A STUDY OF SOME PROBLEMS IN SCHOOL SUPPLY,
ACCOUNTING PROCEDURE IN SECOND CLASS
CITIES IN KANSAS,

by

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To Dr. J.W. Twente, particularly, the writer would acknowledge a debt of gratitude for the splendid interest and helpful counsel which have made the preparation of this thesis a real pleasure.

Guy W. Webster.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>1</td>
</tr>
<tr>
<td>Table of contents</td>
<td>1</td>
</tr>
<tr>
<td>List of diagrams</td>
<td>1</td>
</tr>
<tr>
<td>List of tables</td>
<td>1</td>
</tr>
<tr>
<td>List of forms and plates</td>
<td>1</td>
</tr>
<tr>
<td><strong>I</strong></td>
<td><strong>INTRODUCTION</strong></td>
</tr>
<tr>
<td>School costs increasing</td>
<td>2</td>
</tr>
<tr>
<td>Importance of costs of school supplies</td>
<td>2</td>
</tr>
<tr>
<td>Statement of problems to be studied</td>
<td>2</td>
</tr>
<tr>
<td>Related studies</td>
<td>2</td>
</tr>
<tr>
<td><strong>II</strong></td>
<td><strong>THE METHODS USED IN THE INVESTIGATION</strong></td>
</tr>
<tr>
<td>Setting up criteria to be used in evaluating procedures</td>
<td>5</td>
</tr>
<tr>
<td>The cities selected</td>
<td>5</td>
</tr>
<tr>
<td>The plan of investigation</td>
<td>5</td>
</tr>
<tr>
<td><strong>III</strong></td>
<td><strong>PRESENTATION OF DATA</strong></td>
</tr>
<tr>
<td>Diagrams showing procedures used for accounting for instructional supplies</td>
<td>18</td>
</tr>
<tr>
<td><strong>IV</strong></td>
<td><strong>ARE THE SUPPLY COSTS SO DISTRIBUTED THAT ACCURATE COSTS FOR VARIOUS UNITS AND FUNCTIONS CAN BE DETERMINED?</strong></td>
</tr>
<tr>
<td>Evaluation of procedures found</td>
<td>35</td>
</tr>
<tr>
<td>Conclusions</td>
<td>35</td>
</tr>
<tr>
<td><strong>V</strong></td>
<td><strong>IS ADEQUATE PROVISION MADE TO PREVENT ACCUMULATION AND WASTEFUL PRACTICE AND TO SECURE ECONOMICAL USE OF SUPPLIES?</strong></td>
</tr>
<tr>
<td>Providing standards of use</td>
<td>37</td>
</tr>
<tr>
<td>Providing standardized lists of supplies</td>
<td>37</td>
</tr>
<tr>
<td>Fixing responsibility</td>
<td>37</td>
</tr>
<tr>
<td>Issuing supplies for current use</td>
<td>37</td>
</tr>
<tr>
<td>Physical inventories</td>
<td>37</td>
</tr>
<tr>
<td><strong>VI</strong></td>
<td><strong>DO THE RECORDS IN THE CENTRAL OFFICE SHOW A COMPLETE AND ACCURATE HISTORY OF EACH TRANSACTION AND FIX RESPONSIBILITY FOR THE SAME?</strong></td>
</tr>
<tr>
<td>Criteria that apply</td>
<td>42</td>
</tr>
<tr>
<td>Analysis of procedures</td>
<td>42</td>
</tr>
</tbody>
</table>
VII  DOES THE BUDGET ACTUALLY SERVE AS A
CONTROL IN THE PURCHASE AND DISTRIBUTION
OF SUPPLIES?  . . . . . . . . . . . .  44

Analysis of procedures.

VIII  IS THE ORGANIZATION CONDUCIVE TO ACCURATE
AND ECONOMICAL MANAGEMENT AND HANDLING
OF SUPPLIES?  . . . . . . . . . . . .  46

The administrative organization --
Organization for the keeping of
records -- Organization for the
handling and distribution of supplies.

IX  A PROPOSED TYPE OF ORGANIZATION AND PLAN
OF PROCEDURE IN HANDLING INSTRUCTIONAL
SUPPLIES.  . . . . . . . . . . . . . .  53

Administrative organization -- The
budget -- Purchasing and paying for
supplies -- Storing and distributing
supplies -- Accounting for supplies.

Bibliography  . . . . . . . . . . . . . .  64

Appendix "A"  . . . . . . . . . . . . . .  1

Appendix "B"  . . . . . . . . . . . . . .  xi
## LIST OF DIAGRAMS

<table>
<thead>
<tr>
<th>Diagram</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagram I</td>
<td>Showing the accounting procedure used for instructional supplies in city &quot;A&quot;.</td>
<td>20</td>
</tr>
<tr>
<td>Diagram II</td>
<td>Showing the accounting procedure used for instructional supplies in city &quot;B&quot;.</td>
<td>21</td>
</tr>
<tr>
<td>Diagram III</td>
<td>Showing the accounting procedure used for instructional supplies in city &quot;C&quot;.</td>
<td>22</td>
</tr>
<tr>
<td>Diagram IV</td>
<td>Showing the accounting procedure used for instructional supplies in city &quot;D&quot;.</td>
<td>23</td>
</tr>
<tr>
<td>Diagram V</td>
<td>Showing the accounting procedure used for instructional supplies in city &quot;E&quot;.</td>
<td>24</td>
</tr>
<tr>
<td>Diagram VI</td>
<td>Showing the accounting procedure used for instructional supplies in city &quot;F&quot;.</td>
<td>25</td>
</tr>
<tr>
<td>Diagram VII</td>
<td>Showing the accounting procedure used for instructional supplies in city &quot;G&quot;.</td>
<td>26</td>
</tr>
<tr>
<td>Diagram VIII</td>
<td>Showing the accounting procedure used for instructional supplies in city &quot;H&quot;.</td>
<td>27</td>
</tr>
<tr>
<td>Diagram IX</td>
<td>Showing the accounting procedure used for instructional supplies in city &quot;J&quot;.</td>
<td>28</td>
</tr>
<tr>
<td>Diagram X</td>
<td>Showing the accounting procedure used for instructional supplies in city &quot;K&quot;.</td>
<td>29</td>
</tr>
<tr>
<td>Diagram XI</td>
<td>Showing the accounting procedure used for instructional supplies in city &quot;L&quot;.</td>
<td>30</td>
</tr>
<tr>
<td>Diagram XII</td>
<td>Showing the accounting procedure used for instructional supplies in city &quot;M&quot;.</td>
<td>31</td>
</tr>
</tbody>
</table>
DIAGRAM XIII
Showing the accounting procedure used for instructional supplies in City "N".

DIAGRAM XIV
Showing the accounting procedure used for instructional supplies in city "O".

DIAGRAM XV
Showing the accounting procedure used for instructional supplies in city "P".

DIAGRAM XVI
Showing the accounting procedure proposed in this study.
LIST OF TABLES.

TABLE I  Page 8
Showing results of evaluation of each statement by groups.

TABLE II  Page 9
Showing how ten graduate students would weight the evaluations of the four groups on the statements from which the criteria will be selected.

TABLE III  Page 11
Showing the numerical value computed for each statement by groups, the weighted value for each statement by groups, and the total weighted value for each statement.

TABLE IV  Page 15
List of cities included in this study, showing taxable valuation and total teaching units of each city.
# LIST OF FORMS AND PLATES

<table>
<thead>
<tr>
<th>FORM</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORM I</td>
<td>Showing the proposed form for purchase order, claim form, and store-keeper's receipt.</td>
<td>56</td>
</tr>
<tr>
<td>FORM II</td>
<td>Showing the proposed form for teachers' requests for supplies.</td>
<td>59</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PLATE</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLATE I</td>
<td>Showing distribution of cities studied and other second class cities in Kansas by valuation and number of teaching units.</td>
<td>14</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION.

The total tax collection in the United States in 1913 was $2,194,000,000 and in 1926 it was $8,555,000,000. The expenditures for public elementary and secondary schools for the same years was $621,546,375 and $2,026,303,190 respectively. The expenditures for schools was 23.77 percent of the total tax collections in 1913 and 23.69 percent in 1926. Except for the years of the war period, this ratio has been fairly uniform. (1)*

The total expenditures for public schools represent 55.2 percent of the amount collected by local governments. The middle state -- of a distribution of the states according to percent of school costs raised by local governments -- raises 68.9 percent of the total cost of the common schools in that state by local taxation. In Kansas the local community pays 97.9 percent of the costs (2) of common schools. Since there is actually more money being spent for schools now than in the past and since most of this money is raised by local taxation, there has been an increasing insistence by the taxpayer that the school administration justify the cost of schools.

There has also been an increasing demand from within the ranks of school administrators for analyses of

* References, numbered serially, will be found in the bibliography on page 64
the problems relating to business administration of the schools. Every department of school costs has been made the subject of study during the last ten years.

School supplies constitute one of the major items of school expense. They are not a negligible item in school costs. Statistics from the United States Bureau of Education show that for the school year of 1925-1926 the amount spent for supplies used in instruction in the United States was $44,661,620. This represents 3.2 percent of the total expenditure for schools for that year. The amount spent in Kansas for school supplies is not shown. The total expenditure for common schools in Kansas was $35,603,056. If no more than the national average is spent in Kansas for instructional supplies, which is a reasonable assumption, the bill would be $1,139,297.

To date, the writer of this thesis has found no study published relative to school supply management or costs in Kansas. Any study of comparative costs or standard costs for school supplies in Kansas at the present time would be so handicapped by the lack of uniformity in accounting procedure as to make its reliability questionable. It seems that there is justification for a study of the accounting procedure used in the management of an item of school expense which probably amounts to one million dollars each year in Kansas.

