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## A study of the effect of decreased budgets upon public schools in Massachusetts

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A STUDY OF THE EFFECT OF DECREASED BUDGETS  
UPON PUBLIC SCHOOLS IN MASSACHUSETTS

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A STUDY OF  
THE EFFECT OF DECREASED BUDGETS UPON PUBLIC SCHOOLS  
IN MASSACHUSETTS

Alexander K. Sokol

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This thesis submitted for the Degree of Master of Science

Massachusetts State College  
Amherst, Massachusetts

1935

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## INTRODUCTION

## INTRODUCTION

The public schools of America are one of the most vital activities of the people as a whole. They are the most far reaching in their influences and contacts. They are the developers of our country. But it has only been in the last twenty or thirty years that our public schools have developed from rigid institutions in which there was very little flexibility of curriculum to their present status of offering wide ranges of activities under well trained leadership. Of course this progress has cost money and has been achieved only through the confidence, cooperation, and support of the people.

During the last five years the people have been going through a grave financial crisis. Their willingness to support, financially, the public schools is dampened. From an attitude of few limitations the people have changed to one of insisting on the reduction of educational expenses which heretofore consumed one fourth of the total tax receipts. For this reason school budgets have been and are being decreased.

School administrators, faced with a shortage of funds, naturally had to curtail activities. Classes, already too large, were increased in size so that one teacher could do



the work of two. Salaries were decreased. Books and supplies could not be had so the pupils had to endure with what was on hand.

It goes without saying that such conditions cannot help but be harmful to the youth of our country and, indirectly, to the country as a whole. Too much energy has been wasted through conflict between the taxpayers on the one side, who called for reduction of educational expenses, and the educators on the other side, who insisted that at least the program that had been developed shall be maintained. Some means must be devised by which taxpayers and educators will understand each others problems and, with common understanding, work towards an excellent educational system, which is the most important task of any nation.

The years of depression should bring forth excellent opportunities to see where our schools can be readjusted and improved. A study of the extent of the depression on our schools should reveal to both educators and taxpayers many problems and defects. It was felt that a truer picture of conditions could be obtained by controlling the territory covered by such a study. The state of Massachusetts was chosen for it represents a fair cross section of the United States as a whole.

This study is intended to show the effect of the depression on public school budgets in Massachusetts with reference to teachers, salaries, curriculum, size of classes,

and supplies. Other items that will be considered are: comparison of present school appropriations to normal appropriations; makers of school budgets; and the amount of reduction from average budget. The effect of the depression on curricula will be shown by subjects dropped, activities curtailed, and reduction of supplies. In the last section of this study an attempt will be made to draw conclusions as to the general effects of the depression on public schools.

Alexander K. Sokol

REVIEW OF LITERATURE

## REVIEW OF LITERATURE

During the past five years the public has read considerable about the financial crisis in our public schools. Most of this information has been some educator's or layman's personal opinion backed by limited facts. Massachusetts has made two studies in 1932 and 1933 about public school retrenchments. Both of these are statistical, showing merely each school systems retrenchments in numbers and percents. Few interpretations are given. There are, however, several excellent studies that contain a considerable amount of statistics and much information about the schools of the United States as a whole.

The National Education Association has made a study entitled, "Some Trends in City School Finance", and dated 1933. The results of this study show that the 1933 school budgets were decreased 6.3% below the 1932 budget; that the greatest retrenchment is by increasing teaching load of class room teachers. This does not necessitate hiring new teachers and allows some teachers to be dismissed. This study also showed that only 45.2% of the cities investigated will maintain regular salary levels for 1933.

A later study by the National Education Association shows that the amount of change from 1933 to 1934 budgets

is very small and can be discounted. It may be stated that the downward trend, at least, is stopped.

The United States Office of Education has published a circular, "Some Effects of the Economic Situation on City Schools". This survey gives information on school budgets, teachers' salaries, and educational activities relating to the United States in general. It shows that in 1933 the school budgets decreased 6.3% from 1932. The average decrease in teachers' salaries was 5%. Enrolment has increased 1.3%. The number of teachers has been decreased 2.4%. 53% of all the cities reporting have curtailed or eliminated certain activities. The above percents apply to the average of the United States in 1933.

Of the individual states making studies, Massachusetts, as previously stated, has made two statistical reports. Connecticut, in 1933, made a study, "Economies and Retrenchments in Public Schools of Connecticut". This study is statistical with little interpretation. Ohio, Pennsylvania, and New York, have made studies of the effects of the depression on their schools. The above studies are also statistical.

An interesting survey of a specific city is a report on the Niagara Falls' school system. This report contains a comparison of this city's school system with others of its kind, numerates weaknesses, suggests ways by which these weaknesses may be overcome and tells of ways to reduce

expenditures. The report shows that Niagara's schools compare favorably with other schools of its kind; that there is too much teaching, not enough learning; too much superficiality and not enough mastery of subjects. Reductions in expenditures may be made, without lowering the standard of teaching and learning, by letting each pupil's daily program include adequate time for independent study. Adjusting salaries according to the teacher's worth is another suggestion for reducing costs. Savings can be made on the first item because this will allow a reduction in the teaching staff and the second is wholly obvious.

The reports, surveys, and studies that have been reviewed include all of the worthwhile contributions to the subject of this particular study. Each one has been carefully analysed and important items noted in these reviews.

The above reviews show that much of the work deals with generalities, averages, and statistics. The following pages of this study will attempt to show specific effects of the depression on schools of Massachusetts.

## COLLECTION AND TREATMENT OF DATA

## COLLECTION AND TREATMENT OF DATA

Most of the statistical information for this study was obtained from a questionnaire<sup>1</sup> sent out to the 205 superintendents of the state of Massachusetts in the spring of 1934. (By a seminar in Education.) One hundred and twenty-five answers were received and the territory covered by these returns includes enough samples of every type of community in the state to give an accurate picture of school conditions in Massachusetts. These returns from the superintendents substantiate all information in this study.

To further assist in getting a better cross section of education in this state the returns were divided into three groups. The 25 cities will be considered separately from the 53 towns. The third group of the division will be the 47 superintendency unions. It is felt that with this grouping, the information will be more useful as a basis of comparison with any type of school in Massachusetts.

The items mentioned in the introduction namely, effect on school budgets with reference to teachers, salaries, curriculum, size of classes, supplies, comparison of budgets, makers of budgets, subjects dropped, activities curtailed, and supply reductions, will be discussed and tabulated under

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1. Will be found in appendix.



the three groups of cities, towns, and superintendency unions.

Tables and graphs will be drawn to assist in making comparisons clearer.

A summary will conclude this study.

SCHOOL BUDGETS IN MASSACHUSETTS

## SCHOOL BUDGETS IN MASSACHUSETTS

The educational system of the state of Massachusetts has not escaped the effects of the grave financial crisis we have been going through. Municipalities have had their tax revenue reduced and yet their expenses have mounted for such work as welfare. For this reason school budgets have had to be cut. In the last ten years the total school budget for the state of Massachusetts has increased only 2%<sup>2</sup>. Yet during the last ten years the school enrolment has increased 12%.

