

A STUDY OF TEACHING SUPPLY PROCUREMENT PRACTICES IN
TWENTY-THREE REPRESENTATIVE SCHOOL
DISTRICTS IN TEXAS

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DISTRICTS IN TEXAS

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CHAPTER I

INTRODUCTION

Public demands for additional school services in recent years have placed universal emphasis on the wise spending of school funds. Present inflationary prices, teacher salary increases, and an ever-increasing tax burden on the patrons of practically every school district in Texas, as well as in the nation as a whole, have spurred a new interest in the economical use of these funds. Increasing school population, in conjunction with the facts mentioned above, has helped to complicate school business to an even greater degree. Administrators in some districts who once enjoyed board policies which allowed them to bargain for the best teachers in the state, to build the plants they felt were justifiable, regardless of extremely high costs in some cases, and to offer many extra services, continue to be confronted by taxpayers who demand more for their tax dollar. School budgets have become more realistic under the scrutiny of big business, of the press, and of the ordinary taxpayer.

Generally, public opinion places school purchasing in the same category as any business transaction which involves the act of buying. School buyers have a unique problem, however, and do not have some of the advantages commonly found in

purchasing for private business. The various items required for school use are spread over a variety of areas rarely approached in any other purchasing field. The school purchasing agent must evaluate the characteristics of innumerable items that will satisfy the needs of the various levels of education as well as the many specialized departments. On the other hand, procurement in private enterprise is usually restricted within limited fields of a relatively specialized nature. The items required are selected, designed, or developed by technical staffs and passed on to the procurement officers. The school purchasing agent can partially duplicate this selective process through the efficient utilization of the technical help of teachers and other school employees concerned with the use of the product involved, although in the final analysis, the agent is still confronted with the problem of evaluating the product in relation to the over-all school program.

Carefully planned school purchasing can result in the efficiency of buying methods employed by well operated commercial enterprises partly to the extent that competitiveness among the limited number of school suppliers of the items involved can be depended upon. Some supply materials for school offices and for teachers are probably representative of products which can be selected and purchased on an economical basis comparable to practices employed by commerce. Naturally, volume of purchases is a big factor to consider. However, one should not assume that the medium-sized district could not overcome, to some

extent, the advantages gained by larger districts which normally take advantage of quantity purchasing. Smaller districts employ drop-shipping techniques which allow them to receive bids on quantity shipments with the understanding that the bidder will ship specified parts of the total bid according to the need of the district. Some smaller systems have entered into agreements which allow them to buy collectively. In at least one Texas county the county superintendent does all the purchasing for supplies which are bought in quantity.

Need for the Study

There is a need for a current analysis of purchasing practices within the medium sized districts in Texas.

Recent investigations within this field have been limited to small schools in which superintendents generally act as purchasing agents with little delegation of this responsibility to subordinates. An investigation of larger schools, in which increased work loads for superintendents have forced them to employ extra personnel, should provide an opportunity to discover more economical purchasing practices than have been revealed in the studies concerned with small schools.

Problem of the Study

The problem of this study is to survey the purchasing practices of a group of representative school districts and to determine the extent to which these practices follow the recommendations presented by authorities on school supplies procurement.

The cooperating schools include six of thirteen districts in Texas which have a scholastic population of from ten to fifteen thousand and seventeen of the thirty-six districts which have a population of from five to ten thousand, according to data contained in the 1958 issue of "Salary Schedules for Classroom Teachers of Texas Public Schools" published by the Texas State Teachers Association.

Limitations of the Study

The study will deal with consumable office and teaching supply accounts within the budgetary expenditures of the representative districts. The survey will be restricted to representative Texas schools. The schools which failed to answer the questionnaire may represent less defensible programs, and this study may therefore present a slightly better picture than would be true of the entire group of schools involved.

Sources of the Data

There are four sources of the data for the study; (1) professional literature, which includes professional books, bulletins, research studies, and periodicals, (2) personal interviews with purchasing agents of five Harris County school districts, (3) board minutes, financial records, policy and teacher handbooks, bid and inventory files, office memorandums, requisitions, and purchase orders available for study in a few school districts and (4) answers to questionnaires which were

mailed to the superintendents of forty-nine school districts in Texas. Answers to these questionnaires were received from twenty-four schools. One of this group was not completed sufficiently to be of value for this survey.

The twenty-three districts surveyed in this study include Edgewood of San Antonio, Midland, Pasadena, Spring Branch, Tyler, and Victoria in the larger districts (10,000 - 15,000 scholastics), while Alamo Heights of San Antonio, Arlington, Big Spring, Borger, East and Mount Houston, Garland, Grand Prairie, Highland Park of Dallas, Irving, Longview, Lufkin, Plainview, Robstown, Rosenberg, San Benito, Sherman, and Texarkana comprise the group of smaller districts (5,000 - 10,000 scholastics).

Procedure of the Study

Interviews were employed as a source of information for designing the questionnaire used in the study. (Appendix B) Five purchasing agents, two from large (ten to fifteen thousand scholastics) and three from smaller (two to five thousand scholastics) districts in Harris County, were interviewed in the summer of 1959 in an attempt to discover information which would reflect their purchasing habits and which could provide a basis for developing a more extensive survey. The interviews made use of a preliminary survey instrument which contained an outline of the purchasing routine which included the origination of the order, the specifications, bid getting, delivery, paying of invoices, the follow-up (checking of material in use, dates of delivery, date for sending follow-up letter to vendor,

and why the vendor was a successful bidder), statement of purchasing policy, information concerning the current budget for school supplies, and current enrollment.

These interviews were quite extensive, lasting for as long as six hours, and including the examination of any record or instrument which was considered unique, unfamiliar to the interviewer, or useful in determining the practices of the district considered. In each case the superintendent, or the person to whom he assigned the responsibility for purchasing, was the subject of the interview. As new information was discovered, an occasional telephone conversation was necessary to determine if the practices within one district were similar to those employed in another district which had been interviewed previously.

Conversations with agents in smaller and larger districts readily revealed a variety of practices, as well as a variation of opportunities for increased efficiency, in purchasing within the districts.