This study will be confined to an analysis of some of the problems in school supply accounting procedure.
School supplies as referred to apply only to supplies for instruction and supervision. Supplies for plant operation, auxiliary agencies, and general control are not included in this study.

Statements of the problems to be studied follow:

1. Are supply costs so distributed that accurate costs for various units and functions can be determined?
2. Is adequate provision made to prevent loss from accumulation and wasteful practice, and to secure economical use of supplies?
3. Do the records in the central office show a complete and accurate history of each transaction and fix responsibility for the same?
4. Does the budget actually serve as a control in the purchase and distribution of supplies?
5. Is the organization conducive to accurate and economical management and handling of supplies?

From the study it is expected to learn what the present practices in accounting procedure for supplies in Kansas are, as represented by the cities studied. It is hoped the study will show the way to a uniform system of procedure which will make standards of costs available and comparative studies valuable.

Numerous articles dealing with various phases of school supply management may be found in the magazines devoted to the field of educational administration. These articles usually are statements of practices which have
been used in some particular place. The whole literature on this subject indicates how varied and unlike the practices are. Only one study which attempts to evaluate practices and to set up a standard procedure has been found by the writer. That is the study made by R.B. Taylor of sixteen cities located near New York City. Anderson and Fowlkes, in a study recently published, (1929) set up standardized lists of items of supplies and suggest standard costs for those items.
CHAPTER II

THE METHODS USED IN THE INVESTIGATION.

Setting up criteria to be used in evaluating procedures.

The method chosen for setting up criteria for measuring the efficiency of school supply accounting systems was an evaluation of statements of principles by experts in educational administration.

The writer recognizes that the practice of setting up criteria from the judgments of experts may be subject to criticism. The most valid argument against such practice is that conclusions are arrived at subjectively rather than objectively. However, the judgment of an expert is based upon observation, the literature in the field, and his own philosophical thinking. The judgment of specialists is considered valid for the purposes of this study because the selection of those who were to evaluate the statements was made to include those who have had the best opportunity for observation as well as those who were most likely to be acquainted with the literature and experimental work in the field. The group includes superintendents of city schools, professors of education and advanced students in educational administration.

The following series of statements, which may be found in Appendix "B" in the form in which they were sent out, were submitted to fifty individuals whose...
training and experience include work in the field of business administration of city schools. This list of statements is adapted from the principles set up as criteria in Taylor's study of school supply management. Taylor depended upon the judgement of experts in setting up these principles.

Statements from which criteria were chosen:

1. The board of education should limit its activity to determining policies and exercising broad general control.
2. The board of education should function as a whole rather than through committees.
3. The board of education should require the superintendent to assume responsibility for determining kind and quantity of supplies needed, and for purchase and distribution of the same.
4. Depending on the size of the system, the superintendent should re-delegate this responsibility.
5. In the office of the superintendent should be centralized all details of budgeting, purchasing, distributing, and accounting for all supplies.
6. The machinery should be efficient, simple, and of standard procedure.
7. The machinery should avoid duplication or unnecessary delay, and should guard against waste or misuse of supplies.
8. There should be a permanent and continuing system of accounting to show at any time the amount on hand, quantity distributed and where.
9. There should be a complete record of every transaction which should be continuous and cumulative.
10. All supplies (exclusive of perishable goods) should be purchased on competitive bids.
11. The superintendent should have the authority, within limits, to make special and emergency purchases without bids.
12. Emergency or supplementary purchases should be reduced to a minimum.
13. Major items of staple supplies for the whole year should be found in the various buildings, ready for use, at the opening of school in the fall.
14. Accurate records of consumption per grade should be kept for preparation of the annual budget and to estimate future needs.
15. Unnecessary duplication of closely related types of supplies should be avoided.
16. Standard list of supplies should be adopted and published by the Board of education. Each item should be accompanied by definite specifications and probable cost. This list to be modified as occasion demands.
17. Expenditures should be in accordance with budgetary provisions.
18. All records and transactions should conform with legal requirements.
19. A central store-room should be used, from which all supplies would be delivered.
20. Requisitions should originate in those using the supplies.
21. Responsibility for each transaction should be fixed.
22. Records should show that supplies have been distributed as reported.

Responses were secured from forty-six of the fifty to whom the statements were sent. Five professors who teach courses in educational administration in the school of education of the University of Kansas and ten graduate students in seminar in educational administration of the same school were asked to evaluate the statements. All professors and graduate students checked the criteria as directed. Ten of the eleven superintendents of schools in cities of the first class in Kansas gave responses. The superintendents of schools in the fifteen second class cities included in the study and nine other superintendents of schools in second class cities located in parts of the state not covered by the survey were asked to evaluate the statements. The twenty-one replies received include all except two of the superintendents whose schools are included in this study. The statements of principles were not submitted until after the data for this study had been collected.

The statements were scored as essential, desirable but not essential, or neither desirable nor essential. Table I is a tabulation of the scores from each group on each statement. In columns marked "E" is given
TABLE I

SHOWING RESULTS OF EVALUATION OF EACH STATEMENT BY GROUPS.

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</thead>
<tbody>
<tr>
<td>E</td>
<td>D</td>
<td>N</td>
<td>E</td>
<td>D</td>
</tr>
<tr>
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<td>10</td>
<td>0</td>
<td>16</td>
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Columns "E" show number of each group scoring the statement as essential.
Columns "D" show the number of each group scoring the statements as desirable but not essential.
Columns "N" show the number of each group scoring the statements as neither essential nor desirable.

The table is read as follows: On statement No. 2, three superintendents of first class cities score essential, seven of the same group score desirable but not essential, and none score it neither desirable nor essential; nine superintendents of second class cities score it essential, eight as desirable but not essential, and four as neither desirable nor essential.
the number of persons in the group who scored the statements essential. Similarly, the columns marked "D" show the number who judge the statement as desirable but not essential. The columns marked "N" show the number who score the statement as neither desirable nor essential. For example, in the faculty group, five scored the statement No. 1 as essential, two scored statement No. 2 as essential while three scored it as desirable but not essential, and none scored it as neither desirable nor essential.

In order to determine how much weight should be given the opinion of each group judging the statements, ten graduate students in educational administration seminar of the University of Kansas were asked to submit judgements as to the weight that should be attached to each group opinion. Table II shows the response of each student and the weight finally assigned to the opinion of each group.

TABLE II
SHOWING HOW TEN GRADUATE STUDENTS WOULD WEIGHT THE EVALUATIONS OF THE FOUR GROUPS ON THE STATEMENTS FROM WHICH THE CRITERIA WILL BE SELECTED.

<table>
<thead>
<tr>
<th>Student</th>
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<td></td>
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</tr>
<tr>
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<td>4.</td>
<td>3.</td>
<td>2.</td>
</tr>
<tr>
<td>K</td>
<td>.8</td>
<td>1.</td>
<td>.4</td>
<td>.2</td>
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<td>56.</td>
<td>43.275</td>
<td>26.575</td>
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<td>5.6</td>
<td>4.3</td>
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* The average of the students' weighting was used in the computations for selecting the criteria.
The next step in the procedure was to convert the ratings shown in Table I into numerical values and apply the weights shown in Table II. First, the judgement of essential was given a value of two, and a judgement of desirable but not essential was given a value of one. Those judgements of neither desirable nor essential were given zero value. Columns marked (1), (2), (3), and (4) in Table III show the numerical value for each statement by groups. Secondly, these values were multiplied by the average weights assigned to the respective groups in order to find the weighted value for each statement. These weighted values are shown in columns (5), (6), (7), and (8) of Table III. The total weighted value for each statement is shown in column (9) of the same table.

The highest possible total weighted score for a statement would be 401.6. This would be the score if every one had scored the statement essential. Statement No. 18 illustrates the point. It was decided that any statement scoring more than three-fourths of the highest possible score would be used as one of the criteria. This provides a high standard for selection. Those statements which score more than three-fourths of the highest possible score are indicated by an asterisk (*) in Table III.

The statement of criteria for the purposes of this study follow. They are arranged in the order of the total score, beginning with the statement receiving the highest score.
TABLE III

SHOWING THE NUMERICAL VALUE COMPUTED FOR EACH STATEMENT BY GROUPS, THE WEIGHTED VALUE FOR EACH STATEMENT BY GROUPS, AND THE TOTAL WEIGHTED VALUE FOR EACH STATEMENT.

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<td>22*</td>
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<td>16</td>
<td>34</td>
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* These statements will be used as criteria. Columns 1,2,3, and 4 were multiplied by 5.7, 5.6, 4.3, and 2.6 respectively to get weighted values in columns 5,6,7, and 8.
1. All records and transactions should conform with legal requirements.

2. Expenditures should be in accordance with budgetary provisions.

3. The board of education should limit its activity to determining policies and exercising broad general control.

4. In the office of the superintendent should be centralized all details of budgeting, purchasing, distributing, and accounting for all supplies.

5. The machinery should be efficient, simple, and of standard procedure.

6. The machinery should avoid duplication or unnecessary delay, and should guard against waste or misuse of supplies.

7. Responsibility for each transaction should be fixed.

8. The board of education should require the superintendent to assume responsibility for determining kind and quantity of supplies needed, and for purchase and distribution of the same.

9. The superintendent should have authority, within limits, to make special and emergency purchases without bids.

10. Unnecessary duplication of closely related types of supplies should be avoided.

11. There should be a permanent and continuing system of accounting to show at any time the amount on hand, quantity distributed and where.

12. Records should show that supplies have been distributed as reported.

13. There should be a complete record of every transaction which should be continuous and cumulative.

14. Emergency or supplementary purchases should be reduced to a minimum.

The cities selected.

The cities included in this study were selected because of their convenient location with respect to Lawrence. The data were secured through personal interview
by the investigator who was making his home at Lawrence at the time the study was made. The cities studied all lie in the eastern one-third of the state. Some degree of uniformity in the size of the cities studied was secured by limiting the study to second class cities.