Before showing how decreased budgets have affected public schools, the extent of the decreases and other information related to the budgets will be given. As stated in the introduction, the decreased budgets are only a cause for the effects on public schools. How they have affected education of our pupils is the main purpose of this study, yet it is well to know the extent of the decreases, the makers of budgets, and comparative costs before effects are studied.

Table I is a condensation of the information on budgets that was received from the returned questionnaires.

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2. "Annual Report", Massachusetts Department of Education, 1934.

TABLE I - GENERAL SCHOOL BUDGET

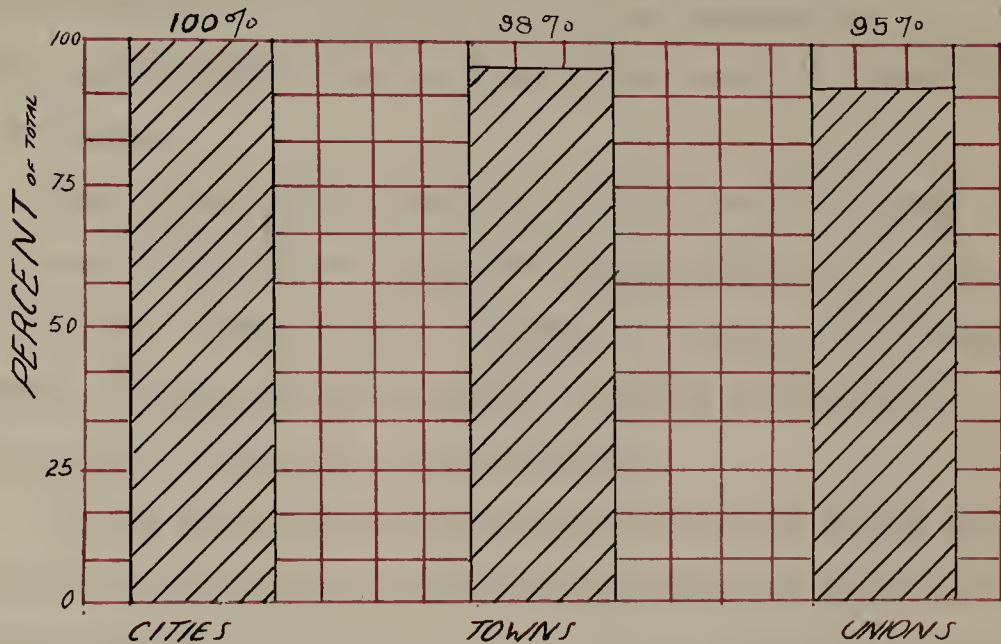
	Cities	Towns	Unions
1. School budget not cut	0	1	4
2. School budget comprises percentage of total municipal budget -- 1931 1935	33.0% 27.3%	37.6% 32.5%	41.7% 38%
3. School budget made by:			
a. Superintendent and School Committee	12	29	30
b. Superintendent	3	14	6
c. School Committee	2	4	1
d. Superintendent, School Committee, and Finance Committee	1	5	8
e. Superintendent, School Committee, and Others	7	3	1
4. Has above procedure been customary?			
Yes	23	55	45
No	2	0	0
5. Cost of education per pupil in 1933	\$88.36	\$82.20	\$98.31
6. Average for state in 1933 Average for state in 1923		\$89.34 \$102.85	
7. Percent decrease		10%	

EXTENT OF DECREASED SCHOOL BUDGETS

The first item in Table I shows that all cities, 98% of the towns, and 95% of the superintendency unions have decreased their school budgets. The towns that did not decrease also did not increase their budgets and only four unions of those

making returns did increase. From the following graph it may be seen that the depression in the state of Massachusetts has extended into practically all of its schools.

*GRAPH A - DECREASE OF SCHOOL BUDGETS*



In 1931<sup>3</sup> the school budget, in cities, comprised 33% of the total municipal budget. In 1933 this percentage was 27.3% or a decrease of 5.7% in two years. The percentage in 1933 varied from 20% in some cities to 33.3% in others. Towns, in 1931, appropriated 37.6% of their total budgets for schools while in 1933 they appropriated only 32.5% or a decrease of 5.1%. These appropriations varied from 23% to 46.7%. It is interesting to note that one town spends exactly twice as

3. "Survey of Economies in Education", 1932, Massachusetts Department of Education.

much of its budget as another. Superintendency unions averaged the greatest percentage of their total budgets for school use. In 1931 they allotted 41.7% while in 1933 the allotment was 38% or a decrease of 3.7%. This group had the greatest spread in appropriations for the minimum was 19% and the maximum 60%. In other words one superintendency union spends three times as much of its money for education as another.

The average school budget of Massachusetts in 1933 comprises 32.3% of the total municipal budget. Cities average 5% less, towns appropriate about the same as the state average, while superintendency unions allot 6% more for their schools than the state average.

(Graph B indicates that 1931 was the peak budget year for most school systems and for this reason it is used for comparison.)

#### MAKERS OF SCHOOL BUDGETS

Although a majority of school budgets are made by school superintendents and school committees, several systems report that "Mayor", "Finance Committee", and "Others" perform this duty. As may be seen from item 4 in Table I these procedures have been customary except in two cities. Incidentally, these two cities are mill centers which have been affected most

seriously by the depression. The two cities are also at the bottom of the group with reference to the amount of school budget as compared to the total budget.

This distribution in the different groups that make school budgets shows that no one group is responsible for decreasing school budgets. In other words all these groups see the necessity for curtailments.

That only two cities, as mentioned before, have changed the persons responsible for making school budgets, indicates the firm foundation of our educational system in Massachusetts. It also shows the faith that the laymen have in our school administrators and, in the last analysis, in our educational system.

This distribution in the makers of school budgets also indicates that no one group of persons is responsible for the cutting of budgets. In other words it is not only the school board that is responsible for decreased budgets, but the superintendent, the finance committee, the mayor, and others have also shared in making or suggesting decreases.

#### COST OF EDUCATION PER PUPIL

How these decreased budgets have affected the cost of education per pupil is shown by items 5, 6, and 7 in Table I.

In 1933<sup>4</sup> the cost per pupil in cities was \$88.36, in towns \$82.00, and in superintendency unions \$98.51, averaging \$89.34. In 1923<sup>4</sup> the average was \$102.85. For the ten year period extending from 1925 to 1933, the average cost of education per pupil in Massachusetts has decreased 10%. Statistics on enrolment increases will be given under the heading of class sizes.

### PEAK BUDGETS

Along with these percents and costs, it might be well to know the years that peak budgets were in operation.

