# FINANCIAL ACCOUNTING IN THE PUBLIC SCHOOLS--

# A COMPARATIVE ANALYSIS OF PRACTICES

# AND NEEDS IN OKLAHOMA

By

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#### CHAPTER I

# FINANCIAL ACCOUNTING IN THE PUBLIC SCHOOLS--A COMPARATIVE ANALYSIS OF PRACTICES AND NEEDS

#### IN OKLAHOMA

# Introduction

With the exception of defense, education, as a major component of the public's expenditures, now claims the largest single part of the tax dollar. The multiplicity of programs to meet the needs of American youth has grown by leaps and bounds since the "depression years". This growth gives no evidence of declining and will, no doubt, continue making greater demands on the taxpayers of this nation. Many, who have unquestioningly supported budgetary requests in the past, are beginning to ask for clearer financial explanations of how their money is being spent. The desire for the best educational programs for their youth is no less now than in the past but doubts exist when there is no common means of comparing the costs of their programs to those of other communities and states. Comparisons of this kind are not possible as long as different approaches are being used to account for public school income and expenditures. As a result, many requests for funds to support educational needs are being denied by an ill-informed public.

As the elected and appointed representatives of the school district, the board of education and the administration must be able to show through their financial practices and statements that the most efficient and uniform means of public stewardship is being maintained.

To do otherwise will seriously impede the support for the educational programs of this Country.

# Background of the Problem

Education has a unique place in the governmental system of the United States. Constitutional provisions and statutory laws reflect the tendency in all states to make different arrangements for the government of public education. However, although desirable in the educational process, this uniqueness and individuality has been practiced in the financial accounting procedures and has made uniform reporting an impossibility.

For over 100 years, uniformity in practices, procedures, and terminology has been a much sought after goal. Fowlkes and Hansen reported:

Beginning with a plea for more uniformity in reporting school statistics made by a committee of the National Education Association in 1860, followed by the work of many committees and individuals, a virtual mass of literature has been developed on the importance of accounting, auditing, and reporting of school moneys.

Sheer numbers of students, new programs, expenditures, and monies from state and federal sources have created enormous logistical problems. The most recent figures published by the U. S. Department of Health, Education, and Welfare reflect the enormity of numbers and dollars during the 1969-70 school year. Some 58,600,000 elementary and secondary students were taught by 2,013,836 full-time and part-time

<sup>&</sup>lt;sup>1</sup>John Guy Fowlkes and Abner L. Hansen, "Business Management-Accounting, Auditing, and Reporting," R. L. Johns and E. L. Morphet, Chairmen, <u>Problems and Issues in Public School Finance</u>, The National Conference of Professors of Educational Administration (New York, 1952), p. 464.

classroom teachers at a cost of over \$40 billion dollars.<sup>2</sup> The increasingly militant attitude on the part of teachers seeking sanctions or striking to improve salaries and working conditions suggest that educational costs created by these demands will continue to soar. These conditions have necessitated a greater emphasis on the fiscal management of today's schools. To provide the leadership necessary for planning and determining direction, today's administrator must have the facts and figures at his fingers without any undue delay.

Many past practices in fiscal and resource management continue to determine present activities as though there had been no change in conditions since such practices and reports originated. Since educational institutions are particularly subject to the winds of social change it is imperative that fiscal management practices and reports adequately reflect these changes. Lindman pointed out that:

Parents and citizens generally are interested in such questions as how much are we spending for guidance and counseling per pupil next year? How does this compare with the amount spent by other school districts? Is our summer school program for gifted children adequate? How does it compare with similar programs in other systems? How much are we spending for foreign language instruction in the lower grades? How does this program compare with the amounts per pupil expended by other school systems for this service? These questions usually cannot be answered from the official shopping list of the School Board. A new kind of program accounting supplementing the present system is needed in order to provide the information about such costs. Our budget instrument was adequate for the simple school program of fifty years ago, but is hardly adequate to describe the complex program of the school's today. It reveals little about the quality

<sup>&</sup>lt;sup>2</sup>U. S. Department of Health, Education, and Welfare, <u>Statistics</u> of <u>Public Elementary and Secondary Day Schools</u>, Circular OE-20007 (Washington, D. C., 1969), p. 1.

or variety of educational services to be provided during the ensuing year. 3

Accounting for the local school includes the responsibility not only of accurate accounting for funds but also of intelligible accounting. School administrators and school business officials are responsible for full, accurate, and timely reports, and interpretation of all financial affairs. Important decisions affecting the public schools are based and will continue to be based on interpretation of facts that can be objectively reported, recorded, and analyzed.

State legislatures and the United States Congress make many decisions that influence school revenues, expenditures, and indebtedness. A number of attempts have been made to devise a system whereby school finance data for use by these state and federal agencies could be reported and interpreted without loss of meaning, duplication, and misinterpretation. Much confusion exists in state and federal reporting of school financial affairs because of lack of uniformity. Barr suggests that one of the greatest contributions that could be made in reporting financial statistics would be the adoption of a system of uniform classification and reporting of certain key items which would make possible the tabulation of state and national totals while they are still of some interest. Use of modern sampling techniques, data-processing methods, and computing machines could eliminate much of the time-consuming manual

<sup>&</sup>lt;sup>3</sup>Eric L. Lindman, "Outlook for Public School Finance, 1968," <u>A</u>
<u>Financial Program for Today's Schools</u>, The Proceedings of the Seventh
National Conference on School Finance, April 5-7, 1964, Committee on
Educational Finance, National Education Association (Washington, D. C., 1968).

W. Monfort Barr, American Public School Finance (New York; 1960), p. 276.

record-keeping which often results in a one-year delay in the computation of state totals and a two-year delay in national totals. These delays make it impossible to do any planning that requires current financial information and statistics.

Reason and White indicate that the use of standard accounts and terminology in school systems will:

- 1. Help to insure the appropriate initial recording of financial data;
- 2. Improve the accounting for school funds;
- 3. Improve school budgeting;
- 4. Establish a sound basis for cost accounting;
- 5. Improve the accuracy of local, state, and national summaries;
- 6. Facilitate comparisons of financial information among communities and among states;
- 7. Enable local and state educational authorities to obtain more suitable needed information for policy determination than is available without standardization;
- 8. Improve the accuracy of educational research; and
- 9. Facilitate and improve reliable reporting to the public on the condition and progress of education.

For many years, various groups have been attempting to develop a classification system which could be adopted in every state. At the present time only limited success has been experienced. Four committees, on the national level, have been more influential than any other organizations, they are: The National Education Association Committee on Uniform Records and Reports, The National Committee on Governmental

State School Systems, State Educational Records and Reports Series Handbook II, Bulletin No. 4, by Paul L. Reason and Alpheus L. White (Washington, D. C., 1957), p. xvi.

Accounting, The United States Office of Education's advisory Committee on School Records and Reports, and the Association of School Business Officials of the United States and Canada. The Association of School Business Officials has been actively involved in the major studies concerning uniformity and, at their annual meeting held in San Francisco, California, October 21, 1964, adopted a set of Recommended School Accounting Principles and Procedures which were the culmination of more than one hundred years of work. According to the United States Office of Education, these principles and procedures were an important guide in the development of Handbook II-B, Principles of Public School Accounting.

#### Statement of the Problem

The problem of this study was to investigate the accounting practices of the public schools of Oklahoma as expressed by the financial custodians of those schools. In addition, the variables of wealth and size were examined to determine the extent to which they influenced the type of accounting practices employed. Three sub-problems of this study were:

(1) To determine how current accounting practices compare with the principles and procedures as recommended by the Association of School Business Officials of the United States and Canada.

<sup>&</sup>lt;sup>6</sup>U. S. Office of Education, <u>Principles of Public School Accounting</u>, Handbook II-B (Washington, D. C., 1967), p. v.

Association of School Business Officials of the United States and Canada, Research Corporation, "Guiding Principles and Practices in Office Management," A Handbook for School Business Officials, Research Bulletin No. 4 (Chicago, 1966), pp. 67-69.

- (2) To determine the extent to which the Alternate Accounting System, as authorized by Oklahoma House Bill No. 906, Oklahoma School Law, 1965, Article IV, Section 78, is being used with electronic data processing machines.
- (3) To determine the accounting needs as perceived by the financial custodians of the school districts of Oklahoma.

#### Hypotheses Tested

Ho There is no significant difference in the degree of compliance with the recommended accounting principles and procedures when responding schools are categorized according to wealth.

Ho There is no significant difference in the degree of compliance with the recommended accounting principles and procedures when responding schools are categorized according to size.

Ho 3 There is no significant difference in the use of the alternate accounting system with electronic data processing when responding schools are categorized according to wealth.

Ho $_{\slash}$  There is no significant difference in the use of the alternate accounting system with electronic data processing when responding schools are categorized according to size.

Ho 5 There is no significant difference in the frequency of perception of accounting needs when responding schools are categorized according to wealth.

Ho There is no significant difference in the frequency of perception of accounting needs when responding schools are categorized according to size.

<sup>8</sup> Oklahoma State Department of Public Instruction, School Laws of Oklahoma, 1968, pp. 55-57.

#### Need for the Study

The preponderance of literature indicating the accounting practices, from the standpoint of uniformity, in the public schools of the United States seemed sufficient to justify a study in any one of the states. However, rather than to place Oklahoma under this blanket of general indictment, this writer made a preliminary investigation to see if such a study was warranted.

Since little had been published about financial accounting in the public schools of Oklahoma, the principle source for this type of information appeared to be from individuals who had had broad contact with the schools in this specific area. Miles Hall, Chairman of the Oklahoma State Board of Public Accounting, reported:

In working with the public schools of Oklahoma we have found very little uniformity in school accounting. Uniformity would afford the opportunity for meaningful comparative analysis on financial and other data. This would also be very helpful to the legislature in their appropriation problems each year.

We are just entering into a quasi-permanent U. S. Government financing of many programs and, from these, cost systems that should be uniform must be developed to satisfy their requirements as well as insure the school proper overhead reimbursement.

Perhaps the most beneficial item would be the public protection aspect from testing for compliance and results of operations for each year. 9

Expressing similar views, Charles Weaver, President of the Association of School Business Officials of Oklahoma, stated:

After having worked in the Finance Division of the Oklahoma State Department of Education for five years and as Finance Director of the fifth largest school district in

Interview with Miles Hall, Chairman of the Oklahoma State Board of Public Accounting, June 26, 1971.

the state for the past three years, it has become very apparent that a uniform accounting system must be developed for public schools.

Any attempt to make comparative analysis based on reports that are currently filed at the state level soon becomes frustrating because of the vagueness of the rules governing classification of revenue and expenditures. Too much has been left to the discretion of the individual finance personnel who prepare these reports.

With the current emphasis upon accountability in educational finance, it is most important that a school administrator or an interested layman be able to intelligently analyze statistics. Uniformity should be established on the level of HEW because it is no longer sufficient just to be able to analyze state statistics. Comparability must now be made on regional and national levels. Efforts currently under way in the revision of Handbook II-B are pointed in the right direction. However, enforcement on state and local levels will be a serious problem. 10

Prior to 1957, no mention was made of the accounting function in the Oklahoma State Department of Education's biennial publication,

Handbook on Budgeting and Business Management. Since that time, each publication has included a section entitled "Accounting, Analysis and Reporting" to serve as a guide for Oklahoma schools. However, the procedures and systems in this section are recommended rather than required. Two statements made in the Handbook are indicative of the Department's support of the need for uniformity and its willingness to improve the accounting function in its schools:

For purposes of public reporting and comparisons, a standard system of terminology, classification, and reporting is desirable. Local adjustments should be built around compliance with these factors.

Nothing is so permanent about school district accounting that it cannot be changed. However, changes should

<sup>10</sup> Interview with Charles Weaver, President of the Association of School Business Officials of Oklahoma, June 18, 1971.

come from active research into ways to make the methods and procedures better able to help schools educate people. 11

The present Director of the Finance Division of the Oklahoma State Department of Education, Dr. Charles Weber, recognizes the importance and need for uniformity and gave his approval to the study by a letter to the participating schools (see Appendix A).

Further research revealed no evidence of such a study having been conducted in Oklahoma.

#### Treatment of Data

The  $\chi^2$  test for two independent samples discussed by Siegel was used to determine whether different samples of school districts based on the variables of wealth and size differ in the frequency with which they conform to recommended accounting principles and procedures, their use of the alternate accounting system with electronic data processing, and their perception of accounting needs. The level of significance chosen was 0.05.

The chi-square one-sample test was used to test the representativeness of the random sample of the population, the sample return of the population, and the sample return of the random sample. 13

<sup>11</sup> Oklahoma State Department of Education, <u>Handbook on Budgeting</u> and <u>Business Management</u>, Bulletin No. 145-P (State of Oklahoma, 1969-70), p. 45.

Sciences (New York, 1956), p. 107.

<sup>&</sup>lt;sup>13</sup>Ibid., pp. 42-44.

#### Purpose of the Study

The purpose of the study was to examine accounting practices in the Oklahoma public schools and to measure them against the recommended principles and procedures developed by the Association of School Business Officials of the United States and Canada. Further purposes were to determine the extent to which the alternate accounting system with electronic data processing was being used and, also, the perception of accounting needs by the financial custodians of the Oklahoma public schools. In addition, the variables of size and welath were examined to determine whether they appeared to have impact on the selection of an accounting system.

It was hypothesized that size and wealth influence the selection of the type of accounting employed. Whether the districts' accounting task is managed by a business manager as opposed to a school district secretary or superintendent is, in part, a result of the size of enrollment and, in some instances, wealth. Too, as the school size increases, the number of programs and the costs of programs usually increase, thus dictating the need for a greater degree of accounting efficiency. If the accounting procedures and principles employed result in increased accountability for each tax dollar and, if there is a significant difference between schools according to size and in their adherence to these principles, it can be inferred that school size and wealth may have some influence upon the accounting system employed.

It is hoped that this study will contribute to the efforts that have been made and that are currently being made toward the development of a standardized accounting system for the schools of this state and nation.

#### Definition of Terms

To classify the operational and accounting terms used in this study, the following definitions are deemed to be pertinent:

# Operational Terms

Average Daily Attendance (ADA) - the total number of student attendance divided by the total number of days that school was in session.

<u>Large School Districts</u> - those school districts having 1,500 or more in ADA.

<u>Small School Districts</u> - those school districts having less than 1,500 in ADA.

High-Valuation Districts - those school districts having \$6,264 or more in valuation per ADA.

<u>Low-Valuation Districts</u> - those school districts having less than \$6,264 valuation per ADA.

Financial Custodian - that person charged with the responsibility of performing or overseeing the accounting function for the school district.

#### Accounting Terms

Account - a financial record into which are posted all transactions relating to the specified asset, liability, fund balance, revenue, expenditure, or budgetary item identified in the account title.

Accounting - concerned with recording and reporting activities and events affecting personnel, facilities, materials, or money of an administrative unit and its programs.

Accounting Procedure - refers to the policy and systematic arrangement of methods and operations, and the flow of documents for recording accounting information so as to provide internal control and produce accurate and complete records and statements.

Accrual Basis - an accounting system which includes revenue when it is earned though not yet collected and expenditures when incurred but not yet paid.

<u>Audit</u> - an examination of documents, records, and accounts for the purpose of (1) determining the propriety of transactions; (2) ascertaining whether all transactions have been made properly; and (3) determining whether statements drawn from accounts reflect an accurate picture of financial operations and financial status.

Balance Sheet - a formal statement of assets, liabilities, and fund balance at any given time but usually at the end of a fiscal period.

<u>Budget</u> - a plan of financial operations which contains an estimate of proposed expenditures for a given period and the proposed means of financing them.

<u>Cash</u> - consists of currency, checks, money orders, and bankers' drafts on hand, on deposit with the Government official responsible for custody of school district funds, or depositied in the bank or banks. Cash may be qualified as Cash, meaning on hand, and/or Cash in Bank.

<u>Cost</u> <u>Accounting</u> - that phase of accounting which provides for the accumulation of costs of a specific program or service.

<u>Double Entry</u> - refers to an accounting system in which for each entry in the debit side of an account or accounts there are entries in the same total amount in the credit side of another account or other accounts.

Encumbrances - obligations arising from the issuance of purchase orders, contracts, and salary or other commitments which are chargeable to a particular appropriation (or to particular appropriations) and for which a part of the appropriation is reserved.

<u>Fiscal Period</u> - any period at the end of which a school district determines its financial condition and the results of its operations.

Fund - the assets, liabilities, and fund balance of each of a school district's "businesses" constitutes a "Fund". Stated another way, a Fund is an independent accounting entity with its own assets, liabilities, and fund balances. Generally, funds are established to account for financing of specific activities of a school district's operations.

