

1946

# A salary schedule for Lawrence, Mass

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SERVICE PAPER

A SALARY SCHEDULE FOR LAWRENCE, MASS.

Submitted by

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(B.P.E., Ithaca College, 1929)

1946

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Bill of Joe Jordan

School at ...

June 12, 1946

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## CHAPTER I

### THE PROBLEM AND METHODS OF SOLVING IT

The problem.-- It is the main purpose of this master's paper to make suggestions for the improvement of the salary schedule in Lawrence, Massachusetts.

To achieve this purpose, it has seemed necessary, first to set forth as clearly as possible the existing salary schedule in the city under discussion. Next, it has seemed necessary to analyze the existing educational literature to derive a set of criteria or standards by which to judge this salary schedule.

Finally, it has seemed necessary, to apply these criteria to the existing situation in Lawrence, as a means of deriving recommendations for improvement.

The present salary situation in Lawrence.-- The salaries of school teachers in Lawrence are determined by a position-type schedule. In this type of salary schedule, the basic groups are established in terms of school positions, such as elementary school teacher, secondary school teacher. The elementary school teacher receives the elementary school salary, whether he has a master's degree or is a graduate of a two year normal school. This is the traditional type of schedule in which salaries are lowest in the elementary school, and highest in the secondary school. This type of schedule is an inheritance from American school tradition. The early high school typified

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the aristocratic tradition, while the early elementary schools were more typical of the common people. Teachers for the two types of schools were selected from different sources. Secondary school teachers were recruited from colleges and, in most cases, had four years preparation beyond high school, and a bachelor's degree. Elementary school teachers were recruited from normal schools, and in most cases, this consisted of two years preparation beyond high school. These two types of educational practice have come together to form the public school system, as we know it to-day.

The present salary schedule in Lawrence was quite adequate as long as the curriculum consisted, for the most part, of academic subjects. However, when the course of study began to change, teachers with a different type of training were necessary. In some cases professionally trained teachers were not available, and the school committee found it necessary to elect teachers having a limited amount of training. Naturally the general public, who for the most part thought of education in terms of academic subjects, began to consider the new departments as fads, and immediately opposed them. Because of this opposition, the school committee began to grade the incumbent rather than the position. This plan worked out quite well in the beginning, but as time passed, new teachers were appointed to these new departments and the degree of teacher preparation began to vary. It was at this point that the position-type salary schedule began to fail. Teachers' salaries were still determined by placement in the school system with complete disregard for the teachers' preparation. As a result, teachers began to form departmental groups and this in turn led to individual bargaining by the

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various units. This only helped to complicate matters, and in due time the morale of the entire school department was lowered considerably.

Under the existing salary schedule, the minimum salaries of teachers range from fifteen hundred and fifty dollars, to eighteen hundred dollars, and teachers maximum salaries range from two thousand dollars, to three thousand and one hundred dollars (Table I).

Table I. Minimum and Maximum Salaries of all Full Time Teachers in the Lawrence School Department.

Department	Men		Women	
	Minimum	Maximum	Minimum	Maximum
<u>Elementary:</u>				
Academic	---	---	\$1,550	\$2,000
Physical Education	\$1,800	\$2,400	\$1,800	\$2,400
Sewing	---	---	\$1,550	\$2,000
Cooking	---	---	\$1,550	\$2,100
Manual Arts	\$1,800	\$2,400	---	---
Music	---	---	\$1,800	\$2,200
Art	---	---	\$1,800	\$2,200
<u>Secondary:</u>				
Academic	\$1,800	\$3,100	\$1,800	\$2,595
Physical Education	\$1,800	\$2,400	\$1,800	\$2,400
Home Economics	---	---	\$1,800	\$2,300
Domestic Science	---	---	\$1,800	\$2,500
Manual Arts	\$1,800	\$2,700	---	---
Music	\$1,800	\$3,100	---	---
Art	---	---	\$1,800	\$2,595
Median salaries	\$1,800	\$2,683	\$1,732	\$2,299

Teachers advance from minimum salaries to maximum salaries by automatic increments, awarded annually. The number of these increments vary, according to departments, and range from four to eleven (Table 2).





Table 2. Number of Increments Leading from Minimum to Maximum Salary for Teachers in the Lawrence School Department.

Department	Elementary		Secondary	
	Men	Women	Men	Women
Academic	--	9	7	4
Physical Education	6	6	6	6
Sewing	--	9	--	--
Cooking	--	11	--	--
Domestic Science	--	--	--	7
Home Economics	--	--	--	5
Manual Arts	6	--	9	--
Music	--	4	7	--
Art	--	4	--	4
Median number of increments	6	7	7	5

Although the minimum and maximum salaries, and the number of increments vary, the teachers degree of preparation is not taken into consideration in determining this action (Table 3).

Table 3. Levels of Training of all Full Time Professional Employees in the Lawrence School Department.

Department	Elementary				Secondary			
	Less than 3yrs.	3yrs.	Bachelor's degree	Master's degree	Less than 3yrs.	3yrs.	Bachelor's degree	Master's degree
Academic	212	5	5	4	0	2	76	15
Phys. Educ.	5	3	3	0	4	0	2	0
Sewing	8	0	0	0	--	--	--	--
Cooking	4	1	1	0	--	--	--	--
Domestic Science	--	--	--	--	2	0	0	0
Home Economics	--	--	--	--	2	1	1	0
Manual Arts	6	1	0	0	5	2	3	0
Music	0	0	2	0	0	1	1	0
Art	0	1	0	0	0	2	1	0
Total	235	11	11	4	13	8	84	15

Date	Description	Debit	Credit	Balance

The above account is correct for the year 1921. The balance carried forward to the account for 1922 is \$100.00. This balance is correct and should be carried forward to the account for 1922.

Date	Description	Debit	Credit	Debit	Credit	Balance

Under the existing schedule, the salaries of elementary principals, grammar masters, and others with added responsibility are on a more equitable basis than the teachers' salaries, when their degree of preparation is considered (Table 4).

Table 4. Levels of Training of all Elementary Principals, Grammar Masters, Sub-Masters, Department Heads and Supervisors in the Lawrence School Department. a/

Position	Number	Less than 3yrs.	3yrs.	Bachelor's degree	Master's degree
Elementary Principals	13	13W	--	--	--
Grammar Masters	7	--	--	3M	4M
Sub-Masters (High School)	3	--	--	2M	1W
Supervisors	8	3W 1M	2W	2M	--
Department Heads (High School)	9	--	--	1W 1M	3W 4M
Total	40	17W	2W	8M 1W	8M 4W

a/ M and W, designates men and women.

All elementary principals were formerly teachers of academic subjects in the elementary schools, and have supervision of small schools employing from four to ten teachers. The grammar masters, all men, were formerly teachers in the secondary school and have supervision of larger schools employing from twelve to twenty-one teachers. All sub-masters and department heads were secondary school teachers before they obtained their present positions. All supervisors were formerly teachers in the same departments over which they now have supervision.

The minimum and maximum salaries of all groups listed in Table 4

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
5408 SOUTH DICKENS STREET  
CHICAGO, ILLINOIS 60637

REPORT OF THE COMMITTEE ON THE STUDY OF THE  
RESEARCH AND TEACHING OF CHEMISTRY  
IN THE UNITED STATES

1970

The Committee on the Study of the Research and Teaching of Chemistry in the United States was organized in 1966 by the American Chemical Society, the American Chemical Education Society, and the American Institute of Chemical Education. Its members are listed on page 1.

The committee's report is divided into two main parts: one dealing with the research in chemistry and the other with the teaching of chemistry. The first part, "Research in Chemistry," is divided into five sections: (1) General Considerations, (2) Research in Chemistry, (3) Research in Chemical Education, (4) Research in the History of Chemistry, and (5) Research in the Philosophy of Chemistry. The second part, "Teaching of Chemistry," is divided into three sections: (1) General Considerations, (2) Research in the Teaching of Chemistry, and (3) Research in the Teaching of Chemical Education.

THE AMERICAN CHEMICAL SOCIETY  
11 DUKE STREET, WASHINGTON, D. C. 20036

are as follows (Table 5).

Table 5. Minimum and Maximum Salaries of all Elementary Principals, Grammar Masters, High School Sub-Masters and Department Heads, and Supervisors in the Lawrence School Department.

Position	Men		Women	
	Minimum	Maximum	Minimum	Maximum
Elementary Principals	---	---	\$2,100	\$2,280 *
Grammar Masters	\$3,200	\$3,900	---	---
Teaching Supervisors	\$2,500	\$3,100	\$2,200	\$2,500
Supervisors	\$3,200	\$3,700	\$2,695	\$3,300
Sub-Masters (High School)	\$3,200	\$3,900	\$2,695	\$3,300
Department Heads (High School)	\$3,200	\$3,600	\$2,695	\$3,100
Median Salaries	\$3,060	\$3,640	\$2,477	\$2,896

\* Salary differentials of four hundred dollars each have been given to two elementary principals and one grammar master because of added responsibility.

In view of the facts presented in this chapter it is evident that the various school boards have tried to set salaries equitably. However since the degree of preparation varied among teachers, and since the salary schedule did not recognize preparation, it was impossible to determine the salaries of teachers equitably.

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## CHAPTER II

### AN ANALYSIS OF THE EDUCATIONAL LITERATURE TO DERIVE A SET OF CRITERIA OR STANDARDS BY WHICH TO JUDGE THE PRESENT SALARY SCHEDULE.

The National Education Association says: <sup>1/</sup>

"The advantages of paying teachers according to a systematized plan are numerous. It is now rather generally conceded among educators that salary scheduling is essential to budgetary planning; that an individual pay basis is highly unreliable since a teachers' real worth cannot be measured objectively; that individual bargaining is unfair to teachers because, under this arrangement, the best salary may go to the teacher who is a shrewd salesman rather than to one who possesses superior teaching qualifications; and that the morale of both teachers and board members is enhanced by a definite plan of salary payments. The establishment of sound wage policies, then, is of paramount importance to the profession as well as to the public.

"The problem of salary scheduling is a highly complicated one. It cannot be solved merely by the use of a scientific formula, nor can it be resolved by the employment of technics commonly used by business firms. Education is unlike business enterprise in many respects. Business is conducted by private enterprisers on a competitive basis; schools are operated by the community and state as a virtual monopoly. Wages for industrial workers come from the sale of a finished product; teacher's salaries come from tax revenues. The value of the educational product cannot be measured accurately nor can the teachers unique contribution to the development of children be separated from those of the home, the church, and other social agencies. While the experience of commercial enterprises is sometimes enlightening, the difference which exists in motive, in organization, and in operation between business and education are so pronounced that forces which rule unchallenged in the former field may be far less potent or even negligible in the latter."

All available educational literature recommends the single-salary type schedule. In this type of schedule teachers are paid according to

<sup>1/</sup>The National Education Association, Committee on Salaries, Problems and Principles in the Scheduling of Teacher's Salaries. The Association, Washington, D.C. 1942, p. 36.



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their degree of preparation and experience, regardless of sex or grade taught and there are provisions for those with added responsibility.

Again quoting from The National Education Association:<sup>1/</sup>

"The committee on salaries of The National Education Association urged the desirability of paying teachers according to a systematized schedule. It recognized that the problem of salary scheduling is a highly complex one that cannot be solved by a scientific formula. On the basis of research and experience of recent decades the committee drafted the following principles:

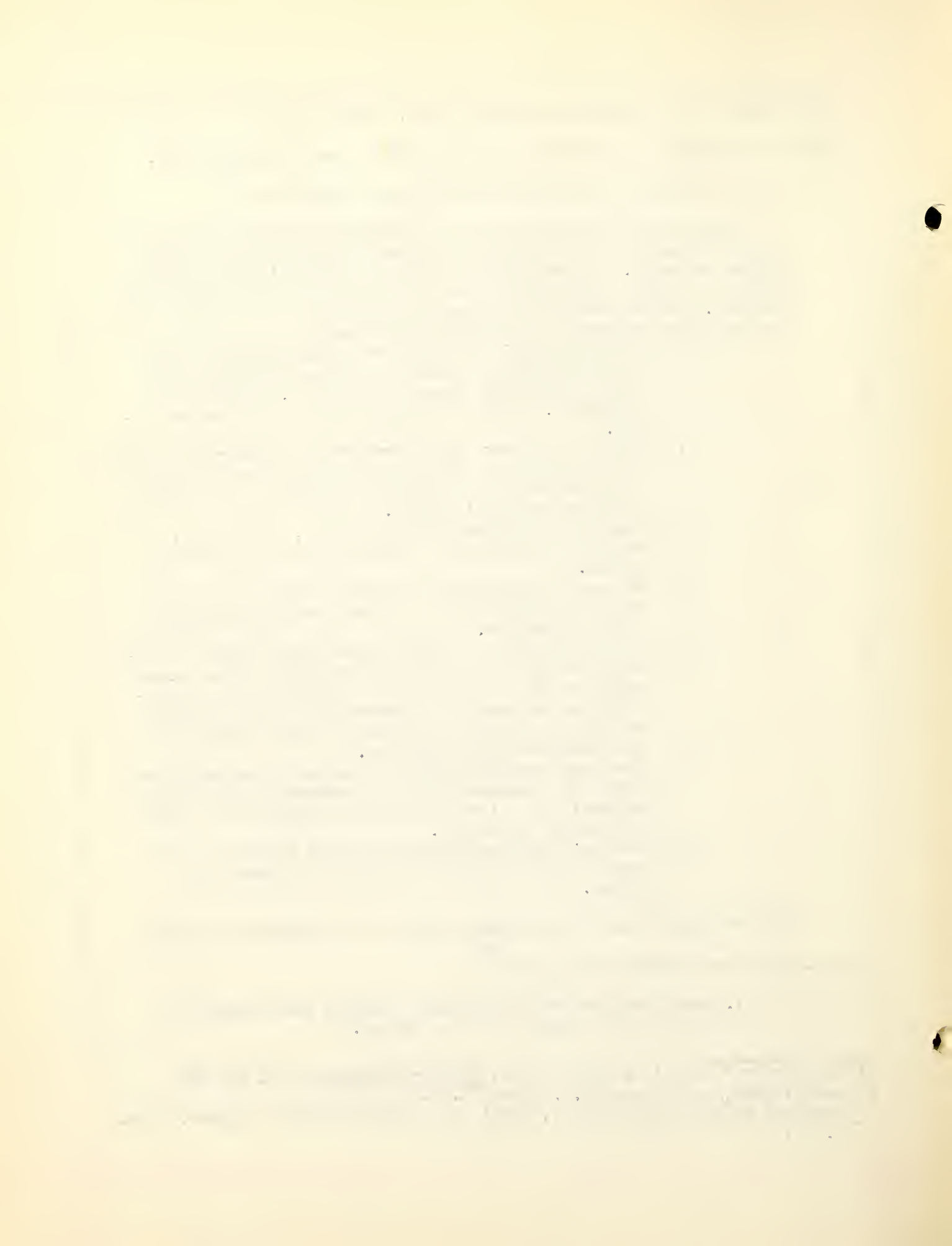
- (a) The construction of teacher's salary schedules and the formulation of salary policies should be undertaken jointly by classroom teachers, school administrators, school board members, and interested laymen.
- (b) The basic salary classification of teachers in public school systems should be determined by professional and academic qualifications regardless of the grade level of the pupil taught.
- (c) Teachers of equivalent preparation, experience, and teaching load should receive equal pay regardless of sex.
- (d) The use of so called efficiency ratings as a basis of salary awards is impractical and inadvisable in public education.
- (e) The relationship of professional and academic qualifications to the location of teachers on the salary scale should be clearly stated in the rules and regulations governing the operation of the schedule and regular appraisal should be made of the individual teachers qualifications.
- (f) Provision should be made in the salary schedule for definitely announced salary increases to be awarded regularly at fixed intervals of time until a maximum salary is reached.
- (g) Teacher's salaries should be based in part on the cost of maintaining an appropriate standard of living."

The American School Board Journal suggests the following criteria as a basis for scheduling salaries:<sup>2/</sup>

- "1. The salary schedule should not decrease any salaries of teachers now employed in the system.

<sup>1/</sup>The National Education Association, Research Bulletin, No. 20, The Association, Washington, D.C. 1942, p. 3.

<sup>2/</sup>American School Board Journal, "Basis of Salary Schedule," August, 1944, p. 34.

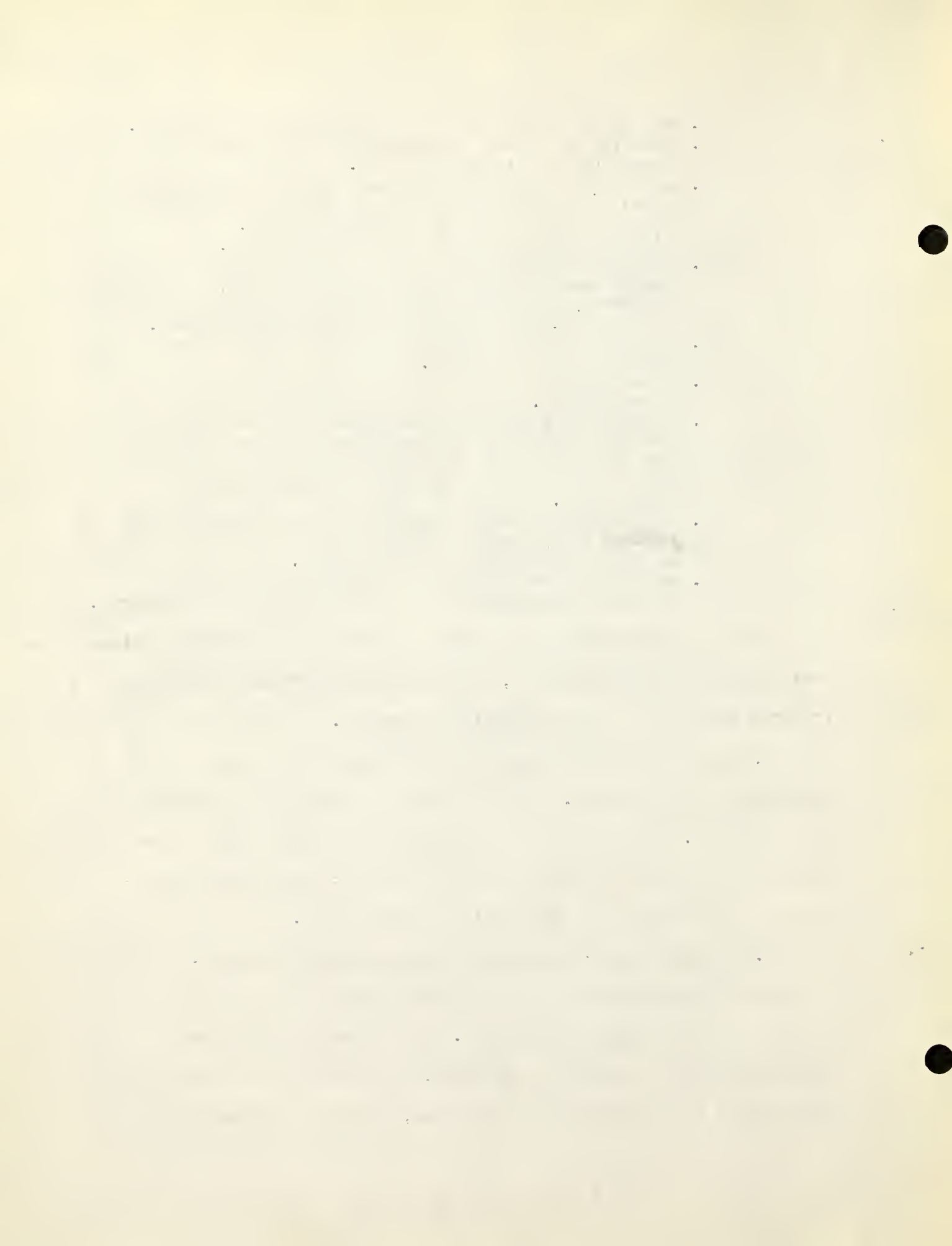


- "2. The schedule should include all professional employees.
3. There should be no discrimination in the salary schedule because of sex or marital status.
4. The schedule should classify salaries according to the amount of preparation attained by each teacher and not according to placement in the school system. Equal salaries for equal preparation and experience.
5. The minimum salary should be sufficiently large to attract capable young men and women to the profession, to give an opportunity for saving and some repayment on the investment in education, and to permit professional improvement.
6. The maximum salary should be high enough to justify looking upon teaching as a career.
7. There should be extra increments for jobs requiring special responsibility.
8. The adjustment of the old schedule to the new should be made by annual increments added to the salary paid at the time of the adoption of the schedule until the maximum for the level of training achieved by each teacher has been reached.
9. A job analysis should be made to determine whether extra pay for certain extra duties required of individual teaching should be included in the contract.
10. There should be a standing salary committee to make revisions and improvements from time to time in the schedule."

The foregoing criteria are in agreement with those advocated by all available educational literature, and are acceptable as a basis by which to judge the existing salary schedule in Lawrence.

1. The salary schedule should not decrease any salaries of teachers now employed in the system. - The principle of ex post facto operates in this situation. Teachers in service should not be penalized by a new ruling making salaries dependent upon preparation, when formerly preparation had little to do in determining their salaries.

2. The schedule should include all professional employees. - When all professional employees are not included in the schedule there is a tendency toward individual bargaining. All professional employees are concerned with the teaching of the child, and since education is a process whereby the whole child is considered, then all those responsible



for this development should receive equitable consideration.

3. There should be no discrimination in the salary schedule because of sex or marital status. - The National Education Association <sup>1/</sup> says:

"The National Education Association through its resolutions and committee reports has endorsed the principle that salary differences should attach to individual teachers, recognizing the differences in maturity and educational qualifications, and that such differences should be outlined in a systematic form in a salary schedule. The policies advocated by The National Education Association are clearly in favor of differences based on experience and education; are varying in their recommendations with reference to differences based on teaching skill and efficiency; and are clearly opposed to differences based on grade taught, sex, race, color, belief, residence, or economic or marital status."

Educational authorities also agree that there should be a salary differential for married teachers with dependents, and many cities have adopted such a plan. Single teachers should receive the same pay regardless of sex but married teachers with dependents should receive enough money to enable them to maintain the same standard of living as single teachers.

4. The schedule should classify salaries according to the amount of preparation attained by each teacher and not according to placement in the school system. Equal salaries for equal training and experience:- <sup>2/</sup> The Review of Educational Research says:

"Equal pay for equal work is a general principle of salary scheduling that underlies the recurring efforts to eliminate differentials based on grade level of pupils taught, on race, or on sex. It is invoked as the justification for basing salaries on merit or teaching efficiency. This principle has been broadened at once to equal pay for

<sup>1/</sup>The National Education Association, Research Bulletin, No. 20, The Association, Washington, D.C. 1942, p. 8, no. 1.

<sup>2/</sup> Review of Educational Research, "Teacher's Salaries," Vol. 13, No. 3, June 1943, p. 279.

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equal work in terms of equal training and experience in order to make it apply to the usual teaching situations in which teachers doing equal work may be paid different salaries due to differences in years of experience and level of preparation. The principle appears to be in conflict with any specific effort to apply to teachers with dependents the equally familiar principle that teachers salaries should be related to the cost of maintaining an adequate standard of living.

"The persistence of the position schedule was attributed to tradition, to lower professional requirements for elementary teachers, to the presence of many poorly prepared teachers in the elementary field, and to the fact that school patrons think that elementary school work is easier."

The Nations Schools says:<sup>1/</sup>

"The community educational process should be an unbroken unity from pre-primary years through the 14th year of secondary education. Sub-divisions of the process into elementary and secondary divisions are merely mechanical administrative devices. All parts of the educational process are relatively as important as any other part. Salary differentials for secondary over elementary teachers cannot be justified. Teaching skill may be initially measured by technical preparation, and initial salary schedules based on years of general and professional preparation.

"Technical preparation, plus teaching experience, results in individual growth and greater technical competence under normal conditions. A period of partially or completely automatic increase may be logically provided within the ten year span.

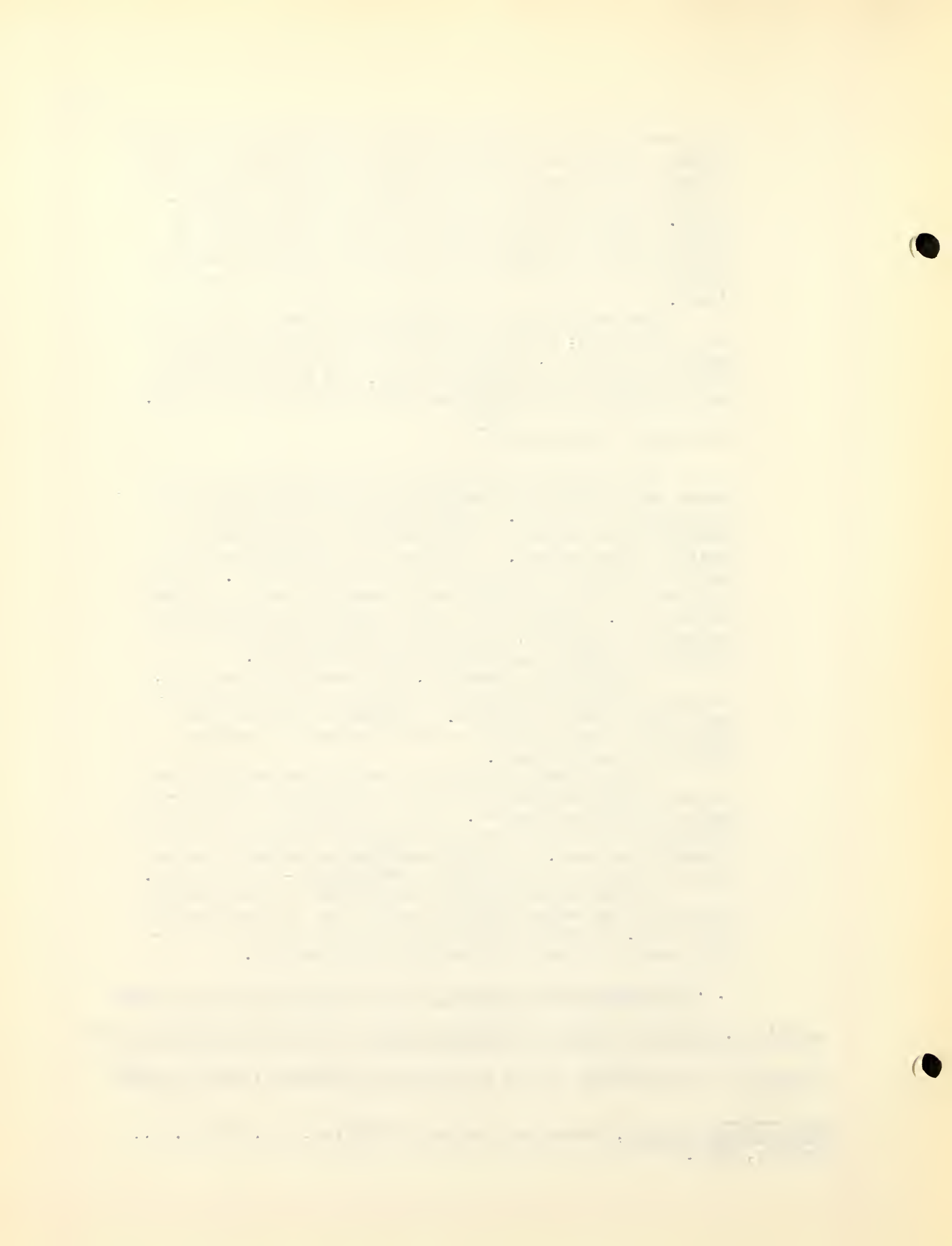
"The salary schedule is a most important instrument in maintaining teaching efficiency through reasonable rewards for superior service. It is both logical and sensible to provide for special merit increments beyond the period of automatic increase. The total combination schedule may be classified as the preparation - development - merit system.