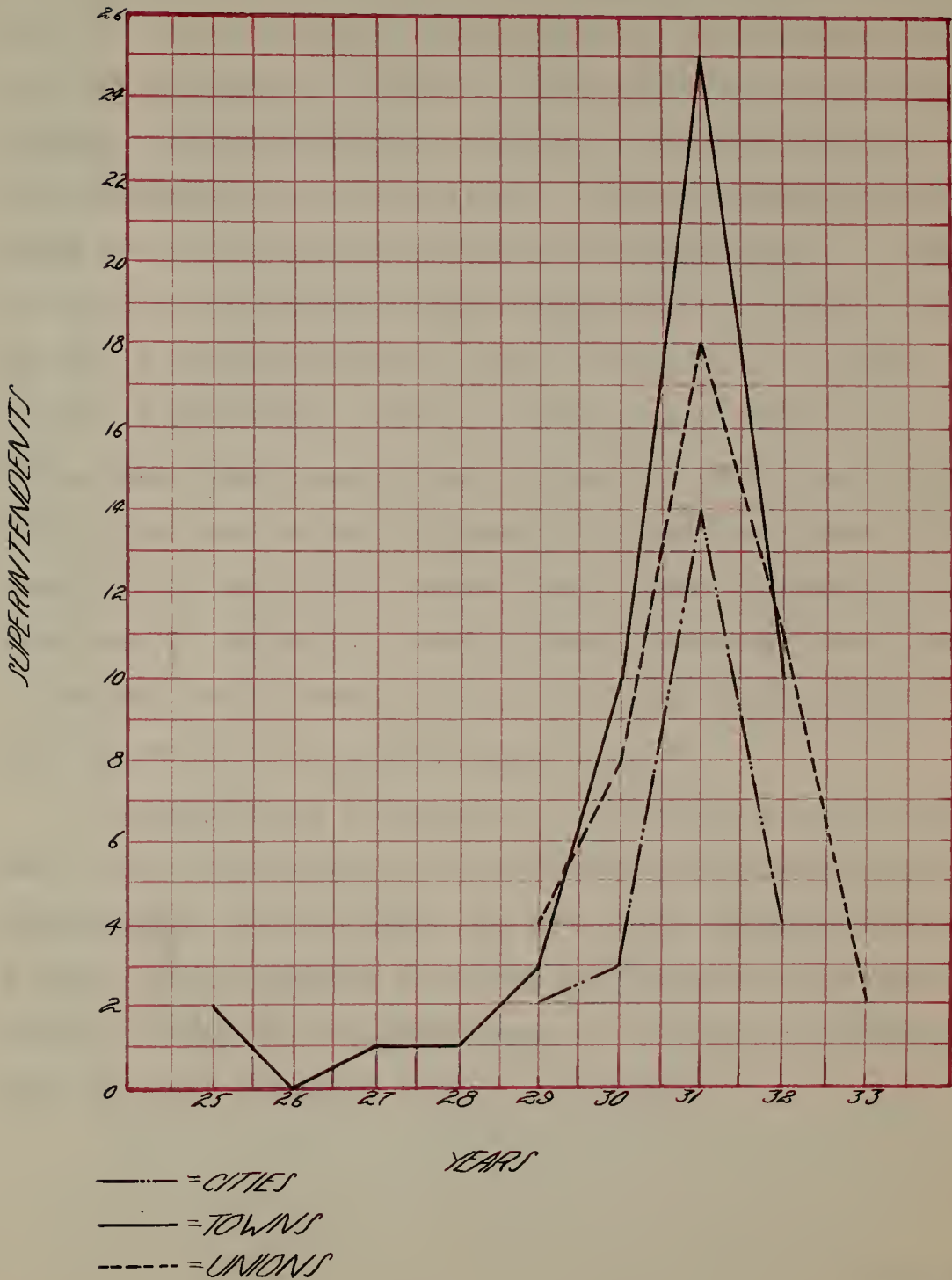
Graph B represents the years during which peak budgets were in operation in the schools of Massachusetts. 1931 stands out as the year during which most cities, towns, and superintendency unions had the greatest appropriations. It is taken for granted in this study that during this year the schools were offering and giving the best educational opportunities of their existence. And for this reason 1931 will be used for comparisons.

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4. "Annual Report", Massachusetts Department of Education, 1934.



GRAPH B - YEARS OF PEAK BUDGETS



It is interesting to note on this graph that the towns show the greatest spread of peak budgets. The first was in 1925 and the last was in 1932. Cities are well grouped, more than 60% having peak budgets in 1931 and no city reporting highest appropriations more than two years from this year. The superintendency unions offer a unique situation for their peaks are recent and two unions report peak budgets in 1933, the year of the survey. These results are not exactly unexpected. A probable reason is that towns were in excellent financial conditions before the boom days of 1929, 1930, and 1931, thus their peaks are not limited to those years. Cities, of course, were the most prosperous during these years which accounts for their peak budgets then. Superintendency unions, which may be classed as rural systems, apparently were slow in getting their educational systems progressing and have just caught up to so-called modern systems.

Summarizing the information on budgets, it may be said that school appropriations in Massachusetts have decreased approximately 5% from 1931, the peak year, to 1933. This is a large enough decrease to affect many phases of our educational system. The following pages of this study attempt to show the more important effects on schools.

## THE SCHOOL PERSONNEL

## THE SCHOOL PERSONNEL

Teachers' salaries amounted to 74.6%<sup>5</sup> of the total operating costs in the public schools of the United States in 1933. Naturally this has been an item for consideration when budgets were decreased. Any means of reducing the number of teachers, or increasing the size of classes so that new teachers will not need to be hired, assists in keeping educational costs within the decreased limits. It will be interesting to see to what extent Massachusetts has decreased its teaching staff in the face of a 12%<sup>6</sup> increase in pupil enrolment within the last ten years. Such a condition cannot help but be harmful to the pupils from the standpoint of educators who feel that character and social training cannot be taught through impersonal and standardized methods. Yet this is a matter for conjecture as some educators and many laymen believe in large classes. Undoubtedly this forcing of large classes onto teachers will be beneficial in some ways for inferior methods will have to be discarded and superior ones instituted but how can a teacher create the most helpful

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5. "Teachers' Salaries", Department of Research, Ohio State, T. C. Holy.
  6. "Annual Report", Massachusetts Department of Education, 1934.

personal contacts with a large group as well as she can with a small group?

Let us see how the teachers in Massachusetts have been affected by decreased budgets. Table II tabulates the returns on personnel.

