A STUDY OF THE METHODS USED IN THE PURCHASING, STORING, BUDGETING, ACCOUNTING, DISTRIBUTING, AND INVENTORYING OF INDUSTRIAL ARTS WOODWORKING MATERIALS IN SELECTED HIGH SCHOOLS IN THE STATE OF TEXAS

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This study was conducted to determine the methods used in the purchasing, storing, budgeting, accounting, distributing, and inventorying of woodworking materials by industrial arts instructors in secondary schools in the state of Texas.

The study was limited to fifty-eight woodworking instructors in geographically dispersed secondary schools in the state of Texas selected from the list of Texas Schools Having Industrial Arts Teachers During 1970-71 provided by the Texas Education Agency.

Data for the study were obtained from a research instrument formulated to provide the needed information. It was mailed to ninety-one instructors. Fifty-eight responses, or 63.7 per cent, were received.

Chapter I includes a statement of the problem, the background and significance of the study, definition of terms, limitation of the study, a review of related studies, source

of data, the procedure used for collection of the data, and an organization of the study. Contained in Chapter II are important facts related to the purchasing, storing, budgeting, accounting, distributing, and inventorying of industrial arts woodworking materials. A study of the methods used in the purchasing, storing, budgeting, accounting, distributing, and inventorying of industrial arts woodworking materials in selected Texas high schools is presented in Chapter III. Chapter IV contains the summary, findings, conclusions, and recommendations of the study.

The following conclusions are presented as a result of the study:

1. In the majority of the cases the instructor was the person essentially responsible for most phases of laboratory operation involving the purchasing, storing, budgeting, accounting, distributing, and inventorying of industrial arts woodworking materials.

2. There was little if any standardization of procedures involved in the purchasing, storing, budgeting, accounting, distributing, and inventorying of woodworking supplies.

3. Since a majority of the instructors did not believe any of these phases of operation took an excessive amount of their time, it was assumed that the majority of the

respondents spend a satisfactory amount of time on actual classroom instruction.

4. The majority of the instructors were conscientious about the collection of money, checking of shop finances, keeping of records, and ordering of supplies in their laboratories.

5. The fact that a majority of the respondents had a salable supplies deficit did not keep students who could not pay for their supplies from enrolling in a woodworking class. This points out the fact that in the majority of the cases no discrimination was made against the poorer students as far as being given an equal educational opportunity in the woodworking laboratories of the participating Texas schools.

6. Unless they have devised a means other than a safety deposit box for the safekeeping of money collected from students druing the day, the majority of the instructors were left with the responsibility of carrying an unknown amount of money on their person for an unknown amount of time each day.

7. A majority of the instructors were given a "carte blanche" as far as collection of money from students and when this money was to be turned into the office or the like.

8. As shown by the responses of the instructors, a majority of the woodworking laboratories in the participating

Texas schools appeared to have adequate purchasing arrangements, inventorying and budgeting system, and shop accounting arrangements.

A STUDY OF METHODS USED IN THE PURCHASING, STORING, BUDGETING, ACCOUNTING, DISTRIBUTING, AND INVENTORYING OF INDUSTRIAL ARTS WOODWORKING MATERIALS IN SELECTED HIGH SCHOOLS IN THE STATE OF TEXAS

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By

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CHAPTER I

INTRODUCTION

An industrial arts teacher often faces frustration when he is confronted with having to adjust to the various methods used by different school systems in the purchasing, storing, budgeting, accounting, distributing, and inventorying of industrial arts woodworking supplies. The industrial arts teacher employed in different Texas cities would soon find that, although basically the same principles are applied, many school systems have adopted a different method for performing each of these procedures. Yet, as Silvius and Curry have stated:

> The teacher must work for industrial efficiency. Accounting for tools, taking and keeping inventories up to date, closing the shop at the end of the school term, and accounting for and controlling the sale of supplies should be done with twentieth century efficiency (10).

Since the industrial arts field has grown so vastly, the problems connected with the aforementioned procedures have also assumed greater proportions. If a well-developed and concise method for performing each of these duties is not employed, the industrial arts teacher is faced with having to

sacrifice the time and effort needed for actual laboratory instruction in directing his attention to the worrisome, yet necessary, details involved in the purchasing, storing, budgeting, accounting, distributing, and inventorying of industrial arts woodworking supplies and materials.