The preliminary device which was used to guide the interviews was expanded and revised during each interview. During the following summer, in August, 1960, the instrument which appears in Appendix B was mailed to forty-nine superintendents in Texas. This questionnaire includes the information gathered as a result of the five interviews, and incorporates the ideas presented by authorities as acceptable practices.

Since the districts within each category responded at approximately the same rate - forty-six percent for the larger districts and forty-seven percent for the smaller districts - no follow-up enquiry was made. The response presents a sampling which is somewhat stratified geographically and according to the major population centers in the categories.

Organization of the Remainder of the Thesis

Chapter II will review the principal literature in this field in order to permit the recognition of recommendations of authorities concerning teaching supply procurement.

Chapter III will include the information gathered from the school districts concerning their current practices.

Chapter IV will be an evaluation chapter in which current practices within the representative districts will be compared with the criteria presented in the literature by authorities.

Chapter V will contain the summary, conclusions, and recommendations.

CHAPTER II

REVIEW OF THE LITERATURE

Related Research

"Business Practices in Missouri Public Schools" (10) was written by Terry at the University of Missouri in 1954. An attempt was made to determine the practices of purchasing officers in two hundred and eleven schools in Missouri in which the scholastic populations ranged from three hundred and fifty students to one thousand students, and to relate these practices to the opinions of a jury of experts composed of sixteen men who majored in the area of educational administration on the doctoral level at the University of Missouri. These men were or had been employed as school superintendents in Missouri public schools. The opinionnaire was sent to the sixteen men and to the several school districts; the results were tabulated as percentages for both the actual practices indicated in the schools as well as the practices indicated by the jury as being best in their opinion. The results included the fact that, in the opinion of these experts, the larger the school system the more efficient was the operation of the purchasing program.

"An Analysis of Purchasing Practices in Small School Systems of Texas" (9) was written by Shields at North Texas State University in 1960. This study was concerned with

analyzing the purchasing practices in two hundred and four schools in Texas in which the average daily attendance ranged from four hundred and forty-five to one thousand. A survey of practices in these districts was made and rated with a scale developed by Little, who used the instrument in the State of Kentucky (10).

Purchasing Policies

Linn (6, p. 252) advises that the purchasing officer's responsibility in making decisions, commitments, and his delegated authority should be clearly recognized and understood by academic and nonacademic staff members.

According to the buying and selling code for schools which is sponsored by the American Association of School Administrators:

Good business practices in public schools demand that there be a clear set of policies governing procurement practices in public schools (4, p. 71).

Centralization of the Purchasing Function

It is important to centralize purchasing and to file all records in one place for ready access when needed (3). In agreement, Morphet (7) says centralized purchasing should be provided for all budget funds except for necessary petty cash accounts.

The welfare of children must always come first in the purchase of items. These items must be bought with the idea of fitting the needs of school teachers and students (4, p. 71).

Schools exist to educate children; therefore, the purposes of activities concerned with buying school supplies should bear this fact in mind. Grieder (4) and others (3) agree that the business tasks of school administration are educational in nature and cannot be separated from the school's purposes. Mort (8) states that the superintendent should have the authority to see that the business office serves the purpose for which public education is designed, since he is responsible for the instructional program. According to Morphet (7), business administration should be the servant, not the master of the educational program.

The American Association of School Administrators (1) warn that, as has been learned in industry and business, there can be only one executive in a successful enterprise. The delegation of primary administrative responsibility must be to the superintendent only. When the board of education deals with a superintendent of schools for educational affairs and deals independently with a business manager for financial affairs, the members are reducing the likelihood of efficient service to the children.

In clear support of this principle, the Texas Education Agency Handbook for School Board Members states that the school board should:

Confine its time and energies to policy-making and evaluation of these policies; and
Delegate the detailed and technical duties to a trained administrative staff with a single executive (superintendent) at its head (11, p. 1).

Engelhardt and Engelhardt (2) reiterate that the board should place this responsibility in the hands of the superintendent irrespective of the size of the system, and add that the centralization of all the details for purchasing, distributing, and accounting for supplies should be planned for the office of the business head.

Selection of Teaching Supplies

According to Engelhardt and Engelhardt:

The business office is a service department and exists primarily as an aid to the professional staff to facilitate and improve the educational work. This office should not determine standards, but should cooperate with the staff in formulating them (2, p. 694).

Grieder (3) thinks that a fundamental principle in the selection of materials is that the person who uses the materials should have a voice in their selection, since that person will know the kind that best suits his purposes. He further states that standards of quantity and quality should be determined by both the administrator and user.

Morphet (7) agrees that neither the administrator nor the supervisor alone can intelligently select instructional materials. Even though each may have wide knowledge concerning the number, types, and sources of instructional materials available, neither can possibly know when and where all such materials will be useful in a classroom. However, since classroom teachers do not always know what materials are available, where they can be secured, and how they can be procured, the selection of instructional materials should be on a cooperative basis.

Engelhardt and Engelhardt (2) add that accuracy and efficiency are not fostered when a business official determines, on the basis of his own opinion, when a requisition should be filled and how much of the request should be allowed. Mort (8) says that both the nature of the offerings and the objectives of each subject or activity should be studied carefully and that this in itself suggests that teachers should be allowed a voice in the selection of equipment and supplies.

Mort further states that a very flexible plan to facilitate the computation of the amounts of supply items needed for the succeeding fiscal period includes giving each principal a supply allowance to be spent in the purchase of materials and supplies particularly adapted to the various activities and projects that he wishes to carry out in his building. This plan has much to recommend it because of the many possibilities it affords and the consequent adaptation it permits to the work of an individual grade, teacher, or subject-matter field. The greater supply amounts required by one teacher may be offset by others who use less than their quotas. By this method, selection is made cooperatively by teachers and administrative officials and all purchases are made through the central office.

Competitive Bidding

The practice of bidding on quantity orders with its many ramifications raises more problems than any other buying and selling activity. It was recommended that boards be delegated authority to buy with certain

specified limits and categories. Where bidding prevails, ample time should be allotted for careful preparation of bids (4, p. 71).