TABLE II - PERSONNEL OF SCHOOLS

	Cities	Towns	Unions
1. Teachers dropped (number)	26	76	46
a. Thrown out of employment (others transferred to other departments)	16	50	33
2. Superintendents favoring stagger system	0	4	3
3. Married teachers eliminated	40	0	8
4. Average list of teachers waiting	200	60	60
5. Local preference in hiring teachers (towns)	all	43	27
6. Teachers' salaries reduced	20	52	39
7. Increments discontinued	13	29	33
8. Extra training - extra pay Practice recently discon- tinued	7 7	20 16	18 25
9. Other municipal employees received proportionate salary cut	21	52	38
10. Shortened school year	3	7	3
11. Past pupil load	31.5%	28.5%	30.3%
12. Present pupil load	34.3%	20.75%	31.6%

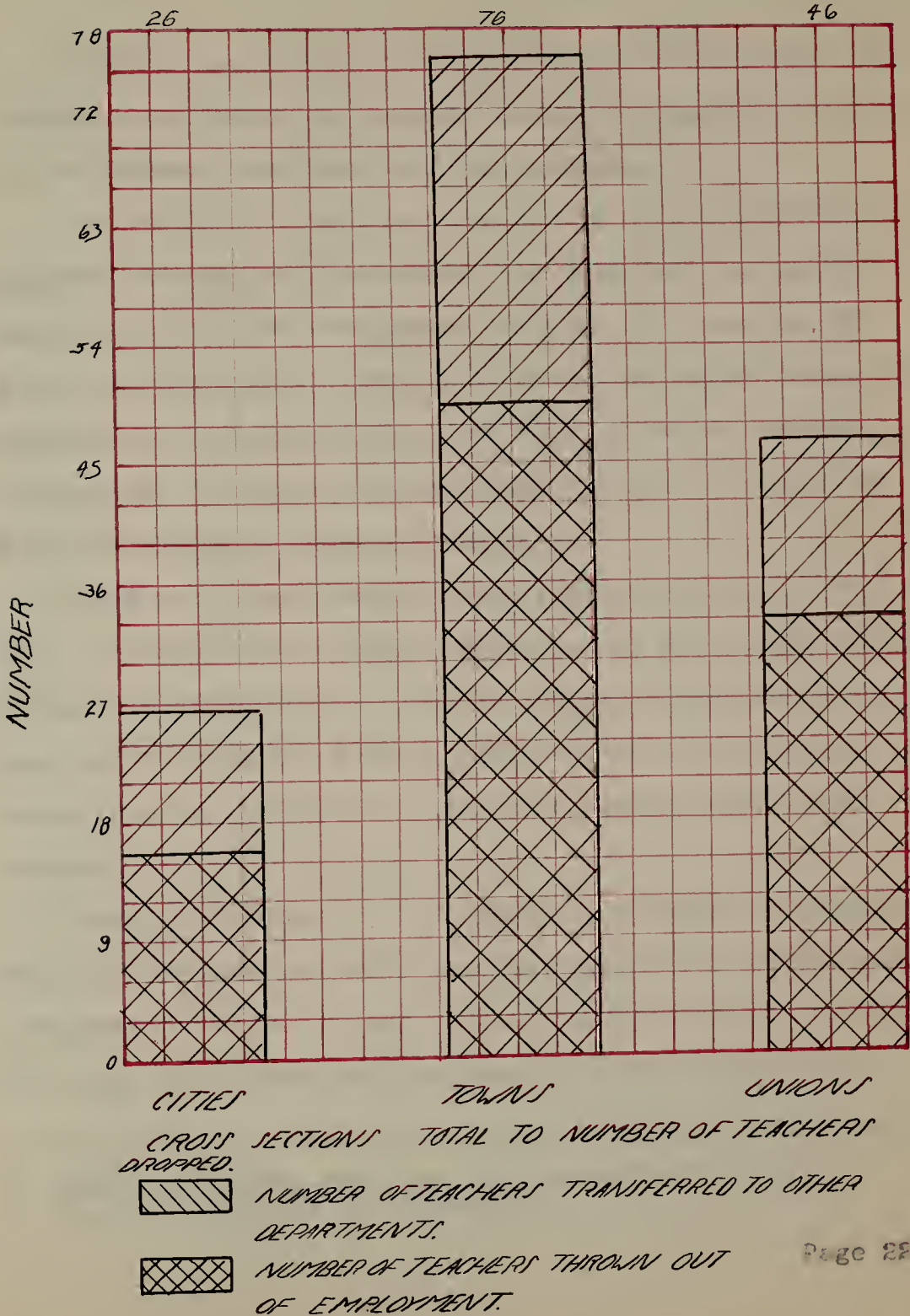
## ELIMINATION OF TEACHERS

Figures from Table II indicate that 143 teachers have been dropped in the state of Massachusetts. 76 or 50% of these teachers have been dropped by towns. Cities have dropped 26 teachers and superintendency unions, 46. Of these teachers, those who taught music, drawing, and physical education were the most frequent to be dropped. From this survey only seven of the 124 superintendents favor the stagger system of keeping teachers employed and of this 7, 3 have inaugurated it. These 7 were divided as follows: 4 in towns favoring but not adopting and 3 in superintendency unions, both favoring and adopting. Along with this elimination of teachers, the question of married women teachers arises and statistics in Massachusetts show that 48 married teachers have been eliminated.

60% of the single teachers who had been dropped because of the abolishment of their subjects have remained in the teaching profession by being transferred from the dropped subject to another department. The rest are without teaching positions.

Graph C shows the distribution of teachers whose subjects have been dropped and where they have been placed.

# GRAPH C - ELIMINATION OF TEACHERS



## TEACHER UNEMPLOYMENT

This study, although not concerned primarily with the teacher unemployment situation, is however closely related to it. Certain facts may well be included.

In the first place, how serious is this teacher unemployment situation? Statistics<sup>7</sup> indicate that the average waiting list of the unemployed teachers in cities is 200 with 1400 the highest number. In towns and superintendency unions, the average waiting list is 60 with 150 mentioned in 3 cases. The above figures show, without question, the great extent of teacher unemployment.

What action are school administrators taking to relieve this situation? The stagger system is not favored by superintendents except in the case of three, who are connected with superintendency unions, and these have adopted this method for the purpose of aiding the teacher unemployment problem.

Local preference in the hiring of teachers is used by all city systems, by 80% of the towns, and 50% of the superintendency unions. It may be said, in connection with this, that this is a good practice only when used judiciously. If

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7. "School Survey", 1933, Massachusetts State College, Amherst, Seminar in Education.



a local teacher is given preference over an "outside" teacher who has better qualifications, this method is a failure and is detrimental to the school pupils of that system. Fortunately superintendents are opposed to this practice but pressure from the taxpayers has forced them to adopt it.

Five reasons<sup>8</sup> have been given for the oversupply of teachers:

1. Reduction in school personnel due to decreased budgets.
2. A return to teaching of former teachers who have lost their business positions.
3. Rapid increase in number of college graduates who turn to teaching because of lack of opportunity in other fields.
4. No reduction in output of teacher training institutions.
5. Decrease in teacher turnover due to lack of opportunity in other lines.

Reports<sup>8</sup> from 90 teacher training institutions indicate that approximately 50% of the 1931 graduates have secured teaching positions.

What can be done about this situation is problematical. Reference has recently been made in Massachusetts to reason four in the above paragraph, concerning the decrease in the number of teacher training institutions of which we now have 11. An attempt was made to decrease this number of training schools for teachers. Fortunately no institution

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8. Bureau of Educational Research, Ohio State, 1931.

was eliminated. This perhaps would have relieved the oversupply of teachers but it would also have removed opportunities for boys and girls of Massachusetts to get an education. Undoubtedly it is discouraging to graduate from a Teachers' College and be without a position. Yet we all know that an educated person is able to enjoy a fuller and a richer life on account of his training. Such a person is of much greater benefit to his community and to society. After all, the ultimate aim of education is to produce good citizens.