Plate I shows the second class cities of the state, except those in which community high schools are located, distributed according to their taxable valuation and total number of teaching units. The taxable valuation and teaching units used are those given by Paul R. Hort (6) in the Kansas School Code Commission report. It will be noted that the selection of cities used in this investigation is fairly representative of the second class cities in the state on a basis of valuation and school population. There are, in the state, nine second class cities with more than ten million dollars valuation and more than seventy teaching units. Three of these are represented in the study. Of the forty-four second class cities with less than six million dollars valuation and less than forty teaching units, eight are included in this study.

It is no part of the study to analyze the differences between the larger systems and the smaller systems. It is pertinent to the problem of representativeness of the cities selected to suggest that, rated by the criteria which have been set up, the larger cities studied generally have better accounting control than the smaller cities included in the study.
PLATE I
SHOWING DISTRIBUTION OF CITIES STUDIED AND OTHER SECOND CLASS CITIES IN KANSAS BY VALUATION AND NUMBER OF TEACHING UNITS. DATA FROM PAUL R. MORT'S STUDY FOR KANSAS SCHOOL CODE COMMISSION.

Valuation in millions of dollars
o cities studied
x other second class cities
Since the larger cities are represented by one of each three, whereas the smaller cities are represented by only one for each five, and since the larger cities of the group generally are given a higher rating than the smaller cities, it is fair to assume that the conditions reflected in the study represent a somewhat better situation than would be shown if all second class cities had been represented in the investigation. It is only fair to state that at least two of the smaller cities have accounting procedures for supplies that would rate equal to any of the larger cities according to our criteria.

The cities studied, with the taxable valuation and total teaching units of each are listed in Table IV.

**TABLE IV**

LIST OF CITIES INCLUDED IN THIS STUDY, SHOWING TAXABLE VALUATION AND TOTAL TEACHING UNITS OF EACH CITY.

<table>
<thead>
<tr>
<th>Name of city</th>
<th>Taxable valuation</th>
<th>Total teaching units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bonner Springs</td>
<td>$3,818,000</td>
<td>22.15</td>
</tr>
<tr>
<td>2 Chanute</td>
<td>11,578,000</td>
<td>85.47</td>
</tr>
<tr>
<td>3 Cherryvale</td>
<td>4,118,000</td>
<td>43.25</td>
</tr>
<tr>
<td>4 Garnett</td>
<td>2,748,000</td>
<td>26.16</td>
</tr>
<tr>
<td>5 Hiawatha</td>
<td>4,692,000</td>
<td>31.99</td>
</tr>
<tr>
<td>6 Holton</td>
<td>3,633,000</td>
<td>25.93</td>
</tr>
<tr>
<td>7 Horton</td>
<td>3,822,000</td>
<td>33.40</td>
</tr>
<tr>
<td>8 Humboldt</td>
<td>6,592,000</td>
<td>26.55</td>
</tr>
<tr>
<td>9 Independence</td>
<td>15,356,000</td>
<td>37.07</td>
</tr>
<tr>
<td>10 Iola</td>
<td>7,253,000</td>
<td>68.72</td>
</tr>
<tr>
<td>11 Manhattan</td>
<td>12,046,000</td>
<td>78.50</td>
</tr>
<tr>
<td>12 Olathe</td>
<td>5,555,000</td>
<td>54.92</td>
</tr>
<tr>
<td>13 Osawatomie</td>
<td>3,176,000</td>
<td>38.54</td>
</tr>
<tr>
<td>14 Ottawa</td>
<td>9,837,000</td>
<td>75.57</td>
</tr>
<tr>
<td>15 Paola</td>
<td>5,019,000</td>
<td>27.96</td>
</tr>
</tbody>
</table>

Figures for taxable valuation and total teaching units were taken from Kansas School Code Commission report by Dr. Paul R. Hort. (6)
Plan of investigation.

The data for this study were secured by personal interview with a check list. The questions in the check list were designed with the purpose of securing complete and exact information for any situation that might be encountered.

The questions were grouped under the general headings: "Administrative organization for supply control", "The budget and supplies", "Accounting procedure for supplies", "Purchasing of supplies", "Requisitions for supplies", "Receiving deliveries and paying for supplies", "Storage of supplies", "Supplies for special classes", and "Distribution and allocation of supplies".

In every case the interview was with the superintendent of schools. Appointments for the interview were secured by letter. During the interview the investigator and the superintendent each had a copy of the check list. The answers were dictated by the superintendent to the investigator. Each copy had written interpretations or multiple choice type of responses where necessary, in order to secure uniformity in terminology. The complete set of questions in the check list will be found in Appendix "A".

The plan used has much to recommend it. In every case the interview was most pleasant. It gives the superintendent an opportunity to ask questions and to learn something of what other schools are doing with respect to some particular problem in which he is interested. There
are one hundred thirty-six items on the check list. These were covered in interviews of not more than two hours, usually slightly over an hour. Several superintendents expressed their appreciation of such a method of securing data. The visit enabled the investigator to give the superintendent a better idea of the whole purpose and plan of the study than would have been possible in a letter of ordinary length.

Further justification for the study was indicated by the interest shown in the subject. Several of the superintendents were found to be working for a solution of some of the problems relating to the management of school supplies.
CHAPTER III

PRESENTATION OF DATA.

Diagrams I to XV, inclusive, show graphically the procedure for budgeting, requisitioning, ordering, distributing, and paying for supplies in each of the fifteen cities.

Physical inventories are made annually in every city. In most cases these inventories are submitted with the estimate for the next year's supply and are taken into consideration by the superintendent in making his annual budget. This is good practice.

In most cases the teachers', supervisors', and principals' estimates are considered as annual requisitions and when incorporated into the budget and approved they serve as approved requisitions. On the basis of this approved requisition the superintendent or purchasing agent makes the purchase order for the yearly supply. All later requisitions or requests are considered as supplementary supplies. The procedure for these requests is indicated in the diagrams.

The movement of the supplies from vendor to user is indicated. The user, so far as the accounting records are concerned, is the teacher or other person who distributes the supplies to pupils or uses them in his work. It is pertinent to note that in only one city are the teachers required to receipt for deliveries of supplies. In cities
"C" and "G" the supplies for secondary schools are stored in one central store-room, while those for elementary schools are stored in a separate central store-room. These are designated as central store-rooms because they serve more than one building. In neither case are there central store-rooms in the sense that all supplies must pass through them or be stored in them.
SHOWING THE ACCOUNTING PROCEDURE USED FOR INSTRUCTIONAL SUPPLIES IN CITY "A".

R. Annual requisition; estimated needs for year.
E. Budget estimate; compiled from annual requisition.
A. Request for supplies; verbal or written; supt. may (1) deliver from stores, (2) write purchase order, or (3) forward to supply committee.
P. Purchase order; supt. writes for small amounts only.
I. Invoices; approved by supt. and auditing comm.
S. Supplies.
W. Warrant; written by clerk, pres. signs, treas. countersigns.
D. Approved requisition.
B. Budget.

Notes:
All supplies through central store-room.
Supt. is store-keeper.
No receipt given by person receiving supplies.
SHOWING THE ACCOUNTING PROCEDURE USED FOR INSTRUCTIONAL SUPPLIES IN CITY "B".

S. Supplies.
V. Annual inventory; submitted with annual requisition.
R. Annual requisition; estimated needs for year.
E. Budget estimate; compiled by supt. from annual req.
B. Budget.
P. Purchase order; supt. orders on basis of items approved in budget.
A. Request for supplies; supt. may deliver from store or order from vendor; verbal or written.
I. Invoice; approved by supt.
W. Warrant; written by clerk; countersigned by treasurer.
D. Approved requisition.
F. Request for supplementary purchase; verbal or written.

Notes:
Supt. is storekeeper; issues all supplies from central stores direct to teachers.
No receipt given by person receiving supplies.
V. Annual inventory; submitted with annual requisition.
R. Annual requisition; estimated needs for year.
E. Budget estimate; compiled by supt. from annual requisition.
B. Budget.
P. Purchase order; by purchasing agent only.
I. Invoice; checked by clerk and approved by purchasing agent.
W. Warrant; clerk writes; signed by treasurer.
S. Supplies; all supplies for grades to one central store-

room, for secondary schools and supervisors to another
central store-room; janitors are store-keepers; issue only
on written order of clerk.
A. Request for supplies; written only; forwarded by clerk to
store-keeper for issue or to purchasing agent for order;
headed 'Want Sheet'.
C. Receipted copy of 'Want Sheet' returned to clerk after
supplies received.
D. Approved requisition.

Notes:
Supt. is authorized purchasing agent.
Clerk of board is secretary to supt.
SHOWING THE ACCOUNTING PROCEDURE USED FOR INSTRUCTIONAL SUPPLIES IN CITY "D".

V. Annual inventory; submitted with annual requisition.
R. Annual requisition; estimated needs for the year.
B. Budget.
D. Approved requisition.
P. Purchase order.
S. Supplies.
A. Request for supplies from store; verbal request through prin. to supt. who issues from central stores.
I. Invoice; claim form sent with order.
W. Warrant; clerk writes; treasurer countersigns.
E. Budget estimate; compiled by supt. from annual requisitions.
F. Request for additional supplies to be purchased; verbal or written request through prin. to supt.

Notes:
Custodian of high school building is store-keeper.
No receipt is given by person receiving supplies.
No record is kept of deliveries to or from store-room.
Claim form for vendor; approved requisition and purchase order form are identical.
V. Annual inventory.
R. Annual requisition; estimated needs for year; principals make summary of teachers' requisitions.
E. Budget estimate; compiled by supt. from annual requisitions.
B. Budget.
F. Requisition for supplies to be purchased; forwarded to supt. through principals.
P. Purchase order.
D. Approved requisition.
I. Invoice; approved by supt. and sent to board.
W. Warrant; clerk writes; president signs; treasurer countersigns.
S. Supplies.
A. Request for supplies from stores.

