3	12	9.7	42
25-26	21.6	8	15.8	45.4
23-24	22.3	12.3	8.1	42.7
21-22	28.7	12.	28.5	69.2
19-20	29.5	11	2.2	42.2
17-18	19	12	15.5	46.5
15-16	27	8	8	40
13-14	23.6	10.1	9	42.7
11-12	25.5	9	10.1	44.6
9-10	23.8	18.2	7.8	49.8
7- 8	23.2	7.3	13.1	43.6
5- 6	20.8	12.4	6.3	39.5
3- 4	24	8.8	8.2	41
1- 2	26.1	8.2	8	42.3
Average	23.8	9.9	11.6	45.3

The intrinsic character of teacher time load in the schools studied in this survey can be more readily shown when the figures supplied by these tables are converted into percentage terms. Taking the total time load, based on computation of the mean in each case, and assigning to it 100 per cent, the following table 11 is obtained:

Table 11

Percentage Breakdown of the Time Load of Participating Teachers in the Elementary and Secondary Schools

Field	Men In H. S.	Men In Elem. Sch.	Women In H. S.	Women In Elem, Sch.
Teaching Time	40.4	43.2	45.7	52.5
Preparation Time	14.4	19.2	18.2	21.9
Activities Time	45.2	37.6	36.1	25.6
Total	100.0	100.0	100.0	100.0

Thus women teaching in the elementary schools are the only group still consuming more than half of their total time load in actual teaching. Such teachers put in 74.4% of their total time either teaching or preparing to teach.

By contrast, men in high school spend only 40 per cent of their time in actual teaching, about 14 per cent in preparation and more than 45 per cent with other activities related to school and community.

Summary of the Chapter

By manipulation of the figures and results given in this chapter several conclusions may be drawn and perhaps as many hypotheses set up. But the specific objectives of the survey were concerned with time load, how it was distributed and the differences which might exist between the elementary and secondary teachers.

These objectives, once attained, may, of course, suggest additional thought and certainly a conclusion which is barren of any implication for further study is a rare one.

Time load of teachers in this survey has been shown to exceed 40 hours per week for all categories; specifically, it is 45.9 hours for men teaching in high school, 56.3 hours for men teaching in the grades, 43.5 hours for women teaching in the high schools, and 45.3 hours for women teaching in the grades.

Secondly, the figures show that actual teaching consumes less than half of the total time load of teachers with the single exception of women teaching in the elementary schools who spend 52.5 per cent of their time in this work. Men teaching in high school spend only 40.4 per cent of their time load in classes, men in elementary schools 43.2 per cent and women in high school 45.7 per cent. Preparation time is lowest among men in high school and highest among women teaching in the grades; with activities time the reverse is true. Men in high school spend 45.2 per cent of their time with activities incidental to teaching, school operation and community service, men in elementary schools 37.6 per cent, women in high 36.1 per cent and women in the elementary schools 25.6 per cent.

Finally, the load differences, ignoring men in elementary schools for reasons given above, appear to favor women in high school whose average time load was 43.5 hours per week. Women in elementary schools had a time load of 1.8 hours per week higher, men in high school, 2.4 hours per week for a total of 45.9.

Chapter 4

RELATED ASPECTS

Experience, universally regarded as the great contributing factor to efficiency and improvement in every vocation, is shown for the teachers who reported in this survey in table 12.

The table reveals that of the 266 teachers who divulged their experience, 27.5 per cent of the whole number had taught two years or less when the survey was taken. This, of course, means that the remainder, or 62.5 per cent of the teachers, had two years of experience or more.

The table seems to indicate, though more evidence would be needed from a wider field than this to fully substantiate it, that men and women alike who continue in the field of teaching beyond the six to eight year interval of experience tend to remain in the field. The figures with respect to men teaching in the elementary school are too fragmentary to warrant a conclusion except that seven out of the eight who participated had less than six years of experience, suggesting that such men tend to leave the elementary schools, either for other work or to teach in high school.

It should also be pointed out that this survey was taken in the fully accredited schools of the area and that therefore, the level of experience is probably higher than in non-accredited schools. The fact that 62.5 per cent of the teachers in these schools were experienced teachers in varying degree seems to augur well for this phase of education.