Morphet (7) states that competitive bids should be obtained on all sizable purchases and that quantity purchasing should be followed whenever possible, because of the better prices it tends to obtain. Mort (8, p. 315) shares the idea that quantity purchasing is desirable because of the saving it permits. Knezevitch (4, p. 68) suggests, however, that there is nothing fundamentally wrong with seeking informal bids through telephone calls, catalogues left by salesmen, or seeking quotations by letter and making purchases on this basis because of the savings involved in time, as long as it is executed with the honest and professional care that purchasing deserves.

None of the jury of experts in Terry's study (10) indicated that the competitive bid should be used for all purchases; in fact, fewer than three per cent of the schools surveyed by Terry used this method entirely. Sixty-two and five-tenths per cent of the jury in his study recommended, and forty-two and six-tenths of all schools he surveyed practiced, the use of competitive bids for all purchases costing more than specified amounts.

Order and Delivery Dates

The seasonal scheduling of the school year, with the summer vacation break, encourages school business officials

to handle many of their business affairs on a seasonal basis. Thus purchasing traditionally is placed in the summer months, partly because of the release from administrative pressures coming directly from school operation, partly from the fact that the school budget year ends between terms, and partly because demand for school supplies is likely to coincide with the beginning of each new term. The heavy concentration of purchase orders and requested delivery dates into the summer months, however, causes problems.

Three-fourths of the year's business is delivered within two months and this results in more expensive products, for the seller must hire extra and inexperienced help, schedule overtime, and risk shortages and shipments. Many times materials are ordered for September delivery and not used until January (4, p. 71).

Mort (8) states that bids should be placed in April and May if possible in order to permit purchasing and delivery during the summer months. Only one school district in ten places orders throughout the school year (4, p. 70).

Storage and Distribution

A central warehouse may be necessary in a large school system, and frequently a single storage place is needed in a smaller one. Decentralized storage in the building where the materials are to be used, however, has the advantages of low overhead through elimination of deliveries, the original cost and upkeep of a central warehouse, and the need for storeroom clerks, according to Knezevich (4). Mort (8) agrees that storage arrangements should differ with the size of the school

system and with the plan of supply management in force in the system. The usual plan by which teachers secure the needed supplies is through the requisition system. In this system, supplies can be effectively handled through either central storage or distributed through the several school units.

Cooperative Purchasing

The objective of cooperative purchasing is the saving that can frequently result from quantity buying. Knezevitch (4) says there is evidence that cooperative purchasing is of considerable value. According to Mort (8) cooperative purchasing can overcome some of the disadvantages associated with procedures within smaller districts where it is impossible to purchase in quantity.

Shields discovered, however, only three smaller districts in Texas which operated at that time under a cooperative purchasing plan (9).

Relationships with Vendors

Specifications should be complete in all details and be based on sufficient knowledge of the use, functional value, and longevity of the product. Thus, specifications should never be so loose that price becomes the only factor, for the cheapest article seldom represents the best value in use (4, p. 71).

Linn (6) states that close cooperation between the buyer and seller will result in savings for both. He also expresses the fact that reliability of the seller often is of more importance than lower prices of products. Lewis (5) says that the purchasing agent should keep competition open and fair,

respect confidential information gained about competitors or their products, cooperate with the vendor in solving his difficulties, and be courteous in stating rejection of bids with explanations that are reasonable but do not betray confidential information.

Chapter Summary

The following principles seem to be supported by the foregoing review of the literature regarding school purchasing practices:

- Principle I - There Should Be a Clear Set of Policies Governing Procurement Practices in Public Schools.
- Principle II - Details for Purchasing, Distributing, and Accounting for Supplies Should Be Centralized in the Office of the Business Head, Who Has Been Delegated This Authority by the Superintendent.
- Principle III - Teachers Should Have a Hand in the Selection of the Teaching Supplies Which They Will Use.
- Principle IV - Competitive Bidding on Quantity Purchases Will Result in Savings if Supported by Careful Inventory, Storage, and Distribution Practices.
- Principle V - Careful Timing of Purchasing and Delivery of Goods Can Reduce Prices of Teaching Supplies.
- Principle VI - Appropriate Storage Systems Will Differ with the Size of the School System.
- Principle VII - Cooperative Purchasing Can Be of Considerable Value if it Results in Savings on Quantity Orders.
- Principle VIII - Close Cooperation Between Buyer and Seller Can Result in Savings for Both.

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CHAPTER III

PURCHASING PRACTICES

Centralized administrative control is vital to economical and efficient school purchasing. Administrative policies assure the continuity of operation within an enterprise of any nature.

The larger schools included in this study give somewhat greater emphasis to a formally written policy which defines purchasing routine. Four larger and seven smaller districts reported written policies as indicated in Table I:

TABLE I

STATUS OF POLICIES GOVERNING PROCUREMENT
PRACTICES IN TWENTY-THREE REPRESENTATIVE
TEXAS SCHOOL DISTRICTS SURVEYED IN
1960

Status of Policy	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
Formally Written	4	67	7	50
Oral or Traditional	2	33	7	50
Total	6	100	14	100

In two larger districts and five smaller districts the policies were oral and traditional. Three smaller schools did not answer the question. Districts' handbooks, office

memorandums, and school board minutes were given as the possible locations of formally written policies concerning this aspect of the administration of school supplies.

Personnel Authorized to Make Purchases

Schools of different sizes differ widely in the number of persons authorized to make purchases obligating the school district and thus in the number of persons in control of purchasing practices. Table II shows that schools in Texas differ also with respect to the official designated as the official purchasing agent.

TABLE II

PERSONNEL AUTHORIZED TO MAKE PURCHASES WHICH
OBLIGATE THE DISTRICT, AS REPORTED BY
TWENTY-THREE REPRESENTATIVE TEXAS
SCHOOL DISTRICTS SURVEYED IN
1960

Title of Personnel	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
Purchasing Officer	4	67	10	59
Purchasing Officer in Combination with:				
Athletic Director	2	17	2	4
Head Custodian	..	..	5	10
Librarian	..	..	3	6
Principal	1	8	4	8
Superintendent	..	..	2	4
Supervisor	1	8	2	4
Teacher	..	..	2	4
Total*	6	100	17	99

*This total will not agree with total schools reporting because more than one person shares this authority in some of the reporting districts.

In 33 per cent of the large districts and 41 per cent of the smaller districts, the authorization for purchasing supplies is divided among several people. Strict control of the purchasing functions in these schools would appear to be handicapped by this decentralization of responsibility.