Statement of the Problem

This study was concerned with the methods used in the areas of purchasing, storing, budgeting, accounting, distributing, and inventorying of woodworking materials by industrial arts instructors in the secondary schools in the state of Texas. Relative to the problem, answers to the following questions were sought:

1. What are the most frequently used methods for purchasing industrial arts woodworking materials?

2. What are the practices used by the industrial arts teachers in storing woodworking materials?

3. What are the budgeting policies that the industrial arts instructor must follow?

4. What are the accounting practices confronted by the industrial arts teacher in the various selected Texas schools?

5. What methods are used to distribute woodworking supplies to the students?

6. What practices are used in the inventory of woodworking supplies?

Background and Significance of the Study

Industrial arts in education has progressed considerably since the early twentieth century when Bonser and Mossman defined industrial arts with reference to education as "a study of the changes made by man in the forms of materials to increase their values, and of the problems of life related to these changes" (3).

Although no one person is credited with the development of the industrial arts program, it has been generally established that industrial arts as a significant part of education came into being between 1906 and 1917. It was after World War I that the industrial arts program really began to spread, and only after 1930 that it really grew at a more rapid pace (10).

At first, only a few simple items were used and the cost of these supplies was generally small. Because industrial arts classes entailed the use of few supplies, generally the problems were few. The items used were often limited to clays, construction paper, flour paste, cardboard, and wood. Basketry work involved the use of reeds, rattan, cord, and yarn.

Storage area needed for these products was minimal. Expenses involved in these early industrial arts classes were also nominal, making budgeting of such classes a simple operation. Roullion spoke of classes composed of forty boys and thirty-four girls incurring a total annual expenditure of eighty-four dollars and seventy-eight cents (8).

Presently, the industrial arts laboratory is large and often located in the most accessible area of the school building. Because they have kept trend with the times and expanded in the number of people they serve, industrial arts laboratories now require a wide variety of special materials of increasing cost for effective operation (7). Thus, the industrial arts instructor finds himself with the multiple duties of having to manage and supervise the purchasing, storing, budgeting, accounting, distributing, and inventorying of the materials required to run an efficient industrial arts class.

The methods used for purchasing of materials vary and involve a wide range of needs. A study conducted by Smith in 1927 showed that great diversity of purchasing methods can exist even within one city. Answers received from instructors ranged from statements that the instructor himself made all purchase requisitions based on actual classroom need, to

statements to the effect that the departmental supervisor alone bought all materials without anyone's specific approval or request (11). Such is the case even now, but the purchasing needs are even greater at the present, since the entire field of industrial arts itself has reached greater proportions in the last thirty years.

In distributing materials to his students, an instructor has to choose a determined method for distribution if time is to be utilized well. In general, two methods for getting the distribution accomplished easily are that of using a monitor system or that of using a "student-directed organization" (10). However, with the present and growing volumes of materials used in a woodworking laboratory, practices may vary from distribution of supplies by a shop foreman to random securing of materials by individual students as they find a need for any item. This in turn leads to the question of when the student should pay for materials. Should he pay for them when they are issued to him, should he pay a shop fee, or should he pay for materials when he completes his project and is ready to take it home?

These questions point out the importance of an accurate accounting system. Collection of money from students could

be a time-consuming task if not properly managed. Methods varying from shop tickets to fixed shop fees have been formulated to pay for the materials a student uses within one woodworking course. It has been stated that the ideal situation is one in which the teacher never handles money (12). However, a teacher who has worked in different cities finds that, although most schools have a different accounting system, it is the teacher who invariably handles the money at one time or another. The important thing to remember is to keep accurate records, for it is these records which "protect the teacher against any question concerning financial accounting" (3).