"There is no justification within our democratic pattern for any wage principle except that of equal pay for equal work. There is no more validity for a sex differential than for a racial or religious differential."

5. The minimum salary should be sufficiently large to attract capable young men and women to the profession, to give an opportunity for saving and some repayment on the investment in education, and to permit

<sup>1/</sup>The Nations Schools, "Scheduling Teacher's Salaries, Vol. 30, No. 5., November, 1942.





professional improvement. - All educational literature is in agreement with this criterion. However, the same literature also agrees that the salary schedule should avoid setting the salaries of beginning teachers too high at the expense of older and more experienced teachers.

Some of the standards suggested by educational literature, for determining the minimum salaries of teachers, are:

- a. At least twice the local average annual expenditures by teachers for board and room - subsistence wage for twelve months.
- b. One and one third times the cost of necessities.
- c. An amount equal to or better than the average minimum salary paid in comparable school systems.
- d. An amount large enough, over and above a subsistence wage, to represent a return on the teacher's investment in professional training.

6. The maximum salary should be high enough to justify looking upon teaching as a career. - All available educational literature is in agreement with the following:

- a. At least twice the cost of necessities for an experienced teacher, these necessities to include the maintenance of a home and provisions for the average number of persons dependent upon such teachers for support, thus providing (above necessities) for giving, education and cultural activities, and savings.
- b. An amount equal to or better than the average income received by persons of similar ability, training, and ex-

1. The first part of the document discusses the importance of maintaining accurate records.

2. It then goes on to describe the various methods used to collect and analyze data.

3. The next section details the results of the study and the conclusions drawn from them.

4. Finally, the document provides a list of references and a bibliography for further reading.

5. The overall goal of this document is to provide a comprehensive overview of the research.

6. It is hoped that this information will be helpful to those interested in the field.

7. The author would like to thank the following individuals for their assistance:

8. Dr. John Doe, Dr. Jane Smith, and Dr. Robert Brown.

9. Their contributions were invaluable to the success of this project.

10. The author also wishes to express appreciation to the funding agency.

11. Without their support, this research would not have been possible.

12. The author is grateful for the opportunity to share these findings.

13. It is hoped that they will contribute to the advancement of the field.

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20. The author can also be reached by phone at (123) 456-7890.

21. The author's email address is john.doe@example.com.

perience in other occupational groups.

7. There should be extra increments for jobs requiring special responsibility. Teachers with special responsibilities are entitled to extra increments. Industry and business recognize this fact and set salaries accordingly. However, in order to avoid the possibility of individual bargaining, some definite plan of awarding these increments should be determined which is dependent upon the amount and type of these responsibilities.

8. The adjustment of the old schedule to the new should be made by annual increments added to the salary paid at the time of the adoption of the schedule until the maximum salary for the level of training achieved by each teacher has been reached. New salary schedules, in most cases, mean a larger school budget. If, in adjusting the old schedule to the new, teachers received the difference in their salaries in a lump sum the cost to the taxpayer would, in many instances, be enormous. If the adjustment is gradual it may be possible in some communities to consolidate classes when teachers retire and save money in this manner. In other cases young teachers may be appointed to replace those who retire, and the money thus saved will help to defray at least part of the cost of the new schedule.

The National Education Association says: <sup>1/</sup>

"In adopting a new salary schedule a question arises as to the method of transferring teachers from present salaries to the new schedule. There are two basic alternatives, and several variations of each that may be considered.

<sup>1/</sup>The National Education Association, Research Division, "Adjustments of Salaries of Teachers in Service to the Provisions of the New Schedule, November, 1944. p. 2. (Mimeographed)

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- A. To let the starting point on the new schedule be determined by level of preparation or by school division, but the salary step in the class would be determined by the size of his present salary.

"In following Plan A, the teacher may be placed at the step in the new schedule, in the appropriate salary class, which is next above his present salary, even tho the adjustment may be very small. Usually the provision is made for placement to include at least one annual increment for experience. Or it may be provided that the teacher shall be placed at a step in the new schedule which is at least some fixed amount above the present salary, for example, \$200 or \$300.

"When a former salary schedule has been only partially in effect, some adjustment may be necessary first to bring the teacher to his proper place on the old schedule before providing for transfer to the new.

- B. To give the teacher full credit for preparation and experience and to place the teacher at a point on the new schedule at which the teacher would be paid if the new schedule had been in effect for many years; in other words, to make the new schedule retroactive.

Under Plan B, there are almost sure to be greater differences in the amount of increase received by individual teachers than under Plan A. If the new schedule is of the same type as the old (e.g. old and new schedule both of the position type, or old and new schedules both of the preparation type) the differences are less than if there is a transfer from the position to the preparation schedule, a transfer which is typical of many current adoptions of new schedules.

If the new schedule is such that the increases for some individuals is very large - as much as \$600 or \$800 for some person - the cost of placing the new schedule into full effect for the first year is very high, and there appears to be inequality in the treatment given to different teachers.

What can be done in such a case is to scale down the size of the individual increase. This can be done by putting a ceiling on the amount - no teacher in any single year to receive an increase, for example, of more than \$400, such increases to continue each year until all teachers are on schedule. Each year, of course, the salary due on the schedule will increase if longevity increments are being accrued.

#### Other Principles and Problems

"In transferring to a schedule of the preparation type, there is the problem of the older teacher who was

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appointed years ago when standards of preparation were much lower than at present. It is not unusual to make some special placement of such teachers to give them higher salaries than are open to new teachers of low qualifications. Various devices may be used - to assume that the teachers in service meet the minimum requirements for the positions they now hold, and thus to place them in salary classes higher than their academic records would justify; to provide that they may receive certain increments beyond the maximum of the class to which they are assigned on the basis of their academic records, or otherwise to give them special recognition."

9. A job analysis should be made to determine whether extra pay for certain extra duties required of individual teachers should be included in the contract. - The National Education Association says:<sup>1/</sup>

"In municipal and state governments, a number of general practices have been found desirable in the process of analyzing and classifying jobs of workers and of evaluating the services rendered. The following principles, suggested by authorities in the field of public administration, are significant for education:

1. Do not try to compare incomparable positions; relate each position to others of a similar nature, and to the key position for the group.
2. Grade the position and not the incumbent.
3. Define all factors selected for rating, and avoid those which overlap. Success depends on clear cut recognition of the various degrees of each factor, and those must be defined in advance.
4. Sell the grading process to the staff and solicit their cooperation. They should be fully informed of the factors which have entered into the grading.

Jobs are graded in terms of the following factors or a combination of them:

1. The place of the position in the line of authority.
2. The need for supervisory relations.
3. The degree of initiative and resourcefulness required.
4. The responsibility of the position.
5. The experience requirements.
6. The education and training requirements.

<sup>1/</sup>American School Board Journal, "Some Principles for the Construction and Administration of Teachers' Salary Schedules," No. 108, March 1944, pp. 35, 36.



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10. There should be a standing salary committee to make revisions and improvements from time to time in the schedule. - Since the welfare of so many people is governed by salary policies, it is in keeping with democratic principles that teachers, board members, school administrators, and lay citizens, have a voice in determining salary policies.

The National Education Association says:<sup>1/</sup>

"A teachers' salary schedule that has not been developed cooperatively from the experience and reflection of representative teachers, administrators, and schoolboard members may prove to be ineffective because the minds of the interested parties never actually met and agreed. In the long run a democratic procedure should produce superior results. Anyone who participates or shares in making anything, whether it be a house, a boat, or a salary schedule, has a personal interest in the success of the project just by virtue of his or her part in the task. While disagreements within salary study committees may delay action and produce some strange proposals, the final recommendations will not come as a complete surprise to the group most interested in them, nor will the public be unduly concerned since their representatives will have had ample opportunity to discourage any tendencies in the direction of extravagance. Major differences may be largely ironed out in the process of studying the problem.

It seems logical, therefore, for teachers, administrators, board members, and lay citizens to work together in the formulation of salary policies."

<sup>1/</sup>The National Education Association, Report of the Committee on Salaries, 1940, Problems and Principles in the Scheduling of Teachers' Salaries, p. 8.

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### CHAPTER III

#### APPLYING THE CRITERIA IN CHAPTER II TO THE EXISTING SALARY SCHEDULE IN LAWRENCE AS A MEANS OF DERIVING RECOMMENDATIONS FOR IMPROVEMENT.

The first criterion.-- Salaries of teachers now in the system should not be decreased. The vast majority of teachers in the Lawrence school department at the present time have been teaching in the system for many years and, for the most part, have carried out their duties conscientiously. If all teachers were placed on the new salary schedule according to the amount of their professional preparation some would receive lower salaries than they do under the existing schedule. For the most part, those effected in this manner would be teachers whose maximum salaries even now provide barely enough for a subsistence wage. The vast majority of the teachers referred to were elected at a time when there was a lack of trained teachers in their particular field. In recognition of their many years of faithful service their salaries should not be reduced. Instead, as has been the custom in many other communities, they should receive every consideration for a salary increase on the new schedule.

The second criterion. -- All professional employees should be included in the schedule. Under the existing salary schedule most salary adjustments are considered in terms of departments. Because of this the various groups resort to individual bargaining and some departments are more successful than others in having their requests granted.

The school committee should discuss all matters concerning salaries

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and change. It begins with the first settlers who came to the eastern coast of North America. These settlers were mostly from Europe, and they brought with them the culture and customs of their home countries. Over time, these settlers and their descendants merged to form a new people, the Americans. The American people have a strong sense of individualism and freedom, and these values have shaped the course of their history.

The American Revolution was a turning point in the nation's history. It was a struggle for independence from Great Britain, and it resulted in the creation of a new government. The American people wanted a government that would protect their rights and freedoms, and they created a system of checks and balances. This system has allowed the United States to remain a democracy for over two centuries.

The American people have also been a nation of immigrants. People from all over the world have come to the United States in search of a better life. These immigrants have brought with them their own cultures and traditions, and they have helped to shape the American identity. The United States is a melting pot of different cultures, and this diversity is one of its strengths.

The American people have also been a nation of pioneers. They have explored the vast western lands and have built a great nation. The American people have a strong sense of adventure and a desire for progress. They have always been looking for new frontiers, and they have always found them.

The American people have also been a nation of leaders. They have produced some of the greatest leaders in the world, and these leaders have shaped the course of human history. The American people have a strong sense of responsibility and a desire to make a better world for themselves and for others.

The American people have also been a nation of dreamers. They have always had a vision of a better future, and they have always worked hard to make that vision a reality. The American people have a strong sense of hope and a belief in the power of the American dream.

The American people have also been a nation of heroes. They have produced some of the greatest heroes in the world, and these heroes have inspired people all over the world. The American people have a strong sense of courage and a willingness to sacrifice for their beliefs.

The American people have also been a nation of innovators. They have produced some of the greatest inventions in the world, and these inventions have changed the way we live. The American people have a strong sense of curiosity and a desire to know more about the world around them.

The American people have also been a nation of artists. They have produced some of the greatest works of art in the world, and these works of art have inspired people all over the world. The American people have a strong sense of creativity and a desire to express themselves.

The American people have also been a nation of scientists. They have produced some of the greatest scientists in the world, and these scientists have advanced our knowledge of the world. The American people have a strong sense of curiosity and a desire to understand the world around them.

The American people have also been a nation of explorers. They have explored the vast western lands and have discovered new worlds. The American people have a strong sense of adventure and a desire to explore the unknown.

The American people have also been a nation of builders. They have built a great nation, and they have built a great future. The American people have a strong sense of responsibility and a desire to make a better world for themselves and for others.

The American people have also been a nation of dreamers. They have always had a vision of a better future, and they have always worked hard to make that vision a reality. The American people have a strong sense of hope and a belief in the power of the American dream.

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with a representative group composed of all professional employees in the system. This is the democratic way and will do much to raise the morale of the entire teaching body.

The third criterion. -- There should be no discrimination in the salary schedule because of sex or marital status. Under the present schedule men receive higher salaries than women, and married women are prohibited from teaching.

The new schedule should consider all single men and women in the same light but should allow differentials in salaries for those teachers who are married and have dependents. A few communities have gone a step farther and considered the single teachers having dependents. This plan has merit but presents a perplexing problem in that it would be most difficult to determine who were entitled to the differentials.

The fourth criterion. -- Salaries should be determined by the amount of preparation, experience and responsibility of each teacher. Under the existing schedule teacher's salaries are determined by department, grade taught, sex, experience, and the amount of responsibility. Some departments have higher standards for appointment than others, but once a teacher is appointed to a department his preparation is not considered in determining his salary. As a result of this procedure there are teachers with bachelor's degrees in some departments who receive lower salaries than teachers with less preparation in other departments.