The larger schools, with from 10,000 to 15,000 scholastics, tend to keep purchasing tightly in the hands of the designated purchasing officer. In four of the six larger reporting schools, only the purchasing officer has the power to buy for the district. In one of the remaining two the athletic director may buy in his specialized area. One large district departs from the central control principle by allowing its athletic director, principals and supervisors, in addition to purchasing officer, to obligate the district.

Of the seventeen reporting smaller schools, with from 5,000 to 10,000 students, ten permit purchasing by only one officer. In the remaining seven, purchasing power is also given by two districts to teachers, by two districts to supervisors, by five to head custodians, by two to coaches, by four to principals, by three to librarians and by two to superintendents--all in addition to the respective designated purchasing officers.

Title of Purchasing Official

The title of the person in charge of purchasing in each district indicates the greater attention of the larger districts to a formal system of purchasing control. Table III indicates

that four of the six larger schools have officials specifically titled "purchasing agents", while only two of the seventeen smaller schools use that title for their purchasing officers. The purchasing officer in one of the two remaining larger districts is the business manager. The other is the director of business services. Thus, in all eight of the larger districts purchasing responsibility resides in the office of a person whose title specifies or strongly implies this responsibility.

TABLE III

TITLES ASSIGNED TO PERSONNEL RESPONSIBLE FOR
THE OPERATION OF PURCHASING ACTIVITIES
IN TWENTY-THREE REPRESENTATIVE
TEXAS SCHOOL DISTRICTS
SURVEYED IN 1960

Exact Title Assigned	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
Assistant Superintendent	..	..	7	41
Business Manager	1	16	4	17
Director of Accounting	..	..	1	6
Director of Business Services	1	16	1	6
Purchasing Agent	4	67	2	11
Superintendent	..	..	4	17
Superintendent's Secretary	..	..	1	2
Total*	6	99	17	100

*This total will not agree with total schools reporting because more than one person bears this responsibility in two reporting districts.

The official most often named purchasing officer in the smaller districts is an assistant superintendent. Seven purchasing officers have that title. In three other districts the business manager is in charge of purchasing and in two others the purchasing officer is the director of business services or the director of accounting. The superintendent is in charge of this activity in three districts, while this officer is given the title of purchasing agent in the remaining two districts.

Two districts reported more than one person in charge of purchasing. In one the power is vested in the superintendent and the business manager and in the other the superintendent, business manager and the superintendent's secretary are all involved in responsibility for purchasing.

Approval of Payment on Invoices

The larger and smaller districts follow much the same practice on approval of payment on invoices, although again the larger schools employ closer centralization of this activity. Table IV reports the findings of the survey regarding this feature of administration.

Three of the larger schools allow only the purchasing officer to approve payments; one gives that authority to the chief auditor, who is actually an integral part of the centralized purchasing system in this particular district;

and another gives this authority to the principals. One school did not answer this part of the questionnaire.

TABLE IV
PERSONNEL AUTHORIZED TO APPROVE INVOICES FOR
PAYMENT IN TWENTY-THREE REPRESENTATIVE
TEXAS SCHOOL DISTRICTS SURVEYED
IN 1960

Title of Personnel	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
Assistant Superintendent	..	..	1	3
Business Manager	..	..	2	6
Chief Auditor	1	20	..	..
Director of Business	..	..	1	7
"Person having final custody of supplies in storage"	..	..	1	7
"Person making purchase"	..	..	1	3
Principal	1	20	2	6
Purchasing Officer	3	60	7	43
School Board	..	..	3	19
Superintendent	..	..	1	3
Superintendent's Secretary	..	..	1	3
Total*	5	100	16	100

*This total will not agree with the total number of the schools reporting because more than one person shares this authority in three reporting districts.

In six of the smaller districts approval authority is exercised exclusively by the purchasing agent. In three districts an official other than the purchasing officer

approves invoice payments - the director of business, the superintendent and the "person having final custody of supplies in storage". Three districts permit more than one person to approve payments. In one district approval authority is vested in the person making the purchase, the principal, and the assistant superintendent, who is also the purchasing official. In another district payments are approved by the business manager or by the several principals. In the third, approval comes from the superintendent, the business manager or the superintendent's secretary. Of the two remaining districts, one omitted that section of the questionnaire and the other uses the purchase order system.

Requisitioning Procedures

Table V reveals that little difference exists between the schools of different sizes in their respective methods of requisitioning teaching supplies. In five of the six larger districts teachers submit requisitions with approval by their principals and finally by the purchasing officer. In the other district the principals estimate needs for their buildings and turn in requisitions. The purchasing officer in one large district is permitted to anticipate needs by stock-piling certain items according to past experience and without much help from principals or teachers.

TABLE V

REQUISITIONING PROCEDURES EMPLOYED IN TWENTY-THREE
REPRESENTATIVE TEXAS SCHOOL DISTRICTS SURVEYED
IN 1960

Procedure Employed*	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
A	5	83	14	66
B	1	16	2	12
C	..	..	1	6
D	..	..	3	12
E	..	..	1	4
Total**	6	99	17	100

*The letters in this column refer to the following procedures:

A Each teacher submits a requisition which is approved by the principal, who submits it for final approval by the purchasing officer.

B Each principal assesses the need of the building and makes purchases.

C The purchasing officer orders according to past experience.

D In conjunction with the method listed in "A" above, the schools in this category also use standard lists worked out for each grade level and ordered by the district according to enrollment.

E In combination with the method listed in "A" above, the school in this category also allows department heads, supervisors, and principals to originate requisitions.

**This total will not agree with the number of schools reporting because more than one procedure was employed by the same schools.

Estimating Costs for Budget Preparation

Several procedures were represented within each size group in estimating the cost of teaching supplies for budget preparation. Table VI reports these procedures.

One smaller district estimates the cost of teaching supplies at \$100 a teacher and another at just \$20 a teacher. One school sets the cost at \$2 a pupil. Among the larger schools, one estimates the cost of teaching supplies at \$50 a teacher; another at \$100 for elementary teachers, \$140 for junior high teachers, and \$180 for senior high teachers.