Notes:
Supt.'s. secretary is store-keeper of central store-room.
No record is made of deliveries to and from central store-room.
Supplies are issued to teachers and supervisors through building store-rooms.
Supt. does not know plan used by principals in issuing supplies from building store-rooms.
No record of amount of supplies issued to any teacher is received in the central office.
SHOWING THE ACCOUNTING PROCEDURE USED FOR INSTRUCTIONAL SUPPLIES IN CITY "F".

R. Annual requisition; estimated needs for year; need not be reported in writing by teachers; compiled by supt.; approved by board and president of board orders.

P. Purchase order; made by president of board or supt.

S. Supplies.

I. Invoice; sent to supt. or clerk of board; either may approve and present to board for order to pay.

W. Warrant; written by clerk; treasurer countersigns.

A. Request for supplies; usually verbal; supt. may issue from stores or make purchase order.

V. Annual inventory made at close of school year.

Notes:
Supt. is store-keeper.
No record made of deliveries to or from store-room.
No receipt given for supplies issued.
No budget used in this system.
Frequently purchases are made by employees of the board and refunds made to the purchaser.
V. Annual inventory; submitted with annual requisition.
R. Annual requisition; estimated needs for year; principals summarize teachers estimates.
E. Budget estimate; compiled by supt. from annual requisition.
D. Approved requisition; budget is considered as approved requisition for items included; supplementary requisitions approved by supt. or purchasing agent.
P. Purchase order; made by purchasing agent only.
A. Request for supplies; verbal or written; issued by prin. if in store; if not, prin. makes supplementary request for purchase.
S. Supplies.
B. Budget.
I. Invoice; sent to purchasing agent who checks; supply committee approves; board orders paid.
W. Warrant; written by clerk; treasurer countersigns.
F. Request for supplementary purchase.

Notes:
Purchasing agent is clerk of board and bookkeeper; office next to supt. office.
No receipt required of persons receiving supplies.
Supervisors supplies stored in building store-room.
DIAGRAM VIII

SHOWING THE ACCOUNTING PROCEDURE USED FOR INSTRUCTIONAL SUPPLIES IN CITY "H".

V. Annual inventory; submitted with annual requisition.
R. Annual requisition; estimated needs for year.
E. Budget estimate; compiled by supt. from annual requisition.
B. Budget.
D. Approved requisition; approval of budget is approval of annual requisition items included; supplementary requests are approved by supt. who writes requisitions.
P. Purchase order
S. Supplies; delivered by vendor to either high school stores or central grade stores.
A. Teachers' requests for supplies from stores; secondary school teachers to prin. of senior high school; grade school through prin. of bldg. to supt. who issues.
AC. Grade school teachers request for supplies. (see A)
I. Invoice; may be sent to supt. or clerk; approved by either.
W. Warrant; written by clerk; countersigned by treasurer.
P. Requests for supplementary supplies to be purchased.

Notes:
Central stores for grades is in supt's office.
Central stores for Jr. H.S., Sr. H.S., and Jr. Coll. in H.S. bldg.
Supervisor helps herself from bldg. stores or central stores.
Clerk is bookkeeper; books kept in his office downtown.
No receipt required from person receiving supplies.
Janitors supplies handled by clerk of board.
SHOWING THE ACCOUNTING PROCEDURE USED FOR INSTRUCTIONAL SUPPLIES IN CITY "J"

V. Annual inventory; submitted with annual requisition.
R. Annual requisition; estimated needs for year.
E. Budget estimate; compiled by supt. from annual requisition.
B. Budget; when returned to supt. serves as approved requisition for yearly purchase.
D. Approved requisition; from adopted budget or supplementary requisitions approved by supt.
P. Purchase order.
A. Teachers' requests for supplies; prin. issues the supplies.
F. Supplementary requisition; made by teacher or prin.; to supt. for approval and purchase order.
H. Teacher may help herself to supplies from bldg. stores.
S. Supplies.
I. Invoice; approved by supt.; O.K. by supply comm.; ordered paid by board.
W. Warrant; clerk writes; treasurer countersigns.

Notes:
No supervisors in this school.
No receipts required from those receiving supplies.
SHOWING THE ACCOUNTING PROCEDURE USED FOR INSTRUCTIONAL SUPPLIES IN CITY "K".

V. Annual inventory; submitted with annual requisition.
R. Annual requisition; estimated needs for year.
E. Budget estimate; compiled from annual requisitions.
B. Budget.
D. Approved requisition; may be annual requisition items in budget or supplementary requisitions approved by supt.
S. Supplies; all go through central store-room.
F. Supplementary requisition; written and sent to supt. who approves.
A. Request for supplies from store-room.
P. Purchase order; made by supt.; it is the same form as the requisition of the supt.
I. Invoice; O.K. by supt.; ordered paid by board.
w. Warrant; written by clerk; signed by president of board.

Notes:
No receipt required for delivery of supplies to teachers or supervisors.
Clerk of board is supt's. secretary and bookkeeper for the board.
Janitor's supplies handled by supt. of buildings and grounds.
All supervisors supplies stored in central store-room and issued by supt.
SHOWING THE ACCOUNTING PROCEDURE USED FOR INSTRUCTIONAL SUPPLIES IN CITY "I".

V. Annual inventories made but not submitted with annual requisitions.

R. Annual requisition; estimated needs for year; approved by principal and forwarded to supt.

E. Budget estimate; compiled by supt. from annual requisitions.

B. Budget; authority for approved requisitions of the supt.

D. Approved requisition; may be items from annual requisition in the budget or supplementary requisitions from teachers.

P. Purchase order; made by supt.

S. Supplies; all delivered by vendor to central store-room and issued directly to teacher or principal who uses them.

F. Supplementary requisitions; to supt. who approves and writes purchase order.

A. Request for supplies from stores; written; sent to supt. who issues from central stores.

I. Invoice; approved by supt. and auditing comm.; board orders paid.

W. Warrant; written by clerk; signed by president.

Notes:

There are no supervisors in this school.

Principals handle supplies only as a teacher.

No receipt required for supplies delivered.
SHOWING THE ACCOUNTING PROCEDURE USED FOR INSTRUCTIONAL SUPPLIES IN CITY "M".

**Diagram XI.**

- **V** Annual inventory.
- **R** Annual requisition; may be verbal; principals summarize teachers' requisitions.
- **D** Approved requisition; made by Supt.; same form used for requisition and purchase order.
- **P** Purchase order
- **S** Supplies; delivered to central stores; sent on to buildings and distributed to rooms before school opens in the fall; very little kept in store-rooms and no uniform plan for distributing what is there.
- **F** Request for additional supplies; verbal request to principal who makes verbal request to Supt.
- **I** Invoice; approved by Supt.; ordered paid by Board.
- **W** Warrant; written by clerk of Board; countersigned by treasurer of Board.

**Notes:**
- Supervisors are special teachers and supplies handled the same as teachers' supplies.
- Person receiving supplies for use does not give receipt.
- No budget used in this system.
- Clerk of Board does the bookkeeping for the school.
- Board records kept in the Clerk's home.
SHOWING THE ACCOUNTING PROCEDURE USED FOR INSTRUCTIONAL SUPPLIES IN CITY "N"

V. Annual inventory; submitted with annual requisition.
R. Annual Requisition; estimated needs for the year.
E. Budget estimate; compiled by Supt. from annual requisition.
B. Budget
D. Approved requisition; Supply committee approves annual requisition; requisitions for additional supplies approved by Supt. only.
F. Request for supplementary supplies; written.
A. Request for supplies from store-room; verbal or written.
S. Supplies; all supplies go through central store-room.
I. Invoice; approved by Supt. and ordered paid by Board.
W. Warrant; order drawn by Clerk; Treasurer writes warrant.
P. Purchase orders; made by Supt. only.
H. Principal's request for supplies from central stores to grade building stores.

Notes:
All supplies issued to teacher from building store-room.
No receipt required from person receiving supplies for use.
Supt's. secretary does the bookkeeping.
There are no supervisors in this system.
SHOWING THE ACCOUNTING PROCEDURE USED FOR INSTRUCTIONAL SUPPLIES IN CITY "O".

**DIAGRAM XIV**

V. Annual inventory; submitted with annual requisition.
R. Annual requisition; estimated needs for year.
E. Budget estimate; compiled by supt. from annual requisition.
B. Budget.
D. Approved requisition; bldg. comm. approves annual requisitions after budget is adopted; supt. makes approved requisitions for supplementary purchases.
A. Request for supplies from stores; verbal or written; no receipt required on delivery.
F. Requests for supplementary purchases; verbal or written.
P. Purchase order; made by clerk of board; building comm.; or supt.
S. Supplies; vendor may deliver to store-room or direct to teacher who uses.
I. Invoice; may be sent to supt., clerk, treasurer, or chairman bldg. comm.; all invoices approved by auditing comm.
W. Warrant; clerk draws order on treasurer who writes warrant and sends to supt. who mails to vendor.

Notes:
Principals handle supplies as teacher only.
Clerk of board is bookkeeper; books at his home.
No store-rooms in buildings but principals have cupboards in which a few items are kept. Teachers help themselves.
SHOWING THE ACCOUNTING PROCEDURE USED FOR INSTRUCTIONAL SUPPLIES IN CITY "F".