It has been stated that requirements for teacher certification should be raised. This has actually been done in Massachusetts<sup>9</sup>. The two year elementary teacher training course has been abolished and all graduates of Teachers' Colleges must have three years of training. The previous three year course has been lengthened to a four year degree course. Whether this relieves the oversupply of teachers remains to be seen.

The above means of decreasing teacher unemployment have one glaring defect. A good teacher is not necessarily a holder of many degrees. If we limit opportunities for teacher training we also limit the supply of good teachers. Since education is the "foundation for progress, prosperity, and civilization", and since the one basic requirement for

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9. Teachers College Bulletin, 1934.

effective education is good teaching we must not limit any opportunities for training and securing good teachers.

#### REDUCTION OF TEACHERS' SALARIES

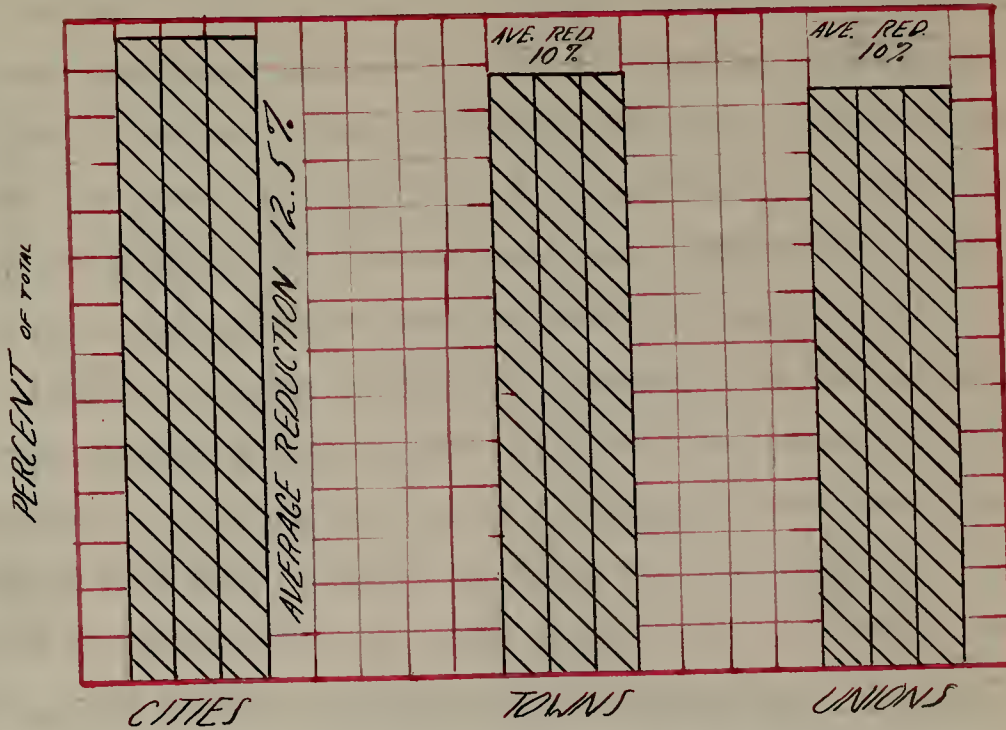
Since teachers' salaries consume three-quarters<sup>10</sup> of the school budget, Massachusetts, like other states, has used this item quite freely as a means of keeping budgets low. All but two of the cities making returns have reduced teachers' salaries. These reductions varied from 10% to 25% with an average of 12.5%. In towns, the reductions varied from 5% to 22%, reductions were made in 97% of the systems, and the average reduction was 10%. Superintendency unions reduced salaries in 90% of their systems at an average reduction of 10% varying from five to 33%. Thus we see that teachers' salaries have been reduced in practically all of the schools in Massachusetts, and all groups, cities, towns, and superintendency unions, have reduced salaries at about the same average rate although the spread is greater in superintendency unions than in the other two groups.

The graph on the following page gives this information in condensed form.

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10. "Superintendents' Report," National Education Association, 1934.

## GRAPH D - TEACHER SALARY REDUCTIONS



This salary reduction problem is an important matter in the educational field. Massachusetts has decreased its teachers' salaries 10.7%. With salaries, even during prosperous years, at a low scale in comparison to other fields with equal training, this decrease will force the more progressive, the better teacher into other fields. Education cannot afford to let such changes occur. The better teachers must be induced to stay in the teaching profession. At the same time the more desirable candidates for Teachers Colleges are discouraged into more attractive financial fields. If Massachusetts, or any state, expects to secure more progressive,

better teachers for its children, it must not reduce its teachers' salaries.

Not only must the present salary schedule be maintained but also deserving teachers should be rewarded financially for their efforts. In Massachusetts, 13 cities discontinued salary increases. 29 towns and 33 superintendency unions did likewise. Speaking in percentages, over 50% of the school systems in Massachusetts have discontinued salary increments.