Records also play an important role in the keeping of laboratory inventories. When few materials were used, inventories were simple tasks. Presently, methods used for keeping inventory of supplies are numerous. Random inventory by an instructor leads to inaccuracy. However, where each item is given a code number, an inventory can be conducted easily and can be a useful tool to the instructor in accounting to school officials for all materials and supplies (2). The importance of the inventory also lies in the fact that it enables the industrial arts teacher to know what and how many supplies he has on hand and how much he needs to purchase.

A study of the practices and procedures utilized in handling or dealing with the multiple methods of operation involved in each of these areas was presented. In so doing, an attempt was made to bring to the fore problems confronted by industrial arts instructors throughout the state of Texas in the areas involving the purchasing, storing, budgeting, accounting, distribution, and inventorying of industrial arts supplies.

Definition of Terms

For the purpose of this study, the meaning of certain terms needed clarification. The definition of these terms are as follows:

Materials or supplies are used synonymously and refer to the nonpermanent materials that are used for instructional purposes and are actually consumed in use.

A bill of materials refers to a record of supplies kept by the student and/or instructor of all materials used in the construction of a project.

A project refers to the object the student is constructing in a woodworking class.

An inventory is a detailed survey or record of materials or supplies on hand at a certain time.

A purchasing agent refers to a person in a central office who directs the requisitioning, ordering, and purchasing of materials.

Distribution refers to the issuing of materials to the students.

Accounting refers to the final disposition of funds from the sale of instructional materials.

Methods, as used, refers to the practices or means followed in achieving each of the studied procedures.

Selected high schools refers to high schools chosen from a list of industrial arts teachers compiled by the Texas Education Agency.

Shop bill refers to the total cost of materials which must be paid by the student for construction of a project.

Shop, as used in the study, pertains to the industrial arts woodworking laboratory; shop and laboratory are used synonymously.

Limitations of the Study

Certain limitations were necessary in order to conduct the study. They are as follows:

1. The study was limited to the woodworking area of industrial arts at the secondary school level, 1972.

2. Only the phases of laboratory operation involving purchasing, storing, budgeting, accounting, distributing, and inventorying of industrial arts materials were studied.

3. The study was limited to a selected group of geographically dispersed schools in the state of Texas.

4. It was further limited to fifty-eight responses, or 63.7 per cent of the ninety-one instruments mailed to industrial arts woodworking teachers.

Related Studies

Emerson conducted a study entitled "Problems of Purchasing, Issuing, and Accounting Relating to Supplies Used in Industrial Arts Classes in Oklahoma" in 1940. One of the findings resulting from this study was that in large classes a personnel program which includes provision for student help in issuing materials in the industrial arts shop was considered a necessity (6).

In 1950, Boyd conducted a study entitled "A Study to Develop and Propose a System of Industrial Arts Accounting and Bookkeeping for the Secondary Schools of Fort Worth, Texas." Some of the conclusions drawn are as follows:

1. Records were not kept according to a standard system.

2. Most teachers need further preparation in accounting.

3. Administrators were against collecting the money in the business office of each school.

4. A good system of accounting for industrial arts shops would be one that would enable the instructor to record the desired information with a minimum of time and effort (4).

Anderson's study in 1951 entitled "A Study and Evaluation of Certain Practices of the Financial Administration of Industrial Arts Departments in Class "A" High Schools of Texas" concluded that many different financial systems were being used in the state of Texas. As a result of this study, it was recommended that more teacher preparation during college study was needed in the area of financial administration. Anderson also concluded that persons entrusted with public funds and who are paid by the public are subjected to criticism. He recommended that standards of practices and procedures should be adopted by the Division of Industrial Arts of the Department of Education, and be published in a bulletin available to all industrial arts teachers (1).

A study entitled "Procedures of Industrial Arts Teachers in Providing Supplies in Selected Southern California High Schools" was conducted by Dowley in 1954. The following are some of the conclusions reached as a result of this study:

1. There was a wide range in the size of budgets which were prepared for industrial arts supplies.

2. The majority of industrial arts teachers kept an inventory.

3. Storage facilities were deficient, measured by convenience and adequacy.

4. A large majority of teachers were not satisfied with their distribution system and many of these expected to change their system soon.

5. In general, the accounting for the issuing of supplies required too much of the teacher's time.

6. In the majority of instances, the industrial arts teacher kept the student account records. This responsibility required too much of the teacher's time (5).