General Ledger - that group of accounts which constitute the basic accounts of a fund. Included are those summary accounts for which detailed subsidiary ledgers are maintained.

<u>Ledger</u> - consists of all the accounts of a particular fund or all those detailed accounts which support a particular General Ledger account.

<u>Purchase Order</u> - a written request to a vendor to provide material or services at a price set forth in the order; it is used as an encumbrance document.

Revenue - an addition to assets which does not incur an obligation and does not represent exchanges of property for money.

<u>Unencumbered Balance</u> - the balance remaining in an appropriation after deducting encumbrances and expenditures.

<u>Warrant</u> - an order drawn by the school board on the school district's treasurer ordering him to pay a fixed amount to a payee named on the Warrant. In a fiscally dependent school district, the order is drawn on a city or county treasurer. Once signed by the treasurer the warrant becomes a check payable by a bank named on the warrant by the treasurer. 14

#### Limitations of the Study

Certain limitations should be kept in mind while interpreting the results of this study. The most serious are those which are inherent in an <u>ex post facto</u> design, namely the inability to manipulate independent variables and to exercise control over randomization of subjects.

Another limitation has to do with the danger of uncritically generalizing from the findings. This is, in part, due to the lack of control pointed out in the preceding paragraph. Though the study deals with a specific type of population, no statistical evidence is available to indicate that this population is typical of any larger group of schools either regionally or nationally.

This study pertains to an analysis of the accounting procedures and needs of the public school systems of Oklahoma. It is limited to

of Public School Accounting, Handbook II-B (Washington, D. C., 1967), pp. 260-272.

include only the independent school districts during the 1970-72 fiscal year. It is also limited to the independent variables of school size and wealth.

#### Organization of the Study

This dissertation is organized into five chapters. Chapter I is a description of the study and includes the introduction, background of the problem, statement of the problem, hypotheses tested, need for the study, treatment of data, purpose of the study, definition of terms, and limitations of the study. Chapter II contains the review of selected literature. The design of the study is contained in Chapter III.

Chapter IV contains the presentation of data and findings. The summary, conclusion, and recommendations are presented in Chapter V.

#### CHAPTER II

#### REVIEW OF SELECTED LITERATURE

The History of Public School Financial
Accounting in the United States

The history of public school accounting is primarily one of meeting the financial record-keeping problem from the standpoint of local expediency rather than the pursuit of uniform, effective, accounting principles and procedures.

During the early colonial period, education was largely a local problem, and the schools that arose were mainly local institutions. As a result of this local development of schools, mention of education was made only once in the discussions of the Federal Constitutional Convention, and then, it was in the form of a question concerning a national university. The colonists seemed determined to maintain a local-control approach to education, and they reserved education as one of the state's powers under the Tenth Amendment of the United States Constitution. American educational literature frequently refers to this amendment which states that "the powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to

<sup>&</sup>lt;sup>1</sup>Ellwood P. Cubberley, <u>State School Administration</u> (Boston, 1927), p. 9.

the States, respectively, or to the people". Although empowered to do so, most of the states appeared reluctant to accept the educational responsibility that had been given to them. Of the fourteen states that had framed constitutions by 1860, six made no mention of schools or education, and furthermore, in a number of others the mention was very brief and indefinite. 3

With no overall coordinating body, either from the Federal or state levels, it seems only natural that there would be a great variation in the organizational makeup of schools. The inadequacy of communication facilities further magnified the problem of interchanging ideas and practices which, had they enjoyed full expression, would, no doubt, have led to some degree of uniformity in the handling of educational problems.

Financial accounting was not a major problem in the early schools. Limited curriculums and the nature of the courses were such that the number and amount of expenditures were kept low, and a bookkeeping system with any degree of sophistication was unnecessary. Any system that satisfied the simple needs of the local school district was considered adequate. Since there were no state boards of education until 1837, nor any federal education agency until 1867, there was little reason for an accounting system that would provide the financial information that is demanded today. The main purpose for keeping records of financial transactions was to check on the faithfulness of the stewardship of those entrusted with school monies.

The Constitution of the United States of America. Amendment X, "Powers Reserved to States of People."

<sup>&</sup>lt;sup>3</sup>Ellwood P. Cubberley, <u>Public School Administration</u> (Boston, 1916), p. 3.

During the latter part of the nineteenth century, schools were beginning to experience a period of tremendous expansion. This expansion did not result solely from increases in the number of pupils who came in contact with the school; the increased recognition by school staffs of the need to enrich the school's offerings also contributed to the school's expansion. Record-keeping, financial and otherwise, had become a logistical problem that could not be adequately solved under existing administrative procedures.

Organized accounting practices for public schools in local districts, states, and the nation began with a number of movements dating as far back as 1860. The reports of the National Education Association of that period reveal attempts to bring about a degree of uniformity in school financial accounting. Another national organization, The National Association of School Business Officials was actively working with the problem of standardization of accounting terminology and methods.

In 1912, the U. S. Bureau of Education in cooperation with the Census Office, the Association of School Accounting Officers, and the Department of Superintendence of the National Education Association, published a set of report forms which did much to bring about agreement in practices, especially in the definition of terms, the classification of receipts and expenditures, and the general procedures for handling accounts. This report was primarily concerned with receipts and payments, and the expenses were broken down under three classifications:

<sup>&</sup>lt;sup>4</sup>U. S. Bureau of Education, "Report of the Committee on Uniform Records and Reports," <u>Bulletin</u>, 1912, No. 3 (Washington, 1912), pp. 13-17, 36-46.

expense of conducting schools, outlays, and other payments. Provision for a functional classification was made but was not clearly defined.

The United States Commissioner of Education, P. P. Claxton, gave impetus to the movement toward uniform school accounting methods when, in his letter of transmittal prefacing the 1912 Report of the Committee on Uniform Records and Reports, he stated:

The best interests of education demand that there should be adequate and uniform methods and forms for collecting and recording statistics of schools of all kinds in all the states, cities, and rural districts of the Union.<sup>5</sup>

Hutchinson mentions that, of all the subjects presented at the 1913 meeting of the Department of Superintendence of the National Education Association, none was so productive of discussion as that of standardization. At this same meeting, two men, one United States Commissioner of Education, the other Auditor of the Board of Education of New York City, are reported to have repeated the statement that "figures or statistics may make or unmake policies". Before standardization can take place, data must be provided; and before data can be provided, there must have been installed the mechanism for their collection.

In 1914, Hutchinson made a significant study concerning school cost factors and accounting practices in twenty cities ranging from 10,000 to 100,000 in population. One revelation was a lack of uniformity in

 $<sup>5</sup>_{\text{Thid}}$ 

Howard J. Hutchinson, <u>School Costs and School Accounting</u>, Teachers College Contributions to Education, No. 62 (New York, 1914), p. 4.

<sup>&</sup>lt;sup>7</sup>Ibid., p. 98.

expenditure classification. The following is an example of how two of the cities classified their annual expenditures:

# City A

Teachers and Superintendent
Repairs
Fuel
Library
Compulsory Education
Night School
Medical Inspection
Contingent Expenses
Bonds due May 1, 1911
Interest due May 1, 1911
Interest due Nov. 1, 1911
Total:

#### City B

Teachers' Wages
High School Teachers
Repairs
Furniture, etc.
Library
Contingent
Bonds and Interest
Total:

The study found wide variations in almost all kinds of accounting forms used. The study revealed four major deficiencies.

- (1) No attempt was made to account for revenue accruing and expenses incurred.
- (2) There was no separation of expenditures for maintenance of school plants and expenditures for capital outlays.
- (3) No city obtained the total expenditures for each type of school.
- (4) No school obtained the total amount spent for each character of expenditure.

Hutchinson concluded that:

The inability of the cities to furnish the data desired (by him) is due to the inadequate mechanism used by the school authorities in recording, treating, and reporting financial facts. Helpful information can be recorded and become useful only after the forms and methods for its collection and treatment have been provided and elaborated.

As a result of the problems revealed by the study, he proposed a system of accounting that would serve the following purposes:

<sup>8&</sup>lt;sub>Ibid., p. 12.</sub>

- 1. to provide a complete history of all transactions from their beginning to their completion,
- 2. to make it possible to account for funds in terms of specific purposes of expenditure,
- 3. to assist the administrative officers in judging whether the school services rendered were made at the lowest cost compatible with efficiency.

One of the first workable school-accounting systems was developed by Case. This was a cash accounting system which no doubt influenced the subsequent strengths of cash accounting procedures. Case's system employed a voucher register, cash book, and a ledger. The voucher register contained a record of all bills to be paid and indicated the ledger account to which it belonged, thus serving as a journal for the ledger. The cash book served as a record of all receipts and payments. The ledger posted from the voucher register, showed the distribution of all expenditures and classified them as follows:

- (1) General Control
- (2) Instructional Service
- (3) Operation of School Plant
- (4) Maintenance of Plant
- (5) Fixed Charges
- (6) Debt Service
- (7) Capital Outlay
- (8) Auxiliary Agencies and Sundry Activities

Case's work is important for its contribution to the clarification of the classes of expenditures by character, function, object, and

<sup>9</sup> Ibid.

Hiram C. Case, <u>Handbook of Instructions for Recording Disbursements for School Purposes</u> (Albany, N. Y., 1916), p. 7.

location. The following four classifications governed the system of distributing expenditures:

- (1) Function: The kind of work promoted by the payment,
- (2) <u>Character</u>: The financial character of the payment as a fiscal transaction,
- (3) Object: The actual thing or service obtained,
- (4) <u>Location</u>: The location benefited by the transaction to which the expenditure is chargeable.

During the 1920's, continued efforts were being made by national education organizations toward uniformity and simplicity in financial accounting for schools. In December, 1912, following the example of the Committee of 1912, a second joint committee representing the National Association of School Business Officials, the Department of Superintendence of the National Education Association, and the Inter-City Schools met with the United States Commissioner of Education to reconcile the significant number of differences that had developed since the 1912 report. The result of this meeting, according to Moehlman, was a revised accounting classification report for larger city school systems. The report emphasized the importance of reporting school fiscal information to the United States Bureau of Education. Although the terminology was more adequately defined and clarified than before, little effort was made to develop a uniform method of accounting.

Peel made a significant contribution to the school accounting movement when, in 1925, he devised a simplified accounting process for

<sup>11</sup>A. B. Moehlman, "Revision of School Accounting Reports," American School Board Journal, 62:42-45, 121-122, 125, May, 1922.

small school districts. 12 His system consisted of five basic accounts: the balance sheet accounts listing the assets and liabilities of the school district, the appropriation accounts, the revenue accounts, the operating accounts, and fixed charges. Any number of subdivisions could be added to each of the accounts if necessary.

Another cooperative study was begun in 1925 and concluded in 1928. The participants included the National Association of School Business Officials, the United States Bureau of Education, the Department of Superintendence of the National Education Association, and the National League of Compulsory Attendance Officials. Their intentions were to make further refinements that would facilitate and clarify the methods of school accounting and reporting.

The results of this study were published by the United States

Bureau of Education in 1928 as Bulletin Number 24, entitled Report of

Committees on Uniform Records and Reports. 13 It stressed the development of a system of accounting for city school systems and suggested various types of forms and records that could be utilized. The improvement of this report over previous efforts was that it considered the entire financial accounting procedure rather than just those specific areas necessary for the reporting of financial statistics to state departments of education and the federal government. Most of the suggested accounting plan followed the pattern of the Case system. It differed from the study of 1912 in that it included examples of forms

<sup>12</sup> Arthur J. Peel, <u>Simplified School Accounting</u> (Milwaukee, 1925).

<sup>13</sup>United States Bureau of Education, Report of Committees on Uniform Records and Reports, Bulletin 1928: Number 24, Washington, 1928.

for pupil, census, attendance records, reports to parents, county and state officials, and to the United States Bureau of Education, as well as financial record forms.

The efforts and investigations made by the Committees of the National Education Association, the National Association of Public School Business Officials, and others, did much to encourage contributions from many who were interested in school finance and its accounting needs.

Publications by Englehardt and Von Borgersrode <sup>14</sup> and by Englehardt and Englehardt <sup>15</sup> presented more comprehensive plans of financial records needed for school accounting. They recommended that receipts be classified as revenue, non-revenue, and revolving fund. Expenditures were classified into nine areas: general control, instruction, auxiliary agencies, coordinate activities, operation of plant, maintenance of plant, fixed charges, debt service, and capital outlay. Further subdivisions were made of these classifications on the ledger sheet. By means of a four-digit code, revenues and expenditures could be coded according to their source and destination.

Englehardt and Von Borgersrode indicated their support of the principle of uniformity with such statements as:

Although the states do not exercise a direct control over the fiscal affairs of local school systems, uniformity in accounting in some form has been rather generally followed. Any adequate system can be readily adapted to local requirements in most states, and there is no reason why the bookkeeping should not be consistent with accepted practices.

<sup>14</sup> Fred Englehardt and Fred Von Borgersrode, Accounting Procedures for School Systems (New York, 1927).

<sup>15.</sup> N. L. Englehardt and Fred Englehardt, <u>Public School Business</u> Administration (New York, 1927).

Uniformity of classification and accounting procedures throughout the country is essential to educational progress. The need of reliable comparable data is most important when the superintendent of schools attempts to justify the educational program on a factual basis. 16

Fowlkes made further contributions in the field of accounting in 1934. 17 He accepted the character basis for the classification of expenditures that had previously been recommended by the National Education Association, the United States Office of Education, and the National Association of School Business Officials. He divided the character classification into current expense, capital outlay, and debt service. His work also provided for revolving fund accounting and utilized several mechanical aspects that facilitated the use of ledger sheets included in his system.

The National Committee on Governmental Accounting was organized in 1934 for the purpose of developing and instituting sound principles of governmental budgeting, accounting, and reporting. 18 Its members included all of the national accounting organizations, municipal finance organizations, the United States and Canadian Governments, and the organization that had appeared in all previous accounting studies, the National Association of Public School Business Officials.

The third in the series of cooperative studies of school records and reports, 1936-40, was initiated by the U. S. Office of Education at the request of the National Council of Chief State School Officers and

<sup>16</sup> Englehardt and Von Borgersrode, p. 11.

John Guy Fowlkes, <u>Principles and Practices of Financial Accounting for Schools</u> (Milwaukee, 1934), pp. 73-95.

National Committee on Governmental Accounting, <u>Municipal</u>
Accounting and <u>Auditing</u> (Chicago, 1951), pp. 1-3.

with the assistance of a small grant from the General Education Board. 19
Although this study was not fully completed owing to the lack of available funds and the interference of war-emergency activities, it did result in the production and issuance of a series of suggested forms, including: (1) teacher's register of attendance; (2) teacher's and principal's periodic reports; (3) administrative unit report to county or state; (4) State report to the U. S. Office of Education; and (5) a series of forms on school transportation.

The committee report on school finance was issued in mimeographed form by the United States Office of Education as Circular 1940, No. 204, entitled <u>Financial Accounting for Public Schools</u> and as Bulletin No. 10 of the National Association of Public School Business Officials. 20

Circular 204 is considered to be one of the most important publications in the field of public school accounting and is the culmination of the efforts of the three cooperative studies. Throughout its entirety, emphasis is placed upon the necessity for developing accounting systems that would meet the needs of the local school and, at the same time, conform to state and federal reporting systems.

The Circular made no significant changes in accounting for receipts. It did suggest, however, that only the net profits from revolving funds or advancement accounts be included in reporting revenue receipts. Also, money borrowed and repaid during the fiscal year should be excluded from nonrevenue receipts for loans and bond sales. Two

Nolan D. Pulliam, "National Study of Uniform Basis for School Records and Reports," School Life, 30:21-22 (April, 1948).

United States Office of Education, National Advisory Committee on School Records and Reports, <u>Financial Accounting for Public Schools</u>, Circular 204 (Washington, 1940).

bases were recommended for the classification of revenue receipts;
(1) by source and (2) by method of production.

A number of changes were specified in the classification of items for the accounting of expenditures. Fixed charges, for example, had been under a single category, but Circular 204 recommended that it should be divided into two separate classifications: those expenditures that should be included as a part of the per pupil costs, and those that should not. Another expense classification stressed was under Auxiliary Agencies which was broken down into three sections: (1) School Services, (2) Transportation, and (3) Community Services. It also suggested a solution to the problem of distinguishing between supplies and equipment. The solution was that after the original equipment of a school building had been purchased, only the articles costing more than five dollars and lasting more than five years should be classified as equipment and charged to Capital Outlay.

Another recommendation that lacked a precedent was the inclusion of the minutes of boards of education as an integral part of the accounting system because such documents frequently included original authorizations.