TABLE VI

METHODS EMPLOYED FOR DETERMINING COSTS OF TEACHING SUPPLIES IN BUDGET PREPARATION, AS REPORTED BY TWENTY-THREE REPRESENTATIVE TEXAS SCHOOL DISTRICTS SURVEYED IN 1960

Budget Estimate Based On	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
Allowance Per Teacher	3	50	8	50
Allowance Per Estimated Pupils	2	33	6	38
Principal's Estimate	1	17	..	..
Past Experience	..	..	2	12
Total	6	100	16	100

One district bases its estimate on \$3 for elementary and \$6 for high school pupils; another at \$3 for elementary, \$4.50 for junior high, and \$5 for high school pupils.

Actual amounts of money available for teaching supplies within each district varies widely, influenced principally, of course, by the local financial resources of the district. However, a study of Table VI indicates that both sizes of schools use fairly similar methods in making their budget estimates.

Asked what per cent of their total operating budget the cost of teaching supplies amounted to, the smaller schools gave answers ranging from seventeen-hundredths of one per cent to eight per cent. The larger districts reported proportions ranging from one and six-tenths per cent to ten per cent. The wide spread indicates the variety of financial conditions among the districts. Some schools cannot afford much money for school supplies, while others have ample money available. It is noteworthy in this connection that at the time of this survey each of the districts surveyed was receiving from the formula provided by the Minimum Foundation Program an operation allowance of \$450 per professional unit. The difference between this amount and the very small amounts spent by some schools on teaching supplies reveals a diversion of these funds to other cost items, particularly teacher salaries. The less fortunate districts supplement teaching supply budgets with resources from activity accounts. The average reported by the larger districts was 3.08 per cent of their budgets spent on teaching supplies. The average for the smaller districts was 2.4 per cent for this purpose.

The estimated cost of teaching supplies per scholastic ranged in the larger schools from \$1 to \$5 and in the smaller districts from \$1 to \$10. The average for the larger districts was \$3.63 and for the smaller \$4.86.

Competitive Bidding

Table VII shows the variety of practices among the several districts responding to this portion of the inquiry.

TABLE VII
COMPETITIVE BIDDING PRACTICES USED IN PURCHASING SCHOOL SUPPLIES FOUND IN TWENTY-THREE REPRESENTATIVE TEXAS SCHOOL DISTRICTS SURVEYED IN 1960

Practice Employed*	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
A	5	83	12	75
B	1	17	..	..
C	..	..	4	25
Total	6	100	16	100

*The letters in this column refer respectively to the following practices:

A School board ruling requires competitive bidding on these items.

B In absence of school board ruling competitive bids are received on these items.

C No board ruling requires competitive bidding and this method is not employed for school supply purchases.

Board policies in five of the six larger districts require bids and the sixth school follows the bid system, even though the board does not require it.

Twelve of the seventeen smaller districts are required by their boards to accept bids on teacher supply items. Four districts do not have this requirement, and one did not answer that question. In one of the twelve small districts reporting, bids are required only on competitive items costing more than \$100 in the aggregate. In another, the minimum non-bid level is \$500.

Order and Delivery Dates

The larger districts appear to show a much greater appreciation of the merchants' problems in delivering supplies by and during the first month of the fall term, when almost every school in the country is clamoring for its shipments.

TABLE VIII

DELIVERY DATES OF TEACHING SUPPLIES AMONG TWENTY-THREE REPRESENTATIVE TEXAS SCHOOL DISTRICTS SURVEYED IN 1960

Months in Which Supplies are Delivered	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
May	3	3	3	1
June	3	6	1	2
July	4	31	3	9
August	5	41	11	52
September	3	18	10	36
Total*	5	100	14	99

*This total will not agree with the total schools reporting because supplies were delivered within each district in more than one month. The percentage column indicates the per cent of supplies delivered to the participating number of schools in relation to the total amount delivered to all schools during the period indicated.

As indicated in Table VIII, while both groups placed the largest number of their orders in June with substantial but lesser orders in July and August, the larger districts receive a considerable portion of their supplies in July. The smaller districts receive by far the greater part of their shipments in August and September. One smaller school was sent all its supplies in August and one received all its supplies in September. Only four smaller districts received any part of their teaching supply shipments before August, the month when the rush is most pressing.

Table VIII further reveals the fact that supplies are received in a more even flow by the larger districts. The smaller districts tend to wait until the last minute with eighty-eight per cent of their supplies delivered in August and September.

Storage and Distribution

Table IX shows the variety of procedures followed in the storage and distribution of teaching supplies. To insure greater distribution control, each of the larger districts has set up a centralized system of storage for teaching supply items. Only eight of the smaller schools reported such systems. Seven have no centralized storage system and two did not answer this question. The methods for supplying the teachers from central storage points are much the same, regardless of the

size of the school system. Either the teacher makes requisitions through the principal or the principal himself draws items for his school.

TABLE IX

METHODS OF STORAGE OF TEACHING SUPPLY ITEMS
IN TWENTY-THREE REPRESENTATIVE TEXAS SCHOOL
DISTRICTS SURVEYED IN 1960

Method of Storage Employed	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
Centralized	6	100	8	53
De-Centralized	..	..	7	47
Total	6	100	15	100

In some districts principals draw against quotas set up for each of the schools in their district. One novel distribution plan is that of a larger district which "sells" items at cost plus to its schools against a budget. The small profit realized is used to test samples of teaching supplies.

Purchasing and Storage for Use Beyond Current Year

The larger schools are able to take advantage of temporarily favorable prices by purchasing teaching supplies for long-term storage. Table X indicates that school board policy in five of the six larger districts permits the purchase of large supplies of certain items which can be easily stored with a minimum of spoilage and which will be used in future school years.

TABLE X

PURCHASING FOR LONG-TERM STORAGE PRACTICES FOUND
IN TWENTY-THREE REPRESENTATIVE TEXAS
SCHOOL DISTRICTS SURVEYED IN
1960

Purchasing for Long-Term Storage	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
Practiced	5	83	7	54
Not Practiced	1	17	6	46
Total	6	100	13	100

Seven smaller districts follow such a practice and six do not. Four schools did not answer the question. Among the teaching supplies bought for use in future school years are paper items of all kinds, pencils, pencil sharpeners, physical education equipment, small hand tools, chalk erasers, typewriter ribbons and crayons.