The median experience age for men teaching in high school is 8.3 years, for women, 8 years. In the elementary schools the median for men was 2.5 and for women, 6.6 years. The median experience age for the 276 teachers is 7.5 years.

Table 12

Experience of Participating Teachers
In Elementary and Secondary Schools

Years	Men		Women		
	High School	Elementary	High School	Elementary	Total
39-40			2		2
37-38			1		1
35-36			1	4	5
33-34	1		1		2
31-32			2	1	3
29-30	1		1	1	3
27-28	1		3	3	7
25-26	3		5	5	13
23-24	4		2	6	12
21-22	6		3	1	10
19-20	6	1	3	2	12
17-18	8		1	1	10
15-16	3		3	2	8
13-14	2			9	11
11-12	6		4	6	16
9-10	7		2	4	13
7- 8	8		2	10	20
5- 6	3	1	2	11	17
3- 4	9	2	7	17	35
1- 2	27	4	24	21	76
Totals	95	8	69	104	276
Median	8.3	2.5	8	6.6	7.5

Ages

In the questionnaire used to obtain the data for this survey, teachers were asked to report their chronological ages in the brackets shown in table 13. The results show that women teachers tend to run to

Table 13

Ages of Participating Teachers in
The Elementary and Secondary Schools

Age	Men		Women		
	High School	Elementary	High School	Elementary	Total
40 or over	30	1	26	37	96
35-39	12		3	7	22
30-34	20	2	3	5	30
25-29	24	5	8	20	57
20-24	9		27	35	71
Under 20				1	1
Totals	95	8	69	105	277
Median	33.7	28	29	28.3	31.7

the very young on one hand and "over 40" on the other. This is, of course, understandable since women in the marriageable age tend universally to leave the profession in favor of homemaking. Nevertheless, it is interesting to note that only 18 out of 174 women teachers in this survey were in their thirties, while 65 were forty or more, and 62 were twenty-four or younger.

With respect to men teaching in the high school the picture is quite different with 62 out of 95 being beyond thirty and 32 of them actually in their thirties. Thus, the division of men by age indicates that one-third of them, roughly speaking, are in their twenties, one-third in the thirties and one-third are 40 or over.

The median age for men in high school is 33.7 and for men in the elementary schools, 28. For women teaching in high school it is 29 and for women in the elementary schools 28.3 years.

Salaries

Teachers' salaries were reported in brackets and therefore, the average salary which might be computed would not hold great meaning. But computation of the median gives the following results: for men in high school, $3,485; for men in elementary school, $3,374; for women in high school, $2,828; for women in elementary school, $2,291.

Table 14 gives the salaries of the participating men and women of the 31 accredited schools included in this survey.

Table 14

Salaries of Participating Teachers in Elementaty and Secondary Schools

Salary	Men		Women		
	High School	Elementary	High School	Elementary	Total
4,000 or over	14				14
3,500-3,999	32	1	2		35
3,000-3,499	36	4	15	5	60
2,500-2,999	12	2	46	14	74
2,000-2,499	1	1	5	79	86
1,500-1,999				6	6
1,000-1,499					
Totals	95	8	68	104	275
Median	3485	3374	2828	2291	2811

If comparison is made between time load and salary some significant results emerge: The average working week of the highest paid group of teachers - men who teach in high school - was 45.9 hours while the average working week of the lowest paid - women teaching in the elementary schools - was 45.3. This difference in time load amounts to only 36 minutes per week, but the difference in the median salary of the two groups is nearly $1,200.

While it is true that high school teachers have prepared longer for their positions on an average than have elementary school teachers by reason of educational requirements, it is doubtful if the two years of added preparation have much to do with the difference in salary. The very importance of the elementary school position would seem in itself to offset any salary advantage two years of college training might command on the market.

It is evident that time load has little influence on salary. It is also evident from the figures that women as a group are not being paid on the same scale as men, for men in the elementary schools receive a median salary of nearly $1,100 more than women in the grades and $500.00 more than women teaching in high school.

Added increments reported by schools which have adopted salary schedules indicates that one year of graduate preparation is worth from $100 to $150 per year.