A revised edition of Circular 204 was published in 1948. No significant changes were made in the accounting procedures in the new edition but it did make a twofold contribution from the standpoint of uniform school accounting practices:

(1) It presented in summary form a school-accounting program whose methods and procedures had been drawn from more than forty years of study and experience on the part of individuals and groups.

(2) It provided a basis or a point of departure for a continuation of the work which is directed toward the establishment of sound and accepted uniform school-accounting standards.

During the 1950s, two important handbooks in public school financial accounting, entitled <u>Handbook I</u> and <u>Handbook II</u>, were published by the United States Office of Education. These were the culmination of the efforts of hundreds of individuals and five national associations. The five associations involved were: (1) The American Association of School Business Officials of the United States and Canada, (2) The American Association of School Administrators, (3) The Council of Chief State School Officers, (4) The National School Boards Association, and (5) The Department of Rural Education—National Education Association.

Handbook I, The Common Core of State Educational Information, published in 1953, contained basic items of educational information for state departments of education. It included a plan for reporting public school fiscal information which contributed to the program for the development of a financial accounting manual that would help solve the problem for uniformity.

Handbook II, A Guide to Financial Accounting for Local and State School Systems, was published in 1957. 22 It was an enlarged and more refined version of Handbook I and soon became the suggested pattern of financial accounting by many state departments of education for their

United States Office of Education, The Common Core of Educational Information, Bulletin 1953, No. 8.

United States Office of Education, Financial Accounting for Local and State School Systems, Handbook II.

respective public schools. Its detailed breakdown of accounting information included: (1) Standard Receipt and Expenditure Accounts, (2) Standard Accounts and Terminology, (3) Standard Financial Accounts, (4) A Guide for Determining Per-pupil Expenditures, (5) An Index for Recording Specific Receipts and Expenditures, and (6) Criteria for Classifying Items of Supply and Equipment.

After more than one hundred years of working toward uniformity in public school accounting, the National Association of School Business Officials of the United States and Canada (ASBO), the organization that had served on all national study committees, adopted a set of accounting principles and procedures which it considered adequate and uniform for local school systems. These were presented and adopted at the 50th ASBO meeting in San Francisco, California, October 21, 1964.

#### Principles

- 1. A school district's accounting system must make it possible to:
  - a. show that legal provisions have been complied with and,
  - b. to reflect the financial condition and financial operations of the school district.
- 2. If legal and sound accounting provisions conflict, legal provisions must take precedence. It is however, the school district's duty to seek changes in the law which will make such law in harmony with sound accounting principles.
- 3. The general accounting system should be on a doubleentry basis with a general ledger in which all financial transactions are recorded in detail or in summary.
- 4. Every school district should establish the funds called for either by law or by sound financial administration. It should be recognized, however, that funds introduce an element of inflexibility in the financial system.

Accordingly, consistent with legal provisions and requirements of sound financial administration, as few funds as possible should be established.

The classification of funds to the extent required should be followed in the budget document and in the school district's financial reports.

- 5. A complete self-balancing group of accounts should be established for each fund. This group should include all of the accounts necessary to set forth the financial condition and financial operations of the fund and to reflect compliance with legal provisions.
- 6. A clear segregation should be made between the accounts relating to current assets and current liabilities and those relating to fixed assets and long term liabilities. With the exception of Working Capital or Trust Funds, fixed assets should not be carried in the same fund with the current assets but should be set up in a self-balancing group of accounts known as General Fixed Assets Group of Accounts by the National Committee in Governmental Accounting. Similarly, long-term liabilities should not be carried with the current liabilities of any fund but should be shown in a separate self-balancing group of accounts.
- 7. The fixed assets group of accounts should be maintained on the basis of original cost, or the estimated cost if the original cost is not available; or, in the case of gifts, the appraised value at the time received.
- 8. Depreciation on the general fixed assets of a school district should not be recorded in the accounts unless cash for replacements can legally be set aside. Depreciation on such assets may be computed for unit cost purposes even if cash for neplacement cannot legally be set aside providing these depreciation charges are used for memorandum purposes only and are not reflected in the accounts.
- 9. The accounting system should provide for budgetary control for both revenues and expenditures, and the financial statements should reflect, among other things, budgetary information.
- 10. The use of the accrual basis in accounting for revenues and expenditures is recommended to the extent applicable. Revenues, partially offset by provisions for estimated losses, should be taken into consideration when earned, even though not received in cash. Expenditures should be recorded as soon as liabilities are incurred.

- 11. Revenues should be classified by fund and source; and expenditures by fund, function, department, activity, character and by main classes of objects.
- 12. Cost accounting systems should be established wherever costs can be measured. Each cost accounting system should provide for the recording of all the elements of cost incurred to accomplish a purpose, to carry on an activity or operation or to complete a unit of work or a specific job. Although depreciation on general fixed assets may be omitted in the general accounts and reports, it should be considered in determining unit costs if a cost accounting system is used.
- 13. A common terminology and classification should be used consistently throughout the budget, the accounts, and the financial reports.

#### Procedures

- 1. The accounts should be centralized under the direction of one officer. He should be responsible for keeping or supervising all accounts and for preparing and issuing all financial reports.
- 2. A budget should be prepared by every organizational unit of the school district even if not required by law because such budgets are essential to the proper management of the school district's financial affairs. A distinction between the different funds must be made in such budgets.
- 3. As soon as purchase orders or contracts are signed, the resulting obligations should be recorded at once as encumbrances of the funds and appropriations affected.
- 4. Where applicable inventories of both consumable and permanent property should be kept in subsidiary records controlled by accounts in the general accounting system and physical inventories of both consumable and permanent property should be taken at least annually with the accounts and records made to agree with such inventories.
- 5. Financial reports should be prepared monthly or oftener, to show the current condition of the budgetary accounts and other information necessary to control operations. At least once each year a general financial report should be prepared and published.

# 6. An independent annual audit is recommended. 23

These accounting principles and procedures came to be an important guide in the development of <u>Handbook II-B</u>, the latest U. S. Government publication on public school accounting. A revision of <u>Handbook II-B</u> is under way at this time but it has not reached the publication stage.

# The History of Finance and Accounting Practices of Oklahoma

The accounting for funds, except on a local basis, was one of the least problems faced by the early public schools of Oklahoma.

From the opening of the unassigned lands in 1889, Oklahoma was settled very rapidly, and a growing need for schools was soon apparent. Settled primarily by young parents — people with growing families — the children frequently numbering from four to eight or more per family. During the period from April 22, 1889, when the first lands were opened to settlement, to May 2, 1890, when the Territory was organized, no legal form of government existed and the maintenance of an adequate school system was impossible. However, schools maintained by subscriptions or like means were organized in several of the towns. 25

Oklahoma was divided into Indian and Oklahoma Territories until formal statehood in November, 1907. Prior to this time, there was very

<sup>23</sup> Association of School Business Officials, pp. 67-69.

United States Office of Education, Principles of Public School Accounting, Handbook II-B (Washington, D. C., 1967).

Guy H. Lambert and Guy M. Rankin, A <u>History Outline of the Oklahoma State Department of Education</u> (Oklahoma City, Oklahoma, 1965), pp. 6-7.

little legal overall educational leadership except for a Territorial School Superintendent in each of the two Territories.

Educational standards were very low during this period. The certification of teachers was the duty and responsibility of each county superintendent. The Territorial Department of Education prepared questions for teacher examinations and these, in turn, were administered by the county superintendents. This plan was in effect until statehood (1907) when a state superintendent was elected and the first State Board of Education came into being.

Since few provisions were made for the raising of funds, school costs were, out of necessity, kept low. School terms were generally short, ranging from three to eight months. Funds for maintenance and teachers' salaries were equally low. A teacher's contract employing him for a three-month period at a salary of twenty dollars a month was not uncommon.

During the early years of statehood, the accounting practices and procedures varied from school district to school district but most were simple, elementary, and meager, because there was little to account for. In 1909, the State Legislature entered the public school financial picture by providing for a direct state tax levy of one-fourth of one mill for the support of common schools. The Legislature of 1911 set aside 40,400 acres of land to be sold for the purpose of encouraging the establishment of rural consolidated schools. 27

 $<sup>^{26}</sup>$ Ibid.

 $<sup>^{27}\,\</sup>rm Interview$  with Dr. Charles L. Weber, Assistant State Superintendent and Director of Finance of the Oklahoma State Department of Education, June 18, 1971.

The County Excise Board was created in 1915 with one of its purposes being the examination of the Estimate of Needs as certified by the local board of education. The Constitution made a provision for a five mill local tax for school district operation and, in addition, an excess levy of ten mills if passed by majority vote. 28

A county survey of Oklahoma education was made under the direction of E. E. Brown, Chief High School Inspector, in the early 1920's.

Several problems were revealed in the survey such as wealth inequities between districts, low tax assessments, and lack of state tax sources for funding educational needs. These problems appear as timely today as they did then. In suggesting a solution for the financial problems, Brown stated:

There is only one solution of the financial problems of Oklahoma public schools. This fundamental measure is a large state distributive fund equaling at least one-third, preferably one-half, and if possible two thirds, of the cost of maintaining an adequate school system for the state.<sup>29</sup>

The first state aid of any consequence came in 1919 when the State Legislature appropriated \$100,000 to help pay the current expenses of the financially weak schools. This amount was gradually increased by succeeding legislatures until by 1925 it had reached \$500,000 per year.

As more funds became available, more interest was shown in the accounting for these funds and how they were spent. The Oklahoma State Legislature in Special Session, 1921, passed an "Act creating a

<sup>28&</sup>lt;sub>Ibid.</sub>

<sup>29</sup> Oklahoma State Department of Education, A Statistical Survey by Counties of Education in Oklahoma, Bulletin No. 110, 1925, pp. 54-55.

<sup>30</sup> Lambert and Rankin, pp. 7-8.

Commission of Educational Survey, naming the duties, providing for an educational survey of the State school system of Oklahoma, and making an appropriation of twenty thousand dollars (\$20,000)."<sup>31</sup>

A survey team composed of educational experts from seven widely separated states (Minnesota, Kansas, Illinois, Ohio, Kentucky, New York, and Georgia) participated in an educational investigation under the direction of the Federal Bureau of Education. Approximately 523 days were devoted to field work by nineteen members of the Survey Staff, most of the visiting being done between October 16 and November 11. Schools were visited in forty-six of the seventy-seven counties of the state. A major part of this survey was concerned with the financial and accounting procedures used by the elementary and secondary schools; however, a cursory examination of these procedures was also made of the normal schools, colleges, universities, special, and separate schools. The results of their findings are presented below.

## A. Budgetary Procedure

- 1. Organization for financial control erroneous.
- Methods of presenting information regarding school finance tend to confuse rather than to inform the public.
- 3. Methods of estimating revenues extraordinarily conservative.
- 4. Duplication of appropriation accounts.

### B. Accounting Methods

 Practice of reporting revenues and expenditures only under heads of General Fund and Sinking Fund erroneous.

<sup>&</sup>lt;sup>31</sup>United States Board of Education, <u>Public Education in Oklahoma</u> (Washington, 1922), p. 1.

- 2. Appropriation accounts reflect objects of expenditure with little regard to purpose and character.
- Appropriation accounts not followed explicitly when incurring expenditures.
- 4. Financial statements issued in the form of balance sheets without being accompanied by operation statements.
- 5. Financial statements showing functional expenditures can be developed to further advantage.
- 6. School annual statistical reports to State Superintendent of Education subject to improvement. 32

In summarizing their findings, the survey team stated that

The methods of financial and accounting procedures in the various educational institutions, elementary, secondary, and higher education, are deficient in producing digested financial information necessary for administrative and financial review; and the methods lack co-ordination. In fact, a general reorganization of school financial procedure is necessary if the schools are to function as an independent, constructive, educational force. 33

Little change is reported during the remaining 1920's in the financial inequities that existed between school districts.

In 1930, the Oklahoma Survey Commission filed a report concerning the financing of Oklahoma schools. The consultive staff consisted of such men as Paul R. Mort and George D. Strayer. The greatest value of this report from the standpoint of accounting lay in its recommendation of a director of finance and accounting. It recommended that he should

<sup>&</sup>lt;sup>32</sup>Ibid., p. 77.

<sup>&</sup>lt;sup>33</sup>Ibid., p. 116.

be made responsible for the handling of the monies made available by the state to local school systems. It stated that "he should have general oversight and should make recommendations with respect to systems of accounting to be employed in local school systems and in the state's higher educational institutions."

In 1933, the Oklahoma Department of Education issued a bulletin that recommended a uniform financial procedure for general fund expenditures. A major portion of this bulletin dealt with accounting and was concerned primarily with the recording of warrants, the distribution and classification of expenditures, appropriation accounts and school audits.

The first law that could be called a state aid law was passed in 1935 by the State Legislature, and it appropriated \$8,200,000 for each year of the biennium. This legislation also made provision for a minimum program and minimum program income. Whatever a district lacked between its chargeable income and the cost of a minimum program was provided by the state and called state aid. It assured all schools of a minimum school term (8½ months).

In 1939, the State Department of Education published Bulletin No. 145-A, The School Finance and Transportation Law, which was the first of a series of bulletins to be published each biennium. 36 No mention

<sup>34</sup> Oklahoma Department of Education, <u>Financing Oklahoma Schools</u>, Bulletin No. 110-A, December, 1930, p. 33.

<sup>35</sup> Oklahoma State Department of Education, <u>A Uniform Financial</u>
Procedure for General Fund Expenditures, Bulletin No. 135, 1933, pp. 20-27.

<sup>36</sup> Oklahoma State Department of Education, The School Finance and Transportation Laws, Bulletin No. 145-A, 1939-1941.

was made in the earlier bulletins concerning the accounting for funds and, consequently, schools continued as they had in the past.

Yeats describes accounting conditions in small Oklahoma public schools in 1949:

Many have criticized, and some unfairly, the system of accounting used, rather than the lack of a system. One school's records can be examined, and a similar examination of a school comparable in size, would not present a similar set of records. One, familiar with the former would be at a complete loss in the same position in another school system. Where one school uses a neat, well-organized plan of recording and handling transactions in connection with school receipts and expenditures, another is equally as careless and lacks a proper organization. 37

Oklahoma was one of a number of states who took a more serious look at its accounting needs when the U. S. Office of Education published <a href="Handbook II">Handbook II</a> in 1957. A section in its biennial publication, Bulletin No. 145-J, included the following statements under "Accounting, Analysis and Reporting":

- 1. The public schools are in operation to educate and to assist in bettering conditions for the people and, in particular the youth. There are real limitations to getting accurate measurements of this success. The accounting and reporting program should recognize both the objectives and the problems. Meanings should not be read into data which cannot be scientifically supported.
- 2. Schools are not operated for a financial profit motive. The balance sheet report of a school district's operations has different implications from one for a private business concern.
- 3. School districts are interested in economy of operation within a concept of obtaining desired quality staff, materials and other items at the most reasonable cost possible. The business records should assist in achieving this goal.

<sup>37</sup> Eugene Millage Yeats, "The Accounting System and Reports for a Small Independent School District in Oklahoma," (unpub. Master's thesis, Oklahoma University, 1949), p. 2.

- 4. School districts are public political subdivisions in which untrained lay citizens may be actively involved in responsible managerial positions as a result of the democratic process. The accounting and reporting records must be susceptible to utilization and interpretation by these people. Administrative adjustments in methods and procedures will therefore occur which may seem unnecessary or burdensome to a person highly trained or considerable experienced in complex accounting practices.
- 5. Statutes and other responsible directives will have an impact on school district accounting and reporting. The public welfare requires adherence to these limitations until and unless they are changed by the orderly process established in the law.
- 6. School districts must operate on a system of appropriations and authorizations. The accounting and reporting methods should facilitate compliance with these grants for as long as they remain conscionable and sufficient, and should indicate the need for changes.
- 7. These records provide a demonstration of the public stewardship of the board, the district officers and the administrators. They should be audited annually by competent and disinterested parties and the resulting reports made public.
- 8. For purposes of public reporting and comparison, a standard system of terminology, classification and reporting is desirable. Local adjustments should be built around compliance with these factors.
- 9. Nothing is so permanent about school district accounting and reporting that it cannot be changed. However, changes should come from active research into ways to make the methods and procedures better able to help schools educate people and not merely because of analysis factors totally unrelated to the successful administration of public education.<sup>38</sup>

Authorization for the use of an alternate accounting system came with the passing of House Bill No. 906 by the Oklahoma State Legislature

<sup>38</sup> Oklahoma State Department of Education, The School Finance, Transportation and Activity Fund Laws Including the State Board of Education Regulations for Administration and Handbook on Budgeting and Business Management, Bulletin No. 145-J, 1957-59, pp. 62-63.

in 1965.<sup>39</sup> One advantage of this system over the modified cash system is that an encumbrance against a particular fund is made at the time the purchase or encumbrance order is signed. This enables the administrator to know the unencumbered balance of any fund at any time. With the modified cash system, an expenditure is not recorded until a warrant is written for the payment of an account. This legislative act also authorized the use of the services of a data processing center to furnish the required records and reports.