Purchasing Cooperation With Other Districts

Mass purchasing in cooperation with other districts is practically unknown among the districts of either size. Only one of each takes advantage of price reductions possible under such a system. One responding system reported its supplies are purchased by the county superintendent along with supplies for all the county's schools. The items purchased cooperatively, as reported by both the larger and smaller systems, were duplicating paper and paper towels.

Courtesy to Bidders

Table XI indicates that schools in the two groups vary widely in their responses to unsuccessful bidders. Five of the six larger districts normally furnish unsuccessful bidders with reasons for not accepting their bids. The sixth does so on request.

TABLE XI

RESPONSES TO UNSUCCESSFUL BIDDERS AS REPORTED BY
TWENTY-THREE REPRESENTATIVE TEXAS SCHOOL
DISTRICTS SURVEYED IN 1960

Reasons For Not Accepting Bids	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
Normally Furnished	5	83	4	27
Furnished on Request	1	17	1	7
Never Furnished	..	..	10	66
Total	6	100	15	100

Only four of the smaller schools customarily give the bidders reasons for turning down their bids. Ten give no reason and one does so on request. Two did not answer this question.

Disciplining Bidders

Table XII shows that both groups are lenient to vendors who fail to bid on requested items on a number of successive occasions. Only one of the six larger and only five of the

seventeen smaller districts remove such vendors from their bid lists. Four of the smaller schools did not answer this question.

TABLE XII

ACTIONS TAKEN TOWARD VENDORS WHO FAIL TO BID ON REQUESTED
ITEMS AS REPORTED BY TWENTY-THREE REPRESENTATIVE
TEXAS SCHOOL DISTRICTS SURVEYED IN
1960

Action Taken	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
Removed from Bid List	1	17	5	40
No Action Taken	5	83	8	60
Total	6	100	13	100

As indicated in Table XIII, the schools are much more severe with vendors who fail to follow shipping instructions or fail to deliver goods on time, although a few districts still keep such bidders on their bid list.

Asked to give specific reasons for dropping vendors from bid lists, the districts gave replies ranging from "shipped inferior quality items" to "asked to bid but did not". There was little difference in the complaints of the two groups. Districts of both sizes complained particularly of vendors who substituted inferior quality merchandise for specified bid items and of late delivery or no delivery at all.

TABLE XIII

ACTIONS TAKEN TOWARD VENDORS WHO FAIL TO FOLLOW SHIPPING
INSTRUCTIONS OR FAIL TO DELIVER GOODS ON TIME AS
REPORTED BY TWENTY-THREE REPRESENTATIVE
TEXAS SCHOOL DISTRICTS SURVEYED IN
1960

Actions Taken*	Size of Scholastic Population			
	10,000 - 15,000		5,000 - 10,000	
	Number	Per Cent	Number	Per Cent
A	4	67	12	86
B	1	16	..	..
C	..	..	1	7
D	1	16	1	7
Total	6	99	14	100

*The letters in this column refer respectively to the following practices:

A Districts drop unsatisfactory vendors from their bid lists.

B Vendors are dropped from bid lists after specific board action.

C Vendors are dropped if the trouble is recurring and unremedied.

D Districts do not drop vendors from their bid lists.

One bidder was dropped because he did not bid on the complete list of items, but only on selected parts. Another who did not deliver ordered supplies was later readmitted to the bid list. One district "ignores merchants who offer little service and seldom come in". A sporting goods supplier who "continued to substitute lower quality items than those bid and ordered" was dropped after he failed to make good the order in the quality specified.

Table XIII shows that four of the larger districts drop unsatisfactory vendors from their bid list, another takes this action only after specific board action, and one keeps them on. Of the smaller districts, twelve cut the unsatisfactory vendors from their lists, one drops the vendor if the trouble is recurring and unremedied, and one keeps them on anyway. Three did not answer the question.

CHAPTER IV

THE PURCHASING PRACTICES OF TEXAS SCHOOLS IN COMPARISON WITH CRITERIA FROM THE LITERATURE

Purchasing Policies

PRINCIPLE I There Should Be a Clear Set of Policies
Governing Procurement Practices in Public
Schools.

A clear set of policies regarding purchasing affords a positive approach to complete understanding of the desires of a district by its employees as well as vendors who engage in business transactions with the district.

The data collected from the different schools indicate a very positive relationship to the recommendations given in the literature with regard to purchasing policies. The group of smaller reporting districts indicated less concern for written policies than was found among the larger districts. While this principle would seem to be no less important to the smaller district, it undoubtedly is true that administration proceeds on a much more informal basis, and that this does not always imply inefficiency or impropriety.

Centralization of the Purchasing Function

PRINCIPLE II Details for Purchasing, Distributing, and Accounting for Supplies Should Be Centralized in the Office of the Business Head, Who Has Been Delegated This Authority By the Superintendent.

This principle encompasses selection of items to be purchased as well as control of the purchasing routine by the single head of each school district who carefully delegates his authority concerning this phase of his over-all operation. Centralization of the purchasing routine cannot be over-emphasized as an important part of following through with this idea. The literature strongly recommends centralization and control by a single head of the school district in order to prevent the loss of prime purposes in educational purchasing.

Superintendents in the larger school districts in this study are more prone to follow recommendations found in the literature than are smaller district administrators. The majority of large districts reporting indicated the power for purchasing was delegated to a single subordinate employee.

Strict centralized purchasing was discovered in only a few of the districts with scholastic populations ranging from five to ten thousand students. Some school boards within the smaller districts have retained the authority to approve payments on invoices, a policy which would not tend to be in accord with the recommendations of the Texas Education Agency concerning delegation of detailed and technical duties to a trained administrative staff with the superintendent at its head.

Selection of Teaching Supplies

PRINCIPLE III Teachers Should Have a Hand in the Selection of Teaching Supplies Which They Will Use.

Although teaching personnel should cooperate in the selection of materials for their particular use, the single head of the purchasing department should in every case have the final authority for authorization for expenditure of funds. Generally, this routine has acceptance among both the large and small schools surveyed in this study.