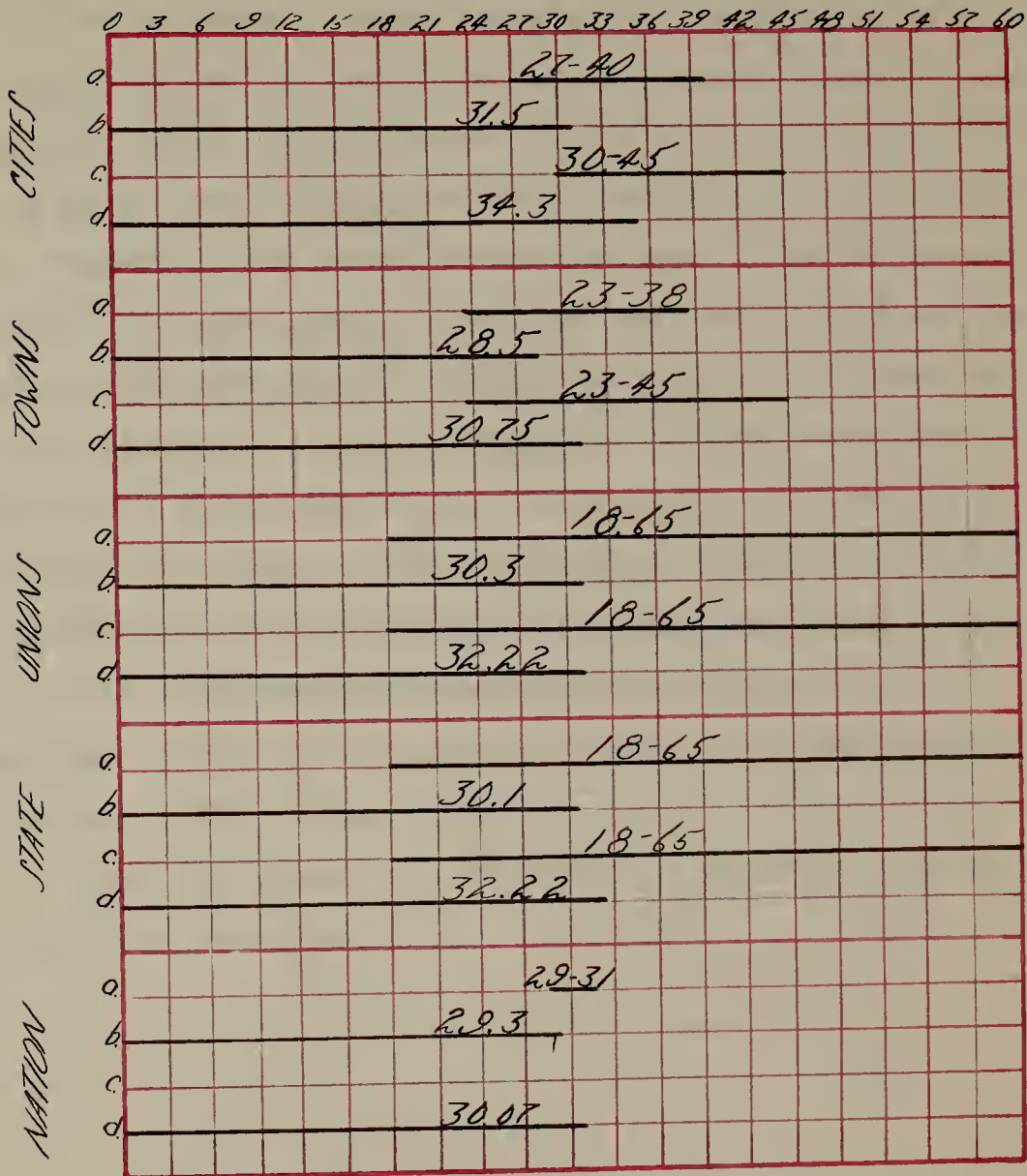
A matter closely related to increments is the rewarding of extra training with higher salaries. City school systems, according to returns from the questionnaire, rewarded extra training with more salaries in seven (7) instances and these have been discontinued in 1933. Twenty (20) towns have such rulings but sixteen (16) have discontinued. Only eighteen (18) superintendency unions followed the rewarding of extra training and all have discontinued this practice.

Incidentally, the questionnaire shows that other municipal employees have received proportionate salary decreases in all cases from cities, towns, and superintendency unions.

#### SIZE OF CLASSES

A means employed quite frequently by school systems to avoid hiring new teachers is the increasing of the size of classes. Table II shows that every system in Massachusetts

# GRAPH E - CLASS SIZE DISTRIBUTION



a - 10 YEAR RANGE  
 b - 10 YEAR AVERAGE  
 c - 1933 RANGE  
 d - 1933 AVERAGE

has used this means of school economy. Graph E shows the increase in class size in the state of Massachusetts.

For purposes of comparison, let us study averages in class sizes for the United States as a whole. Graph E states that the range for ten years<sup>11</sup> was 29 to 31. The average was 29.3 pupils per teacher. The 1933 average number of pupils per teacher in the United States was 30.07. The Massachusetts' ten year average is 30.1 as compared to 29.3 for the nation. The 1933 average is 32.22 as compared to 30.07 for the nation. Cities in Massachusetts, for ten years range from 27 to 40 and the average is 31.5. The 1933 average is 34.3 and the range from 30 to 45. Towns range from 23 to 38 for ten years and average 28.5. For 1933 they range from 23 to 45 and average 30.75. Superintendency unions have the greatest spread which is 18 to 65 with a ten year average of 30.1 and a 1933 average of 31.6.

Table III shows these figures in a composite form to facilitate comparison.

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11. "Major Trends in Education", National Education Association Bulletin, 1935.

TABLE III --- CLASS SIZE

Number of pupils per teacher

	Nation	Massachusetts			Union
		State	City	Town	
10 Year Range	29-31	18-65	27-40	23-38	18-65
10 Year Average	29.3	30.1	31.5	28.5	30.3
1933 Range	-----	18-65	30-45	25-45	18-65
1933 Average	30.07	32.22	34.3	30.75	31.6
Change (Number of pupils)	.77	2.12	2.8	2.25	1.3
Change (Percent)	3%	8%	8.5%	8.7%	8.3%

Comparing from the above table, the state of Massachusetts has a larger class size than the nation.

The averages for the different groups in Massachusetts do not vary too much from accepted educational standards but the 1933 ranges that indicate classes of 45 and 65 are too large to be approved by even the most radical educator.

#### SHORTENING OF SCHOOL TERM

Very few school systems in the state of Massachusetts



attempted to reduce school costs by shortening the school year. Table II gives three (3) cities or 13% of the total which are using this means to decrease expenses. Seven (7) towns and only three (3) superintendency unions employed this means to keep within the school budget.

Summarizing this section of the effect of decreased budgets on school personnel, we find that 148 teachers have been dropped, 40 married teachers eliminated from teaching, and that the teacher unemployment situation is serious with a minimum of 60 teachers on the waiting list. The great majority of school systems favor hiring local teachers. The reduction of teachers' salaries is quite universal in the municipalities of Massachusetts and the average for the state is 10.7%. Salary increments have been discontinued quite consistently and very few towns reward extra training with extra pay. Teachers are no exceptions in the reduction of their salaries for other municipal employees in all localities received equal decreases. The pupil load in Massachusetts is several percent higher than the nation's figures. The shortening of the school year as a means of keeping within the school appropriations was used only by a few systems, undoubtedly because there is a minimum "number of school days" law in Massachusetts. The decreased budgets for the schools of Massachusetts have affected the teachers in the above manner.

How school activities have been affected in the state of Massachusetts will be tabulated and discussed in the next section.

SCHOOL CURRICULA

## SCHOOL CURRICULA

After selecting good teachers, the next step in making a good school system is to set up a curriculum that will interest the pupils and yet give them useful and needed knowledge. They must be taught social mindedness. The United States Office of Education states that in 1890, less than fifty years ago, the high schools of our country taught only nine subjects. Recently some of the larger schools offer in their programs as many as two hundred and fifty (250) different subjects<sup>12</sup>. Some of these subjects were added to the school programs because new bodies of knowledge have been discovered in recent years. Every new development has added to the school curriculum.

It was a comparatively simple matter before 1929 to add a new subject to the school curriculum for money was plentiful. But now that there is a scarcity of funds, taxpayers are clamoring for the withdrawal of, to them, the "fads and frills" from school programs. As evidenced by the subjects that have been dropped, little consideration is given to the value of a subject before it is eliminated.

How does Massachusetts rate on this factor? The following table gives the subject and the number of places in which it has been dropped.

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12. "Education", C. H. Judd, Columbia, 1955.