Currently, the attitude of the Oklahoma State Department of Education toward accounting in the public schools is expressed in the 1971-72 Bulletin No. 145-Q:

. . . it behooves the superintendent as executive officer for the board of education, to assume the responsibility of leadership in seeing that a truly functional system of accounting is established and maintained for the school district or districts over which he is the administrative officer.  $^{1}40$ 

#### Summary

Throughout the history of public school financial accounting the efforts of individuals, national committees, and other organizations have been directed toward the development of an accounting system that would reveal comparable data from the public schools of this nation. The literature from these sources reveals that the principle of uniformity was the central theme and prime objective.

 $<sup>^{39}\</sup>mathrm{Oklahoma}$  State Legislature, House Bill No. 906, 1965, Section 1, Chapter 275.

Oklahoma State Department of Education, <u>The School Finance</u>, <u>Transportation and Activity Fund Laws Including the State Board of Education Regulations for Administration and Handbook on Budgeting and Business Management</u>, Bulletin No. 145-Q, 1971-72, p. 46.

The first organized effort from the Federal government began shortly after the century with the 1912 report from the Committee on Records and Reports. This report introduced accounting principles that, with some revision and supplementation, have become the basis for present-day school accounting. Several national educational organizations assisted in the 1912 study and in four major government-sponsored accounting studies during the next fifty years. In 1964, one of these organizations, the Association of School Business Officials of the United States and Canada, adopted these revised principles with only minimal changes. These became the basis for the Association's Recommended Principles and Procedures which, in turn, became the foundation for Handbook II and II-B, the U. S. Office of Education's official guide to public school financial accounting.

Oklahoma, like the Nation, has experienced similar problems in the development of a uniform accounting system for the public schools. Very little organized effort was aimed at this problem during the first fifty years of statehood.

In 1957, the Oklahoma State Department of Education included, for the first time, in the business management handbook some general recommendations and desired outcomes for financial accounting systems in the public schools. The Department has indicated that a standard system of terminology, classification, and reporting is desirable but leaves the selection of the system to the superintendent of the local district.

#### CHAPTER III

#### DESIGN OF THE STUDY

#### Methodology

The population for this study includes all of the independent school districts in the State of Oklahoma; there were 452 such districts in Oklahoma during the 1970-71 fiscal year. These districts varied in pupil population from 97 to 69,399. There was also a wide variation in the per capita valuation, ranging from \$1,009.68 to \$40,293.44 per pupil.

A general hypothesis was made that wealth and size have some influence upon the programs and facilitating services of schools. A point was selected in each of these variables that divided the schools into two categories. The average per capita valuation of Oklahoma school districts was \$6,264. Those school districts whose per capita valuation was greater than \$6,264 were classified as high valuation school districts. School districts were classified as low valuation districts if their per capita valuation was below \$6,264. There were 192 school districts in Oklahoma with a per capital valuation greater than \$6,264 and 260 districts with less than this valuation during the 1970-71 fiscal year.

Oklahoma school districts are predominately small in population.

The Finance Division of the State Department of Education of Oklahoma classifies school districts as large or small districts with 1,500

average daily attendance as the point of division. This figure was suggested by the National Education Finance Study as the minimum ADA for justifiable efficiency of operation for schools. For the purpose of this study, schools were classified as large or small districts in population with 1,500 ADA as the dividing point. There were 58 school districts in Oklahoma with an ADA greater than 1,500 and 394 districts with less than this ADA during the 1970-71 fiscal year.

The division of schools as to size and wealth created four categories:

Large High Valuation Districts (LHV) - those above 1,500 in ADA with more than \$6,264 per capita income.

Large Low Valuation Districts (LLV) - those above 1,500 in ADA with less than \$6,264 per capita income.

Small High Valuation Districts (SHV) - those below 1,500 in ADA with more than \$6,264 per capita income.

Small Low Valuation Districts (SLV) - those below 1,500 in ADA with less than \$6,264 per capita income.

To increase the probability that the sample would be representative of each of the four categories, a sample size of one-fourth of the total population was selected, using a table of random numbers to make the selection.

<sup>&</sup>lt;sup>1</sup>Interview with Dr. Charles Weber, Ass't. State Superintendent and Director of Finance of the Oklahoma State Department of Education, October 16, 1970.

<sup>&</sup>lt;sup>2</sup>Roe L. Johns and Kern Alexander, "Status and Impact of Finance Programs," National Educational Finance Project, Vol. IV (University of Florida, 1968-71), p. 54.

The chi-square one-sample test was used to test the representativeness of the random sample of the population, the sample return of the
population, and the sample return of the random sample. When both
independent variables were considered, a chi-square of 3.32 with three
degrees of freedom indicated the random sample to be representative of
the population.

The descriptive survey method was used to attack the problem. A mail questionnaire was chosen because of the time and costs involved in a state-wide study. The questionnaire was similar to one developed for a public school accounting study by Perry. The questionnaire was developed through consultations with specialists in the field of public school accounting and school business management. Individuals, schools, and firms assisting in the questionnaire development were: Mr. Miles Hall, C.P.A., Chairman of the Oklahoma State Board of Public Accountants and member of the firm of Hurst, Thomas, and Co. of Oklahoma City; Mr. Bill McKeel of McKeel Public Accountants, Ada, Oklahoma; Mr. Charles Weaver, President of the Oklahoma Association of School Business Officials and Finance Director of Midwest City Schools, Midwest City, Oklahoma; Dr. Charles Weber and Mr. Cecil E. Folks of the Finance Division of the State Department of Education of Oklahoma.

After completing the initial questionnaire, a field study was conducted among four school districts, each representative of one of the four categories of size and wealth, to determine its appropriateness.

Sciences (New York, 1956), p. 42). Statistics for the Behavioral

James Donald Perry, "Public School Financial Accounting--An Analysis of Practices and Needs in Iowa," (unpub. PH. D. dissertation, University of Iowa, 1966).

Superintendents, business managers, and financial secretaries of the Ada School District, the Seminole School District, the Weleetka School District, and the McLish School District assisted with this phase of the study and made recommendations that were incorporated in the final instrument.

There are a number of factors that influence the percentage of returns to a questionnaire. Among the most important are:

- (1) the sponsorship of the questionnaire;
- (2) the attractiveness of the questionnaire format;
- (3) the length of the questionnaire;
- (4) the nature of the accompanying letter requesting cooperation;
- (5) the ease of filling out the questionnaire and mailing it back;
- (6) the nature of the people to whom the questionnaire is sent.<sup>5</sup>

In order to secure the highest possible return, the questionnaire was constructed with special consideration being given to the above points. A self-addressed stamped envelope was provided with the questionnaire. The questionnaires, accompanied by a letter from the Director of the Finance Division of the State Department of Education and a letter of instruction from this writer, were mailed to those individuals most closely associated with the accounting function in each district chosen. If the questionnaires were not returned within ten days of the original mailing, follow-up letters were sent. This letter requested again the respondent's help in completing the data for this study (see Appendix A).

The first mailing of the questionnaire accomplished a 72.5 per cent return. The follow-up letter obtained another 11.5 per cent which made

<sup>&</sup>lt;sup>5</sup>Claire Selltiz et al., <u>Research Methods in Social Relations</u> (New York, 1961), pp. 241-242.

- a final return of 84 per cent. The respondents included:
  - 1. the superintendent of schools (84)
  - 2. the business manager (6)
  - 3. the assistant superintendent of schools (1)
  - 4. the financial secretary (2)
  - 5. the comptroller (1)
  - 6. the clerk of the board of education. (1)

#### Instrumentation

The survey instrument consisted of forty-four questions devised to elicit information in regard to present accounting practices and needs of the independent school districts of Oklahoma. The questions were structured with particular regard being given to the accounting principles and procedures recommended by the Association of School Business Officials of the United States and Canada; the Alternate Accounting System, with electronic data processing machines, as authorized by Oklahoma School Law; and the accounting needs as perceived by the financial custodians of their districts.

#### Treatment of the Data

The  $\chi^2$  test for two independent samples discussed by Siegel was used to determine whether different samples of school districts based on per pupil valuation and school size differ in the frequency with which their accounting systems compare to the recommended accounting principles and procedures, their selection of the alternate accounting system,

and their perception of accounting needs. 6 The following formula was used:

$$X = \frac{N\left(|AD - B| - \frac{N}{2}\right)^2}{(A + B)(C + D)(A + C)(B + D)} df = 1$$

As  ${\rm Ho}_1$  and  ${\rm Ho}_2$  are concerned with nineteen principles and procedures, each principle and procedure was tested to present a more analytical understanding.

The level of significance was selected as  $\alpha$  = 0.05. To determine the significance of the observed value of  $\chi^2$  reference was made to Table C in Siegel. The probability given for the observed value of  $\chi^2$  for the observed degrees of freedom was equal to or greater than  $\alpha$ , the Ho was rejected.

The open-ended questions in the questionnaire were summarized in a narrative section to present attitudes and beliefs toward needs and current requirements.

<sup>6</sup> Siegel, p. 107.

<sup>7&</sup>lt;sub>Ibid., p. 249.</sub>

#### CHAPTER IV

#### PRESENTATION OF THE DATA AND FINDINGS

The data of this study were collected from respondents in ninetyfive randomly selected school districts in Oklahoma. These ninety-five districts represented an 84 per cent return of the total sample population of 113. The division of the two independent variables, size and wealth, created four categories of school districts. It was decided to check the sample distribution to see how large a discrepancy existed between the sample and the population. To determine if the discrepancies in the sample frequencies could be considered to be caused by sampling error, the null hypothesis tested was that the sample distribution had the same shape as the population distribution. With 3 degrees of freedom a  $\chi^2$  value of 3.32 indicated that the null hypothesis could not be rejected at the 0.05 level of confidence and that the sample provided a good fit to the population. The different categories of districts had the following returns: Large-High Valuation Districts - 100 per cent; Large-Low Valuation Districts - 78.6 per cent; Small-High Valuation Districts - 88.4 per cent; Small-Low Valuation Districts - 80 per cent.

When the independent variable of size was considered separately, a chi-square value of 2.39 with one degree of freedom was not significant at the 0.05 level of confidence. When the independent variable of wealth was considered separately a chi-square value of 0.04 with one degree of freedom was not significant at the 0.05 level.

The data were arranged so that the statistical treatment could be performed as stated in the section on the treatment of the data in Chapter III; all hypotheses were tested by use of chi-square.

Hypothesis 2 was: There is no significant difference in the degree of compliance with the recommended accounting principles and procedures when responding schools are categorized according to size.

Hypothesis 1 was: There is no significant difference in the degree of compliance with the recommended accounting principles and procedures when responding schools are categorized according to wealth.

In testing these hypotheses, each of the nineteen recommended principles and procedures was treated independently. The questions used to secure the data for each principle and procedure are presented for clarity. To avoid restating the principles, procedures, and questions for Hypothesis 2, the results from testing Hypotheses 1 and 2 are shown concurrently.

#### Principle 1

A school district accounting system must make it possible to:

- a. show that legal provisions have been complied with and,
- b. to reflect the financial condition and financial operation of the school district.

#### Question:

13. Does your school district conduct an annual audit?

Hypotheses 1 and 2 were not rejected on the basis of the data pertaining to legal provisions ascertained by annual audits under Principle

1a. All school districts sampled, regardless of size or wealth, indicated that annual audits were conducted (see Tables I and II).

TABLE I

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH
IN THE CONDUCTING OF ANNUAL AUDITS

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	44 (100%)	51 (100%)
No	O	0

 $\chi^2 = 0.00$ ; NS

TABLE II

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
IN THE CONDUCTING OF ANNUAL AUDITS

	Large Districts N = 17	Small Districts N = 78
Yes	; 17 (100%)	78 (100%)
No	. 0	0

 $\chi^2 = 0.00; NS$ 

# Questions:

- 6. Do you prepare balance sheets for your school? If so, are they published?
- 7. Do these balance sheets reflect the net worth of your district including fixed assets and inventories?

Hypothesis 1 pertaining to the preparation of balance sheets was rejected. A significant difference at the 0.05 level of confidence existed between high valuation and low valuation school districts (see Table III). Balance sheets were prepared by 91 per cent of the low valuation districts and 70 per cent of the high valuation districts.

TABLE III

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH
IN THE PREPARATION OF BALANCE SHEETS

	High Valuation Districts N = 44	Low Valuation Districts N =51
Yes	31 (70%)	47 (92%)
No	13 (30%)	4 (8%)

 $<sup>\</sup>chi^2 = 6.17$ ; Sig at P  $\leq .05$ , 1 d.f.

Hypothesis 2 was not rejected on the basis of the data. There were no significant differences existing among large and small school districts from the standpoint of balance sheet preparation as indicated in Table IV. Preparation of balance sheets was practiced by 94 per cent of the large school districts followed by the small schools with 79 per cent.

TABLE IV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
IN THE PREPARATION OF BALANCE SHEETS

	Large Dis N = 17		Small Dis $N = 7$	
Yes	16	(94%)	62	(79%)
No	1	(6%)	16	(21%)

 $\chi^2 = 1.16; NS$ 

An analysis of the data revealed in Table V allowed rejection of Hypothesis 1. The wealth of a school district did appear to influence the publication of balance sheets. A significant difference existed at the 0.05 level of confidence. Balance sheets were published by 71 per cent of the high valuation districts, while 43 per cent were published by low valuation districts.

TABLE V

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH
IN THE PUBLICATION OF BALANCE SHEETS

	High Valuation Districts N = 44	Low Valuation Districts N = 55
Yes	22 (71%)	21 (43%)
No	9 (29%)	28 (57%)

 $\chi^2$  = 4.96; Sig at P < .05, 1 d.f.

Hypothesis 2 was not rejected. There were no significant differences existing between large and small schools in the publication of balance sheets (see Table VI). The publication of balance sheets was performed by 56 per cent of the small districts and 44 per cent of the large districts.

TABLE VI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
IN THE PUBLICATION OF BALANCE SHEETS

	Large Districts N = 17	Small Districts N = 78
Yes	7 (44%)	36 (56%)
No	9 (56%)	28 (44%)

 $\chi^2 = 0.38$ ; NS

Hypothesis 1 was not rejected when the data pertaining to fixed assets and inventories in the balance sheet were considered. Hypothesis 2 was not rejected on this same data; however, a significant difference did exist at the 0.10 level (Table VIII). Fixed assets and inventories were included by 34 per cent of the high valuation districts followed by 31 per cent of the low valuation districts. On the other hand, 37 per cent of the small schools complied with this recommended principle while only 12 per cent of the large schools complied.

TABLE VII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH
IN THE INCLUSION OF FIXED ASSETS AND
INVENTORIES ON BALANCE SHEETS

	High Valuation Districts $N=44$	Low Valuation Districts N = 51	
Yes	15 (34%)	16 (31%)	
No	29 (66%)	35 (69%)	

 $<sup>\</sup>chi^2 = .004$ ; NS

TABLE VIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
IN THE INCLUSION OF FIXED ASSETS AND
INVENTORIES ON BALANCE SHEETS

	Large Districts N = 17	Small Districts N = 78
Yes	2 (12%)	29 (37%)
No	15 (88%)	49 (63%)

 $\chi^2 = 3.03$ ; NS

## Principle 2

If legal and sound accounting provisions conflict, legal provisions must take precedence. It is, however, the school district's duty to seek changes in the law which will make such law in harmony with sound accounting principles.

# Questions:

- 4. What professional organizations do you belong to that are primarily concerned with the business function of public schools?
- 5. Are you actively involved with any of the above mentioned groups, such as committee work, etc.?

If so, please indicate the nature of your involvement.

The only organizations, primarily concerned with the business function of public schools, reported by the school districts were the National Association of School Business Officials of the United States and Canada and the Oklahoma Association of School Business Officials.

Hypothesis 1 was not rejected on the basis of the data pertaining to membership in the NASBO as indicated in Table IX. Membership in the NASBO was reported at 18 per cent by both high and low valuation districts.