Requisitioning systems are fairly uniform in nature and include the following steps: (1) the submitting of recommendations by teachers; (2) approval of these recommendations by principals; (3) final approval by the purchasing officer. This routine was indicated by practically all of the districts.

In one small district the purchasing officer orders according to past experience, an activity which is not recommended in the literature.

Competitive Bidding

PRINCIPLE IV Competitive Bidding on Quantity Purchases Will Result in Savings if Supported by Careful Inventory, Storage, and Distribution Practices.

Securing formal bids on all materials to be purchased is a practice which is not universally accepted by the contributors to the literature in this field. A more informal approach in receiving prices can be just as economical as receiving bids

if honesty and efficiency can be assured. Generally, bids should be received on certain specified categories or limits.

The districts within this study indicate practices which are in agreement with the literature. In bidding on teacher supplies, as in purchasing authority and in requisitions, the larger schools appear to employ a more businesslike approach than the smaller districts. The majority of the purchasing officers are required by board policies to receive bids on certain teacher supply items. In one district, bids are required only on competitive items costing more than \$100 in the aggregate. In another, the minimum non-bid level is \$500. The latter activities are recommended by the literature.

Order and Delivery Dates

PRINCIPLE V Careful Timing of Purchasing and Delivery of Goods Can Reduce Prices of Teaching Supplies.

Although this principle is presented within the buying and selling code for schools it is not generally found in the other literature. The recommended procedure is to time deliveries as the material is to be consumed in the program and to receive materials during each month of the year rather than during the summer months. This recommendation is not widely practiced according to some of the authorities; but nevertheless warrants the attention of school purchasing officers.

Practices with regard to order and delivery dates within the surveyed districts are very similar to the practices cited within the literature. Recommendations regarding delivery dates

as presented by the literature go practically unnoticed among the smaller schools. The larger schools represent little improvement in receipt of their shipments, although the majority of shipments are received a month earlier.

Storage and Distribution

PRINCIPLE VI Appropriate Storage Systems Will Differ With the Size of the School System.

This recommendation is very flexible and easily interpreted. All of the larger systems within the survey have a centralized storage system. The smaller schools reported both centralized and decentralized arrangements for their storage practices.

Cooperative Purchasing

PRINCIPLE VII Cooperative Purchasing Can Be of Considerable Value if it Results in Savings on Quantity Orders.

Cooperative purchasing can produce savings that are the result of quantity buying and can overcome some of the disadvantages of quantity buying. The districts involved in this study failed to take advantage of this means of saving to any great extent. Only one district in each category reported such an arrangement.

Relationships with Vendors

PRINCIPLE VIII Close Cooperation Between Buyer and Seller Can Result in Savings for Both.

This principle involves an attempt on the part of the school purchasing agent to keep competition open and fair without betraying confidential information.

The two school groups vary widely in their responses to unsuccessful bidders. The larger districts normally make statements to unsuccessful bidders without being requested to do so. The smaller schools fail to respond to unsuccessful bidders to any great extent. Both groups indicate severe actions to vendors who fail to ship on time; an interesting fact when their requests for shipments are made at such inopportune times with respect to the rush season.

Chapter Summary

1. Authorities recommend clear sets of policies with regard to procurement practices. This recommendation is ignored by some of the districts in both categories.

2. Centralization of the purchasing function is another recommendation which is somewhat overlooked by the school systems. Failure to comply with the first recommendation appears to contribute to the lack of centralization found among the districts.

3. Teachers have a hand in the selection of their supplies in compliance with the recommended procedure.

4. The bidding, storage, and distribution practices within the schools comply with the recommendations deemed acceptable by the authorities.

5. Practically all teaching supplies are received during the summer months. Larger district purchasing and timing of delivery more nearly conformed to the recommendations in the literature.

6. Recommendations for cooperative purchasing arrangements are not generally followed.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The problem of this study was (1) to explore the literature concerned with school supply purchasing; (2) to gather and study information pertaining to this aspect of school buying in forty-nine representative schools in Texas; (3) to determine to what extent purchasing activities within these schools follow the recommendations as outlined in the literature; and (4) to offer suggestions and recommendations for the improvement of purchasing practices within medium-sized school districts in Texas.

The information used in the study was obtained from the following four sources:

1. Information was obtained from general sources, which include professional books, bulletins, research studies, and periodicals.

2. Additional information was furnished in personal interviews with purchasing agents of five Harris County school districts.

3. Data were obtained from examination of school board minutes, financial records, policy and teacher handbooks, bid and inventory files, office memorandums, requisitions and

purchase orders located within the five districts visited and from some of these items which were mailed by the superintendents within the study.

4. Answers to questionnaires returned from twenty-three superintendents furnished the primary information for the study.

Findings

The following list provides a summary of the recommendations revealed by a study of the literature:

1. There should be a clear set of policies governing procurement practices within each school district in Texas.

2. Details for purchasing, distributing, and accounting for supplies should be centralized in the office of the person designated by the superintendent for handling business affairs.

3. A fundamental principle in the selection of materials is that the person who uses the materials should have a voice in their selection, since that person will know the kind that best suits his purposes. Standards of quantity and quality should be determined by both the administrator and user.

4. Buying in quantity is desirable because of the savings it permits. Quantity purchasing will result in savings if supported by careful inventory, storage, and distribution.

5. Careful timing of purchasing can reduce prices of products and reduce the risk of shortages and shipments.

6. Storage arrangements should differ with the size of the school system and with the plan of supply management in force in the system.

7. Cooperative purchasing can be of considerable value if lower costs can be obtained.

8. Purchasing agents should deal fairly and ethically with vendors in order to produce savings for their school districts.

Conclusions

The conclusions drawn from the data gathered in this study are as follows:

1. There exists a real need for the establishment of clear sets of policies governing procurement practices within both the larger and smaller districts studied. It is strongly recommended that these policies be written and understood by district personnel and vendors who deal with the district.

2. Superintendents in the larger districts delegate purchasing authority to a person entitled "Purchasing Agent," indicating enough work in this field to require a specialized person to handle it. The smaller district superintendents delegate this authority to "Assistant Superintendents" or "Business Managers" who serve in many other functions as well as in that of procurement. This single fact explains to some extent the greater skill apparent in handling this function in the larger districts.