The new salary schedule should be one in which the salaries of all professional employees are determined by the amount of preparation, and experience of each teacher.

The vast majority of cities with a population of thirty thou-

Dear Sir,  
I have the honor to acknowledge the receipt of your letter of the 14th inst. in relation to the above mentioned matter.

The same has been referred to the proper authorities for their consideration and they will be glad to hear from you again.

I am, Sir, very respectfully,  
Yours truly,  
[Signature]

[Name]  
[Address]  
[City, State]

Very truly yours,  
[Signature]

sand to one hundred thousand in the United States have salary schedules in which the teacher's preparation is recognized in determining salaries (Table 6).

Table 6. Salary Schedules in 171 Cities of 30,000 to 100,00 Population in United States. 1/

Type of Schedule	Per cent 1940-41	Per cent 1942-43	Per cent 1944-45
Single-Salary .....	37	42	53
Position-Preparation .....	43	37	34
Position .....	20	21	13

The statistics in Table 6 show that there is a decided trend toward schedules that recognize the professional preparation of teachers. The percentage of cities with position-type schedules, such as the one in the Lawrence school department, is very low when compared with others in the same population group. The same table also shows a marked trend toward the single salary schedule, which offers the same opportunities to elementary teachers as to high school teachers with equivalent qualifications. There is evidence to show that the degree of teacher preparation is higher in systems that recognize the teachers professional training in determining salaries (Table 7).

1/The National Education Association, Educational Research Service, Circular No. 6, 1945. p. 3.



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Table 7. Full Time Principals and Teachers Classified According to Training in Lowell, Lawrence, Lynn, Quincy, and Newton, Massachusetts. 1944-45 1/

	Number of teachers	Percent with bachelor's degree			Percent with master's degree		
		Elementary	Junior High	Senior High	Elementary	Junior High	Senior High
Lowell	403	12	32	87	1	5	23
Lynn	439	24	58	81	2	11	34
Lawrence	384	7	--	83	1	--	12
Quincy	405	34	64	89	2	11	32
Newton	445	37	73	84	6	31	51

State Tabulations (Includes all cities)

Low	5	32	70	0	2	3
25 percentile	15	49	80	1	6	20
Median	24	57	84	2	11	27
75 percentile	33	67	88	5	21	37
High	53	82	96	17	34	67

These cities in Table 7 range in size from a population of sixty-nine thousand, eight hundred and seventy-three, to one hundred and one thousand, three hundred and eighty-nine. <sup>2/</sup> Of the cities listed, Lowell and Lawrence have position-type schedules, and the others had position-preparation schedules at the time the statistics were tabulated. Since then however, Lynn, Quincy, and Newton have adopted the single-salary schedule.

The evidence in Table 7 shows that Lawrence is just slightly above the low in the state in regard to the percent of teachers with bachelor's degrees in the elementary schools, and slightly below the median in the

1/ Massachusetts Teachers Federation, Tabulation of School Returns, 1944-45. p. 6.

2/ Ibid., p. 3.

Date	Particulars	Debit	Credit
1917			
Jan 1	Balance		100.00
Jan 15	By Cash	50.00	
Jan 20	To Cash		25.00
Jan 25	By Cash	75.00	
Jan 30	To Cash		100.00
Feb 5	By Cash	100.00	
Feb 10	To Cash		50.00
Feb 15	By Cash	25.00	
Feb 20	To Cash		75.00
Feb 25	By Cash	50.00	
Feb 30	To Cash		100.00
Mar 5	By Cash	100.00	
Mar 10	To Cash		50.00
Mar 15	By Cash	25.00	
Mar 20	To Cash		75.00
Mar 25	By Cash	50.00	
Mar 30	To Cash		100.00
Apr 5	By Cash	100.00	
Apr 10	To Cash		50.00
Apr 15	By Cash	25.00	
Apr 20	To Cash		75.00
Apr 25	By Cash	50.00	
Apr 30	To Cash		100.00
May 5	By Cash	100.00	
May 10	To Cash		50.00
May 15	By Cash	25.00	
May 20	To Cash		75.00
May 25	By Cash	50.00	
May 30	To Cash		100.00
Jun 5	By Cash	100.00	
Jun 10	To Cash		50.00
Jun 15	By Cash	25.00	
Jun 20	To Cash		75.00
Jun 25	By Cash	50.00	
Jun 30	To Cash		100.00
Jul 5	By Cash	100.00	
Jul 10	To Cash		50.00
Jul 15	By Cash	25.00	
Jul 20	To Cash		75.00
Jul 25	By Cash	50.00	
Jul 30	To Cash		100.00
Aug 5	By Cash	100.00	
Aug 10	To Cash		50.00
Aug 15	By Cash	25.00	
Aug 20	To Cash		75.00
Aug 25	By Cash	50.00	
Aug 30	To Cash		100.00
Sep 5	By Cash	100.00	
Sep 10	To Cash		50.00
Sep 15	By Cash	25.00	
Sep 20	To Cash		75.00
Sep 25	By Cash	50.00	
Sep 30	To Cash		100.00
Oct 5	By Cash	100.00	
Oct 10	To Cash		50.00
Oct 15	By Cash	25.00	
Oct 20	To Cash		75.00
Oct 25	By Cash	50.00	
Oct 30	To Cash		100.00
Nov 5	By Cash	100.00	
Nov 10	To Cash		50.00
Nov 15	By Cash	25.00	
Nov 20	To Cash		75.00
Nov 25	By Cash	50.00	
Nov 30	To Cash		100.00
Dec 5	By Cash	100.00	
Dec 10	To Cash		50.00
Dec 15	By Cash	25.00	
Dec 20	To Cash		75.00
Dec 25	By Cash	50.00	
Dec 30	To Cash		100.00
Total		1000.00	1000.00

The following is a list of the names of the persons who have been  
 named in the above account, and the amount of the sum which they  
 have respectively paid into the fund, and the date when they  
 have respectively paid the same.

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 account, and the amount of the sum which they have respectively  
 paid into the fund, and the date when they have respectively  
 paid the same, are as follows:

same respect in the secondary school. Lowell is slightly above the low for the state in regard to the percent of teachers in the elementary schools with bachelor's degrees; is low in the same respect in the junior high school, and is slightly above the median in the state classification of those teachers in the secondary schools with bachelor's degrees. Both Lowell and Lawrence are slightly above the low for the state in the percent of teachers with master's degrees in the elementary schools. In the state tabulations for secondary schools, regarding the number of teachers with master's degrees, Lowell is slightly above the twenty-fifth percentile in this classification and Lawrence is slightly above the low for the state. On the other hand Lynn is in the median group or above in all tabulations with the exception of the secondary schools where it is slightly above the twenty-fifth percentile. Quincy is in the median group in two classifications, and is either slightly above or slightly below the seventy-fifth percentile in all others. Newton is above the seventy-fifth percentile in all classifications with the exception of the secondary school in which it is classified with the median group.

As further proof that salary schedules show their effect upon the degree of teacher preparation, the writer refers to the results of a survey conducted by the National Education Association (Table 8). All salary schedules in this table have been in operation since the year nineteen hundred and twenty-nine, or some earlier date, and are matched as far as possible to size and to geographical location.

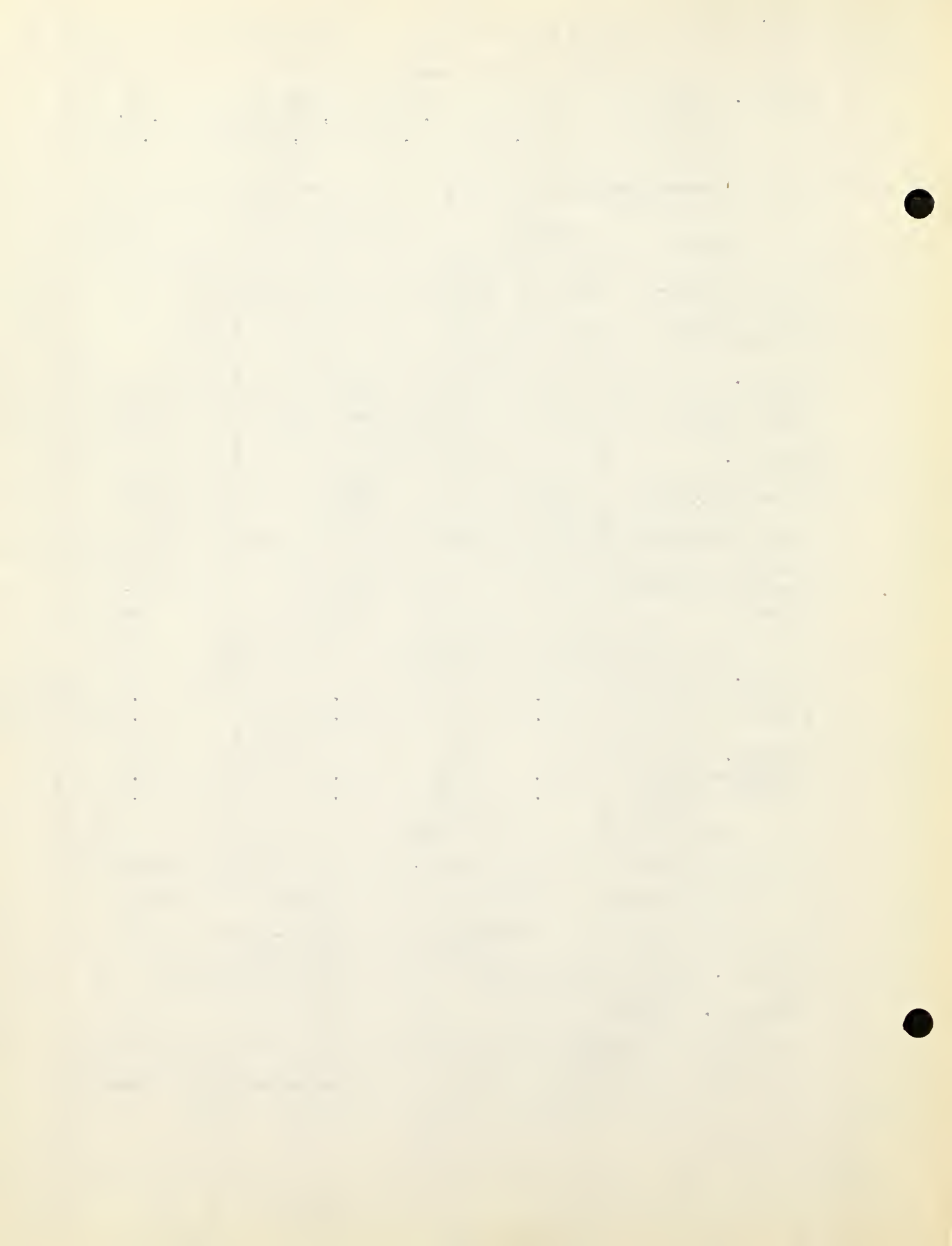
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Table 8. Levels of Training in Single-Salary Schedule Cities and in Position-Type Schedule Cities. (Group I, Cities over 100,000 Population; Group II, Cities 30,000 to 100,00 Population). 1/

Classification	Elementary Teachers	Secondary Teachers	All Teachers
Total number of teachers			
<u>Group I.</u>			
9 single-salary	6366	4917	11283
9 position-type	7220	4822	12042
<u>Group II.</u>			
15 single-salary	2337	2272	4609
15 position-type	2454	2073	4527
Teachers having four years training or more	Per- cent	Per- cent	Per- cent
<u>Group I.</u>			
9 single-salary	47.1	87.5	64.7
9 position-type	32.0	83.6	52.7
<u>Group II.</u>			
15 single-salary	32.7	84.4	58.2
15 position-type	19.4	79.4	46.8

When Tables 7 and 8 are compared, the level of teacher preparation in the elementary schools in Lawrence and Lowell is definitely lower than in cities having single-salary or position-preparation type schedules. This is also true of the cities with position-type schedules in Table 8.

In view of the evidence presented in reference to the fourth criterion it is obvious that the position type salary schedule in Lawrence



is obsolete and should be replaced by one in which teacher's salaries are determined by their amount of preparation and experience. In this way the degree of teacher preparation would be raised to a higher level and this in turn, under normal conditions, would result in a more competent teaching staff.

The fifth criterion. - Minimum salaries should be large enough to attract capable young people to the profession, allow for saving and professional improvement, and some repayment on the investment in education.

Under the existing schedule the median minimum salary of men is eighteen hundred dollars, and median minimum salary of women is seventeen hundred and thirty two dollars (Table 1). The teachers in the elementary schools in the academic, cooking and sewing departments are the only ones who receive less than this amount and their minimum salaries are fifteen hundred and fifty dollars.

The National Education Association published the following statistics concerning minimum salaries of teachers (Table 9).

Table 9. Distribution of Minimum Salaries, not including Bonus, Scheduled for regular Classroom Teachers in 166 School Systems in Cities 30,000 to 100,00 in Population, 1944-45. a/ 1/

Salary interval within which the minimum salary falls	Elementary		Secondary		Single-Salary		
	Less than degree	4yrs. preparation	4yrs. preparation	5yrs. preparation	3yrs. preparation	4yrs. preparation	5yrs. preparation
1	2	3	4	5	6	7	8
\$1,800 and over	..	..	3	9	..	..	3
1,700 - 1,799	1	3	8	17	..	2	9
1,600 - 1,699	5	10	15	18	1	8	11
1,500 - 1,599	13	21	21	23	1	11	14

1/National Education Association, Educational Research Service, Circular, No. 6, 1945. p. 5.