TABLE IX
RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND MEMBERSHIP IN THE NASBO

	High Val Distri N = 4	cts	Low Valu Distri N = 5	cts
Member	8	(18%)	9	(18%)
Non-Member	36	(82%)	42	(82%)

 $\chi^2 = 0.04$ ; NS

Hypothesis 2 was rejected. A significant difference at the 0.05 level of confidence existed between large and small school districts and their membership in the NASBO as indicated in Table X. The responses from the large school districts indicated that 41 per cent were members of the NASBO, while only 13 per cent of the small schools indicated membership.

TABLE X

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND MEMBERSHIP IN THE NASBO

	Large Districts N = 17	Small Districts N = 78
Member	7 (41%)	10 (13%)
Non-Member	10 (59%)	68 (87%)

 $\chi^2$  = 5.83; Sig at P  $\leq$  .05, 1 d.f.

Hypotheses 1 and 2 were not rejected on the basis of the data pertaining to membership in the OASBO (see Tables XI and XII). Membership in the OASBO was expressed by 80 per cent of the high valuation districts followed by 69 per cent of the low valuation districts. Approximately the same percentages were indicated by large and small districts with large districts expressing 82 per cent and small districts with 72 per cent.

TABLE XI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND MEMBERSHIP IN THE OASBO

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Member	35 (80%)	35 (69%)
Non-Member	9	16

 $\chi^2 = 0.94$ ; NS

TABLE XII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND MEMBERSHIP IN THE OASBO

	Large Districts N = 17	Small Districts N = 78
Member	14 (82%)	56 (72%)
Non-Member	3 (18%)	22 (28%)

 $\chi^2 = 0.20$ ; NS

Hypothesis 1 was not rejected, the wealth of the school districts appeared to be of little significance in determining active involvement in public school business organizations (see Table XIII). Only 7 per cent of the high valuation districts and 2 per cent of low valuation districts indicated active involvement.

TABLE XIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH
IN THEIR INVOLVEMENT WITH SCHOOL
BUSINESS ORGANIZATIONS

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	3 (7%)	1 (2%)
No	41 (93%)	48 (98%)

 $\chi^2 = 0.45$ ; NS

Hypothesis 2, however, was rejected on the basis of data pertaining to active involvement. A significant difference existed at the 0.05 level of confidence as indicated in Table XIV. Responses from 18 per cent of the large schools and 1 per cent of the small schools indicated active involvement with school business organizations.

TABLE XIV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE IN THEIR INVOLVEMENT WITH SCHOOL BUSINESS ORGANIZATIONS

	Large Districts N = 17	Small Districts N = 78
Yes	3 (18%)	1 (1%)
No	14 (82%)	75 (99%)

 $\chi^2$  = 5.47; Sig at P  $\leq$  .05, 1 d.f.

Three of the five responses to the question of nature of involvement came from large-high valuation districts and the fourth from a large-low valuation district. The four responses listed in the order previously mentioned:

Chairman of the OASBO Negotiations Committee

Chairman of the OASBO Accounting and Finance Committee

Member of the Accounting and Finance Research Committee of
the NASBO

President of the OASBO

The fifth response came from a small-high valuation district but the nature of involvement was not clear. The respondent indicated that his involvement was of an administrative nature with the OASBO.

#### Principle 3

The general accounting system should be on a double-entry basis with a general ledger in which all financial transactions are recorded in detail or in summary.

#### Questions:

- 21. Do you employ a double-entry (for each debit a corresponding credit) approach in your accounting system?
- 22. Do you employ a general ledger in which all financial transactions are recorded in detail or in summary?

Hypotheses 1 and 2 were not rejected on the basis of the data.

Double-entry systems were employed by 57 per cent of the low valuation districts followed by 55 per cent of the high valuation districts. On the other hand, 76 per cent of the large schools and 51 per cent of the small schools utilized this system. Responses to question 21 are indicated in Tables XV and XVI.

TABLE XV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH
IN THE UTILIZATION OF DOUBLE-ENTRY SYSTEMS

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	24 (55%)	29 (57%)
No	20 (45%)	22 (43%)

 $\chi^2 = 0.0005$ ; NS

TABLE XVI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
IN THE UTILIZATION OF DOUBLE-ENTRY SYSTEMS

	Large Districts N = 17	Small Districts N = 78
Yes	13 (76%)	40 (5 <b>1</b> %)
No	l <sub>1</sub> (24%)	38 (49%)

 $\chi^2 = 2.64$ ; NS

The data in Tables XVII and XVIII failed to reject Hypotheses 1 and 2. General ledgers were utilized by 96 per cent of the low valuation districts and 91 per cent of the high valuation districts. Similar percentages appeared when size was analyzed, with 95 per cent of the

small districts and 88 per cent of the large districts indicating the use of general ledgers.

TABLE XVII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH
IN THE UTILIZATION OF GENERAL LEDGERS

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	40 (91%)	49 (96%)
No	4 (9%)	2 (4%)

 $\chi^2 = 0.372$ ; NS

TABLE XVIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
IN THE UTILIZATION OF GENERAL LEDGERS

	Large Districts N = 17	Small Districts N = 78
Yes	15 (88%)	74 (95%)
No	2 (12%)	4 (5%)

 $\chi^2 = 0.220; NS$ 

# Principle 4

Every school district should establish the funds called for either by law or by sound financial administration. It should be recognized, however, that funds introduce an element of inflexibility in the financial system. Accordingly, consistent with legal provisions and requirements of sound financial administration, as few funds as possible should be established. Question:

25. Which of the following funds have been established in your district's financial system?

Hypotheses 1 and 2 were not rejected on the basis of the data. There appeared to be no significant differences existing in funds established by high and low valuation districts. All of the districts sampled maintained general and building funds with the exception of two high valuation districts that indicated no building funds. The only funds not reported by the majority of schools were the petty cash, insurance, federal, and gifts and endowments funds. Low valuation schools responded with a mean of 6.8 funds followed closely by 6.7 funds for high valuation districts. Large school districts indicated a mean of 7 funds per district followed by 6.7 funds for small districts (see Tables XIX and XX). Only one fund, the bond fund, indicated a significant difference at the 0.02 level of confidence.

TABLE XIX

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH IN THE MAINTENANCE OF FUNDS

Funds Reported	By High Valuation Districts N = 44	Per Cent of Districts	By Low Valuation Districts N = 51	Per Cent of Districts	χ²
General	44	100	51	100	0.00; NS
Building	42	95	<b>51</b>	100	0.04; NS
Petty Cash	28	64	20	39	0.05; NS
Insurance	13	30	27	53	0.44; NS
Food Services	32	73	42	82	0.078; NS
Bond	30	68	38	75	2.06; NS
Sinking	37	84	44	86	0.00008; NS
Federal	19	43	23	45	0.0004; NS
Student Activities	43	98	47	92	0.57; NS
Gifts and Endowments	6	14	3	6	0.88; NS

Mean Funds of School
Districts

6.7

6.8

TABLE XX

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE IN THE MAINTENANCE OF FUNDS

Funds Reported	By Large Districts N = 17	Per Cent of Districts	By Small Districts N = 78	Per Cent of Districts	$\chi^2$
General	17	100	78	100	0.00; NS
Building	17	100	76	97	0.01; NS
Petty Cash	7	41	41	53	0.30; NS
Insurance	7	41	33	42	0.03; NS
Food Services	13	76	61	78	0.03; NS
Bond	17	100	51	65	6.61*
Sinking	16	94	65	83	0.58; NS
Federal	7	41	35	45	0.00007; NS
Student Activities	16	94	74	95	0.40; NS
Gifts and Endowments	3	18	6	77	0.66; NS

\*Significant at the .02 level.

Mean Funds of School
Districts 7

### Principle 5

A complete self-balancing group of accounts should be established for each fund. This group should include all of the accounts necessary to set forth the financial condition and financial operations of the fund and to reflect compliance with legal provisions.

#### Question:

### 26. Are separate accounts maintained for each fund?

Hypotheses 1 and 2 were not rejected on the basis of the data pertaining to accounts and their treatment at the end of the fiscal year (see Tables XXI and XXII). Maintenance of self-balancing accounts was practiced by 94 per cent of the low valuation districts followed by 93 per cent of the high valuation districts. Responses from large districts indicated that 100 per cent complied with this principle while 92 per cent of the small districts expressed compliance.

TABLE XXI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THEIR
MAINTENANCE OF SELF-BALANCING ACCOUNTS

	High Valuation Districts $N = 44$	Low Valuation Districts N = 51
Yes	41 (93%)	48 (94%)
No	3 (7%)	3 (6%)

 $<sup>\</sup>chi^2 = 0.056$ ; NS

TABLE XXII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND THEIR MAINTENANCE OF SELF-BALANCING ACCOUNTS

	Large Districts N = 17	Small Districts N = 78
Yes	17 (100%)	72 (92%)
No	0	6 (8%)

 $\chi^2 = 0.041$ ; NS

# Principle 6

A clear segregation should be made between the accounts relating to current assets and current liabilities and those relating to fixed assets and long-term liabilities. With the exception of Working Capital or Trust Funds, fixed assets should not be carried in the same fund with current assets, but should be set up in a self-balancing group of accounts known as General Fixed Assets Group of Accounts by the National Committee in Governmental Accounting. Similarly, long-term liabilities should not be carried with the current liabilities of any fund but should be shown in a separate self-balancing group of accounts.

#### Question:

17. Do you maintain separate funds for current assets, fixed assets, current liabilities, and fixed liabilities?

Hypotheses 1 and 2 were not rejected. An analysis of the data failed to reveal a significant difference between the wealth and size of school districts and their separation of current assets from fixed assets and current liabilities from long-term liabilities (see Tables XXIII and XXIV). Most of the school districts did not comply with this principle. The low valuation districts expressed 39 per cent compliance while only 36 per cent of the high valuation districts complied. From the standpoint of size, 40 per cent of the small schools and 29 per cent of the large schools indicated adherence.

TABLE XXIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THEIR MAINTENANCE OF SEPARATE ACCOUNTS FOR CURRENT ASSETS, FIXED ASSETS, CURRENT LIABILITIES, LONG-TERM LIABILITIES

	High Valuation Districts N = 44	Low Valuation Districts $N = 51$
Yes	16 (36%)	20 (39%)
No	28 (64%)	31 (61%)

 $<sup>\</sup>chi^2 = 0.005; NS$ 

TABLE XXIV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND THEIR MAINTENANCE OF SEPARATE ACCOUNTS FOR CURRENT ASSETS, FIXED ASSETS, CURRENT LIABILITIES,

LONG-TERM LIABILITIES

	Large Districts N = 17	Small Districts N = 78
Yes	5 (29%)	31 (40%)
No	12 (71%)	47 (60%)

 $\chi^2 = 0.27$ ; NS

### Principle 7

The fixed assets group of accounts should be maintained on the basis of original cost, or the estimated cost if the original cost is not available; or, in the case of gifts, the appraised value at the time received.

#### Question:

16. Are your fixed asset accounts maintained on the basis of the original costs of those assets?

Hypotheses 1 and 2 were not rejected according to data pertaining to the maintenance of fixed asset accounts on the basis of their original cost as indicated in Tables XXV and XXVI. Only 41 per cent of the high valuation districts maintained fixed assets on the basis of original cost compared to 35 per cent of the low valuation districts. Similar percentages were expressed by large schools with 41 per cent and small schools with 37 per cent.

TABLE XXV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THEIR MAINTENANCE OF FIXED ASSETS ON THE BASIS OF ORIGINAL COST

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	18 (41%)	18 (35%)
No	26 (59%)	33 (65%)

 $\chi^2 = 0.12$ ; NS

TABLE XXVI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
AND THEIR MAINTENANCE OF FIXED ASSETS ON THE
BASIS OF ORIGINAL COST

	Large Districts N = 17	Small Districts N = 78
Yes	7 (41%)	29 (37%)
No	10 (59%)	49 (63%)

 $\chi^2 = 0.001; NS$ 

# Principle 8

Depreciation of the general fixed assets of a school district should not be recorded in the accounts unless cash for replacements can legally be set aside. Depreciation on such

assets may be computed for unit cost purposes even if cash for replacement cannot legally be set aside providing these depreciation charges are used for memorandum purposes only and are not reflected in the accounts.

#### Questions:

- 19. Do your accounts reflect the current or depreciated value of the fixed assets of your district?
- 18. Do you maintain reserve funds for the replacement of fixed assets?

Hypotheses 1 and 2 pertaining to the depreciation of fixed assets were not rejected at the 0.05 level of confidence. However, a significant difference did exist at the 0.10 level between high and low valuation districts. Only 20 per cent of the low valuation districts and 5 per cent of the high valuation districts reflected the current or depreciated values of their fixed assets. The reflection was equally low when the variable of size was examined, with 18 per cent of the large schools and 12 per cent of the small schools following this practice (Tables XXVII and XXVIII).

TABLE XXVII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH IN REFLECTING DEPRECIATED VALUES OF FIXED ASSETS

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	2 (5%)	10 (20%)
No	42 (95%)	41 (80%)

 $\chi^2 = 3.587$ ; NS

TABLE XXVIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE IN REFLECTING DEPRECIATED VALUES OF FIXED ASSETS

	Large Districts N =17	Small Districts N = 78
Yes	3 (18%)	9 (12%)
No	14 (82%)	69 (88%)

 $\chi^2 = 0.080; NS$ 

Hypotheses 1 and 2 were not rejected on the basis of the data shown in Tables XXIX and XXX. Low valuation districts expressed 37 per cent compliance with this recommended principle of maintaining reserve funds for the replacement of fixed assets while the high valuation districts

indicated 30 per cent compliance. The large school districts expressed 24 per cent compliance followed by 21 per cent of the small districts.

TABLE XXIX

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH
IN MAINTAINING RESERVES FOR THE REPLACEMENT
OF FIXED ASSETS

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	13 (30%)	19 (37%)
No	31 (70%)	32 (63%)

 $\chi^2 = 0.330; NS$ 

TABLE XXX

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
IN MAINTAINING RESERVES FOR THE REPLACEMENT
OF FIXED ASSETS

	Large Districts N = 17	Small Districts N = 78
Yes	4 (24%)	16 (21%)
No	13 (76%)	62 (79%)

 $\chi^2 = 0.002; NS$ 

# Principle 9

The accounting system should provide for budgetary control for both revenue and expenditures, and the financial statements should reflect, among other things, budgetary information.

Question:

12. What budgetary information is reflected in your financial statements?

The survey instrument listed four procedures for reflecting budgetary information, they were: (1) original budget for each account, (b) current expenditures for each account, (c) expenditures to date for each account, and (d) remaining balance for each account. The data for each of these recommended practices and percentages of compliance are shown in Tables XXXI and XXXII.

Hypotheses 1 and 2 were not rejected on the basis of the data pertaining to Principle 9. However, a significant difference did exist at the 0.05 level of confidence between high and low valuation school districts relative to reflecting current expenditures for each account.

TABLE XXXI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH IN THE REFLECTION OF BUDGETARY INFORMATION IN ACCOUNTS

Budgetary Information	High Valuation Districts N = 44	Per Cent of Districts	Low Valuation Districts N = 51	Per Cent of Districts	χ <sup>2</sup>
Original Budget	33	75	39	76	0.0005; NS
Current Expenditures	30	68	46	90	5.84*
Expenditures to Date	37	84	42	82	0.002; NS
Remaining Balance	36	82	42	82	0.04; NS

<sup>\*</sup>Significant at the .05 level.

TABLE XXXII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE IN THE REFLECTION OF BUDGETARY INFORMATION IN ACCOUNTS

Budgetary Information	Large Districts N = 17	Per Cent of Districts	Small Districts N = 78	Per Cent of Districts	χ²
Original Budget	16	94	56	72	2.67; NS
Current Expenditures	12	71	64	82	0.54; NS
Expenditures to Date	16	94	63	81	0.95; NS
Remaining Balance	16	94	62	79	1.16; NS

# Principle 10

The use of the accrual basis in accounting for revenues and expenditures is recommended to the extent applicable. Revenues, partially offset by provisions for estimated losses, should be taken into consideration when earned, even though not received in cash. Expenditures should be recorded as soon as liabilities are incurred.

#### Questions:

- 28. Do you employ an accrual system of accounting in which revenues are reported when they become due rather than when received?
- 29. Do you use the accrual approach in reporting expenditures even though payment for these has not been made?

Hypotheses 1 and 2 were not rejected on the basis of the data pertaining to the accrual basis in accounting for revenues (Tables XXXIII and XXXIV). Only 41 per cent of the high valuation districts and 35 per cent of the low valuation districts followed this practice. Similar percentages were indicated by large and small districts with large districts expressing 47 per cent and small districts with 36 per cent.