Applying the same scale to undergraduate preparation and using the maximum figure, elementary school teachers should be paid within $300 of their sisters in the high school when teaching on a standard certificate. This would bring their salary up to $2528, a median increase of $237 per year. Further, the degree teacher in the elementary schools has

on the basis of this survey, a good case for equal pay with the high school teacher. For in that case, she has the same educational preparation and has, in addition, the greater load as compared with her sister in the secondary school.

"On the whole, society does not pay its teachers as well as it pays its skilled workers."[16] However, the question of whether salaries paid to teachers are too low or too high is not a question to be settled here, nor even an objective of this survey. Except in so far as teacher load is pertinent to salary, no conclusion may be drawn; but on a time load basis, which is the method by which society rewards many of its segments, even professions, it is evident that the elementary teacher is not being paid what she is worth.

It is perhaps significant to note, too, that the median salary for the whole group is $2811, that the only group falling below this figure is the woman who teaches in the elementary school, and that she is more than $500 below.

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[16] R. H. Morrison, "Teaching is a Profession," NEA Journal, March, 1950, Vol. 39, p. 202.

CHAPTER 5

CONCLUSIONS

The matter of drawing conclusions from this survey, or any survey, must be approached with caution. First of all, it may be pertinent to point out that an inductive hazard always exists wherever an attempt is made to produce a generalization from examination of a group of collected data. That is to say, conclusions to be drawn from examination of the information returned by the 277 teachers who participated in this investigation may not be applicable in equal degree to all teachers in North Dakota, nor Minnesota, and probably still less applicable to the entire field of teaching in this country.

The need for continued investigation along these lines and for development of data on time load of teachers stems in part from this necessity of narrowing the inductive hazard. In the opening chapter of this thesis, an inquiry nation-wide in scope was envisioned as within the realm of possibility, organized and correlated by graduate schools throughout the country. This would seem to provide the largest possible means of attack upon the problem, one which, as has been shown, teachers are agreed needs greater study.

As is well known to members of the education profession, the popular conception of the work of a teacher has in years gone by been that of an easy task. This conception has given some ground, but grudginly, and is little felt on educational levels below college. The nine-month school year and the formal six-hour day of five days a week combine to produce and perpetuate this impression.

To counteract these impressions and provide the kind of public

support which is necessary to attain a full flower of educational power is the job of the educator and teacher, according to teachers themselves.

Surveys of teacher load and related topics provide the ammunition of conviction for this purpose. If the figures prove that the time load of teachers is on the increase as that of other forms of human endeavor decrease, if the figures prove a rising tide of juvenile delinquency in this country; if they prove a correlation between education and social adjustment; if they prove a relationship between education and national service; if they prove education to be intertwined with economic success; then it is time the profession produced the figures.

Nor is this unethical, for the gathering of evidence, the material from which proof is made, is never unethical. In this connection, therefore, surveys of teacher load have a larger aspect than the immediate conclusions which they derive.

Of common knowledge is the fact that the degenerative social influences mentioned earlier in this thesis are multiplying rapidly. It appears to be the basis reason why schools of the elementary and secondary level have turned their attention to activities which stretch beyond the traditional school hours. As far as schools of these levels are concerned, the objective of imparting the knowledge of the race to its pupils and students has been joined by another equally great - to guarantee the worthy use of leisure time on the part of the future citizens of this country and to save American youth from threatened degeneration.

"In view of the wearing nature of teaching, a school day of more than eight hours is consistent neither with healthy living of teachers nor

with fair working requirements." [17]

In these words Douglass has presented the case for the 40 hour week in the field of secondary education. It would seem to be equally applicable to the elementary level.

This survey was an attempt to determine what the working week of teachers actually was. The teachers participating in the survey were divided into groups on the basis of educational level and of sex. All of these in the specific week studied, which was to be a representative week, exceeded the forty hour standard, using the mean figures for each group.

In his statement, Douglass has pointed out a qualification which remains immeasureable. He calls it the "wearing nature" of teaching. It is not possible to estimate the effect of this on teaching load nor to assign figures to it. However, it should be pointed out that the forty-hour week in other lines of activity is already under assault and crumbling to an even shorter week; it should also be pointed out that the work of these others in many lines is not nearly so incessant and unremitting as is the teacher's. Moreover, the figures obtained in this survey do not include time spent within the school building in which no work was done. If the teacher had a period off and did nothing but relax in that time - a common thing in the working day of many people - it went unrecorded. A third additional factor is the developing nature of the teacher's duty, no longer confined to continuous hours, a cohesive segment of the day, but scattered almost twice around the clock.