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Table 9 (concluded)

Salary Interval within which the minimum salary falls	Elementary		Secondary		Single-Salary		
	Less than de- gree	4yrs. prepa- ration	4yrs. prepa- ration	5yrs. prepa- ration	3yrs. pre- par- ation	4yrs. pre- par- ation	5yrs. pre- par- ation
1	2	3	4	5	6	7	8
\$1,400 - \$1,499	15	25	34	34	6	17	17
1,300 - 1,399	24	22	22	22	8	12	15
1,200 - 1,299	41	41	32	22	16	21	5
1,100 - 1,199	19	15	9	4	10	7	4
1,000 - 1,099	27	20	9	5	7	8	3
900 - 999	13	4	2	1	3	2	..
800 - 899	4	1	1	1	2	1	..
Total number of schedules	162	162	156	156	54	89	81
Median of the Minimum salaries	\$1,244	\$1,300	\$1,409	\$1,468	\$1,231	\$1,346	\$1,479

a/When different minimum salaries are scheduled for men and women teachers, the figures tabulated are for women teachers.

The median minimum salaries in Lawrence, bonus included, are definitely higher than the salaries listed in Table 9, and yet, in Lawrence, the degree of teacher preparation is not considered in determining salaries. If the teachers level of preparation is taken into consideration the minimum salaries in Lawrence, in some cases, would be more than five hundred dollars higher than the median salaries listed in Table 9.

The median of the minimum salaries for all cities in Massachusetts are as follows: Elementary school, twelve hundred dollars to twelve hundred and ninety-nine dollars; Junior high school, fifteen hundred

1. The first part of the document discusses the importance of maintaining accurate records of all transactions.

2. It is essential to ensure that all entries are supported by proper documentation and receipts.

3. The second part of the document outlines the various methods used to collect and analyze data.

4. These methods include both qualitative and quantitative approaches, each with its own strengths and limitations.

5. The third part of the document provides a detailed overview of the statistical techniques employed in the study.

6. These techniques are used to identify trends, patterns, and correlations within the data set.

7. Finally, the document concludes with a summary of the findings and their implications for future research.

dollars to fifteen hundred and ninety-nine dollars; Senior high school, sixteen hundred dollars to sixteen hundred and ninety-nine dollars.<sup>1/</sup>

In view of the evidence already presented the median of the minimum salaries, not including bonus, paid to teachers with less than four years training beyond high school is approximately twelve hundred and fifty dollars. The median bonus amounted to approximately one hundred and fifty dollars. This would bring the median of the minimum salaries up to approximately fourteen hundred dollars for teachers with less than four years preparation beyond high school.

One of the standards in Chapter II concerning minimum salaries suggests that the amount should be large enough, over and above a subsistence wage, to represent a return on the teachers investment in professional training. In consideration of this the writer recommends that the minimum salary of fourteen hundred dollars mentioned above be compared with the cost of living index for Massachusetts (See Table 10)<sup>2/</sup> in order to determine the subsistence wage.

Table 10. Cost of Living Index of Specific Goods and Services in Massachusetts.

Percent of income allotted for goods and services	Comparative Index Numbers - - - 1935--1939--100				
	January 1941	November 1942	November 1943	November 1944	November 1945
Food (37.6)	86.2	121.3	126.2	127.6	129.7
Clothing (12.8)	101.1	121.8	125.4	136.9	141.4
Shelter (21.8)	107.7	112.9	112.9	112.9	112.9
Fuel & Light (5.0)	112.8	129.3	142.3	143.3	134.5
Sundries (22.8)	107.2	118.4	117.8	118.7	121.5
Combined (100)	98.9	119.3	122.1	124.3	125.9
Purchasing power of the dollar - 1935-39			\$1.00		
		November, 1945	79.4¢		

<sup>1/</sup>The Massachusetts Teachers Federation, Salary Distribution in Cities, School Year ending June 30, 1945. The Federation, 14 Beacon Street, Boston, Massachusetts, p. 1-6. (Mimeographed)

<sup>2/</sup>The Commonwealth of Massachusetts, Office of Division on the Necessaries of Life, Room 200, State House, Boston, Massachusetts.

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If the sum of fourteen hundred dollars is distributed in accordance with the recommendations in Table 10 the allotments for the various goods and services will be as follows: (Table 11).

Table 11. Distribution of \$1,400 Income Based on Cost of Living Index in Massachusetts, November 1945.

Goods and Services	Yearly Distribution	Monthly Distribution	Weekly Distribution
(1)	(2)	(3)	(4)
Food	\$526.40	\$43.87	\$10.13
Clothing	179.20	14.93	3.45
Shelter	305.20	25.43	5.87
Fuel and Light	70.00	5.83	1.33
Sundries	319.20	26.61	6.14
Total	\$1,400.00	\$116.67	\$26.92

It is true that fourteen hundred dollars is not an elaborate sum for a yearly salary. However the salaries of beginners in the other professions are also low. The vast majority of new teachers now have bachelor's degrees, and due to this, there will be very few teachers appointed in Lawrence in the future who will come under the fourteen hundred dollar minimum salary classification.

In order to determine the minimum salaries for teachers having a higher degree of preparation, equitable salary differentials must be determined. According to a recent survey conducted by The National Education Association these differentials are as follows: (Table 12).

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. This is essential for ensuring the integrity of the financial statements and for providing a clear audit trail.

Date	Description	Debit	Credit	Balance
1/1/2024	Opening Balance			1000.00
1/5/2024	Revenue		500.00	1500.00
1/10/2024	Expenses	200.00		1300.00
1/15/2024	Revenue		300.00	1600.00
1/20/2024	Expenses	100.00		1500.00
1/25/2024	Revenue		200.00	1700.00
1/30/2024	Expenses	50.00		1650.00
2/1/2024	Revenue		150.00	1800.00
2/5/2024	Expenses	80.00		1720.00
2/10/2024	Revenue		100.00	1820.00
2/15/2024	Expenses	60.00		1760.00
2/20/2024	Revenue		80.00	1840.00
2/25/2024	Expenses	40.00		1800.00
2/28/2024	Revenue		60.00	1860.00
3/1/2024	Expenses	30.00		1830.00
3/5/2024	Revenue		40.00	1870.00
3/10/2024	Expenses	20.00		1850.00
3/15/2024	Revenue		30.00	1880.00
3/20/2024	Expenses	10.00		1870.00
3/25/2024	Revenue		20.00	1890.00
3/30/2024	Expenses	5.00		1885.00
3/31/2024	Revenue		5.00	1890.00

2. The second part of the document discusses the importance of maintaining accurate records of all transactions. This is essential for ensuring the integrity of the financial statements and for providing a clear audit trail.

Table 12. Salary Differential Based on Level of Professional Preparation in Single-Salary Schedules Reported by 90 School Systems in Cities 30,000 to 100,00 in Population, 1944-45. a/ 1/

Amount of salary differential	Amount 3yr. level exceeds 2yr. level	Amount bachelor's level exceeds 3yr. level	Amount master's level exceeds bachelor's level	Amount 6yr. level exceeds master's level
	At Minimum Salary			
\$220 & over	..	4	..	1
200 - \$219	..	12	11	3
180 - 199	..	1	2	..
160 - 179	..	1	1	..
140 - 159	5	9	10	3
120 - 139	1	4	2	1
100 - 119	13	18	37	8
80 - 99	..	1	3	..
60 - 79	..	1	2	..
40 - 59	2	2	1	1
20 - 39	..	1	1	..
No difference	4	5	11	5
Total number reporting	25	59	81	22
Median differential	\$110	\$128	\$112	\$113

a/When the salary differentials reported in preparation schedules vary for men and women teachers, the figures tabulated are for women teachers.

If the teacher's minimum salaries in Lawrence were based upon the evidence presented the results would be: (Table 13).

Table 13. Estimated Minimum Salaries for Teachers.

Preparation Beyond High School				
Less than 3 years	3 years	Bachelor's degree	Master's degree	6 years
\$1,400	\$1,510	\$1,638	\$1,750	\$1,863

1/The National Education Association, Educational Research Service, Circular, No. 6, 1945. p.19.



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In a recent salary survey in Worcester Massachusetts, conducted by Professor Willar S. Elsbree of Columbia University, the minimum salaries for teachers with less than three years preparation beyond high school were set at fourteen hundred dollars; at the three year level, fifteen hundred dollars; at the bachelor's degree level, sixteen hundred dollars; the master's degree level was set at seventeen hundred dollars and the six year level at eighteen hundred dollars. <sup>1/</sup>

In view of the evidence, regarding the minimum salaries of teachers, the minimum salaries paid to teachers in the Lawrence school department are too high in some instances and too low in others. In order to correct these inequalities teacher's salaries should be determined by their degree of preparation and experience and not by placement in the system.

The sixth criterion. - The maximum salary should be high enough to justify looking upon teaching as a career. Under the existing salary schedule the maximum salaries of teachers are determined by sex, grade taught and department. As a result of this procedure some maximum salaries are high and some are low, when the teacher's degree of preparation is taken into consideration, and comparisons are made with cities in the same population groups in the United States (Table 14). The salaries listed in this table are the median of the maximum salaries and are classified only from the bachelor's degree level up to the higher levels of training. These salaries do not include any bonus that was awarded in the majority of cities.

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<sup>1/</sup>Worcester Daily Telegram, Salary Schedule Proposed by Professor Elsbree, Worcester, Mass. February 8, 1946. p. 1.

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Table 14. Distribution of Maximum Salaries, not including Bonus, Scheduled for Regular Classroom Teachers in 171 School Systems in Cities 30,000 to 100,000 in Population, 1944-45 <sup>a/</sup> 1/

Salary interval within which salary plus bonus falls	Elementary Schools		High Schools	
	Maximum with bachelor's degree <sup>b/</sup>	Highest Normal maximum	Highest with bachelor's degree	Highest Normal maximum
1	2	3	4	5
\$4,100 & over	..	1	1	3
4,000 - \$4,099	..	..	2	4
3,900 - 3,000	..	2	..	1
3,800 - 3,899	..	..	1	1
3,700 - 3,799	..	3	1	4
3,600 - 3,699	..	2	2	3
3,500 - 3,599	1	1	1	2
3,400 - 3,499	1	1	2	2
3,300 - 3,399	4	3	5	1
3,200 - 3,299	2	3	1	3
3,100 - 3,199	3	1	3	3
3,000 - 3,099	2	9	1	9
2,900 - 2,999	4	2	3	6
2,800 - 2,899	7	6	8	8
2,700 - 2,799	2	9	6	11
2,600 - 2,699	5	6	6	3
2,500 - 2,599	10	17	14	17
2,400 - 2,499	16	11	16	7
2,300 - 2,399	9	4	7	6
2,200 - 2,299	14	16	17	19
2,100 - 2,199	8	4	11	8
2,000 - 2,099	12	13	16	15
1,900 - 1,999	8	5	9	7
1,800 - 1,899	23	19	11	7
1,700 - 1,799	7	10	4	4
1,600 - 1,699	14	8	8	5
1,500 - 1,599	8	7	2	2
1,400 - 1,499	3	1	3	..
1,300 - 1,399	2	1	1	1
1,200 - 1,299	1	1	..	..
Total number	166	166	162	162
Median of the maximum salaries	\$2,163	\$2,288	\$2,294	\$2,500

<sup>a/</sup>When different maximum salaries are scheduled for men and women teachers, the figures tabulated are for women teachers.

<sup>b/</sup>Includes the maximum salaries reported for 4-year level of training, or highest level below 4 years where 4-year level is not recognized.

Date	Description	Particulars	Debit	Credit
1925	Jan 1	Balance		100.00
	Jan 5	Received from A	50.00	
	Jan 10	Received from B	75.00	
	Jan 15	Received from C	25.00	
	Jan 20	Received from D	100.00	
	Jan 25	Received from E	50.00	
	Jan 30	Received from F	75.00	
	Feb 1	Received from G	25.00	
	Feb 5	Received from H	100.00	
	Feb 10	Received from I	50.00	
	Feb 15	Received from J	75.00	
	Feb 20	Received from K	25.00	
	Feb 25	Received from L	100.00	
	Feb 30	Received from M	50.00	
	Mar 1	Received from N	75.00	
	Mar 5	Received from O	25.00	
	Mar 10	Received from P	100.00	
	Mar 15	Received from Q	50.00	
	Mar 20	Received from R	75.00	
	Mar 25	Received from S	25.00	
	Mar 30	Received from T	100.00	
	Apr 1	Received from U	50.00	
	Apr 5	Received from V	75.00	
	Apr 10	Received from W	25.00	
	Apr 15	Received from X	100.00	
	Apr 20	Received from Y	50.00	
	Apr 25	Received from Z	75.00	
	Apr 30	Received from AA	25.00	
	May 1	Received from AB	100.00	
	May 5	Received from AC	50.00	
	May 10	Received from AD	75.00	
	May 15	Received from AE	25.00	
	May 20	Received from AF	100.00	
	May 25	Received from AG	50.00	
	May 30	Received from AH	75.00	
	Jun 1	Received from AI	25.00	
	Jun 5	Received from AJ	100.00	
	Jun 10	Received from AK	50.00	
	Jun 15	Received from AL	75.00	
	Jun 20	Received from AM	25.00	
	Jun 25	Received from AN	100.00	
	Jun 30	Received from AO	50.00	
	Jul 1	Received from AP	75.00	
	Jul 5	Received from AQ	25.00	
	Jul 10	Received from AR	100.00	
	Jul 15	Received from AS	50.00	
	Jul 20	Received from AT	75.00	
	Jul 25	Received from AU	25.00	
	Jul 30	Received from AV	100.00	
	Aug 1	Received from AW	50.00	
	Aug 5	Received from AX	75.00	
	Aug 10	Received from AY	25.00	
	Aug 15	Received from AZ	100.00	
	Aug 20	Received from BA	50.00	
	Aug 25	Received from BB	75.00	
	Aug 30	Received from BC	25.00	
	Sep 1	Received from BD	100.00	
	Sep 5	Received from BE	50.00	
	Sep 10	Received from BF	75.00	
	Sep 15	Received from BG	25.00	
	Sep 20	Received from BH	100.00	
	Sep 25	Received from BI	50.00	
	Sep 30	Received from BJ	75.00	
	Oct 1	Received from BK	25.00	
	Oct 5	Received from BL	100.00	
	Oct 10	Received from BM	50.00	
	Oct 15	Received from BN	75.00	
	Oct 20	Received from BO	25.00	
	Oct 25	Received from BP	100.00	
	Oct 30	Received from BQ	50.00	
	Nov 1	Received from BR	75.00	
	Nov 5	Received from BS	25.00	
	Nov 10	Received from BT	100.00	
	Nov 15	Received from BU	50.00	
	Nov 20	Received from BV	75.00	
	Nov 25	Received from BW	25.00	
	Nov 30	Received from BX	100.00	
	Dec 1	Received from BY	50.00	
	Dec 5	Received from BZ	75.00	
	Dec 10	Received from CA	25.00	
	Dec 15	Received from CB	100.00	
	Dec 20	Received from CC	50.00	
	Dec 25	Received from CD	75.00	
	Dec 30	Received from CE	25.00	
	Total		10000.00	10000.00

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The salaries tabulated compare favorably with those paid to teachers in cities of the same population group in Massachusetts (Table 15.)