TABLE IV - SUBJECTS DROPPED

	City	Town	Union	Total
Music	4	13	11	28
Drawing	4	11	14	29
Physical Education	4	18	6	28
Home Economics	3	12	4	19
Social Science	0	0	2	2
Kindergarten	3	6	0	9
Manual Training	3	6	6	15
Testing	2	0	0	2
German	0	0	1	1
Mathematics	0	1	0	1
Opportunity Class	0	1	0	1
Totals	23	68	44	135

Drawing has been dropped the most number of times with 29 of the systems reporting its discontinuance. Only 4 city systems reported it eliminated while towns and superintendency unions divide the remaining eliminations with 11 and 14 respectively. Music and physical education are close behind in the number of instances they have been dropped, each with 28. Again cities are not great offenders as they dropped these subjects in only four (4) instances each. Towns and superintendency

unions reported 13 and 11 for music and 18 and 6 for physical education respectively. The rest of the subjects range from 19 eliminations for home economies, and 15 for manual training, to one elimination each for opportunity class, mathematics and german. Totaling the eliminations, we find that 135 classes have been eliminated in schools of Massachusetts.

Our schools in Massachusetts are harboring a large group of boys and girls who, because of adverse conditions, are denied employment and go to school because they can find recreation and social contacts there that they could not enjoy elsewhere. They did not come to school to learn. It would be a waste of time, effort, and money to teach these boys and girls the conventional subjects. They must be given such subjects as manual arts and home economics. Yet, here in Massachusetts, these subjects have been eliminated from 56 school systems. The cost may seem large at present but the public schools are the greatest enterprise of civilization and a small saving at present may do unlimited harm in the end.

The health of our students should be of the greatest importance to us. Of what use is our knowledge if we have not the physical ability to put this knowledge to practical use. It is an accepted fact that if the young body is taken care of and developed properly, it is less susceptible to ills in later life. Physical education in schools attempts to perform this good deed of caring for and developing the bodies of our

pupils. Yet 28 school systems have eliminated this activity from their programs.

The majority of the subjects dropped are those that have been added since the formulation of the seven cardinal principles in education and these subjects add to the objectives set forth by these cardinal principles.

There is no doubt that schools have to retrench during this depression but we must do it wisely. The public, as well as the educators, must weigh both the advantages and disadvantages of any subject or activity before it is finally discarded or retained.

SUPPLIES AND EQUIPMENT

## SUPPLIES AND EQUIPMENT

Supplies and equipment consume a minor part of the total school budget, yet their importance should not be judged by this factor. Lack of supplies or even a shortage of them is a serious deterrent to effective teaching. With the large pupil loads that the classroom teacher has, it is necessary that materials and equipment be plentiful if not the best. The majority of high schools at present have only about one-half<sup>13</sup> enough textbooks and most of these are badly scarred from much hard usage. Certainly if we want our schools to train children more effectively, we must, along with good teachers and well planned curricula, give our schools enough equipment for each pupil.

Massachusetts has decreased the costs of supplies and equipment in many of its school systems.

The cities in this study cut book costs in 55% of their school systems. 75% of the cities decreased costs of other supplies and 70% of the cities diminished the amount of supplies. Towns and superintendency unions averaged about the same on these items.

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13. "The Classroom Teacher", National Education Association, Journal, Page 265, December 1933.



Table V shows the extent of supply curtailment.

TABLE V - EQUIPMENT AND SUPPLIES

	Cities	Towns	Unions
1. Decreased book costs	13	29	41
2. Decrease in costs of other supplies	17	50	37
3. Quantity of supplies cut	16	42	27

#### FEDERAL AID

A new situation in public education is the using of federal funds. Several of the returned questionnaires added the information that this means was being used to assist in keeping school plants in repair. Federal Emergency Relief Administration money was also used in certain localities to keep nursery schools in operation. One city is planning to build a large Junior High School with Federal Works Appropriations.

Whether this is a temporary or a permanent condition remains to be seen.

SUMMARY

## SUMMARY

Many states and other educational organizations in the country have made studies concerning the effect of the financial crisis on our schools. Most of these studies are entirely statistical with little interpretation. All of them show that the public schools have been affected quite seriously, through staff and curriculum reductions, by these curtailed appropriations.

The data for this study was collected from questionnaires sent out to the superintendents of the state of Massachusetts. The questionnaire will be found in the appendix.

This study on the effect of decreased budgets upon public schools in Massachusetts shows:

1. Practically every school system in the state has decreased its school budget approximately 4% from 1931 to 1933. The persons who make up the budgets vary from the superintendent to the mayor. The cost of education per pupil has decreased 10% from a ten year average. The peak of school budgets was reached in 1931.

2. The total teaching staff of the state has been reduced greatly causing a serious teacher unemployment problem. The teaching load is higher than the United States average.

Salaries have been reduced and increments discontinued. Few

schools have economized by shortening the school terms.

3. The latest subjects added have been the first to be dropped.

4. Appropriations for equipment and supplies have been cut causing a serious handicap to efficient teaching.

5. Federal aid is beginning to be used in some systems as a supplementary educational appropriation.

APPENDIX

The following questionnaire was sent to the 205 superintendents in Massachusetts.

## SCHOOL CONDITIONS IN MASSACHUSETTS

### GENERAL BUDGET QUESTIONS:

1. Your school budget comprises what percentage of the total municipal budget?
2. Who makes your school budget?      School Committee?  
   Superintendent?  
   And others?
3. Is this the procedure that has been customary?  
    Has it recently been changed?
4. Has your school budget been cut in the last three years?
5. What is the amount of your peak budget?  
    What year?
6. Are there any private endowment funds?  
    In what department of your budget do they appear?
7. Was it necessary to increase the nineteen hundred and thirty-two budget by transfers due to drastic cuts in the budget?  
    Amount of increase?

### PERSONNEL:

8. How many Vice-Principals or Deans have you in  
    Junior High?                      Senior High?
9. Has the staff been reduced recently in the following subjects?

9. Continued.

Please check reasons under the following heads:

economic      program      efficiency  
                 change

Music  
Drawing  
Physical Education  
Manual Training  
Home Economics  
Kindergartens  
Psychological and Testing  
Departments  
Elimination of teachers  
of required subjects  
English  
Mathematics  
Social Studies  
Elimination of Clerks  
Supervisors

10. Have these teachers been thrown completely out of employment?  
Have you inaugurated a stagger system?  
Do you favor the latter system?  
Have these teachers been transferred to other departments?
11. How many married teachers have you eliminated?  
How many new teachers were added in 1931?    32?    33?
12. How many on your list awaiting employment?
13. Do you give local preference?
14. The average number of pupils per teacher?  
Present number?      Former number?
15. Have your teachers' salaries been reduced?  
Has this been accomplished by straight cut?  
Has this been accomplished by contribution?  
Was the reduction accomplished by shortening the school year with the same weekly wage?  
Number of days taken off?  
Have regular yearly increments been discontinued?

15. Continued.  
Do you pay on a weekly - monthly - bi-monthly - basis?  
Did other municipal employees receive a proportionate cut?
16. Do you reward extra professional training with salary increases?  
Have you recently discontinued this plan?
17. How much experience and training required to teach in your Elementary School? Experience? Training?  
Junior High? Experience? Training?  
Senior High? Experience? Training?
18. What was your per capita educational cost in 1929?  
1930? 1931? 1932?
19. Do you find publishers have decreased the cost of books? Other supplies?
20. Have miscellaneous costs been cut?
21. Have your supplies been cut? In quantity? In cost?
22. Have your janitors' supplies been cut? In quantity? In cost?