Thus, the conclusions as they are revealed within the orbit of this survey, may be summarized as follows:

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[17] Harl R. Douglass, Organization and Administration of Secondary Schools, Chapter 5, Ginn and Company, Boston, 1945.

1. Men and women teachers of both elementary and secondary levels exceed in terms of hours per week the working load of the modern standard of 40 hours. For men in high school, the average was 45.9 hours, in elementary schools 56.3 hours; for women teaching in high school 43.5 hours and in the grades 45.3 hours. The average of the 277 teachers is 45.4 hours per week, 13½ per cent in excess of the 40-hour week.
2. Teaching time, which in this survey means only the actual conduct of classes, has become less than 50 per cent of the teachers' effort except in the single case of women who teach in the elementary schools. Preparation for teaching varies from 14.4 per cent to 21.9 per cent of the teachers total time per week on the average, teaching itself accounts 40.4 to 52.5 per cent and the remainder 25.6 to 45.2 per cent, is spent with activities incidental to operation of the school and supervising co-curricular activities. A great increase in activities time is noted at the high school level, particularly in the case of men teachers who spend more time with these than with anything else.
3. The teaching load as between men and women and between the secondary and elementary schools is apparently fairly evenly distributed on the average. On the basis of total time load, men teaching in high school have the heaviest, followed by women teaching in the grades, and even

women teaching in high school in that order. This ignores the figure for men teaching in the elementary schools for which the number participating was again too small. The differences in load terms of hours per week between elementary schools and high schools is no more than 2.4 hours for any group studied, using the mean for each comparison.

Correlating with these are the further relative indications that:

1. The influence of experience on the time load of teachers appears to be insignificant.
2. The importance of time load carried by the teacher is outweighed by other considerations, namely, sex and educational level, when salaries are considered.

APPENDIX A

TO THE TEACHER:

The requests for information which follow will be incorporated into a survey of teacher load in the accredited schools of the Red River Valley. It is hoped that some 500 teachers will participate. The survey is limited to the specific week of February 20-25. Your cooperation will be appreciated by the undersigned.

Man____Woman____ (Please check)

Years of experience in this school_____Total years of experience_____

Teach in grades_____High School_____ (Please check)

Age (check one) Under 20____20-24____25-29____30-34____35-39____

40 or over____

Salary class (check one) $1,000 - 1,499____1,500 - 1,999____2,000 -

2,499____ 2,500 - 2,999____3,000 - 3,499____3,500 - 3,999____ 4,000

or over____

1. List the courses you teach, length of each class period, the number of times each meets per week, and the number of pupils enrolled in each class.

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

2. What is the total time you spent in classes the week of Feb. 20-25?

_____

3. How much time did you spend in preparation for these classes during the week of February 20-25? _____

4. How much time did you spend in this week, supervising assemblies, home rooms, study halls or libraries?_____

5. How much time was consumed by faculty conferences?_____

6. How much time was consumed by guidance and counseling work?_____

7. What extre-curricular activities did you supervise?_____

_____

8. How much time did these entail during the week?_____

9. How much preparation time?_____

10. How much time was spent in administrative work?_____

11. What other events connected with the school required a portion of your time during the week? (Include PTA, and mothers, NDEA local as well as athletic or music or dramatic events attended, etc.,) even though you were not responsible for them nor on the program.)

_____ _____

_____ _____

_____ _____

Thank you kindly,

Oswald Tufte

APPENDIX B

Schools from which returns were received.

Aneta

Buxton

Cogswell

Cooperstown

Edgely

Enderlin

Fargo Senior High

Grafton

Hankinson

Hoople

Hope

Hunter

Kindred

Lakota

Langdon

Lidgerwood

Lincoln Elementary, Grand Forks

Lisbon

Mayville

McVille

Northwood

Oakes

Page

Park River

Pembina

Portland

Teachers College High
Valley City
Valley City

Walhalla

Wahpeton

West Fargo

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