Table 15. Distribution of Normal Maximum Salaries, Including Bonus, of Classroom Teachers in Cities of 30,000 to 100,00 Population in Massachusetts, 1944-45. 1/

Salary interval within which the maximum salary falls	Elementary	Junior High		Senior High	
	Women	Men	Women	Men	Women
(1)	(2)	(3)	(4)	(5)	(6)
\$3,400 & over	..	1	..	1	..
3,300 - 3,339	..	..	..	..	..
3,200 - 3,299	..	..	..	..	..
3,100 - 3,199	..	..	..	3	..
3,000 - 3,099	..	1	..	3	1
2,900 - 2,999	..	3	..	1	1
2,800 - 2,899	..	1	..	5	..
2,700 - 2,799	..	3	..	2	..
2,600 - 2,699	..	1	1	3	4
2,500 - 2,599	..	1	..	..	1
2,400 - 2,499	1	2	2	..	2
2,300 - 2,399	..	..	..	..	2
2,200 - 2,299	1	2	4	1	5
2,100 - 2,199	4	..	4	..	2
2,000 - 2,099	4	..	3	..	1
1,900 - 1,999	7	..	1	..	..
1,800 - 1,899	1	..	..	..	..
1,700 - 1,799	1	..	..	..	..
Total number of cities	19	15	15	19	19
Median of the maximum salaries	\$1,989	\$2,687	\$2,167	\$2,837	\$2,389

In comparing Tables 14 and 15 the salaries of the elementary teachers are more representative of the group because, for the most part all are women. However in order to obtain an accurate estimate of the median maximum salaries being paid to teachers with less than a bachelor's

1/Massachusetts Teachers Federation, Salary Distribution, Cities, 1944-45, The Federation, 14 Beacon Street, Boston, Massachusetts. p. 1 - 6.

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No.	Name	Age	Sex	Profession	Religion
1	...	...	...	...	...
2	...	...	...	...	...
3	...	...	...	...	...
4	...	...	...	...	...
5	...	...	...	...	...
6	...	...	...	...	...
7	...	...	...	...	...
8	...	...	...	...	...
9	...	...	...	...	...
10	...	...	...	...	...

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degree it will be necessary to refer to a recent survey conducted by The National Education Association in which salary differentials based on levels of preparation are tabulated (Table 16).

Table 16. Salary Differential Based on Level of Preparation in Single-Salary Schedules Reported by 90 School Systems in Cities 30,000 to 100,000 in Population, 1944-45. a/ 1/

Amount of salary differential	3yr. level exceeds 2yr. level	Bachelor's level exceeds 3yr. level	Master's level exceeds bachelor's level	6yr. level exceeds master's level
(1)	(2)	(3)	(4)	(5)
\$500 & over	1	15	..	1
480 - \$499	..	1	..	..
460 - 479	..	1	..	..
440 - 459	..	1	..	..
420 - 439	..	..	..	..
400 - 419	1	8	9	1
380 - 399	..	..	..	..
360 - 379	..	..	..	..
340 - 359	..	3	1	..
320 - 339	..	..	..	..
300 - 319	1	10	10	3
280 - 299	..	2	1	..
260 - 279	..	3	1	..
240 - 259	1	6	3	1
220 - 239	..	2	1	..
200 - 219	12	15	20	3
180 - 199	2	3	2	..
160 - 179	1	..	..	..
140 - 159	5	4	7	..
120 - 139	2	..	1	1
100 - 119	12	3	15	7
80 - 99	..	..	2	..
60 - 79	..	..	2	..
40 - 59	1	..	2	1
No difference	2	1	5	4
Number	41	78	82	22
Median differential	\$154	\$300	\$205	\$117

a/When salaries reported are different for men and women, the salaries tabulated are for women.

1/The National Education Association, Educational Research Service, Circular No. 6, 1945. p. 12.



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The median of the maximum salaries for teachers in the elementary school with a bachelor's degree is two thousand, one hundred and sixty-three dollars, not including bonus. (Table 14).

The average bonus paid to teachers in cities of the same population group is one hundred and ninety-one dollars.<sup>1/</sup>

The evidence already presented in reference to the sixth criterion provides a reliable estimate of maximum salaries paid to women teachers in cities of thirty thousand to one hundred thousand population in United States. However since men teachers generally receive higher salaries than women teachers this differential in their salaries will have to be considered in determining the final estimate of equitable salaries for all teachers. The vast majority of cities listed in Table 14 pay higher salaries to men, but there is no available evidence to show the amount of this differential. However the median salary differential in Massachusetts in favor of the men teachers is four hundred and eighty-four dollars.

In view of the evidence presented in reference to the maximum salaries of teachers it is obvious that in order to establish salaries on an equitable basis all teachers regardless of sex or grade taught should receive salaries dependent only upon their preparation, experience and amount of responsibility. With this in mind the following salaries can be considered to be a reliable estimate of the median maximum salaries for cities of thirty thousand to one hundred thousand population in the United States (Table 17).

These estimates were calculated by considering the facts in

<sup>1/</sup>National Education Association, Educational Research Service, Circular, No. 8, 1945. p. 4.

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Tables 14, 15, 16. The median bonus was added to the results obtained and to this was added the differential paid to men teachers in Massachusetts.

Table 17. Estimated Median Maximum Salaries Based Upon Evidence Presented in Reference to the Sixth Criterion.

Teacher's Preparation Beyond High School				
Less than 3 years	3 years	Bachelor's degree	Master's degree	6 years
(1)	(2)	(3)	(4)	(5)
\$2,386	\$2,538	\$2,838	\$3,047	\$3,160

The next point to be considered in connection with maximum salaries is the number of increments leading from minimum to maximum salary. Under the existing schedule the number of increments vary (Table 2)

Statistics show that the number of increments leading from minimum to maximum salary in Lawrence are fewer than the number in comparable cities in United States (Table 18).

Table 18. Number of Increments Leading from Minimum Salary to Maximum Salary Reported by 164 School Systems in Cities Thirty Thousand to One Hundred Thousand in Population, 1944-45 a/ 1/

Number of Increments	Elementary Schools	High Schools
27 .....	..	1
26 .....	1	1
25 .....	2	3
24 .....	..	..
23 .....	1	..
22 .....	3	2
21 .....	2	3
20 .....	4	4
19 .....	3	4

1/The National Education Association, Educational Research Service, Circular No. 6, 1945. p. 6.

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Table 18. (concluded)

Number of Increments	Elementary Schools	High Schools
18 .....	4	5
17 .....	2	4
16 .....	2	2
15 .....	12	12
14 .....	13	12
13 .....	8	7
12 .....	11	13
11 .....	13	14
10 .....	10	16
9 .....	17	15
8 .....	21	19
7 .....	4	8
6 .....	7	2
5 .....	3	4
4 .....	6	3
Total number of schedules....	158	154
Median number of increments..	11	12

a/When different numbers of increments are scheduled for men and women teachers, the figures tabulated are for women teachers.

For the most part, annual increments amount to one hundred dollars. The exceptions to this rule are: men and women teachers of academic subjects in the secondary school, two hundred dollars; women teachers of cooking, sewing, and academic subjects, in the elementary schools, fifty dollars. The amount of increments in comparable cities in United States vary (Table 19).

Table 19. Amount of Increments Leading from Minimum Salary to Maximum Salary reported by 152 School Systems in Cities 30,000 to 100,000 Population, 1944-45. a/ 1/

	Elementary Schools <sup>b/</sup>			High Schools <sup>c/</sup>		
	Low <sup>d/</sup>	Modal <sup>d/</sup>	High <sup>d/</sup>	Low <sup>d/</sup>	Modal <sup>d/</sup>	High <sup>d/</sup>
1	2	3	4	5	6	7
\$200 & over	1	3	4	2	4	6
190 - \$199	..	..	..	..	..	..
180 - 189	..	..	..	..	..	..
170 - 179	..	..	1	..	..	1
160 - 169	..	..	..	..	..	..

1/The National Education Association, Educational Research Service, Circular no. 6, 1945. p. 7.

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Table 19. (concluded)

1	Elementary Schools <sup>b/</sup>			High Schools <sup>c/</sup>		
	Low <sup>d/</sup>	Modal <sup>d/</sup>	High <sup>d/</sup>	Low <sup>d/</sup>	Modal <sup>d/</sup>	High <sup>d/</sup>
	2	3	4	5	6	7
\$150 - \$159	1	1	3	2	2	5
140 - 149	..	..	..	..	..	..
130 - 139	..	..	..	..	..	..
120 - 129	2	3	6	2	7	7
110 - 119	..	..	1	..	1	1
100 - 109	44	58	68	47	55	64
90 - 99	3	4	6	3	4	6
80 - 89	5	7	7	4	6	6
70 - 79	16	17	14	14	16	14
60 - 69	6	8	12	4	9	14
50 - 59	43	35	21	41	29	17
40 - 49	8	7	3	6	7	2
30 - 39	7	1	..	5	1	..
20 - 29	10	3	1	12	3	1
10 or less	1	..	..	2	..	..
Total number of schedules	147	147	147	144	144	144
Median amount of increments	\$68	\$84	\$101	\$71	\$93	\$102

a/When different amounts of increments are scheduled for men and women teachers, the figures tabulated are for women teachers.

b/Includes the amount of increments reported for the 4 year level of training, or highest training level below 4 years where 4 year level is not recognized, or the basic salary class where training is not specified.

c/Includes amount of increments reported for 4 year level of training, or the basic salary class where training is not specified, or 5 years of training when required for initial appointment.

d/"Low", "Modal," and "High," increments: In the majority of schedules the annual increments are uniform in size, e.g., 10 annual increments at \$100; but in others they vary, e.g., 2 at \$50; 8 at \$75; 4 at \$100. Where the increments are uniform, the same amount is tallied under "Low", "Modal", and "High" but where they vary in size, the three columns permit the accurate recording of the lowest, modal, and the highest increment scheduled.

All increments in Lawrence are automatic, and are given annually until



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the maximum salary is reached. There is evidence to show however that approximately eighteen percent of the comparable school systems require the teacher to present evidence of additional professional training at set intervals in order to make continuous progress from the minimum to the maximum salary.

In view of the evidence presented in reference to the number of increments leading from minimum salary to maximum salary, teachers in the Lawrence school department in the vast majority of cases reach their maximum salaries too quickly. In considering the amount of increments, teachers in Lawrence in most instances receive amounts that are comparable with that being paid in cities of the same population group in United States. However there are some teachers in Lawrence who receive greater amounts and others who receive smaller amounts than teachers in comparable communities. In order to improve upon the present method of awarding increments, a new plan should be adopted in which the amount increments will be more uniform. In addition, teachers should be required to present evidence of added professional training at set intervals in order to qualify for added increments.

The seventh criterion. - There should be extra increments for jobs requiring special responsibility. Business, industrial, and educational authorities are all in agreement with this criterion. However great difficulty has been experienced in determining the amount of these increments. With this in mind, the National Education Association published the following statistics: (Table 20).