DIAGRAM XV

V. Annual inventory; submitted with annual requisition.
R. Annual requisition; estimated needs for year.
D. Approved requisition; budget is authority for chairman of purchasing committee to approve requisitions.
E. Budget estimate; compiled by supt. from annual req.
B. Budget
F. Request for additional supplies to be purchased; verbal or written to supt. who writes note to chairman of purchasing committee.
A. Request for supplies from store; verbal or written to prin. or supt.
S. Supplies.
I. Invoices; sent to clerk of board; approved by purchasing committee; ordered paid by board.
W. Warrant; written by clerk; countersigned by treasurer.
P. Purchase order; made by chairman purchasing comm.

Notes:
Supervisors are special teachers; supplies handled as teachers.
No receipt required of person receiving supplies.
It is necessary to know accurately the total costs if reliable cost analyses are to be made. Cost of supplies is not a negligible item in any department of school work and should therefore be included in total costs of various units and functions. The superintendent has many reasons for wanting unit costs, as well as costs by functions. Unit costs are necessary in predicting costs of new programs or added units. They are necessary in comparisons within the system, in compiling budget estimates, and in comparative studies of costs with other schools.

The study shows that supply costs are distributed on the voucher register to various functions in eleven of the cities studied. In six of the cities supply costs are distributed to various units. Bookkeepers in two of the cities make cost distribution sheets for supplies. Records of supplies delivered to each grade or department are made in five cities.

The conclusion is that in most cases supply costs are not so distributed that accurate costs for various units and functions can be determined. Probably the outstanding reason for this condition lies in the fact that there is no standard accounting procedure used in Kansas schools. Seven of the schools were using accounting systems that
provided for the distribution of costs according to the United States Bureau of Education standards. Two of these made no attempt to refine the distribution further than the eight general headings provided for in the voucher register. Three of the schools used quite detailed refinement of costs.

The first need in being able to determine costs for various units is the adoption of an accounting system that will provide for distribution of all costs by units or departments. There would be no point in distributing costs of supplies when costs of instruction, general control, etc. were not distributed to the various units.

The plan presented in chapter IX provides for as detailed distribution of costs of instructional supplies as desired. The costs could be distributed by organization units, department units, grade units, building units, or any combination with a minimum of work. One bookkeeper, spending half a day each month, could do all the posting necessary for quite a large school system.
CHAPTER V

IS ADEQUATE PROVISION MADE TO PREVENT ACCUMULATION AND PREVENT WASTEFUL PRACTICE AND TO SECURE ECONOMICAL USE OF SUPPLIES?

The following criteria apply in a discussion of this question:

The machinery should avoid duplication or unnecessary delay, and should guard against waste or misuse of supplies.

Responsibility for each transaction should be fixed.

Unnecessary duplication of closely related types of supplies should be avoided.

Records should show that supplies have been distributed as reported.

Emergency or supplementary purchases should be reduced to a minimum.

Fourteen of the fifteen superintendents interviewed said that the board of education in its rules or the superintendent in his instructions to teachers does attempt definitely to secure the cooperation of the staff in the wise and economical use of supplies. All except two of the superintendents qualified the statement by saying that this attempt to secure cooperation was made through the superintendent's instructions and not by rules of the board.

There are various opinions as to what constitutes adequate provision for preventing wasteful practices. The writer takes the position that since human nature is as it is, requests and instructions are not adequate provision for preventing wasteful practice. Definite controls as well as instructions must be used if wasteful practices are to be adequately prevented. These controls must be nicely
balanced so they will make it convenient to secure necessary supplies, yet difficult to secure supplies which are not needed.

Some controls that could be used effectively are to provide standards as to the amount and kinds of supplies to be used, (the term, standards of use, will be used hereafter in speaking of these standards) to provide standard items of supplies, to issue only the supplies necessary for current use, to fix responsibility for requesting and issuing supplies, and to have frequent and careful physical inventories. Each of these controls will be discussed in this chapter.

Providing standards of use.

No board of education in the cities studied has adopted standards for gauging quantities of supplies needed. In answer to the question, "Have standards been worked out for estimating supplies needed for the whole system or any part of it?", fourteen superintendents said, "No". Four of them also said the problem was being worked on in their respective schools.

These answers indicate that some of the superintendents recognize the need for standards of use. It is suggested that the first requisite is to establish some system of accounting that will provide the central office with accurate and detailed information as to the use of supplies by various units and departments. The plan
proposed in chapter IX, if put into practice, would provide that information. Anderson and Fowlkes have set up standards of use and standard costs, based on the median practice of one hundred cities.

(5)

Providing standardized lists of supplies.

Standardized lists of supplies would serve as a control in the use of supplies. Such lists would largely prevent some enthusiastic salesman from overselling the school. They would prevent waste due to discontinued items. The survey shows that four schools have adopted standard lists for some items. It is probable that teachers with lists of approved items before them will be less likely to want items of questionable value. Certainly, they would have to justify the need before the items would be purchased. Lists of approved items will facilitate purchasing and should lead to better practices in purchasing. These lists should give specifications of quality so the waste due to buying faulty material would be reduced.

Fixing responsibility for requesting and issuing supplies.

There are many advantages to be derived from requiring that responsibility for supplies be fixed. From the standpoint of encouraging economy in the use of supplies alone, the practice could probably be justified. Teachers will be more likely to consider carefully their need for
supplies if the request must be put in writing. Those who are responsible for accounting for supplies will tend to be more careful in their management if the responsibility is fixed. Written requests and written receipts for supplies would serve to fix the responsibility so far as the teachers are concerned. Only three schools studied require that teachers' requests for supplies be written.

Issuing supplies for current use.

If only the supplies necessary for current use are issued at one time, there is less chance for waste to occur in the school room. This waste may be due to inadequate storage space for larger stocks of supplies. Some teachers do not safeguard the supplies from pupils who use the supplies wastefully. There are more chances for waste from deterioration if large amounts to serve for long periods are delivered at one time.

Physical inventories.

The most direct means of preventing waste from accumulation, deterioration, and discontinued items is to provide for frequent and careful inventories of all store-rooms. One of the cities studied provided for two inventories each year. All the others provide for only one inventory each year and that, in most cases, at the close of the school term. The chances are that many accumulated items that could be used are laid back to await the next year. When the
new year comes with its stock of new supplies, the old accumulated items are forgotten until the next inventory at the close of the year. The proposed plan of procedure provides for at least four regular inventories of store-rooms each year. This practice should keep the supplies moving instead of accumulating.

To those who would argue that such a system of controls as suggested here would tend to discourage the use of supplies, this study would indicate that that is exactly what is intended. The channels for securing needed supplies are wide open and the procedure is made easy and convenient. The teacher herself should welcome a plan of control that would give standards of use, standard items, and a written record of requests and deliveries. She would then have objective evidence on which to base her claims for supplies really needed, for estimating costs for proposed new programs, and for her own protection against any charge of wasteful practice.
CHAPTER VI

DO THE RECORDS IN THE CENTRAL OFFICE SHOW A COMPLETE AND ACCURATE HISTORY OF EACH TRANSACTION AND FIX RESPONSIBILITY FOR THE SALE?

The practices and procedures for accounting procedure should be evaluated with respect to the following criteria;

In the office of the superintendent should be centralized all details of budgeting, purchasing, distributing, and accounting for all supplies.

The machinery should be efficient, simple, and of standard procedure.

Responsibility for each transaction should be fixed.

There should be a permanent and continuing system of accounting to show at any time the amount on hand, quantity distributed and where.

Records should show that supplies have been distributed as reported.

There should be a complete record of every transaction which should be continuous and cumulative.

Nine of the questions on the check sheet that have reference to the records in the central office are listed below. A summary of replies to each question is given.

Can the history of each transaction affecting supplies be traced from records in the central office? Yes, 8; no, 7.

Are copies of all forms used in accounting for supplies filed in the central office? Yes, 9; no, 6.

Are records kept of room or grade to which supplies are issued? Yes, 5; no, 10.

Are records of supplies delivered to and withdrawn from the building store-rooms sent to the central office? Yes, 0; no, 10. (Only ten cities had building store-rooms.)

Does the central office receive written information of supplies put into the central store-room? Yes, 10; no, 5.
Does the central office receive written information of supplies taken out of the central store-room? Yes, 7; no, 8.

Describe the procedure by which a teacher secures supplies from stores. Written request, 3; verbal request, 4; verbal or written request, 6; helps herself, 3.

Does the teacher receipt for supplies received directly from the central store-room? Yes, 1; no, 8. (In six cases supplies are not issued to teachers from the central store-room.)

Does the teacher receipt for supplies received from the building store-room? Yes, 0; no, 10. (In five cities building store-rooms are not maintained.)

A study of these questions and replies shows that in only one-half the cities studied is it possible to get a history of each transaction from records in the central office. The figure is actually lower than indicated by the answers to the first question because in some of those schools in which the superintendents said that a complete history could be traced from his records, the requests for supplies from stores by the teachers were given verbally. Accounting practice cannot recognize such requests for matters of record.

The accounting procedure fixes responsibility for each transaction in only one city. It is in the matter of management of supplies within the system that the responsibility is not fixed. Provision for fixing responsibility in those relations with persons outside the school system is generally adequate.

A proposed procedure for providing a complete history of each transaction for the central office and for fixing responsibility for each transaction will be found in chapter IX.
CHAPTER VII

DOES THE BUDGET ACTUALLY SERVE AS A CONTROL IN THE PURCHASE AND DISTRIBUTION OF SUPPLIES?

Expenditures should be in accordance with budgetary provisions, is the statement of one of the criteria. The use of a budget is generally conceded to be essential to good accounting practice in all institutions handling public funds. In Kansas it is necessary to make some sort of estimate of need for school purposes in order to determine the tax levy for school purposes. There are two cities included in this study that do not operate on a budget plan.

The question was asked, "Do expenditures for supplies exceed the budget?". Three superintendents said they did not, six said they did, and one said he had no record. Two superintendents said that the total amount of the budget was never exceeded though apportionments to one account were frequently used to make up deficits in another account.