TABLE XXXIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THE USE OF THE ACCRUAL SYSTEM IN THE REPORTING OF REVENUES

	High Valuation Districts $N = \frac{l_1 l_2}{l_2}$	Low Valuation Districts N = 51
Yes	18 (41%)	18 (35%)
No	26 (59%)	33 (65%)

 $\chi^2 = 0.122$ ; NS

TABLE XXXIV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
AND THE USE OF THE ACCRUAL SYSTEM IN THE
REPORTING OF REVENUES

	Large Districts N = 17	Small Districts N = 78	
Yes	8 (47%)	58 (36%)	
No	9 (53%)	50 (64%)	

 $\chi^2 = 0.340; \text{ NS}$ 

An analysis of the data revealed in Table XXXV allowed rejection of Hypotheses 1. The wealth of a school district did appear to influence the use of the accrual approach in the reporting of expenditures. A significant difference existed at the 0.05 level of confidence between

high and low valuation districts. High valuation districts expressed 57 per cent compliance to this practice followed by 31 per cent of the low valuation districts.

TABLE XXXV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THE USE OF THE ACCRUAL SYSTEM IN THE REPORTING OF EXPENDITURES

	High Valuation Districts N = 44	Low Valuation Districts N = 51	
Yes	25 (57%)	16 (31%)	
No	19 (43%)	35 (69%)	

 $\chi^2 = 5.24$ ; Sig at P  $\leq .05$ , 1 d.f.

Hypothesis 2 was not rejected on the basis of the data pertaining to the accrual basis of reporting expenditures. Large schools indicated 65 per cent compliance while only 38 per cent of the small schools complied.

TABLE XXXVI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
AND THE USE OF THE ACCRUAL SYSTEM IN THE
REPORTING OF EXPENDITURES

	Large Districts N = 17	Small Districts N = 78
Yes	11 (65%)	30 (38%)
No	6 (35%)	48 (62%)

 $\chi^2 = 2.92$ ; NS

# Principle 11

Revenues should be classified by fund and source; and expenditures by fund, function, department activity, character and main classes of objects. This classification will permit reporting to governmental agencies on a basis consistent with recommendations of the Office of Education of the United States Department of Health, Education, and Welfare in its 1957 publication entitled Financial Accounting for Local and State School Systems, Standard Receipt and Expenditure Accounts. Questions:

31. Do you classify revenues by fund and source?

32.	Please check the means by which expenditures are
	classified.
	Fund
	Function
	Department Activity
	Character

An analysis of the data pertaining to classifying revenue failed to reject Hypotheses 1 and 2. There were no significant differences indicated by either wealth or size as indicated in Tables XXXVII and XXXVIII. Most of the school districts classified revenues by fund and sources. This practice was followed by 86 per cent of the low valuation districts and 80 per cent of the high valuation districts. Compliance to this principle was indicated by 88 per cent of the large schools and 82 per cent of the small schools.

TABLE XXXVII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH
AND CLASSIFICATION OF REVENUES BY FUND
AND SOURCE

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	35 (88%)	44 (86%)
No	9 (12%)	7 (14%)

 $<sup>\</sup>chi^2 = 0.3$ ; NS

TABLE XXXVIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND CLASSIFICATION OF REVENUES BY FUND AND SOURCE

	Large Districts N = 17	Small Districts N = 78	
Yes	15 (88%)	64 (82%)	
No	2 (12%)	14 (18%)	

 $\chi^2 = 0.067$ ; NS

Hypotheses 1 and 2 were not rejected. An analysis of the data pertaining to the classification of expenditures did not reveal any significant differences existing between high and low valuation school districts. However, significant differences at the 0.05 level of confidence did exist on the basis of the data pertaining to the classification of expenditures by character and object between large and small schools. The responses and compliance percentages are shown in Tables XXXIX and XL.

TABLE XXXIX

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH
IN THE CLASSIFICATION OF EXPENDITURES

Classification	High Valuation Districts N = 44	Per Cent of Compliance	Low Valuation Districts N = 51	Per Cent of Compliance	χ²
Fund	39	89	50	98	2.12; NS
Function	18	41	17	33	0.302; NS
Department Activity	19	43	30	59	1.71; NS
Character	7	16	8	16	0.063; NS
Object	8	18	14	27	0.67; NS

TABLE XL

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
IN THE CLASSIFICATION OF EXPENDITURES

Classification	Large Districts N = 17	Per Cent of Compliance	Small Districts N = 78	Per Cent of Compliance	χ <sup>2</sup>
Fund	16	94	73	94	0.22; NS
Function	10	59	25	32	3.23; NS
Department Activity	. 11	65	38	49	o.86; NS
Character	6	35	9	12	4.27*
Object	8	47	14	18	5 <b>.11</b> **

\*Significant at the 0.05 level.

\*\*Significant at the 0.05 level.

# Principle 12

Cost accounting systems should be established wherever costs can be measured. Each cost accounting system should provide for the recording of all the elements of cost incurred to accomplish a purpose, to carry on an activity or operation, or to complete a unit of work or a specific job. Although depreciation on general fixed assets may be omitted in the general accounts and reports, it should be considered in determining unit costs if a cost accounting system is used.

#### Question:

15. Do you use a cost accounting system in your district?

Hypotheses 1 and 2 were not rejected on the basis of the data in

Tables XLI and XLII. Cost accounting systems were employed by 32 per

cent of the high valuation districts and 37 per cent of the low valua
tion districts. There were 47 per cent of the large schools employing

cost accounting systems compared to 32 per cent by small schools.

TABLE XLI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THE EMPLOYMENT OF COST ACCOUNTING SYSTEMS

	High Valuation Districts N = 44	Low Valuation Districts N = 51	
Yes	14 (32%)	19 (37%)	
No	30 (68%)	32 (63%)	

 $<sup>\</sup>chi^2 = 0.11$ ; NS

TABLE XLII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND
THE EMPLOYMENT OF COST ACCOUNTING SYSTEMS

	Large Districts N = 17	Small Districts N = 78
Yes	8 (47%)	25 (32%)
No	9 (53%)	53 (68%)

 $\chi^2 = 0.80$ ; NS

# Principle 13

A common terminology and classification should be consistently used throughout the budget, the accounts, and the financial reports.

### Questions:

- 23. Do you use a common accounting terminology and classification system as recommended by the Oklahoma State Department of Public Instruction and/or the U. S. Office of Education?
- 24. Is this consistency of terminology maintained throughout the budget, accounts, and financial reports?

Hypotheses 1 and 2 were not rejected on the basis of the data.

There were 98 per cent of the high valuation districts consistently using accounting terminologies and classifications recommended by the Oklahoma State Department of Public Instruction and the U. S. Office of Education as compared to 92 per cent being used by the low valuation

districts as indicated in Table XLIII. These same recommendations were followed by 100 per cent of the large schools and 94 per cent of the small schools (see Table XLIV).

TABLE XLIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THE USE OF ACCOUNTING TERMINOLOGIES AND CLASSIFICATIONS

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	43 (98%)	47 (92%)
No ·	1 (2%)	4 (8%)

 $\chi^2 = 0.57$ ; NS

TABLE XLIV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND THE USE OF ACCOUNTING TERMINOLOGIES AND CLASSIFICATIONS

	Large Districts N = 17	Small Districts N = 78
Yes	17 (100%)	73 (94%)
No	0	5 (6%)

 $\chi^2 = 0.20; NS$ 

# Procedure 1

The accounts should be centralized under the direction of one officer. He should be responsible for keeping or supervising all accounts and for preparing and issuing all financial reports.

### Question:

2. Is the administration of the accounting function your primary responsibility?

An analysis of the data in Tables XLV and XLVI failed to reject Hypotheses 1 and 2. The analysis also revealed that 73 per cent of the high valuation and 73 per cent of the low valuation school districts had one officer primarily responsible for supervising all accounts and preparing and issuing all financial reports. When considering size it was found that 71 per cent of the large schools and 73 per cent of the small schools indicated compliance with Procedure 1.

TABLE XLV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THE ADMINISTRATION OF THE ACCOUNTING FUNCTION

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	32 (73%)	37 (73%)
No	12 (27%)	14 (27%)

 $<sup>\</sup>chi^2 = 0.009; NS$ 

TABLE XLVI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND THE ADMINISTRATION OF THE ACCOUNTING FUNCTION

	Large Districts N = 17	Small Districts N = 78
Yes	12 (71%)	57 (73%)
No	5 (29%)	21 (27%)

 $\chi^2 = 0.023$ ; NS

### Procedure 2

A budget should be prepared by every organizational unit of the school district even if not required by law because such budgets are essential to the proper management of the school district's financial affairs. A distinction between the different funds must be made to such budgets.

#### Questions:

- 8. Do you prepare a budget for each organizational unit of your district?
- 9. Do you prepare an annual financial report showing the condition of the budgetary accounts?

Hypotheses 1 and 2 were not rejected on the basis of the data pertaining to budgets for each organizational unit (Tables XLVII and XLVIII). A favorable percentage of compliance with this procedure was indicated by 73 per cent of the low valuation districts and 64 per cent

of the high valuation districts. The large districts expressed an 82 per cent compliance followed by 65 per cent of the small districts.

TABLE XLVII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THE PREPARATION OF BUDGETS FOR INDIVIDUAL UNITS

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	28 (64%)	37 (73%)
No	16 (36%)	14 (27%)

 $\chi^2 = 0.504$ ; NS

TABLE XLVIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND THE PREPARATION OF BUDGETS FOR INDIVIDUAL UNITS

	Large Districts N = 17	Small Districts N = 78
Yes	14 (82%)	51 (65%)
No	3 (18%)	27 (35%)

 $\chi^2 = 1.157$ ; NS

An analysis of the data revealed in Tables XLIX and L failed to reject Hypotheses 1 and 2. Annual financial reports showing the condition of budgetary accounts were prepared by 96 per cent of the low valuation districts and 95 per cent of the high valuation districts. The picture was equally favorable where size was concerned with 96 per cent of the small schools and 94 per cent of the large schools complying.

TABLE XLIX

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THE PREPARATION OF ANNUAL FINANCIAL REPORTS SHOWING CONDITION OF BUDGETARY ACCOUNTS

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	42 (95%)	49 (96%)
No	2 (5%)	2 (4%)

 $<sup>\</sup>chi^2 = 0.130; NS$ 

TABLE L

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND THE PREPARATION OF ANNUAL FINANCIAL REPORTS SHOWING CONDITION OF BUDGETARY ACCOUNTS

	Large Districts N = 17	Small Districts N = 78
Yes	16 (94%)	75 (96%)
No	1 (6%)	3 (4%)

 $\chi^2 = 0.827$ ; NS

Procedure 2 does not refer to those responsible for budget planning and preparation, however, it seemed pertinent to this writer to secure and include this information in this study. The variables of wealth and size were tested and comparative percentages shown in Tables LI and LII.

### Question:

10. Please indicate those having the responsibility for budget planning and preparation in the individual organizational units of your district.

Superintendent	
Assit. Superintendent	
Principal	
Classroom teachers	
Citizens of the community	
Others	

TABLE LI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THOSE INVOLVED IN BUDGET PLANNING AND PREPARATION

	High Valuation Districts N = 44	Per Cent of Districts	Low Valuation Districts N = 51	Per Cent of Districts	χ <sup>2</sup>
Superintendent	44	100	50	98	0.78; NS
Ass't. Superintendent	6	14	6	12	0.0012; NS
Principal	11	25	19	37	1.12; NS
Classroom Teachers	<b>3</b> ,	7	14	27	5.51; Sig at 0.05
Boards of Education	3	7	8	16	1.05; NS

TABLE LII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND THOSE INVOLVED IN BUDGET PLANNING AND PREPARATION

	Large Districts N = 17	Per Cent of Districts	Small Districts N = 78	Per Cent or Districts	$\chi^2$
Superintendent	16	94	78	100	0.16; NS
Ass't. Superintendent	11	65	1	1	45.29; Sig at .001
Principal	9	53	21	27	3.25; Sig at .10
Classroom Teachers	3	18	14	18	0.10; NS
Boards of Education	O	O	11	14	0.407; NS

Only one large district and one small district indicated that they included the citizens of their communities in budget planning and preparation. Both of these districts were of a low valuation classification. Boards of education were indicated under "other" by a number of districts.

# Procedure 3

As soon as purchase orders or contracts are signed, the resulting obligations should be recorded at once as encumbrances of the funds and appropriations affected.

#### Question:

30. Are expenditures recorded as encumbrances at the time of issuing purchase orders or contracts?

Hypotheses 1 and 2 were not rejected on the basis of the data as indicated in Tables LIII and LIV. There appeared to be no significant differences between size and wealth in encumbering funds at the time of issuing purchase orders or contracts. The encumbrance of funds was practiced by 80 per cent of the high valuation districts and 88 per cent of the low valuation districts. On the other hand, all of the large schools and 81 per cent of the small schools appeared to comply with this recommended procedure.

TABLE LIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH
IN THE ENCUMBRANCE OF OBLIGATED FUNDS

	High Valuation Districts N = 44	Low Valuation Districts N = 51	
Yes	35 (80%)	45 (88%)	
No	9 (20%)	6 (12%)	

 $\chi^2 = 0.767$ ; NS

TABLE LIV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
IN THE ENCUMBRANCE OF OBLIGATED FUNDS

· · · · · · · · · · · · · · · · · · ·	Large Districts N = 17	Small Districts N = 78	
Yes	17 (100%)	63 (81%)	
No	<b>0</b>	15 (19%)	

 $\chi^2 = 1.25$ ; NS

# Procedure 4

Where applicable inventories of both consumable and permanent property should be kept in subsidiary records controlled by accounts in the general accounting system and physical inventories of both consumable and permanent property should be

taken at least annually with the accounts and records made to agree with such inventories.

#### Question:

20. Do you maintain current inventories of consumable and permanent properties?

An analysis of the data reported in Tables LV and LVI failed to reject Hypotheses 1 and 2. Current inventories of consumable and permanent properties were maintained by 80 per cent of the high valuation districts and 75 per cent of the low valuation districts. The difference in compliance with Procedure 4 between large and small schools indicated that 88 per cent of the large schools maintained inventories followed by 74 per cent of the small schools.

TABLE LV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THE MAINTENANCE OF INVENTORIES OF CONSUMABLE AND PERMANENT PROPERTIES

	High Valuation Districts N = 44	Low Valuation Districts N = 51	
Yes	35 (80%)	38 (75%)	
No	9 (20%)	13 (25%)	

 $<sup>\</sup>chi^2 = 0.11; NS$ 

TABLE LVI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND THE MAINTENANCE OF INVENTORIES OF CONSUMABLE AND PERMANENT PROPERTIES

	Large Districts N = 17	Small Districts N = 78
Yes	15 (88%)	58 (74%)
No .	2 (12%)	20 (26%)

 $\chi^2 = 0.83$ ; NS

## Procedure 5

Financial reports should be prepared monthly or oftener, to show the current condition of the budgetary accounts and other information necessary to control operations. At least once each year a general financial report should be prepared and published.

### Questions:

- 9. Do you prepare an annual general financial report showing the condition of the budgetary accounts?
- 10. How often are financial reports submitted to the board of education?

Monthly .	•	•	•	•	•	•	•	•	•	•	•	•		
Quarterly	•	•	•		•	•	•	•	•	•	•	•	•	<del></del>
Annually											•			

Hypotheses 1 and 2 were not rejected on the basis of the data shown in Tables LVII and LVIII. No significant differences existed at

the 0.05 level relative to the preparation of annual general financial reports and monthly financial reports to the board of education. An analysis of the data indicated that 96 per cent of the low valuation districts and 95 per cent of the high valuation districts complied with Procedure 5. The data also revealed that 96 per cent of the small schools and 94 per cent of the large schools complied. The data relative to the frequency of submitting financial reports to the board of education are indicated in Tables LIX and LX.

TABLE LVII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH
AND ANNUAL GENERAL FINANCIAL REPORTS

	High Valuation Districts $N = 44$	Low Valuation Districts N = 51
Yes	42 (95%)	49 (96%)
No	2 (5%)	2 (4%)

 $<sup>\</sup>chi^2 = 0.11; NS$ 

TABLE LVIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
AND ANNUAL GENERAL FINANCIAL REPORTS

	Large Districts N = 17	Small Districts N = 78
Yes	16 (94%)	75 (96%)
No	1 (6%)	3 (4%)

 $\chi^2 = 0.08; NS$ 

TABLE LIX
FREQUENCY OF FINANCIAL REPORTS BY WEALTH OF SCHOOL

Frequency	High Valuation Districts N = 44	Per Cent of Compliance	Low Valuation Districts N = 51	Per Cent of Compliance	х <sup>2</sup>
Monthly	31	71	37	73	0.05; NS
Quarterly	3	7	9	18	1.62; NS
Annually	9	20	5	10	1.36; NS

TABLE LX
FREQUENCY OF FINANCIAL REPORTS BY SIZE OF SCHOOL

Frequency	Large Districts N = 17	Per Cent of Compliance	Small Districts N = 78	Per Cent of Compliance	χ <sup>2</sup>
Monthly	15	88	53	70	1.91; NS
Quarterly	О	0	12	15	0.58; NS
Annually	2	12	12	<b>1</b> 5	0.0001;NS

### Procedure 6

An independent annual audit is recommended.