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Table 20. Median Salaries Paid and Index Relationships in 171 Cities of 30,000 to 100,000 in Population, 1944. 1/

Position	Median Salary	Index of relationships - Elementary teachers' salary = 100
<u>Classroom Teachers:</u>		
Kindergarten	\$2,038	103
Elementary	\$1,980	100
Atypical Class	\$2,198	111
Junior High School	\$2,226	112
High School	\$2,464	124
Continuation School	\$2,431	123
<u>Department Heads:</u>		
Junior High School	\$2,542	128
High School	\$2,876	145
<u>Deans:</u>		
Junior High School	\$2,733	138
High School	\$3,014	152
<u>Principals:</u>		
Elementary		
Ass't. Principal	\$2,138	108
Teaching Principal	\$2,316	117
Supervising Principal	\$2,880	145
Junior High School;		
Ass't. Principal	\$3,194	161
Principal	\$3,651	184
High School;		
Ass't. Principal	\$3,458	175
Principal	\$4,396	222
Continuation School		
Principal	\$3,833	194
<u>Administrative and Supervisory Staff:</u>		
Sup't. of Schools	\$6,750	341
Ass't. Sup't. of Schools	\$4,750	240
Business Managers	\$3,775	191
<u>Directors, Ass't. Directors or Supervisors of:</u>		
Research, Tests etc.	\$3,000	152
Vocational Education	\$3,660	185

1/National Education Association, Research Bulletin, Vol. 23, No. 1, February 1945. p. 17

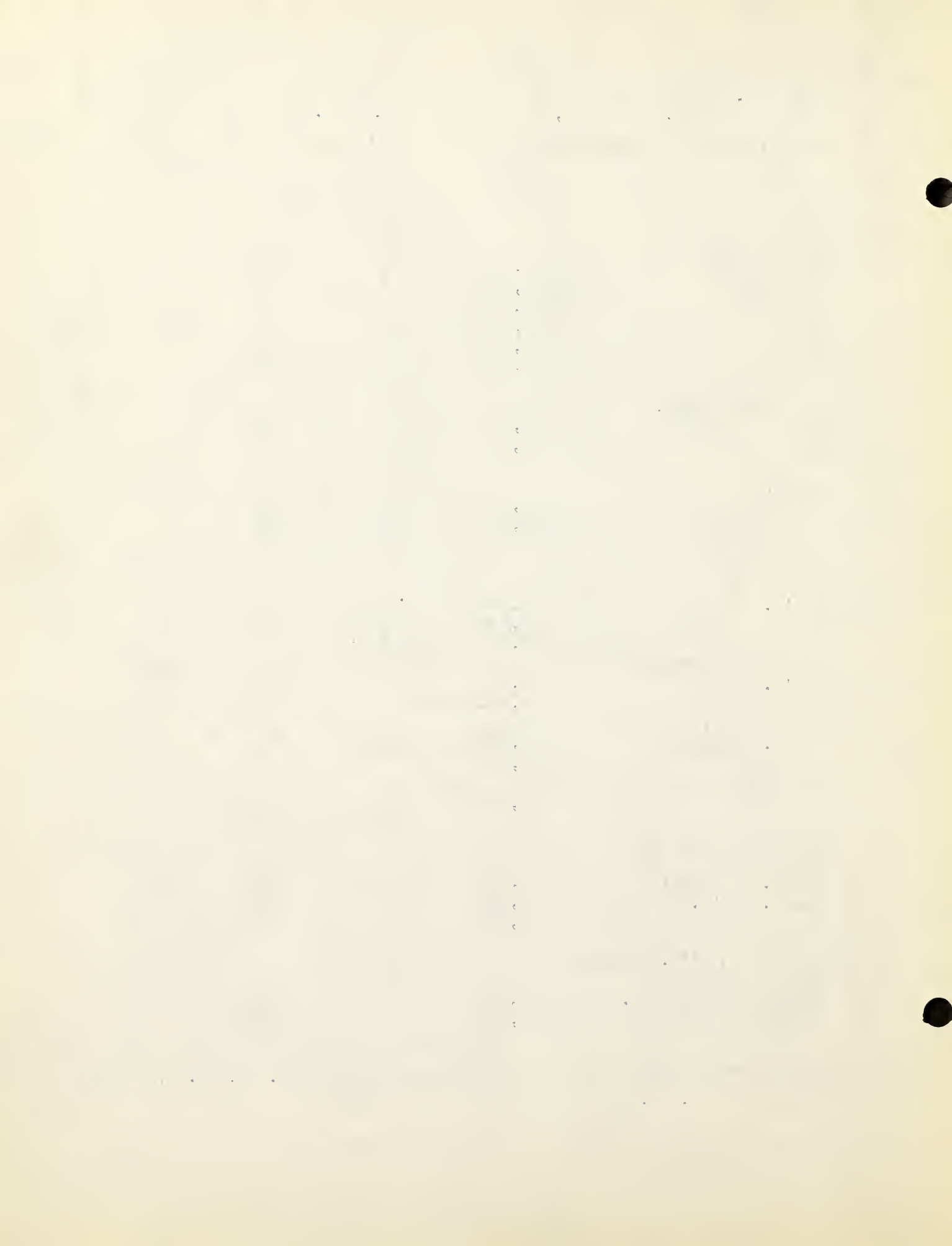


Table 20. (concluded)

Position	Median Salary	Index of relationships - Elementary teachers' salary = 100
<u>Directors, Ass't. Directors or Supervisors of: (cont.)</u>		
Physical Education	\$3,063	155
Health	\$2,950	149
School Library Services	\$2,492	126
Evening Schools	\$3,125	158
Americanization Classes	\$1,650	83
Art	\$2,739	138
Music	\$2,830	143
Penmanship	\$2,750	139
Manual and Industrial		
Art	\$3,250	164
Home Economics	\$2,630	133
Visual Education	\$2,750	139

The above table gives an accurate estimate of the differentials of salaries paid to those teachers with special responsibilities. However, these statistics include cities in the south where wages are extremely low, and in many instances, are tabulated from the salaries paid to women teachers, because when salaries reported are different for men and women The National Education Association has made a practice of tabulating the salaries paid to women teachers.

In view of these facts, a more accurate estimate may be obtained by basing the same relationships index upon the salaries tabulated in Table 17. (Table 21)



Table 21. Estimated Salaries of Teachers with Special Responsibility,  
Based upon Salaries in Table 17.

Position	Median Salary	Index of relationships - Elementary teachers' salary = 100
<u>Classroom Teachers:</u>		
Kindergarten	\$2,458	103
Elementary	\$2,386	100
Atypical Class	\$2,648	111
Junior High School	\$2,672	112
High School	\$2,959	124
Continuation School	\$2,935	123
<u>Department Heads:</u>		
Junior High School	\$3,054	128
High School	\$3,460	145
<u>Deans:</u>		
Junior High School	\$3,293	138
High School	\$3,627	152
<u>Principals:</u>		
Elementary		
Ass't. Principal	\$2,577	108
Teaching Principal	\$2,792	117
Supervising Principal	\$3,462	145
Junior High School		
Ass't. Principal	\$3,841	161
Principal	\$4,390	184
High School		
Ass't. Principal	\$4,176	175
Principal	\$5,297	222
Continuation School		
Principal	\$4,629	194
<u>Administrative and Supervisory Staff:</u>		
Sup't. of Schools	\$8,136	341
Ass't. Sup't. of Schools	\$5,726	240
Business Managers	\$4,557	191
<u>Directors, Ass't. Directors or Supervisors of:</u>		
Research, Tests etc.	\$3,627	152
Vocational Education	\$4,414	185
Physical Education	\$3,698	155



Item	Description	Quantity	Unit Price	Total Price
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Table 21. (concluded)

Position	Median Salary	Index of relationships - Elementary teachers' salary = 100
<u>Directors, Ass't. Directors or Supervisors of: (cont.)</u>		
Health	\$3,555	149
School Library Services	\$3,006	126
Evening Schools	\$3,770	158
Americanization Classes	\$1,979	83
Art	\$3,293	138
Music	\$3,412	143
Penmanship	\$3,317	139
Manual and Industrial Arts	\$3,913	164
Home Economics	\$3,173	133
Visual Education	\$3,317	139

The evidence shows conclusively that there should be extra increments for those teachers with special responsibility, and gives a general idea of what is being done in this respect in regard to the amount of this differential for various positions. However in order to determine the amount of extra increments for extra responsibility it will be necessary to make a job analysis. This will be considered in reference to the ninth criterion.

The eighth criterion. - The adjustment of the old schedule to the new should be made by annual increments added to the teachers present salary. Changing from a position-type schedule to a preparation schedule involves, in many instances, an added appropriation for teacher's salaries. In following the plan suggested by the eighth criterion the original appropriation would not have to be as large as if the adjustment of the old schedule to the new was accomplished by awarding increments in a lump sum. Because of the small teacher load in Lawrence at the present



time it would be possible to consolidate classes as teachers retired and the money thus saved would help to defray part of the cost of the new schedule. A ceiling could also be placed upon the number of increments a teacher could receive in a given year and this too would lessen the burden upon the taxpayers.

The transition to a preparation-type schedule always creates the problem of the older teacher who was elected at a time when the standards for appointment were much lower than they are at present. Because of this the new schedule should include some plan to award this group of teachers for their many years of service even though their degree of preparation would not warrant a salary increase.

The ninth criterion. - A job analysis should be made to determine equitable salary differentials for teachers having special responsibilities. This is an accepted practice in business and industry, but nothing definite has been done in this respect in the Lawrence school department. Tradition and individual bargaining play as great a part in this regard as they do in determining the salaries of the regular classroom teachers. The new schedule should include a more definite plan for awarding these increments, and school board members and teachers alike should be made familiar with it. The six job factors listed under the ninth criterion in Chapter II if combined with the differentials listed in Table 22 will do much to aid in putting the salaries of teachers with special responsibilities on an equitable basis.

The tenth criterion. - There should be a standing salary committee to make revisions and improvements from time to time in the schedule. Under the existing schedule, salary policies are determined

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by the school board with tradition and individual bargaining playing an important part.

In order to remedy this situation it will be necessary to organize a salary committee that will represent all professional employees in the school department. In addition, the salary committee should also include a member of the school board and an interested layman who will represent the citizens of Lawrence. Disagreements within the committee group will arise from time to time and there may be many odd suggestions, but the salary policies finally advocated by the committee will be far more equitable than the ones in operation at the present time.

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CHAPTER IV

RECOMMENDATIONS FOR IMPROVING THE SALARY SCHEDULE IN  
LAWRENCE, MASSACHUSETTS

In order to reward all professional employees of the Lawrence school department equitably, the existing salary schedule should be replaced by one in which the basic salary of all teachers, administrative and supervisory employees, is determined by their degree of preparation and experience, regardless of sex, marital status, or grade taught.

The following recommendations are based upon the evidence contained in Chapters II and III of this paper: (Table 22).

I

Salary Schedule for Classroom Teachers

Schedule steps	Less than 3yrs. training	3yrs. training	Bachelor's degree	Master's degree	6yrs. training
1	\$1,400	\$1,500	\$1,600	\$1,700	\$1,800
2	1,500	1,600	1,700	1,800	1,900
3	1,600	1,700	1,800	1,900	2,000
4	1,700	1,800	1,900	2,000	2,100
5	1,800	1,900	2,000	2,100	2,200
6	1,900	2,000	2,100	2,200	2,300
7	2,000	2,100	2,200	2,300	2,400
8	2,100	2,200	2,300	2,400	2,500
9	2,200	2,300	2,400	2,500	2,600
10	2,300	2,400	2,500	2,600	2,700
11	2,400	2,500	2,600	2,700	2,800
12	2,500	2,600	2,700	2,800	2,900
13		2,700	2,800	2,900	3,000
14			2,900	3,000	3,100
15			3,000	3,100	3,200
16			3,100	3,200	3,300



THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
LABORATORY OF PHYSICAL CHEMISTRY  
CHICAGO, ILLINOIS

RESEARCH REPORT  
NO. 100

BY  
J. H. VAN VLECK  
AND  
H. E. GILBERT

1951

Temperature (°C)	Heat Capacity (cal/mole-°C)	Entropy (eu)	Free Energy (cal/mole)
0	1.5	1.5	0.0
100	2.5	2.5	-1.0
200	3.5	3.5	-2.0
300	4.5	4.5	-3.0
400	5.5	5.5	-4.0
500	6.5	6.5	-5.0
600	7.5	7.5	-6.0
700	8.5	8.5	-7.0
800	9.5	9.5	-8.0
900	10.5	10.5	-9.0
1000	11.5	11.5	-10.0

Table 22. (concluded)

Schedule steps	Less than 3yrs. training	3yrs. training	Bachelor's degree	Master's degree	6yrs. training
17			\$3,200	\$3,300 3,400	\$3,400 3,500 3,600

## II

Progress on the Schedule

1. Teachers shall normally receive annual increments of \$100 until the maximum is reached.
2. No teacher shall receive more than five annual increments in salary unless he presents evidence of approved professional study equal to six college credits earned during the five year period.
3. In order to be eligible for advancement to a higher training level, teachers must submit evidence of having successfully completed thirty semester hour of approved college work over and above the amount required for their present classification.
4. In advancing from the four year level to the five year level, teachers must have a bachelor's degree in addition to the thirty hours of approved study.
5. In advancing from the five year level to the six year level, teachers must have a master's degree in addition to the thirty hours of approved study.
6. No teacher is to receive more than three increments in any one year.

Year	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Population	100	100	100	100	100	100	100	100	100	100	100
...	...	...	...	...	...	...	...	...	...	...	...

The following table shows the population of the United States from 1950 to 1960. The population was 100 million in 1950 and increased to 150 million by 1960. The population growth was steady and consistent over the period.

The population of the United States in 1950 was 100 million. In 1951, it was 100 million. In 1952, it was 100 million. In 1953, it was 100 million. In 1954, it was 100 million. In 1955, it was 100 million. In 1956, it was 100 million. In 1957, it was 100 million. In 1958, it was 100 million. In 1959, it was 100 million. In 1960, it was 150 million.

The population of the United States in 1950 was 100 million. In 1951, it was 100 million. In 1952, it was 100 million. In 1953, it was 100 million. In 1954, it was 100 million. In 1955, it was 100 million. In 1956, it was 100 million. In 1957, it was 100 million. In 1958, it was 100 million. In 1959, it was 100 million. In 1960, it was 150 million.

## III

Placement of Teachers on the Schedule

1. It shall be the duty of the superintendent of schools to evaluate the training and experience of all teachers.
2. All teachers who have had twenty years service in the Lawrence school department and have less than three years training shall receive two annual increments for experience.
3. Teachers shall have an option of remaining at their salary level on the old schedule or of changing to the new level as determined by their preparation and experience.
4. Teachers of vocational courses shall be placed on the schedule as indicated by their present classification, training and trade experience.
5. After placement on the schedule all teachers shall advance in the regular manner.