In 1956 Rublin presented a study entitled "Methods of Issuing and Accounting for Supplies in Industrial Arts Shops in Washington." Several recommendations made by Rublin are as follows:

1. Teacher education schools should devote a minimum of three class periods per "methods" course to discussion of shop supplies arrangement and account handling.

2. Twenty per cent of the total sum should be levied to the final cost of the student projects in an effort to defray the cost of waste.

3. Supplies disbursement should be handled by student shop foremen or student supply clerks, subject to the instructor's guidance.

4. The office of the purchasing agent should be fully utilized by the industrial arts department.

5. A one dollar tool breakage fee should be levied against each student, with any unused amount returned at the year's end (9).

The related studies presented cut across the purpose of this study, but none provide answers to the subquestions listed under the statement of the problem.

Source of Data

Data for this study were obtained from the following sources:

1. The 1970-71 list of "Texas Schools Having Industrial Arts Teachers" compiled by the Texas Education Agency was used for the selection of the names and addresses of the teachers included in the study (12).

2. An instrument was developed for use in the gathering of data for the study.

3. Information was also gathered from various books, previous research, and periodicals.

Procedures of the Study

The idea for this study originated in the problems faced personally in carrying out the everyday operational procedures essential in the woodworking laboratory.

The following procedures were used to conduct this study:

1. A search was made of studies conducted in Texas and other states which bore relation to the problems faced in the operational procedures encountered in most industrial arts laboratories.

2. A study was made of documented facts pertaining to the purchasing, storing, budgeting, accounting, distributing, and inventorying of materials from various books and magazine articles.

3. The names and addresses of ninety-one industrial arts woodworking teachers were selected from the 1970-1971 list of Texas Schools Having Industrial Arts Teachers. The names and addresses were chosen so as to include geographically dispersed secondary schools in the state of Texas.

4. A letter explaining the nature and purpose of the study was mailed to the selected industrial arts teachers along with an instrument containing a check-and-answer list designed to obtain data necessary to complete the study.

5. The data thus gathered were compiled, analyzed, and presented in tabular form.

6. Corresponding summaries, findings, conclusions, and recommendations were presented from the data collected.

Organization of the Study

Chapter I contains a statement of the problem, the background and significance of the study, definition of terms, limitations of the study, a review of related literature, source of data, the procedure used for the collection of data, and the organization of the study.

A review of important facts related to the purchasing, storing, budgeting, accounting, distributing, and inventorying of materials is presented in Chapter II.

A study of the methods used in the purchasing, storing, budgeting, accounting, distributing, and inventorying of industrial arts woodworking materials in selected high schools in the state of Texas is presented in Chapter III.

Chapter IV contains the summary, findings, conclusions, and recommendations of this study.

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CHAPTER II

IMPORTANT FACTS CONCERNING PURCHASING, STORING, BUDGETING, ACCOUNTING, DISTRIBUTING, AND INVENTORYING OF INDUSTRIAL ARTS MATERIALS

Purchasing

Without materials and supplies an industrial arts woodworking laboratory could not function. The amount of supplies used in woodworking is great and the purchasing of these supplies should be done in an orderly manner so as to avoid confusion and waste of the instructor's valuable time. Several factors to be considered in purchasing materials are as follows:

1. A legitimate reason for requesting supplies and equipment.

2. A thorough description of the items, including name, size, grade, quantity, and quality.

3. Definite specifications.

4. Personal knowledge regarding materials desired.

5. Desirability of ordering supplies on a yearly basis.

6. Desirability of local dealers whenever possible.

7. Analysis of all needs so far as possible, making an allowance for emergencies (9).

Purchasing of materials is a continuing task which can lead to problems if not adequately organized. Three problems which often arise in purchasing of supplies are

1. Determining the kind of materials that will best serve the needs.

2. Setting up proper specifications.

3. Determining the most economical and efficient methods of purchasing (1).

Determining the kind of materials that will best serve the needs is a problem which does not concern the shop teacher alone. It also involves the supervisor, purchasing agent and/or the business office. Selection of supplies should be based on the following:

1. Curricular offerings of the department.

2. Methods of presentation and use to be carried on . . . .

3. Simplicity and ease of use . . . .

4. Uniformity of quality and economy in use (1).

Proper and complete specifications insure the quality of the materials to be purchased. Four steps to be considered in preparing specifications are

1. The aims and objectives of the program.

2. Shop organization and activities selected.

3. Size of rooms and classes.

4. Funds available for purchase (5).

Determining the most economical and efficient methods of purchasing is a problem which involves many factors, and it usually varies with different school districts. There are several methods which are used for purchasing materials. In larger schools a purchasing agent in a central office directs the purchasing of materials. The items are purchased through this central office or purchased with funds placed in accounts by this office for the individual schools. If the decentralized plan is used, each school purchases many, but not all, supplies directly after negotiation for the best prices. In smaller schools, the responsibility for planning and purchasing of supplies is left to the industrial arts instructor with allocation of funds for this program depending on the teacher's need and careful requisitioning. In the large centralized systems, requisition forms are used for ordering the supplies needed. A list of materials is furnished for the teacher, and he in turn selects from this list those materials he needs and the quantity which he needs (7). Which method of purchasing

is selected by a school system depends on which method best serves its needs and the needs of the school and/or class as a whole.

Storing

Storage of woodworking industrial arts materials and supplies is a time-consuming function which all woodworking instructors must face and organize in a way which will insure proper operation and therefore insure effective instruction of students. That adequate storage space is usually not available is further pointed out by Svendsen when he stated, "Inadequate space seems to be a way of life for teachers" (8). Storage of materials affects other phases of the woodworking class in that it also affects the amount of materials which can be purchased, the method of distributing materials, the inventory of materials, as well as safety in the laboratory. In general, the articles for which storage must be provided are as follows:

1. Large materials, such as lumber . . . .

2. The smaller supplies, such as screws, nails, and sandpaper.

3. Paint, varnish, pumice, oils, and other finishing materials.

4. Materials needed for special projects . . . .

5. Materials to be sold to students.

6. Student projects under construction.

7. Teaching aids . . . .

8. Books, pamphlets, catalogs, and other reference materials.

9. The teacher's plans . . . .

10. Records . . . .

11. Teacher's personal clothing, such as his coat, hat, apron, or smock.

12. Students' personal belongings . . . .

13. Salvage material: wire, tin cans, auto parts . . . . (7).

Since it appears that most schools do not have ample storage space, it is the teacher who must use his ingenuity and experience in organizing the space that is available. In organizing for storage, he should keep the following in mind:

1. Security. Loss of supplies through pilfering by students or other school personnel must be safeguarded against through use of locks and supervision.

2. Safety. All stocking of materials must be accomplished in a way which will prevent student injury.

3. Protection. Materials must be stored so as to prevent them from being damaged.

4. Accessibility. Materials should be arranged so as to avoid unnecessary stooping, reaching, reshifting or restocking.

5. Ease of inventory. An organized storage area facilitates inventory in that the amount of supplies on hand can be counted with minimum time and effort (2).

Storage of materials is different everywhere, and it is the instructor who must adjust. Silvius and Curry stated, "There is no standard system that would be satisfactory for storing materials in all shops. The system needs to be tailored to the teaching situation. Each teacher needs to determine the storage facilities needed for his type of shop" (7). What is evident, however, is that proper storing of materials must be accomplished if the woodworking class is expected to be a smooth-running and efficient operation.

Budgeting

Availability of funds for the purchase of woodworking supplies and materials is accomplished in several ways. In larger schools, funds are placed in accounts for individual schools by the central purchasing office for use by the industrial arts program. In some schools, however, funds for use by the industrial arts department are raised through various school projects (7).