### Question:

13. Does your school district conduct an annual audit?

The data in Tables LXI and LXII indicated that there were no significant differences among the school districts in conducting annual audits and, as a result, the analysis failed to reject Hypotheses 1 and 2. All of the schools, regardless of size and wealth, complied with Procedure 6.

TABLE LXI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THE CONDUCTING OF ANNUAL AUDITS

	High Valuation Districts $N = 44$	Low Valuation Districts N = 51
Yes	44 (100%)	51 (100%
No	0	0

 $\chi^2 = 0.00;$  NS

TABLE LXII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE
AND THE CONDUCTING OF ANNUAL AUDITS

	Large Districts N = 17	Small Districts N = 78	
Yes	17 (100%)	78 (100%)	
No	0	. 0	

 $\chi^2 = 0.00; NS$ 

Hypothesis 3 was: There is no significant difference in the use of the alternate accounting system with electronic data processing when responding schools are categorized according to wealth.

Hypothesis 3 was not rejected on the basis of the data pertaining to the use of the alternate accounting system with electronic data processing machines. Only 20 per cent of the high valuation districts followed this practice; on the other hand, only 8 per cent of the low valuation districts reported this practice (see Table LXIII).

TABLE LXIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND THEIR USAGE OF THE ALTERNATE ACCOUNTING SYSTEM WITH ELECTRONIC DATA PROCESSING

	High Valuation Districts N = 44	Low Valuation Districts N = 51
Yes	9 (20%)	4 (8%)
No	35 (80%)	47 (92%)

 $\chi^2 = 2.20$ ; NS

Hypothesis 4 was: There is no significant difference in the use of the alternate accounting system with electronic data processing when responding schools are categorized according to size.

An analysis of the data in Table LXIV indicated that Hypothesis 4 should be rejected. The variable of size was found to be significant at the 0.01 level of confidence. The analysis also revealed that 41 per cent of the large districts employed the alternate system of accounting with electronic data processing while only 9 per cent of the small districts followed this practice.

TABLE LXIV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND THEIR USAGE OF THE ALTERNATE ACCOUNTING SYSTEM WITH ELECTRONIC DATA PROCESSING

	Large Districts N = 17	Small Districts N = 78
Yes	7 (41%)	7 (9%)
No	10 (59%)	71 (91%)

 $\chi^2 = 9.098$ ; Sig at P  $\leq .01$ , 1 d.f.

Hypotheses 3 and 4 referred to the use of the alternate accounting system with electronic data processing only. It was deemed pertinent to the study, by this writer, to include data relative to using the alternate accounting system regardless of the type of mechanical process involved. The variables of size and wealth were tested and indicated in Tables LXV and LXVI.

No significant differences were revealed in regard to the variable of wealth. The data indicated that 48 per cent of the high valuation and 33 per cent of the low valuation districts employed the alternate accounting system. On the other hand, a significant difference did exist at the 0.02 level of confidence when data relative to the variable of size were considered. The alternate accounting system was utilized by 71 per cent of the large schools while only 33 per cent of the small schools employed the system.

TABLE LXV

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND EMPLOYMENT OF THE ALTERNATE ACCOUNTING SYSTEM

	High Valuation Districts $N = 44$	Low Valuation Districts N = 51
Yes	21 (48%)	17 (33%)
No	23 (52%)	34 (67%)

 $\chi^2 = 1.483$ ; NS

TABLE LXVI

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND EMPLOYMENT OF THE ALTERNATE ACCOUNTING SYSTEM

	Large Districts N = 17	Small Districts N = 78
Yes	12 (71%)	26 (33%)
No	5 (29%)	52 (67%)

 $\chi^2 = 6.594$ ; Sig at P  $\leq$  .02, 1 d.f.

Those school districts that indicated the use of the alternate accounting system without electronic data processing were queried about future plans in this regard.

### Question:

44. If you are not using electronic data processing of your financial records, are you planning to utilize this means in the near future?

Only one large-low valuation district and seven small-low valuation districts indicated an early implementation of electronic data processing.

Hypothesis 5 was: There is no significant difference in the frequency of perception of accounting needs when responding schools are categorized according to wealth.

Hypothesis 6 was: There is no significant difference in the frequency of perception of accounting needs when responding schools are categorized according to size.

The following four questions were included in the survey instrument relative to the perception of accounting needs:

- 36. Do you feel that the lack of uniformity and standardization of accounting practices and procedures is a problem that needs to be resolved?
- 37. If the answer to the previous question is "yes," please list any practices and procedures that you feel would make the reporting of financial data more uniform and meaningful.
- 38. Do present rules and regulations as required by the Oklahoma Department of Public Instruction and Oklahoma Statutes meet your needs?

39.	II not,	prease	list	any	changes	that	you	ieel	might	
	improve	our sys	stem.			·	<del></del>	····	**************************************	

The responses to Questions 36 and 38 were examined in light of Hypotheses 5 and 6.

An analysis of the data pertaining to uniformity and standardization of accounting practices and procedures failed to reject Hypotheses 5 and 6 as indicated in Tables LXVII and LXVIII. The school districts from the standpoint of both size and wealth indicated identical percentages, 41 per cent, in their expression of the need for standardization and uniformity.

TABLE LXVII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO WEALTH AND STANDARDIZATION AND UNIFORMITY OF ACCOUNTING

	High Valuation Districts $N = \frac{4}{4}$	Low Valuation Districts N = 51	
Yes	18 (41%)	21 (41%)	
No	26 (59%)	30 (59%)	

 $<sup>\</sup>chi^2 = 0.33$ ; NS

TABLE LXVIII

RESPONSES OF SCHOOL DISTRICTS ACCORDING TO SIZE AND STANDARDIZATION AND UNIFORMITY OF ACCOUNTING

	Large Districts N = 17	Small Districts N = 78	
Yes	7 (41%)	32 (41%)	
No	10 (59%)	46 (59%)	

 $\chi^2 = 0.041$ ; NS

The data in Table LXIX were insufficient to make a determination in regard to the null hypothesis, as the expected frequency in two of the cells was less than five. This data is included for information purposes only. All of the high valuation districts and 86 per cent of the low valuation districts appeared to agree that the rules and regulations of the Oklahoma Department of Public Instruction and the Oklahoma Statutes met their needs.

TABLE LXIX

PERCEPTION OF OKLAHOMA STATE DEPARTMENT RULES AND REGULATIONS AND OKLAHOMA STATUTES BY WEALTH OF SCHOOL DISTRICTS

	High Valuation Districts N = 44	Low Valuation Districts N = 51		
Yes	44 (100%)	44 (86%)		
No	0	7 (14%)		

Hypothesis 6 was not rejected on the basis of the data pertaining to the perception of the rules and regulations of the Oklahoma State

Department of Public Instruction and Oklahoma Statutes by the size of the school districts. All of the large schools and 91 per cent of the small schools appeared to accept the rules, regulations, and statutes as sufficient for their needs as indicated in Table LXX.

TABLE LXX

PERCEPTION OF OKLAHOMA STATE DEPARTMENT RULES AND REGULATIONS AND OKLAHOMA STATUTES BY SIZE OF SCHOOL DISTRICTS

	Large Districts N = 17	Small Districts N = 78
Yes	17 (100%)	71 (91%)
No	0	7 (9%)

 $\chi^2 = 0.594$ ; NS

The responses to Questions 37 and 39 were qualitative in nature and, as a result, not treated statistically. Most of the districts, whose answers were applicable to Question 37, indicated that uniformity and standardization would be desirable but appeared pessimistic as to their implementation. Some of the respondents to Question 39 recommended that all districts be required to employ the alternate accounting system with data process and that the state set up centers for this purpose. Some were critical of the redundancy of requirements by the State Department. Answers to Questions 37 and 39 are categorized as to school districts and shown in detail in Appendix C.

### Summary

This chapter was concerned with an analysis of the data allowing a test of the six hypotheses of this study. The .05 lev 1 of probability was used to determine the significance of all tests.

The major findings are summarized and classified under the variables of size and wealth. Significant differences existed between high-valuation and low-valuation districts in the following accounting areas:

- 1. The preparation of balance sheets.
- 2. The publication of balance sheets.
- 3. The use of the accrual approach in accounting for revenues and expenditures.
- 4. The acceptance of uniformity and standardization of accounting principles and procedures as being a problem that needs to be resolved.

Large and small school districts indicated significant differences as follows:

- 1. Membership in the National Association of School Business
  Officials of the United States and Canada.
- 2. Active involvement with organizations primarily concerned with the business function of public schools.
- 3. The employment of the alternate accounting system with electronic data processing.
- 4. The employment of the alternate accounting system without electronic data processing.

No common significant differences appeared between the variables of size and wealth in any of the accounting areas tested.

Other than the areas where significant differences were found relative to size and wealth, there appeared to be low compliance (less than 50%) in the following areas:

 The inclusion of fixed assets and inventories in balance sheets.

- 2. The maintenance of separate accounts for current assets, fixed assets, current liabilities, and long-term liabilities.
- 3. The reflection of depreciated values of fixed assets.
- 4. The maintenance of reserves for the replacement of fixed assets.
- 5. The employment of cost accounting systems.

### CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

### Summary

Accounting for the local school includes the responsibility not only for accurate accounting of funds but also for intelligible accounting. School administrators and school business officials are responsible for full, accurate, and timely reports in their interpretation of all financial affairs. A number of attempts have been made to devise a system whereby school finance data for use by local, state, and federal agencies could be reported, compared, and interpreted without loss of meaning, duplication, and misinterpretation. The extent to which this will be realized appears to rest upon the acceptance of a uniform and standardized approach in the maintenance of financial records.

The purpose of this study was to investigate the accounting practices of the public schools of Oklahoma as expressed by the financial custodians of those schools. In addition, the variables of wealth and size were examined to determine the extent to which they influenced the type of accounting practices employed. Three sub-problems of this study were:

(1) To determine how current accounting practices compare with the principles and procedures as recommended by the Association of School Business Officials of the United States and Canada.

- (2) To determine the extent to which the Alternate Accounting System, as authorized by Oklahoma House Bill No. 906,
  Oklahoma School Law, 1965, Article IV, Section 78, is being used with electronic data processing machines.
- (3) To determine the accounting needs as perceived by the financial custodians of the school districts of Oklahoma.

A questionnaire-type instrument was developed and used to collect data describing current accounting practices and needs in the public schools of Oklahoma (see Appendix B).

The  $\chi^2$  test for two independent samples was used to determine whether different samples of school districts based on per pupil valuation and school size differ in the frequency with which their accounting systems compare to the recommended accounting principles and procedures, their selection of the alternate accounting system with electronic data processing, and their perception of accounting needs.

Data were gathered and the following null hypotheses were tested:

- (1) There is no significant difference in the degree of compliance with the recommended accounting principles and procedures when responding schools are categorized according to wealth.
- (2) There is no significant difference in the degree of compliance with the recommended accounting principles and procedures when responding schools are categorized according to size.
- (3) There is no significant difference in the use of the alternate accounting system with electronic data processing when responding schools are categorized according to wealth.

- (4) There is no significant difference in the use of the alternate accounting system with electronic data processing when responding schools are categorized according to size.
- (5) There is no significant difference in the frequency of perception of accounting needs when responding schools are categorized according to wealth.
- (6) There is no significant difference in the frequency of perception of accounting needs when responding schools are categorized according to size.

### Conclusions

The underlying purpose of this study was to determine how the accounting practices of Oklahoma Public Schools complied with the principles and procedures recommended by the Association of School Business Officials of the United States and Canada. Further purposes were to determine the extent to which the alternate accounting system with electronic data processing was being used and, also, the perception of accounting needs by the financial custodians of the Oklahoma school districts. In addition, the variables of size and wealth were examined to determine whether they appeared to have impact on the selection of an accounting system.

(1) Although a slight majority of Oklahoma schools did comply with the recommended principles and procedures, the variable of wealth had little effect on their accounting practices.

Significant differences were found in only two of the principles and these were in opposite directions. These

differences were found in the preparation and publication of balance sheets. Low-valuation school districts were more frequent in their preparation of balance sheets, however, high-valuation districts indicated a higher frequency in the publication of balance sheets.

- (2) Differences in size of school districts had little influence on the compliance with the recommended principles and procedures. A significant difference was found in only one of the recommended accounting principles and procedures. This difference was found in the membership and active involvement in organizations primarily concerned with the business function of public schools. Large school districts indicated a greater degree of c mpliance with this principle.
- (3) The alternate accounting system with electronic data processing is not a common practice among Oklahoma school districts with only 14 per cent employing this practice.

  The variable of wealth had little influence in the use of this sytem with electronic data processing.
- (4) Although only 14 per cent of the public schools of Oklahoma employed the alternate accounting system with electronic data processing there was a strong indication that size was influential in the employment of this practice. Over one-half of the large schools followed this practice.
- (5) While slightly less than one-half of the school districts felt that lack of uniformity and standardization of public school accounting was a problem that needed to be resolved,

- they were almost unanimous in their approval of the rules and regulations of the Oklahoma State Department of Education. The rules appear to meet their needs.
- (6) The variable of size had little effect on the way school districts perceived their accounting needs. Less than one-half of the schools indicated that the lack of uniformity and standardization of public school accounting was a problem that needed to be resolved. They were practically unanimous in their approval of the rules and regulations of the State Department of Education in meeting their needs.

### Recommendations

Findings and conclusions of this study support the following recommendations:

- (1) Since this study was limited to the State of Oklahoma, it is recommended that future research be representative of regional or national populations.
- (2) A sustained effort should be made by the Oklahoma State

  Department of Education to encourage membership and

  active involvement in state and national school business

  organizations.
- (3) Future research should be directed to establish the validity and utility of the principles and procedures recommended by the Association of School Business Officials of the United States and Canada.

- (4) Future research should determine Oklahoma's position in comparison with other states relative to compliance with the recommended accounting principles and procedures.
- (5) Future research should determine the utility of electronic data processing according to the size of the school.
- (6) Future research should determine the feasibility of the Oklahoma State Department of Education providing electronic data processing for the public schools.

Within any educational institution the decision to expend funds should only be made when optimum benefit to the student has been determined. This determination is difficult unless comparative costs, both state and federal, can be made. A coordinated effort should be made to eliminate the variation in accounting systems employed by Oklahoma schools and implement a system that will facilitate a maximum educational effort.

### A SELECTED BIBLIOGRAPHY

### Books

- Barr, Monfort W. American Public School Finance. New York: American Book Company, 1960.
- Case, Hiram C. <u>Handbook of Instructions for Recording Disbursements for School Purposes</u>. Albany, New York: C. F. Williams and Sons, Inc., 1916.
- Cubberley, Ellwood P. <u>Public School Administration</u>. Boston: Houghton Mifflin Co., 1916.
- Cubberley, Ellwood P. <u>State School Administration</u>. Boston: Houghton Mifflin Co., 1927.
- Englehardt, Fred, and Fred Von Borgersrode. Accounting Procedures for School Systems. New York: Bureau of Publications, Teachers College, Columbia University, 1927.
- Englehardt, N. L., and Fred Englehardt. <u>Public School Business Administration</u>. New York: Bureau of Publications, Teachers College, Columbia University, 1927.
- Fowlkes, John Guy. <u>Principles and Practices of Financial Accounting for Schools</u>. Milwaukee: E. M. Hale and Company, 1934.
- Hutchinson, Howard J. School Costs and School Accounting. New York:
  Bureau of Publications, Teachers College, Columbia University,
  1914.
- Knezevich, Stephen J., and John Guy Fowlkes. <u>Business Management of Local School Systems</u>. New York: Harper and Brothers, 1960.
- Lambert, Guy H., and Guy M. Rankin. A History Outline Oklahoma State

  Department of Education 1900 to 1965. Oklahoma City, Oklahoma:

  State Department of Education, 1967.
- Linn, Henry H. School Business Administration. New York: The Ronald Press Company, 1956.
- Moehlman, Arthur B. <u>Public School Finance</u>. Chicago: Rand McNally and Company, 1927.