Four superintendents said that requisitions for purchases were not checked with the budget, while five said that requisitions were always checked with the budget. Five reported that the budget balances were checked monthly.

The budget apportions supplies to the various functions in eight cities. In six of these cities the superintendent reports that the apportionment is adhered to in distributing the supplies. One reported that the
apportionment was not exactly adherred to and another said it was adherred to reasonably well.

The budget apports definite amounts for supplies to the various buildings in three cities and this apportion-ment is adherred to in distributing the supplies. One superintendent said that in making the budget supplies were apportioned to various buildings for elementary schools and to departments in the high school.

The budget estimates in all cities except one were based upon opinion, experience, or previous use. In two of these cases the educational program and anticipated enrollment also were taken into consideration. One superintendent used a standardized plan of apportionment as a guide in making his budget estimates.

If a budget is to have value as a control for expenditures, and that is the principal reason for making a budget, it must be based upon reliable information as to what the expenditures have been or should be. It was noted in chapter IV that supply costs are not so distributed as to provide accurate costs for the various units and functions in most cities studied. Better budgeting practice must depend upon more refined distribution of costs in order that the superintendent be able to determine more reliable standards for unit costs.
CHAPTER VIII

IS THE ORGANIZATION CONDUCTIVE TO ACCURATE AND ECONOMICAL MANAGEMENT AND HANDLING OF SUPPLIES?

This problem will be discussed under these general headings: the administrative organization, organization for the keeping of records, and organization for handling and distributing supplies.

The administrative organization.

Two of our criteria state that the board of education should limit its activity to determining policies and exercising broad general control, and that the board of education should require the superintendent to assume responsibility for determining kind and quantity of supplies needed and for purchase and distribution of the same.

In twelve of the cities studied the boards of education work through committees. This does not necessarily mean that the committees perform executive functions but it does indicate that probably the board of education performs more than a legislative function.

Supply committees, or committees handling all matters relating to supplies, were found in nine cities. In eight cases the superintendent only authorizes purchase orders for supplies; in two cases, only the purchasing agent authorizes the purchase orders; and in five cases the purchase orders for supplies are authorized by the supply committee, board of education, or designated members of the
board. In two of the five cases, the superintendent shares the authority with board members.

Purchase orders are signed by the purchasing agent in two cities, by the superintendent only in seven cities, by the chairman of the supply committee or purchasing committee in two cities, by some designated member or members of the board in three cities, and by the superintendent or any member of the board in one city.

These practices indicate definitely that in many cases the board of education is performing executive functions. They indicate also a lack of conformity to the fourth criterion, namely; In the office of the superintendent should be centralized all details of budgeting, purchasing, distributing, and accounting for all supplies. Many cases are noted in which the authority for purchase of supplies is so distributed that accurate and economical management is not possible. Certainly, this is a practice that is not economical of time spent in the management of supplies. In one city purchases were made by the board members without the superintendent's recommendation. He frequently found supplies of little use delivered to the store-room. Consequently the funds for needed purchases were not available. Any system of organization that does not rigidly define and place authority and responsibility in a single administrative officer might conceivably drift into the same practice.
Organization for the keeping of records.

The bookkeeping for the schools, including supplies is done by the clerk of the board in eight cities, by the superintendent's secretary in five cities, by the superintendent in one city, and by the purchasing agent in one city. In five cases the books are kept in the home or place of business of the clerk. In only one of these five cities does the superintendent make any effort to keep in his office any accounting records. He does this by taking off data for a duplicate set of records in his office before forwarding the papers to the clerk for entry on the books. His efforts to keep in touch with the financial situation are to be commended but the type of organization that makes this duplication necessary is not to be recommended.

A rather common type of organization, found in seven cities, is that in which some employee in the central office is appointed clerk of the board of education. This employee may be the purchasing agent, the superintendent, or a clerk who serves in the dual capacity of clerk of the board and secretary to the superintendent. Such an organization does serve admirably to centralize the business affairs of the school in the superintendent's office under the care of the one appointed to represent the board of education. The records are easily available to the superintendent and to the board. At the same time the amount of work necessary in keeping the records available
is reduced to a minimum. This type of organization, if made standard, could therefore meet the requirements of the criterion which states that the machinery should be efficient, simple and of standard procedure.

Organization for the handling and distributing of supplies.

The lack of any uniform type of organization or procedure in handling and distributing supplies makes it impossible to describe any common type of organization.

In twelve cities the supplies are delivered by the vendor to a central store-room. The vendor delivers supplies to either a central store-room for elementary schools or a central store-room for secondary schools in two of the systems studied. In one city the vendor may deliver supplies to the central store-room or direct to the teachers. It is uniform practice for the supplies for manual arts courses and domestic science to be delivered by the vendor to the department using such supplies.

There is no uniform concept of a central store-room. The superintendent in one city said he had no place in the building for storage of supplies but that all supplies were delivered to his office, or to the corridor near his office door, and checked with invoices before being sent to the various buildings. This city has been listed among those cities in which supplies are delivered to a central store-room by the vendor. The test materials for supervisors' use in one city are delivered to the
superintendent's office and stored in cupboards. That superintendent reported that all supplies were delivered to a central store-room, which in this case, was located in another building several blocks distant.

These examples are given to illustrate the lack of any uniform understanding as to what a central store-room is. More particularly, it indicates that there is not a very clear conception of the function of the store-room and its place in the organization for handling and distributing supplies.

The function of the store-room is to provide a means for preserving supplies. It should provide safety from theft, deterioration, and wasteful or careless practice. To prevent theft a lock should be provided and used. To prevent deterioration the store-room should be dry, vermin proof, and provided with shelves for orderly storage. By far the greatest loss is due to wasteful or careless practice. To prevent this loss an adequate system of records should be provided. It should be understood that merely providing a system of records will not stop the losses, but it will provide a means for checking the losses and stopping the leaks. The person who is responsible for the supplies should have a record of the amounts of supplies checked into and out of storage. All supplies not provided for current use should be in the store-room.

No attempt will be made to list the many procedures used in distributing the supplies from the central store-room. The reader is referred to the diagrams
in chapter III in case he wishes to know some of the systems being used. One superintendent did admit frankly that he did not know what became of the supplies nor how they were handled after going to the various buildings.

It is not necessary that all school systems, regardless of size of building store-room facilities, should have the same system of store-rooms. It is essential that the organization provide a simple, efficient plan of keeping a record of the supplies and a convenient and adequate place for storing them.

Another advantage to be derived from adequate records of storage and distribution of supplies is that the routine work of issuing the supplies can be done by a subordinate, thus relieving the superintendent for more important administrative duties. There are nine superintendents in the fifteen cities studied who act as storekeepers. This is high priced clerical and custodial service for the taxpayer.

A superintendent of one of the larger systems said he preferred to check out the supplies himself because it enabled him to know which teachers were using supplies. All elementary school teachers from several buildings send directly to his office for supplies at irregular intervals. He probably would have more accurate information if, instead of depending upon his memory, he relied on receipted copies of requests for supplies from teachers to whom supplies had been issued. The clerk in
his office could issue the supplies on requests approved by the building principal, thus saving considerable time for the superintendent.

Even so simple a procedure as requiring that the requests be made at regular intervals would save superintendents much time and constant interruption. The average city superintendent has plenty of detail work to do at the best. Economy of his time demands that he organize the system so as to delegate as much of that type of work as possible.
CHAPTER IX

A PROPOSED TYPE OF ORGANIZATION AND PLAN OF PROCEDURE IN HANDLING INSTRUCTIONAL SUPPLIES.

The proposed plan of procedure for school supply management given here does not present any feature that is new and untried. Every item proposed is to be found in one or more of the school systems studied.

Administrative organization.

The board of education should work as a whole. Responsibility for management of supplies should be delegated to the superintendent. This responsibility may be re-delegated to a purchasing agent or clerk, subordinate to the superintendent, in part or in whole, if the school system is sufficiently large to make such a division economical. The building principals should be delegated the responsibility for management of supplies in the buildings, if a building store-room is maintained.

The budget.

Every school should operate on a budget, carefully prepared and actually serving as a financial control. Standards of use should serve as the basis of the budget estimate for supplies. Changes in the educational program must be considered when compiling the budget estimates. Likewise, the need for supplies should always be considered when anticipating changes in the educational program.
The standards of use would be determined from records in the central office. Until such time as standard use can be determined for each unit it is probably advisable to continue the practice of asking the teachers and supervisors to submit estimates of yearly needs. The final estimates should be arrived at in conference with teachers in cases in which the superintendent desires to change the teachers' estimates.

Principals who are held responsible for distribution of supplies should know the amount apportioned to the units in his building. The superintendent should have information as to the stocks of supplies on hand at the time the budget estimate is compiled.

It is advisable that standardized lists for certain staple items of supplies be adopted. Accounting procedure would be simplified, waste from discontinued items would be decreased, and budget estimates could be more readily calculated from such lists. These lists should be in the hands of the teachers for their use in making out the request form properly. The lists should be revised occasionally in order that the supplies fit the educational needs and that the purchasing agent may keep abreast of what the market has to offer.

Purchasing and paying for supplies.

The authority for making purchase orders should be vested in one person, preferably the superintendent or
purchasing agent. The purchase order should be made in duplicate, one copy for the vendor and one for the central office. It can be made in such form that it would serve also as a claim form and voucher. If this plan is used there should be triplicate copy for the vendor to keep for his files. The purchase order should provide space for the store-keeper to sign when the supplies are delivered to the store-room. A permanent record of such receipted purchase orders then becomes the store-keeper's record of deliveries to the central store-room.

The purchase order, completely filled, checked, and receipted, showing in writing who is responsible for each transaction and approved by the superintendent or purchasing agent for payment should accompany the vendor's invoice or claim form when the bill is presented to the board for payment.