3. The data presented indicate the lack of centralization of the details for purchasing in the office of the business head. Smooth operation in budget control would seem to be

highly improbable in those districts indicating this decentralized situation.

4. Teaching supplies in these districts are generally selected by or with the assistance of the people who plan to use them.

5. Bidding practices within the districts agree generally with the recommendations of the authorities.

6. Districts in both categories fail to take advantage of carefully timed buying as recommended by the authorities. Supplies which are delivered during the summer months are received in a more even flow by the larger districts, which normally have an adequate number of full time employees available to receive the shipments.

7. The storage and distribution of supplies within the districts of both sizes generally appear to adhere to the recommendations found in the literature.

8. The smaller districts fail to furnish unsuccessful bidders with information concerning reasons for not accepting their bids because of the lack of personnel or the employment of more informal buying procedures.

9. Economy in procurement of supplies is gained more readily in larger districts than in smaller ones. The smaller districts fail to take advantage of volume purchasing, which represents one of the largest factors in the reduction of costs in this field.

Recommendations

There is some evidence in the present study that savings can be made through cooperative purchasing. Further study might provide detailed information on the amount of savings of specific types of supplies and under specific arrangements for cooperative purchasing.

The informality of purchasing arrangements found in many of the smaller districts is presumed to result in inefficiency and poor economy. Study of actual cost data would provide evidence of the validity and applicability of the principles involved.

Recommendations underlying the portion of this study dealing with relationships with vendors assumed certain needs and attitudes on the part of the vendors. Those assumptions need to be investigated with particular respect to vendors of school supplies in Texas.

APPENDIX A

(Sample of letter sent to accompany survey questionnaire sent to superintendents of school districts in Texas August 1, 1960)

As a graduate student at North Texas State College, Denton, Texas, I have chosen as a thesis project the study of routine teaching supply procurement in forty-nine Texas school districts.

This project will involve the collection of certain data in an effort to determine some general and unique characteristics in this phase of purchasing.

Enclosed you will find a number of questions relating to your purchasing program with regard to teaching supplies. An attempt has been made to arrange these questions so that you can answer them quickly and easily.

Your cooperation will be sincerely appreciated. Please place the completed form in the return envelope and mail it to me as soon as possible.

Respectfully,

James H. Daniel
3314 Dartmouth
Pasadena, Texas

APPENDIX B

(Sample of questionnaire sent to superintendents of school districts in Texas August 1, 1960)

ROUTINE FOR PURCHASING SCHOOL SUPPLIES

1. What is the title of the person in charge of purchasing for your district?
 - A. Superintendent
 - B. Assistant Superintendent
 - C. Business Manager
 - D. Purchasing Agent
 - E. _____

2. Who is authorized to make purchases which obligate the district?
 - A. Teachers
 - B. Supervisors
 - C. Head Custodian
 - D. Coaches or Athletic Director
 - E. Principals
 - F. Librarians
 - G. Purchasing Officer

3. Who approves payment on invoices?

4. How is the requisition originated?
 - A. Each teacher submits a requisition which is approved by the principal, who submits it for final approval by the purchasing officer.
 - B. Each teacher submits a requisition to the principal who then places the order with the vendor.
 - C. Each principal estimates needs for his building and makes purchases.
 - D. Standard lists are worked out for each grade level and ordered for the district according to enrollment.
 - E. Purchasing officer orders according to needs of the school district as based on past experience without much help from principals or teachers.
 - F. Other (Please elaborate)

5. In your budget preparation, what basis do you use for estimating the cost of teaching supplies?
6. What was the actual amount of money allocated on your 1959-60 budget for teaching supplies?

What per cent of your total operating budget do you estimate the above figure to be?

How much does this amount to for each scholastic, according to your estimated enrollment at the beginning of 1959-60?

7. What unbudgeted money is available for purchasing teaching supplies in your district?
 - A. Pupil Workbook Fees
 - B. Activity funds which are made available for each building principal to use as he deems prudent
 - C. Money derived from profits accumulated from the sale of drinks and sundry items
 - D. Money received as gifts from P.T.A. and/or other parent organizations
 - E. Other (Please elaborate)
8. Does your board policy require you to accept bids on certain teacher supply items?
9. Paper items, rubber bands, blackboard crayon, paper clips, blackboard erasers, duplicator fluid, duplicator master sets, scotch tape and thumb tacks seem to be commonly purchased by some districts.
Did your district ask for bids on any of these items for the year 1959-60?

If your answer is yes, please list one item and its high and low bid.

Item _____	Unit _____
High Bid _____	Low Bid _____
10. Do you normally furnish unsuccessful bidders with reasons for not accepting their bids?
11. Does your policy provide for the exclusion of vendors from your bid list who fail to bid on requested items a number of successive times?
12. Do you remove vendors from your bid list who fail to meet standards of quality, who fail to follow shipping instructions, or who fail to deliver goods on time?
13. Could you please give the specific reason for having dropped a vendor from your bid list?

14. Do you have a centralized system of storage for teaching supply items?
If your answer is yes, please outline briefly your method of supplying teachers with the items you have in storage.
15. Does your board policy allow you to purchase certain items which can be easily stored with a minimum amount of spoilage and which will be needed in a future school year?
If you answered yes, please cite an example of such a purchase.
16. Does your district cooperate with any neighboring district in purchasing items which cost considerably less when bought in mass quantities?
17. Has your district developed a written policy which defines your purchasing routine?
18. Where, in written form, could a copy of your policy covering purchasing routine for teaching supplies be found?
19. During which months are the largest majority of your orders for teaching supplies placed with vendors?
20. Approximately what percentage of your teaching supplies are delivered during the following months?
April _____% May _____% June _____% July _____% August _____%
September _____%
21. Would you please include as many as possible of the following items along with this questionnaire in the return envelope.
- _____ A. A copy of your purchasing policy or documents such as letters and notices to personnel, vendors, etc. which include statements of policy or procedures for obtaining teaching supplies.
 - _____ B. Any information concerning teaching supplies which is available for teachers and/or principals in your district.
 - _____ C. Samples of your requisitions, purchase orders and bid forms.
22. Do you have a unique method of purchasing supplies which assures saving your district money in the long run?
(Please elaborate)

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