- Morrison, Henry C. The Management of the School Money. Chicago: The University of Chicago Press, 1932.
- Mort, Paul R., Walter C. Reusser, and John W. Polley. <u>Public School</u> <u>Finance</u>. New York: McGraw-Hill Book Company, Inc., 1960.
- Peel, Arthur J. <u>Simplified School Accounting</u>. Milwaukee: The Bruce Publishing Company, 1925.
- Selltiz, Claire et al. Research Methods in Social Relations. New York: Holt, Rinehart, and Winston, Inc., 1961.
- Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences.

  New York: The Macmillan Company, 1964.

# Publications by the Government, Learned

### Societies and Other Organizations

- Alves, Henry F. "Progress of the States in Attaining Uniformity in Accounting." Proceedings of the Twenty-sixth Annual Meeting,
  National Association of Public School Business Officials. New York:
  The Association, 1937.
- Association of School Business Officials. <u>Guiding Principles and Practices</u> in Office Management. Chicago: Research Corporation of the Association of School Officials, 1966.
- Fowlkes, John Guy, and Abner L. Hansen. "Business Management--Accounting, Auditing, and Reporting." R. L. Johns and E. L. Morphet, Chairmen. Problems and Issues in Public School Finance, The National Conference of Professors of Educational Administration. New York: Bureau of Publications, Teachers College, Columbia University, 1952.
- Johns, Roe L., and Kern Alexander. "Status and Impact of Finance Programs." <u>National Educational Finance Project</u>, Vol. IV, University of Florida, 1968-71.
- Lindman, Eric L. "Outlook for Public School Finance, 1964." A Financial Program for Today's Schools. The Proceedings of the Seventh National Conference on School Finance. Washington, D. C.: National Education Association, 1964.
- National Committee on Governmental Accounting. <u>Municipal Accounting and Auditing</u>. Chicago: The Committee, 1951.
- Oklahoma State Department of Education. A Statistical Survey by Counties of Education in Oklahoma, Bulletin No. 110, 1925.
- Oklahoma State Department of Education. A Uniform Financial Procedure for General Fund Expenditures, Bulletin No. 135, 1933.

- Oklahoma State Department of Education. Financing Oklahoma Schools, Bulletin No. 110-A, 1930.
- Oklahoma State Department of Education. The School Finance and Transportation Laws, Bulletin No. 145-A, 1939-41.
- Oklahoma State Department of Education. The School Finance, Transportation and Activity Fund Laws Including the State Board of Education Regulations for Administration and Handbook on Budgeting and Business Management, Bulletin No 145-J, 1957-59.
- Oklahoma State Department of Education. The School Finance, Transportation and Activity Fund Laws Including the State Board of Education Regulations for Administration and Handbook on Budgeting and Business Management, Bulletin No 145-Q, 1971-72.
- Reason, Paul L., and Alpheus L. White. <u>Financial Accounting for State and Local School Systems</u>. Washington, D. C.: U. S. Office of Education, 1957.
- United States Bureau of Education. Report of the Committee on Uniform Records and Reports, Bulletin No 3. Washington, D. C.: Government Printing Office, 1912.
- United States Bureau of Education. Report of Committees on Uniform Records and Reports, Bulletin No. 24. Washington, D. C.:

  Government Printing Office, 1928.
- United States Bureau of Education. <u>Public Education in Oklahoma</u>. Washington, D. C.: U. S. Department of the Interior, 1922.
- United States Office of Education. Financial Accounting for Public Schools, Circular No. 204. Washington, D. C.: Government Printing Office, 1940.
- United States Office of Education. Financial Accounting for Public Schools, Circular No. 204 (Revised). Washington, D. C.:

  Government Printing Office, 1948.
- United States Office of Education. The Common Core of Educational Information, Bulletin No. 8, 1953.
- United States Office of Education. <u>Digest of Educational Statistics</u>, Circular OE-20007. Washington, D. C.: Government Printing Office, 1969.
- United States Office of Education. Principles of Public School
  Accounting. Handbook II-B. Washington, D. C.: Government
  Printing Office, 1967.
- United States Office of Education. <u>Statistics of Public Elementary and Secondary Day Schools</u>. Washington, D. C.: Government Printing Office, 1969.

#### Periodicals

- Akerly, Harold E. "Needed Improvement in School Business Administration." American School Board Journal, 91:15-16 (November, 1935).
- Bennett, W. S. "Financial Records of a Public School System." School and Community, 26:292-295 (October, 1940).
- Moehlman, Arthur B. "Revisions of School Accounting Reports." American School Board Journal, 62:42-45, 121-122, 125 (May, 1922).
- Pulliam, Nolan D. "National Study of Uniform Basis for School Records and Reports." School Life, 30:21-22 (April, 1948).

### Unpublished Materials

- Holmgren, Marvin E. "State Public School Financial Procedures." (Unpub. Ph.D. dissertation, University of Minnesota, 1949.)
- Perry, James Donald. "Public School Financial Accounting--An Analysis of Practices and Needs in Iowa." (Unpub. Ph.D. dissertation, University of Iowa, 1966.)
- Sparks, Richard Kingsley. "The Basis of Public School Accounting Practices in the United States." (Unpub. Ph.D. dissertation, University of California, 1953.)
- Yeats, Eugene Millage. "The Accounting System and Reports for a Small Independent School District in Oklahoma." (Unpub. Master's thesis, Oklahoma University, 1949.)

# APPENDIX A

CORRESPONDENCE RELATED TO THIS STUDY

JAKE SMART
ASST. SUPERINTENDENT
INSTRUCTION

# EARL CROSS ASST. SUPERINTENDENT STATE-FEDERAL

CHARLES L. WEBER ASST. SUPERINTENDENT FINANCE

# State Department of Kducation

LESLIE R. FISHER, Superintendent E. H. McDONALD, Deputy Superintendent Balahoma City, Balahoma 73105

Sometime ago an effort was begun on the part of the U. S. Office of Education, the National Association of School Business Officials, and the National Education Association to achieve some degree of uniformity and consistency in the accounting practices and reporting by the public schools.

The Finance Division of the State Department of Education has been involved in this effort and has been assisting in a research study to determine the accounting practices used in the public schools of Oklahoma and, at the same time, to assess the accounting needs as determined by these schools.

The enclosed questionnaire will be the only one you will be asked to complete. Neither you nor your school will be identified, and all responses will be treated in strictest confidence.

Please use the enclosed self-addressed envelope. Thank you for your consideration.

Sincerely yours,

Charles L. Weber

Ass't. State Superintendent

Charles Weber

Finance Division

CLW: vkw

April 16, 1971

The importance of providing financial information and services on a consistent and systematic basis has been recognized for many years, however, the acceptance of a uniform system that will do this is yet to be realized.

The enclosed questionnaire will, hopefully, give some insight on current practices and needs in Oklahoma. It is also hoped that such a study will assist in the development and acceptance of a standardized accounting system for the public schools of this state. Would you please take twenty minutes and complete the questionnaire. There is a self-addressed, stamped envelope enclosed for your convenience.

Thank you very much for your cooperation in this study.

Sincerely,

Joe Parsons

Enclosures: 2

April 26, 1971

Recently you received from me a questionnaire pertaining to the accounting practices and needs of the public schools of Oklahoma. I know that this is one of the busier times of the year and that it is quite possible that the questionnaire has been misplaced or that you have not had the time to complete and return it. If you have returned the questionnaire, thank you; if you have not, I am enclosing another questionnaire and return envelope for your convenience.

Again, may I thank you for your help and cooperation with this study.

Sincerely,

Joe Parsons

# APPENDIX B

COPY OF INSTRUMENT USED IN THIS STUDY

# Survey Form to Determine Accounting Practices and Needs for Oklahoma

1.	What is your official title?		
2.	Is the administration of the accounting function your responsibility?		
		Yes	No
3.	How many years of experience have you had in school bu administration? years	sines	s
4.	What professional organizations do you belong to that concerned with the business function of public schools	_	rimarily
	National Association of School Business Officials of the United States and Canada Oklahoma Association of School Business Officials Others		
_			
5•	Are you actively involved with any of the above mentionsuch as group committee work, etc.?		No
	If so, please indicate the nature of your involvement.		
BALA	NCE SHEET - a formal statement of assets, liabilities, a balance at any given time but usually at the end of af		
6.	Do you prepare balance sheets for your school?	Yes	No
	If so, are they published?  Yes No		
	Through what media?		
7.	Do these balance sheets show the net worth of your dis	trict	
	including fixed assets and inventories?	Yes	No
BUDGI	ET - a plan of financial operations which contains an e proposed expenditures for a given period and the propofinancing them.		
8.	Do you prepare a budget for each organizational unit o	f you	r
	district?	Yes	No

9•	Do you prepare annual general financial reports showing the condition of the budgetary accounts?
	Yes No
10.	Please indicate those having the responsibility for budget planning and preparation in the individual organizational units of your district.
	Superintendent
11.	How often are financial reports submitted to the board of education?
	Monthly
12.	What budgetary information is reflected in your financial statements?
	Original budget for each account
13.	Does your school district conduct an annual audit?  Yes No
	If so, what type?
	Balance sheet
14.	What system of internal control do you employ for the protection of public funds under your supervision?
COST	ACCOUNTING - that phase of accounting which provides for the accumulation of costs of a specific program or service.
15.	Do you use a cost accounting system in your district?  Yes No

16.	Are your fixed asset accounts maintained on the basis of original costs of those assets?				
		Yes	No		
17.	Do you maintain separate funds for current assets, fixe current liabilities, and fixed liabilities?		sets,		
18.	Do you maintain reserve funds for the replacement of fi	xed Yes			
19.	Do your accounts reflect the current or depreciated val fixed assets of your district?	ues Yes	of the No		
	Do you maintain current inventories of consumable and properties?	$\frac{1}{1}$	nent No		
DOUBL	E-ENTRY - refers to an accounting system in which for ein the debit side of an account or accounts there are eithe same total amount in the credit side of another accounts.	entri	es in		
21.	Do you employ a double-entry approach in your accounting	$\frac{1}{1}$	stem?		
GENER	RAL LEDGER - that group of accounts which constitute the accounts of a fund. Included are those summary account detailed subsidiary ledgers are maintained.				
22.	Do you employ a general ledger in which all financial tare recorded in detail or in summary?	$\frac{1}{\text{Yes}}$	actions No		
23.	Do you use a common accounting terminoloby and classifi system as recommended by:	cati	on		
	Oklahoma State Department of Public Instruction, "Handbook on Budgeting and Business Management for Oklahoma Schools				
	U. S. Office of Education, "Financial Accounting for Local and State School Systems."				
	Some other recommended system	<del></del>			
24.	Is this consistency of terminology maintained throughout budget, accounts, and financial reports?	it th $\frac{1}{Yes}$	e No		

25.	Which of the following funds have been established in your district's financial system?
	1. General Fund
26.	Are separate accounts maintained for each fund?  Yes No
27.	Do you close out these accounts at the end of the fiscal year?
ACCR	Yes No  UAL ACCOUNTING - an accounting system which includes revenue when it is earned though not yet collected and expenditures when incurred but not yet paid.
28.	Do you employ an accrual system of accounting in which revenues are reported when they become due rather than when received?
	Yes No
29.	Do you use an accrual approach in reporting expenditures even though payment for these has not been made? ${\text{Yes}} = {\text{No}}$
30.	Are expenditures recorded as encumbrances at the time of issuing purchase orders or contracts?  Yes No
31.	Do you classify revenues by fund and source?
32.	Please check the means by which expenditures are classified:
	Fund

Most of the questions asked thus far have been asked using the accounting principles and procedures recommended by the National Association of School Business Officials of the United States and Canada as an ideal guide for the schools of this nation.

22	And you familian with these recommended executive private	1	d
33.	Are you familiar with these recommended accounting principrocedures?		No No
34.	If so, do you think them desirable for nationwide usage?		
	Ye.	<del>-</del> s	No
35.	If you do not think these recommendations are desirable, have another system that you would like to see in effect?	do	you
	Ye	s	No
	If yes, please indicate		<del></del>
			<del></del>
36.	Do you feel that the lack of uniformity and standardization accounting practices and procedures is a problem that nee be resolved?		
	Ye.	s	No
37.	If the answer to the previous question is "yes", please I practices and procedures that you feel would make the report of financial data more uniform and meaningful.		-
	<del></del>		
•			
38.	Do present rules and regulations as required by the Oklaho Department of Public Instruction and Oklahoma Statutes me		
	needs?	- s	No
39•	If not, please list any changes that you feel might improsystem.	ve —	our
40.	Does your district use the Alternate Accounting System au	th	orized
	by Article IV, Section 78, of the Oklahoma School Code?Ye	- s	No

If yes, questions 41 through 43 will be asked with regard to question number 40. 41. Are you satisfied with this process? Yes No If satisfied, please indicate reason. Releases personnel for other duties . . . . . Gives clearer and more immediate Other (Please specify) If dissatisfied, give reason for dissatisfaction. Does not adapt itself to our particular needs Other (Please specify) What equipment do you use to maintain system? Electronic Data Processing (Please check): Other \_\_\_\_ b. Accounting machines: Other c. Hand posted . . . . . . . . . . . . . . . . . . 43. Please give an estimate (fractional or percentage) of the increase or decrease in total cost of accounting function as compared to the previous means employed. 44. If you are not using electronic data processing of your financial records, are you planning to utilize this means in the near future? Yes No If so, when?

Thank you for your help in the completion of this survey.

# APPENDIX C

RESPONSES TO QUESTIONS 37 AND 39

### Responses to Question 37

### Large-High Valuation Districts

1. No uniformity can be achieved until each district makes the effort to use a common accounting classification. There is too much inconsistency between various districts. Legislation may be necessary as many districts are not voluntarily making efforts in this direction.

### Large-Low Valuation Districts

- To increase the degree of comparability of district-to-district expenditures.
- 2. I think uniformity and standardization of accounting practices and procedures would be ideal, but I doubt if it would be possible because of the great differences in the sizes of the schools. The size of the school usually determines the type of machines and method used in each system. For instance, we used one employee and manual method until the school grew in size, until we added employees and machines in the accounting department.

### Small-High Valuation Districts

- 1. I do feel from what little knowledge I have as to uniformity that there is too much variety of systems. I think all systems have merit and if the merits of each could be combined into one, possibly a better system would develop.
- 2. Use a standard system such as the ASBO.
- 3. Computer accounting used by all school districts.

### Small-Low Valuation Districts

- Adopt standardized system for all schools with variations for different size schools.
- 2. The State Department and Federal accounting should be the same.
- 3. As long as uniformity is maintained the basic type of accounting chosen is not so important.
- 4. Leave off the many different code numbers involved in the various accounts.

### Responses to Question 39

### Large-High Valuation Districts

No Response

### Large-Low Valuation Districts

No Response

### Small-High Valuation Districts

- Placing all school districts under the alternate system of accounting with an accredited and fully staffed data center if local district is not fully equipped to perform these necessary procedures.
- 2. Compiled data reports to the State Department are the same. Some schools charge of principals' salaries to administration other to instruction -- Studies of what percentage of budget for salaries -- transportation -- instruction constitutes the Oklahoma (avg) budget would be helpful to school people for comparison, etc.
- 3. Procedures could be simplified.
- 4. By having all schools employ alternate accounting systems through Data Processing.

### Small-Low Valuation Districts

- 1. The budget can not be set up according to Law now. Another thing is that we have double audits where a school district uses the County treasurer as their treasurer.
- 2. Too many, too lengthy, and unnecessary just like this questionnaire. We function very well but many school administrators do not have an accounting background or course work.

APPENDIX D

POPULATION AND SAMPLE DATA

# SUMMARY OF POPULATION AND SAMPLE DATA ACCORDING TO SIZE AND WEALTH OF SCHOOL DISTRICTS

	Large High Valuation Districts	Large Low Valuation Districts	Small High Valuation Districts	Small Low Valuation Districts	Totals
Population	13	45	179	215	452
Random Sample	6	14	43	50	113
Sample Return	6	11	38	4O	95

A chi-square value of 3.32 and 3 d.f. did not indicate a significant difference in the frequency distribution between the random sample and the expected frequencies of the population. The random sample size was one-fourth of the population.

#### VITA

### William Joseph Parsons

### Candidate for the Degree of

### Doctor of Education

Thesis: FINANCIAL ACCOUNTING IN THE PUBLIC SCHOOLS--A COMPARATIVE

ANALYSIS OF PRACTICES AND NEEDS IN OKLAHOMA

Major Field: Educational Administration

### Biographical:

Personal Data: Born in Pharoah, Oklahoma, February 2, 1924, the son of William Carl and Jessie Dee Parsons.

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