The requisition and claim form used in the Chanute City Schools fulfills all the requirements of the purchase order which has just been described if a place is provided for the store-keeper to receipt for delivery of the supplies when delivered by the vendor. Form I on the following page shows a very usable form which is in rather common use.

A practice that is quite common and highly to be commended is that used by several superintendents who mail to the board members a few days before each regular meeting a list of all bills which will be presented for
Chanute City Schools
Requisition and Claim Form

Chanute, Kansas, 192...

Send the following to...

and render bill on this sheet to the Chanute Board of Education:

<table>
<thead>
<tr>
<th>Supplies received</th>
<th>Store-keeper</th>
<th>By order of</th>
</tr>
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<tbody>
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Persons rendering service or furnishing supplies will fill in blanks below and file claim.

Laws, Common Schools of Kansas, Section 626: "No warrants shall be issued... except... verified by affidavit."

Bills are allowed by the Board at regular meetings, first Monday of each month:

BOARD OF EDUCATION:

Dr. to

To supplies furnished as per requisition $...

To services rendered as per requisition $...

Total $...

I do solemnly swear that the above is a true and correct statement of account and is due and unpaid.

State of... ss.

County of... ss.

City of...

Subscribed and sworn to before me, this day of 192...

My commission expires 192...

Notary Public or Clerk
### Assignment

I hereby assign the within account to

for value received, this date.

---

<table>
<thead>
<tr>
<th>No.</th>
<th>Series 19</th>
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<tbody>
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<td></td>
<td>19</td>
</tr>
</tbody>
</table>

**Claim of**

**Assigned to**

**For**

**Filed**

**Figures** prices correct

---

**Amount claimed** $...

**Amount disallowed** $...

**Amount allowed** $...

**Approved:**

---

**Finance Committee.**

**Paid by warrant No.**

**Dated** 192

**Distribution**

payment at the meeting. Another commendable practice found in one city is that of presenting to the board for their consideration all items of expense before the purchase order is made, if the amount of the expenditure is large. These items are listed in the regular monthly announcement of business to be transacted at the next board meeting.

Storing and distributing supplies.

The plan presented here is sufficiently flexible to allow for issuing supplies from the central store-room directly to the teachers or for issuing supplies from the central store-room to the building store-room and thence to the teachers. It is essential to simplicity in record keeping that any given teacher always get supplies from the same store-room whether it be central store-room or building store-room.

All supplies should be delivered by the vendor to a central store-room. The store-keeper checks the delivery with the invoice and the purchase order and receipts both. This purchase order is his record of accretions to stores. The store-keeper of the central store-room issues supplies on approved request. He retains a copy of the request form as his record of issues. These records of the central store-keeper should be kept in the central office.

The store-keeper of the building store-room makes written request to the superintendent for supplies for his store-room. His receipted copy of the request is the record of accretions to the building store-room.
The teachers or supervisors wishing supplies make a written request for them and receipt a copy of this request when the supplies are delivered. Copies of these receipted requests from the teachers make the building store-keeper's record of withdrawals from his store-room.

If building store-rooms are not used, the teachers' requests would go directly to the superintendent or other person who is delegated the authority for approving requests from teachers.

All store-keepers should make monthly check of supplies in the store-room from the records at hand, periodical physical inventories should be taken at least four times each year. Store-rooms should be lighted, dry, vermin proof, and provided with shelves for orderly storage.

Requests for supplies should be made at regular intervals. If made each four weeks, the teacher would not have to anticipate needs too far in advance and the work of the store-keeper could be scheduled to meet the occasion. Intervals of two weeks or six weeks could be used, depending on the local situation.

Form II, shown on the next page, will provide a complete and accurate record of every transaction affecting the issuance of supplies and will fix responsibility for each transaction. If properly used it will save time for all concerned in the handling of supplies. Copies of the requests go to the central office and from them the accounting records for instructional supplies are
FORM II

SHOWING THE PROPOSED FORM FOR TEACHERS' REQUESTS FOR SUPPLIES.

<table>
<thead>
<tr>
<th>REQUEST FOR SUPPLIES</th>
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<tbody>
<tr>
<td>Requested by:........</td>
</tr>
<tr>
<td>Building:.............</td>
</tr>
<tr>
<td>For use:.............</td>
</tr>
<tr>
<td>For stores:...........</td>
</tr>
<tr>
<td>Code:.................</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number</th>
<th>Description of items</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

Total

Request approved by: Prin. Supt. Supplies received by: Supplies delivered by: Store-keeper.

To be made in duplicate or triplicate; one copy for the central office, one for the maker, and one for the building principal or store-keeper.
made. They furnish the information from which unit costs, standards of use, and budget estimates can be figured. When approved they may serve as requisitions to the purchasing agent for purchase of supplies not in store. If the request is approved but supplies are not in store the request goes to the superintendent or purchasing agent who makes a purchase order. The store-keeper signs the purchase order when the supplies are delivered by the vendor and the teacher signs the request form when the supplies are delivered to her by the store-keeper.

If building stores are maintained the request form should be made in triplicate, one copy for the maker, one for the principal or store-keeper, and one for the central office. Only two copies are necessary when building store-rooms are not maintained. By having the requests for supplies for building store-rooms on one color of paper and those for use by teachers on another color of paper, the chances for error by the bookkeeper might be reduced and the items, for use and for building stores, could be omitted on the form.

The cost is figured by the bookkeeper and the code for accounts against which the items are to be charged is filled by the superintendent or bookkeeper.

Accounting for supplies.

The bookkeeping for the schools, including supplies, should be done in the central office. The voucher register should show the distribution of supply
costs to the various functions, i.e. to general control, instruction, operation, etc. In the plan being proposed it would not be necessary to further refine the distribution of instructional supply costs on the voucher register, nor on the distribution ledger for instructional costs. A subsidiary ledger would be kept for distributing the costs of instructional supplies to the various units and departments.

The distribution could be refined to any degree desired. Charges on this distribution ledger for instructional supplies would be posted from the request for supplies form. The cost of the supplies actually used for any given period would be the total of these charges. Request forms checked for building stores, of course, would not be posted as a charge to supplies used as the charge would be made when the supplies were finally issued to the teacher. The difference between the total charges from the request forms and the total of the amounts paid for instructional supplies would be the value of supplies in store-rooms.

Diagram XVI shows the procedure that would be used in a city which did not have building store-rooms. The important feature of this procedure is that the central office receives a record of all supplies issued and the responsibility is fixed for issuing and receiving supplies. From these records the bookkeeper may distribute costs of supplies on any unit basis desired.
The procedure in a school which maintained building store-rooms would be identical, except that the routine duties would be centered in the principal and a sufficient number of forms would be provided so the central office would receive the record of each transaction.
"A" The store-keeper or clerk in the superintendent's office performs the routine duties.

"B" The superintendent performs the more responsible duties.

V. Inventory made each twelve weeks and reported to "A" who summarizes and reports to the supt. "A" also takes the inventory of the store-room.

F. Form II, request for supplies for use; made at regular intervals; the red line indicates the receipted copy returned to "A" when supplies are received.

FY. Form II, request for supplies from stores; originates in "A"; sent to supt. who makes a purchase order.

P. Purchase order, Form I.; duplicate to "A" who checks with invoice when supplies are delivered, receipts and forwards to supt. who approves and presents to board.

S. Supplies.

E. Budget estimate; originates in supt.; compiled from records of enrollment and units used per pupil enrolled. Units used per pupil or per grade may be compiled from summary of F.

B. Budget; authority for purchases; balances checked monthly.

W. Warrant.

I. Invoice, (may be Form I, claim sheet)
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1. -- --, "Can the Nation Afford to Educate its Children?" Research Bulletin of the National Education Association, Vol. 6, No. 5, Nov. 1928, pp. 277-278.


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APPENDIX 'A'

THE CHECK-SHEET USED IN THE INTERVIEW

"A" Administrative organization for supply control.

1. Does the Board of Education work as a whole or by committees? If the Board has standing committees, the answer would be 'by committees'.

2. Is there a supply committee of the Board of Education? If any committee handles all matters of supplies, give title of that committee.

3. Does the Board of Education delegate to any one of its employees full responsibility for handling and accounting for supplies? Give title.

4. Is this responsibility re-delegated in full to any other one employee? Give title.

5. Has the Board of Education adopted standard lists of supplies? Does not mean that they must have adopted a complete list of standard supplies.

6. Do these lists give definite specifications for items? Trade names or brands would be interpreted as definite specifications.

7. Has the Board of Education any rule limiting the expenditures for supplies?

8. Has the Board of Education adopted standards for gauging quantities of supplies needed? Standards based on any unit basis.

9. Does the Board of Education in the "Rules and Regulations" or the Superintendent in his instructions to teachers attempt definitely to secure the
cooperation of the staff in the wise and economical use of supplies?

"B" The Budget and Supplies

1. During which month is the final budget estimate compiled and approved?

2. Are estimates for the next year's supplies by teachers or principals at hand and used in making the budget for supplies? Annual requisitions may be considered as budget estimates if so used by the Superintendent in making up the budget.

3. Do the teachers submit written estimates for supplies for a definite period?

4. What is the basis of the teachers' estimates?

5. Are printed forms used in submitting estimates mentioned in #2?

6. To whom are teachers' estimates sent?

7. Do supervisors submit estimates for budget making purposes?

8. Do janitors submit estimates for budget making purposes?

9. Does each principal prepare estimates for his building for annual budget?

10. Are the principals' estimates a summary of teachers' estimates?

11. If not, on what basis does the principal make his estimates?

12. To whom are principals' estimates sent?

13. Does the Superintendent change the estimates submitted
by teachers or principals?

14. On what bases are Superintendent's estimates made?

15. Have standards been worked out for estimating supplies needed for the whole system or any part of it? Standards based on some unit.