**BUILDING AND REPAIRS:**

23. Have you erected any new school buildings in the last three years? Kinds? Costs?
24. Are you in need of new school buildings in your system? Elementary? Junior High? Senior High? Costs?
25. Has their construction been delayed because of present municipal financial conditions?
26. How long have proposed buildings been under consideration?
27. Pending construction, how are you meeting the situation? Double sessions? Serious overcrowding? Curtailed curricula? Other methods?
28. Have appropriations for school repairs recently been drastically cut?



29. Is it necessary to let needed repairs go for the present with perhaps larger repair bills in the future?
30. Has there been a decided increase in alteration and repair costs due to inability to secure new buildings at this time?

RESTRICTED CURRICULA:

31. Please check the following items that have recently been eliminated or curtailed in your school system in an effort to reduce costs.

Eliminated      Curtailed

Kindergartens  
 Manual Training  
 Physical Training  
 Household Arts  
 Evening Schools  
 Americanization  
 Music  
 Drawing  
 Vocational Education  
 Special Classes  
 All others  
 None

32. Have you recently closed your local high school?  
 Junior high school?
33. Would the proposed reduction of State aid for transportation of pupils deprive students in your system of high school opportunities?
34. How would you meet such a situation if it should arise?
35. What is the amount of your State aid for this item at present?

## NEW DEVELOPMENTS AS SENT IN BY SUPERINTENDENTS

A city in Massachusetts reports:

The most significant developments in our school system during the past year were:

(1). A restudy of practices pertaining to practical arts curriculums and a consequent increase in the teacher load without affecting the efficiency of the classes.

(2). A restudy of extra-curriculum activities and auditorium practices in the junior high schools. These have been changed with the result that the pupil activities were taken out of the regular schedule and scheduled during the afternoon outside of school hours. Fifty percent increase in pupil membership in all the activities resulted. The auditorium periods were scheduled once every day for two hundred and fifty to three hundred and fifty pupils which resulted in freeing study halls for classroom purposes and freeing teachers from study hall duty to teaching assignments. This arrangement gave more flexibility to schedule making. A regular auditorium program has been instituted and has proved a great help to the administration of the junior high schools.

Courses of study have been revised in keeping with modern trends. A course in hygiene has been inaugurated in the junior and senior high schools as a part of the physical education program.

During the past two years forty teaching positions were absorbed. At the same time there has been an additional enrolment of twelve hundred pupils.

## Other cities report:

Our teachers did outstanding work in cooperating with the home by helping to meet the needs of the children so that their attendance in school would not be hampered. We carried on a series of meetings in connection with the revision of our Course of Study. This work has been completed.

The opening of three Federal Emergency Relief Administration educational centers, which provided nursery school training for 120 children in six units, gave employment to six teachers, and provided instruction to seventy parents, is the most significant supplement to our regular program. The prospect for a new Junior High School for 800 pupils as a Public Works Administration project is another significant development. The complete rehabilitation of school plants, by structural changes, replacements and repairs to heating and ventilating systems, the grading and fencing of school grounds, and painting of exterior and interior of school buildings as Civic Works Administration projects, has been the most significant development of the year.

Fourteen additional senior high school classrooms are being provided, largely by the CWA, to relieve a badly overcrowding high school situation. Advantage is being taken of the drop which has occurred in elementary school numbers and the reduction which has been made in personnel to close several of the more ancient and very unsatisfactory elementary school buildings in the city.

The outstanding feature of one school department during the past two years is that no official was dismissed as an economy measure. As members of the department retire, their positions are left vacant in certain instances. The work is divided among other members of the staff, thereby making a somewhat heavier teaching load.

Other cities report - Continued:

The dental clinic was discontinued March 1933. Americanization, Evening Academic Schools, Evening Industrial for Men, Evening Home Making for Women, and Home Making School for Girls were discontinued during 1933.

We have reduced personnel by the elimination of assistant supervisor of music, supervisors of elementary physical training, supervisors of sewing in the grades, special teachers of French in the junior high schools, a 10% reduction in books and supplies was made in the 1933 budget. New developments also include adoption of a longer school day in the high school, from 5½ hours to 5¾ hours, beginning September 1, 1934. A committee is also at work upon a new curriculum for the high school.

Teaching staff has been reduced by consolidation. Positions have been filled as fast as resignations have been accepted.

No teachers have been dismissed, but classes have been consolidated to as great an extent as possible, appointment of regular teachers has been somewhat curtailed, and substitutes have been employed in regular teaching positions at salaries less than would have been paid had they been regularly appointed to the positions which they have occupied.

The outstanding development during 1933 was an increase in the size of classes due to the reduction in the number of teachers, which of course was a development downward rather than upward.

Reports on economies from cities:

Cut supplies 30% to 50%.  
Cut activities of playground department by 30%.  
Cut activities of the department of extended use  
of public schools by 20%.  
Cut repairs and alterations 25%.

Reduced personnel about 20%, September, 1931.  
Reduction in all departments, supervisory,  
clerical, attendance, janitorial, high school,  
junior high, elementary, special classes, and  
continuation.  
Complete suspension of kindergartens, American-  
ization and evening schools.

Reduce books and supplies.  
Reduce repairs, replacement and upkeep.  
Reduce transportation of supervisory officers.

Elimination of summer schools.  
Possible elimination of evening trade school and  
curtailment of evening elementary and high  
schools by shortening length of term to limit  
required by state law.  
A reduction in the amount of money spent for  
supplies and textbooks.

Some in maintenance, such as repairs.  
Discontinuance of instruction for band and orchestra.  
Smaller appropriations for evening school and  
Americanization.  
Close to the maximum number of pupils for each ele-  
mentary teacher.  
Fewer non-duty periods for high school teachers.  
Each household arts and manual training teacher a  
home-room teacher.

Reports on economies from cities - continued:

From 1931 - 32 drastic cuts in books and supplies.  
Summer schools abandoned.

Reduction in personnel through consolidation of  
classes; closing of small buildings; cutting  
down on number of service employees.  
Reduced expenditures for textbooks, educational  
and janitorial supplies.

There has been a reduction of \$54,000 in the budget  
in material things; no courses have been elimi-  
nated.

Reduced textbooks and supply budget by \$12,000.  
Reduce general expense by \$6,200.  
Increase teaching load.  
Absorb positions where vacancies occur.

Increase pupil-teacher ratio.  
Eliminate the employment of substitute teachers.  
Reduce evening schools in number but not in content.

Increase class size instead of taking on new teachers.  
Possibly eliminate the continuation school and some  
adult education activities.

Reduce repairs to buildings and grounds.  
Restrict evening school program.

Cut expenditures for books and supplies in half.  
Watch for all possible economies.

Elimination of sub-primary classes.

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