## IV

Salaries of Administrative and Supervisory Employees.

1. The basic salary of all administrative and supervisory employees shall be determined in the same manner as teachers salaries.
2. Salary differentials will be paid to those with special responsibility and these will be added to the basic salary as established by the teachers preparation and experience.

The salary differentials for administrative and supervisory employees are as follows: (Table 23).



Table 23. Salary Differentials for Administrative and Supervisory Employees.

Position	Salary Differential
<u>Elementary Principals:</u>	
Schools employing 4 teachers	\$200
Schools employing from 5 to 9 teachers	400
Schools employing from 10 to 14 teachers	800
Schools employing 15 or more teachers	1,000
<u>High School Sub-Masters</u>	800
<u>High School Department Heads</u>	400
<u>Supervisors:</u>	
In charge of both High and Elementary	700
In charge of Elementary	500
Supervisors of instruction	200
<u>Coaching Staff:</u>	
<u>Football</u>	
Head coach	700
Assistant coach	300
<u>Basketball</u>	
Head Coach	400
Assistant coach	200
<u>Track</u>	
Head coach (Indoor track)	300
Head coach (Outdoor track)	300
<u>Faculty Manager (All sports)</u>	900
Athletic Trainer (All sports)	500
<u>Baseball</u>	
Head coach	400
Assistant coach	200

## V

Allowances for Married Teachers

1. The sum of one hundred dollars will be added to the basic salary of all professional employees who are married and living with husband or wife, provided that such husband or wife is not gainfully employed.



2. Another differential of fifty dollars will be allowed for each dependent child up to and including the first three children. For each additional child a differential of twenty-five dollars will be allowed.

## VI

### Salary Committee

1. A salary committee shall be organized to formulate salary policies and bring them to the attention of the school board.
2. This committee shall be composed of one representative from all departments in the school system.
3. The officers for this committee shall be as follows: chairman, vice-chairman, and secretary-treasurer, and shall be elected by the representatives of the various groups.

## VII

### Cooperative Survey

In order to settle the salary problem in a democratic manner a survey should be made that would give a comprehensive understanding of the entire school department. This survey should be conducted on a cooperative basis, by experts in the field of education, teachers, school board members, and lay citizens as well. In this manner all interested parties will have a better understanding of the needs of the school department and will have a part in developing a solution that will be in the best interests of all concerned.



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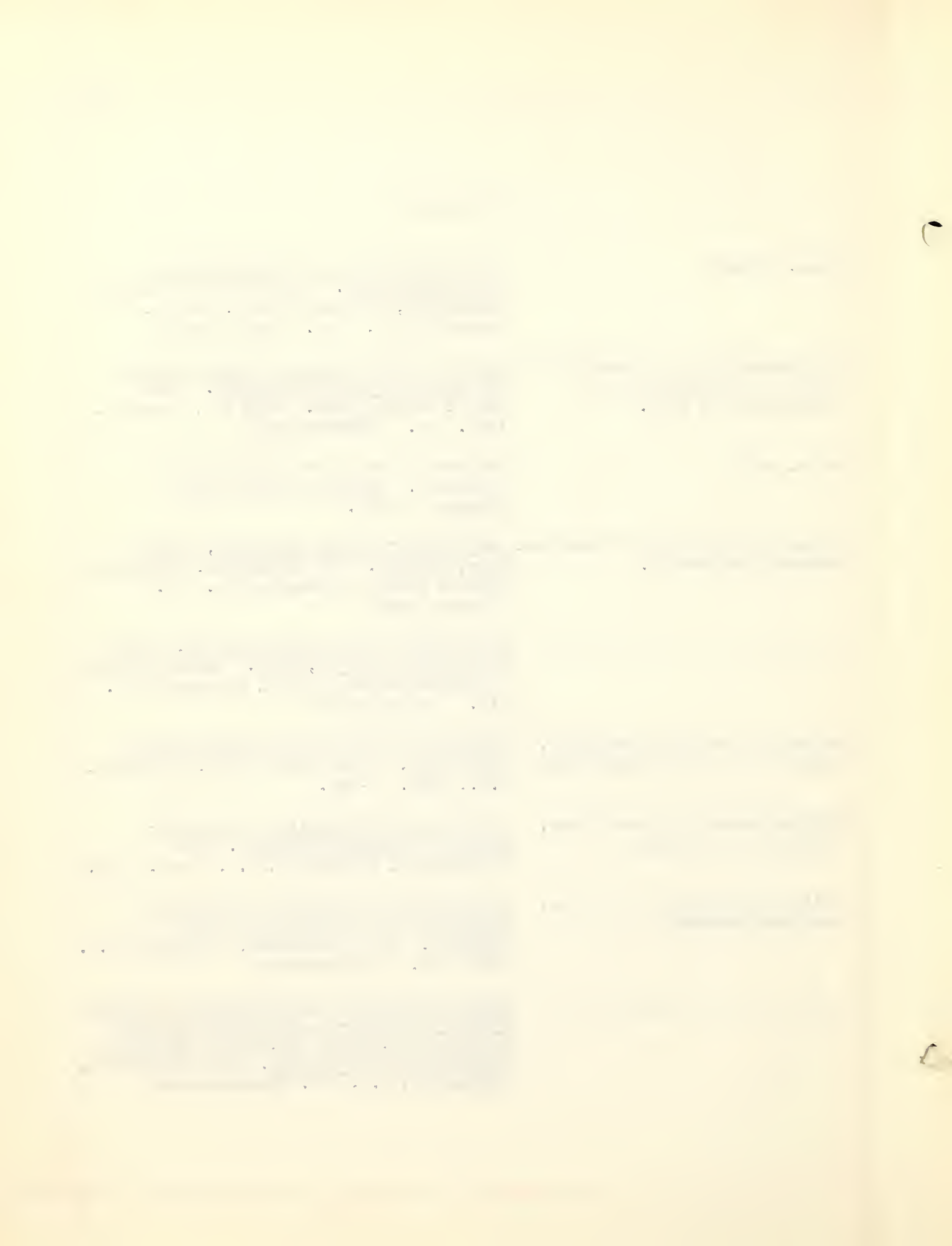
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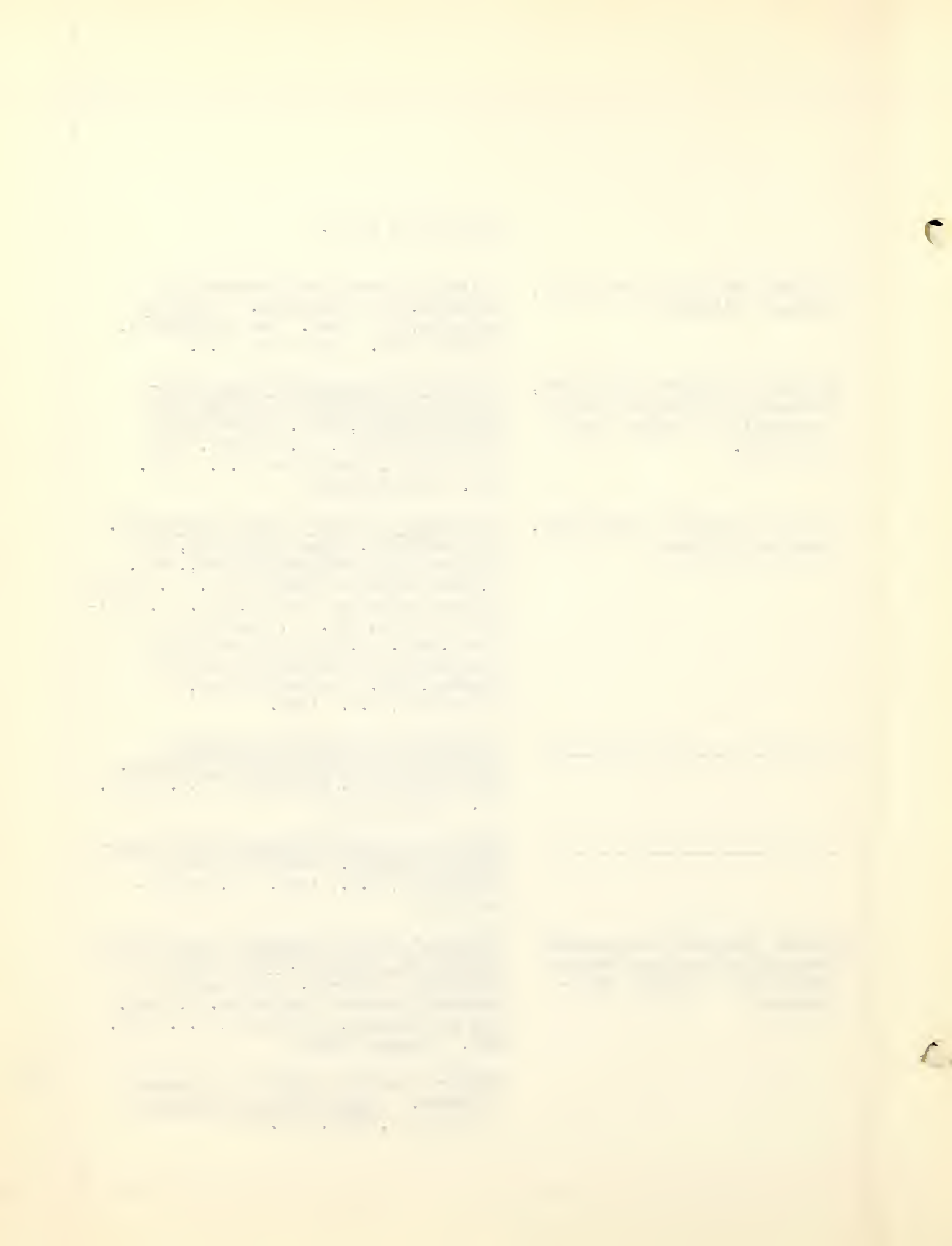
## BIBLIOGRAPHY

- Blair, Herbert The Preparation and Presentation of Salary Proposals. Massachusetts Teachers Federation, 14 Beacon Street, Boston, Massachusetts. 24p. (Planographed)
- The Commonwealth of Massachusetts Office of Division on the Necessaries of Life. Cost of Living Index of Specific Goods and Services in Massachusetts. State House, Boston, Mass. Room 200, November, 1945. 1p. (Mimeographed)
- Davis, Hazel "Interest Grows in the Single-Salary Schedule". American School Board Journal, 71-73p.
- Massachusetts Teachers Federation, Research Department. Salary Distribution in Cities, School Year, 1944-45. The Federation, 14 Beacon Street, Boston, Massachusetts. 6p. (Mimeographed)
- 
- Tabulation of the School Returns, School Year Ending June 30, 1945. The Federation, 14 Beacon Street, Boston, Massachusetts. 11p. (Mimeographed)
- National Education Association, Committee on Equal Opportunity. Progress and Problems in Equal Pay for Equal Work. The Association, Washington, D.C., 1939. 1-29p.
- National Education Association, Committee on Salaries, Problems and Principles in the Scheduling of Teachers Salaries. The Association, Washington, D.C. 1940. 36p.
- National Education Association, Research Division Adjustment of Salaries of Teachers in Service to the Provisions of a New Schedule. The Association, Washington, D.C. 1944 22p. (Mimeographed)
- 
- Average Salaries of Public School Teachers, School Year 1944-45, 190 School Systems in Cities 30,000 to 100,000 in Population According to 1940 Census. The Association, Washington, D.C. 6p. (Mimeographed)



## BIBLIOGRAPHY (cont.)

- National Education Association,  
Research Division, "City Teachers: Their Preparation,  
Salaries, and Experience." Research  
Bulletin, 18: 1-47. The Association,  
January 1940. Washington, D.C.
- National Education Association,  
Research Division and American  
Association of School Admin-  
istrators. Levels of Training and Training Re-  
quirements for Teachers in 186 City  
School Systems, 1937. Educational  
Service Circular, No. 8, 1937. The  
Association, Washington, D.C. 1937.  
26p. (Planographed)
- National Education Association,  
Research Division Procedures in School Salary Scheduling.  
Six bulletins, paged separately, as  
follows: 1, Organizing for Work, 41p.  
2, What Facts Are Needed? 45p. 3. Local  
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mating Costs, 34p. 5, Presenting the  
Facts, 24p. 6, The Story of Salary  
Scheduling in Fourteen City School  
Systems, 25p. The Association,  
Washington, D.C. 1939.
- 
- References on Salaries and Salary  
Scheduling for Public School Teachers.  
The Association, Washington, D.C., 1944.  
9p. (Mimeographed)
- 
- References on the Preparation or Single-  
Salary Schedule. The Association,  
Washington, D.C., 1944. 8p. (Mimeo-  
graphed)
- National Education Association,  
Research Division and American  
Association of School Admin-  
istrators Teachers' Salary Schedules in 171 School  
Systems in Cities 30,000 to 1,000,000 in  
Population, 1944-45. Educational  
Research Service Circular No. 6, 1945.  
The Association, Washington, D.C. 1945.  
63p. (Mimeographed)
- "Salary Schedule Proposed by Professor  
Elsbree." Worcester Daily Telegram,  
February 8, 1946. 1p.



## BIBLIOGRAPHY (cont.)

"Scheduling Teachers' Salaries,"  
The Nations Schools, Vol. 50, No.5,  
November 1942.

"Some Principles for the Construction  
and Administration of Teachers'  
Salary Schedules." American School  
Board Journal, March 1944. 35p.





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