16. Is an inventory of all supplies on hand made by the person submitting an estimate before making his budget estimate?

17. Is this inventory reported with the estimate?

18. Does the budget apportion supplies to various functions? Instructional, operation, etc.

19. Is this apportionment adhered to in distributing supplies?

20. Does each building have its budgetary allowance for supplies?

21. Who decides the amount so allowed?

22. Is this apportionment adhered to in distributing supplies?

23. Do principals have information as to budget allowance for their respective buildings?

24. Are requisitions for purchase of supplies checked with the budget? Before or after purchase order is given?

25. Who checks requisition with budget?

26. Do expenditures for supplies exceed the budget? How frequently?

27. What are the most frequent causes of overrunning the budget?
"C" Accounting Procedure for supplies.
1. Who does the supply bookkeeping for the school?
2. Is money spent for supplies distributed by various units on the voucher record? Units is interpreted here as buildings.
3. Is money spent for supplies distributed by various functions on the voucher record?
4. Does the bookkeeper make a distribution sheet for supplies only?
5. Are invoices to be paid entered on the books as accounts payable?
6. Is a permanent record made of purchase orders and contracts?
7. Are copies of all forms used in accounting for supplies filed in the central office?
8. Do these copies show the authority for each transaction?
9. Can the history of each transaction affecting supplies be traced from records in the central office?
10. Is a perpetual inventory record of unissued supplies kept in the central office?

"D" Purchasing of Supplies.
1. May a teacher order supplies over own signature?
2. Are competitive bids asked on all purchases of supplies over $100? If not $100, what amount?
3. How are bids advertised?
4. Do bidders bid on entire bill or may they bid on any part?
5. Are bonds or deposits required of bidders?
6. What is the average number of bids received on
each bill?
7. Are any purchase orders for supplies made without a requisition having been made?
8. Are bidders required to submit samples?
9. Who authorizes the purchase orders for supplies?
10. Who signs the purchase orders for supplies?
11. Do purchase orders state date of delivery?
12. During which month are most supplies delivered?
13. Are all supplies ordered F.O.B. central store room, or school building?
14. When ordering supplies for several buildings at once, are all supplies for each building ordered packed together and delivered to building?
15. Does the Board of Education provide and use printed bid forms?

"E" Requisitions for Supplies:
(This set of questions apply to requisitions for supplies that are not in store and have to be purchased. Does not apply to annual requisition.)
1. How frequently are periodical requisitions made for supplies?
2. Who makes such periodical requisitions?
3. Are printed requisition forms provided?
4. Are teachers provided with printed lists of supplies?
5. Original copy of requisition goes to whom?
6. Duplicate copy of requisition goes to whom?
7. Triplicate copy of requisition goes to whom?
8. Does the principal check requisitions made by teachers?
9. Does he cut teachers' requisitions?
10. Does the principal requisition supplies for the
whole building?

11. Is the principals' requisition a summary of teachers' requisitions?

12. Does the teacher submit an inventory of supplies on hand with requisitions?

13. Does the Superintendent's office receive copies of all requisitions?

14. Are requisitions approved by Superintendent before orders are placed?

15. Does the Superintendent change quantities or items or specifications on requisitions?

16. On what basis?

17. Does the name of the person making a requisition appear on it?

18. Do requisitions state quantities and prices?

19. Is a permanent record kept of requisitions?

20. Are employees of the Board of Education refunded amounts paid personally for emergency supplies?

21. Describe machinery for making such a refund.

"F" Receiving Deliveries and Paying for Supplies.

1. To whom are supplies billed by the vendor?

2. To whom does the vendor send invoices?

3. Are all supplies delivered to a central store room?

4. Who checks invoices with shipments?

5. Does his name appear on the invoice, or any other form?

6. Are all deliveries checked with invoices?

7. What procedure follows if shipment is short? (Is the whole bill held until settlement, or is a part of the bill paid before settlement of the shortage?)
8. Are invoices checked with purchase orders?

9. Who checks extensions on invoices?

10. Does his name appear on the invoice?

11. Describe procedure for payment of invoices.

12. Does the Board of Education take advantage of discounts?

13. Are supplies delivered by vendor to various school buildings?

14. Who receives for delivery of goods so delivered?

15. Does the central office receive a record of such deliveries?

"G" Storage of Supplies.

Central Store Room

1. Is a central store room maintained?

2. Do all supplies pass through this store room?

3. Who is the store keeper?

4. Is the store keeper bonded?

5. Is a perpetual inventory record kept by the store keeper?

6. How frequently are physical inventories made?

7. Is there any waste due to deterioration while in store?

8. Is insurance carried on supplies in store?

9. Does the central office receive written information of supplies put in central store room?

10. Does the central office receive written information of supplies taken out of central store room?

11. On whose authority does the store keeper issue supplies?

12. May a teacher get supplies direct from the central store room?
13. Describe procedure: a. helps herself
   b. verbal request to ........
   c. written request to ........
   d. teacher receipts for supplies

Building Store Room
1. Are store rooms maintained in the various buildings?
2. Who acts as store keeper in the buildings?
3. Does he receipt for all deliveries to the store room?
4. Is a perpetual inventory record of building store room kept in the principal's office?
5. Are records of receipts and withdrawals sent to the central office?
6. Are periodical physical inventories taken?
7. May supplies be taken from the building store room without orders from the principal?
8. Describe procedure by which a teacher gets supplies from the building store room; a. helps herself
   b. verbal request
   c. written request
   d. gives receipt.

"H" Supplies for Special Classes.
1. May a janitor order supplies?
2. Are janitors' supplies stored separate from other supplies in the building?
3. What check is maintained on the amount of janitors' supplies used?
4. Do students pay for supplies used in Science laboratories?
5. In D.S. and D.A.?
6. In Manual Training or Shop?
7. Do students pay for breakages or losses of supplies?
8. To which account are such payments credited?
9. Are petty cash funds used in any departments for handling supplies sold to students?

10. Describe procedure for buying supplies which are perishable. If regular procedure, so state. This does not apply to materials for cooking.

11. Describe procedure for buying supplies for cooking.

12. Is there an established limit to supplies allowed for manual courses, including cooking and sewing?

13. How is this limit determined?

"J" Distribution and Allocation of Supplies.

1. What means of cartage is used to distribute supplies to various buildings?

2. Is there any loss due to theft or carelessness?

3. Is there any limit to the amount of supplies a teacher may get?

4. Who determines this limit?

5. Are records kept of room or grade to which supplies are issued?

6. Do teachers make periodical inventories of supplies on hand?

7. Do teachers make requests for supplies from stores at regular intervals?

8. Is there an established limit of supplies per pupil?

9. Where are supervisors' supplies stored?

10. Describe procedure used in issuing supervisors' supplies:
    a. helps herself
    b. verbal request to ...........
    c. written request to ..........
    d. gives receipt for all deliveries

11. What procedure is used in issuing janitors' supplies?

12. Do principals receipt for supplies used in office?
APPENDIX "E"
STATEMENTS OF PRINCIPLES SUBMITTED TO SUPERINTENDENTS, GRADUATE STUDENTS, AND FACULTY MEMBERS FOR EVALUATION AS CRITERIA FOR RATING SUPPLY ACCOUNTING PROCEDURE.

EVALUATING CRITERIA FOR MEASURING SCHOOL SUPPLY ACCOUNTING SYSTEMS

The statements of principles which follow are those which may be considered essential as guiding principles in setting up and operating an efficient system of administration and accounting for school supplies.

The plan is to evaluate these principles as criteria for measuring the efficiency of an accounting system for school supplies. Particular reference is made to smaller school systems, as these criteria will be used in evaluating accounting systems in second class cities in Kansas.

Place a cross (X) before each principle considered necessary or essential; a check (✓) before each principle considered advisable but not necessary. Those principles considered neither necessary nor advisable will be left blank.

STATEMENT OF PRINCIPLES:

__ 1. The Board of Education should limit its activity to determining policies and exercising broad general control.

__ 2. The Board of Education should function as a whole rather than through committees.

__ 3. The Board of Education should require the Superintendent to assume responsibility for determining kind and quantity of supplies needed and for purchase and distribution of same.

__ 4. Depending on the size of the system, the Superintendent should re-delegate this responsibility.

__ 5. In the office of the Superintendent should be centralized all details of budgeting, purchasing, distributing, and accounting for all supplies.

__ 6. The machinery should be efficient, simple, and of standard procedure.

__ 7. The machinery should avoid duplication or unnecessary delay, and should guard against waste or misuse of supplies.

__ 8. There should be a permanent and continuing system of accounting to show at any time the amount on hand, quantity distributed and where.

__ 9. There should be a complete record of every transaction which should be continuous and cumulative.

__10. All supplies (exclusive of perishable goods) should be purchased on competitive bids.
11. The Superintendent should have authority, within limits, to make special and emergency purchases without bids.

12. Emergency or supplementary purchases should be reduced to a minimum.

13. Major items of staple supplies for the whole year should be found in the various buildings, ready for use, at the opening of school in the fall.

14. Accurate records of consumption per grade should be kept for preparation of the annual budget and to estimate future needs.

15. Unnecessary duplication of closely related types of supplies should be avoided.

16. Standard list of supplies should be adopted and published by the Board of Education. Each item should be accompanied by definite specifications and probable cost. This list to be modified as occasion demands.

17. Expenditures should be in accordance with budgetary provisions.

18. All records and transactions should conform with legal requirements.

19. A central store-room should be used, from which all supplies would be distributed.

20. Requisitions should originate in those using the supplies.

21. Responsibility for each transaction should be fixed.

22. Records should show that supplies have been distributed as reported.

The following information will be used impersonally. It is not necessary to sign your name.

Highest degree received (underscore): Bachelor's, Master's, Doctor's.

How many years experience in school administration?