The industrial arts instructor has great responsibility in the matter of the budget. If he is to get the funds he

needs for his classes, he must make whoever is responsible for the allocation of funds aware of his needs for the school year. In a survey made to determine those problems which teachers face frequently in industrial arts, the budget ranked high on the list. It was found that "budget allocations place a limit on quality, quantity, and availability of supplies and equipment" (10). The following are suggestions which Jones believed would aid an instructor in getting the funds he needs for supplies and equipment:

1. Tell the school board your aims and how the supplies and equipment contribute to these aims.

2. Display attractive pupil work.

3. Don't be extravagant.

4. Build and repair things for the schools.

5. Adjust projects to supplies on hand.

6. Salvage spoiled material by changing specifications on projects (3).

Since in many school systems the instructor is a major factor in determining the budget for his department, it is important that he be able to estimate how much material is required for the successful operation of his classes. Again, Jones suggested the following in estimating the materials which a class will use in one school term:

1. Estimate from records kept in past.

2. Calculate the material needed from the average per pupil multiplied by the number of pupils.

3. Determine from the course of study what materials the average pupil will need (3).

The major problem concerning budgets is that they are generally too limited. It is extremely important that the industrial arts teacher learn to operate within his budget.

Accounting

The collection of money from students in payment for the materials used in the building of woodworking projects is a chore which can be worrisome. The instructor must, therefore, set up a system for keeping an accurate account of the supplies used by the student. The ideal situation is one in which the instructor can refrain from personally handling any of the money and from delegating this detail to any student. In such a case, it would be better to have the money paid directly to the finance office or to the person designated by the school authorities to handle school funds. Such a procedure would not only eliminate a time-consuming task, but would relieve the industrial arts teacher of any possibility of personal criticism (2).

However, several other methods for the issue and sale of materials are practiced, such as the following:

1. The school provides all of the supplies without charge.

2. Students are required to pay for a portion of the supplies they use.

3. Students are obligated to pay for all of the materials expended.

4. Students are charged a flat fee for the course regardless of the amount of materials consumed (2).

The instructor also needs to decide when to collect money for the use of materials. The student could pay for materials before he starts the project, as each item of material is issued to him, or after he completes his project.

Silvius and Curry discussed four plans for handling funds from sale of materials. Selling all materials from a central store involves the sale of supplies directly to the students. Although it makes the teachers' job easier because he handles no money, the disadvantage to this plan is that students who come to class without their materials must leave during class time to obtain their supplies. The second plan involves the teacher selling materials directly to students from the supply he has purchased for the school term. A receipt is given to the student as he purchases materials, all receipt copies being turned in to the central office by the teacher at regular

intervals. In plan three, numbered material credit cards are sold to students from the school store. When he needs materials, the student gives his card to the teacher and he in turn punches out from this credit card the amount of purchase cost of the material. At terms' end, a refund is made to the student of the amount of credit left on his card. Here again, the teacher handles no money. In plan four the teacher purchases all materials directly from dealers and in turn sells these materials directly to the students. This method places heavy responsibility on the teacher. Receipts must be kept of all transactions (7).

Although instructors would like to do as Minter suggested when he stated, "The shop should be more than just a 'help yourself' establishment where cash is paid and accounts are balanced for privileges of using equipment and materials," (6) it is an impossibility if the instructor is to give his superiors an accurate accounting of all monies involved in running a woodworking class.

Distributing

Distribution of woodworking materials to students can be a wearisome operation which can foreshorten the time which the instructor has alloted for actual teaching. Three techniques

used for dispensing materials to students are: (1) the closed control system, (2) the open control system, and (3) the supervised closed-opened control system (2).

The closed-control system requires that all supplies be kept under lock and key. All items needed by the student must be requested from the teacher. This provides a minimum waste of materials and assures accurate accounting of all materials used. However, it is time consuming to the teacher.

With the open-control system, the students help themselves to what they need when they need it. The advantage of a system such as this is that the teacher has more time for teaching. However, it may lead to poor utilization of materials and poor attitudes on the part of students as to economy and sense of value. It does not work well in systems where the funds available are limited.

The most effective of the three systems has been found to be the supervised close-open control system. With this system, small supplies such as bolts and nails are obtained by the student as the need arises. The larger and more expensive materials are dispensed by the instructor alone. If a student personnel organization is maintained, a supply foreman is responsible for issuing supplies.

Inventorying

An inventory is an invaluable tool to the industrial arts teacher, for it is through the use of an inventory that he is able to ascertain expeditiously and with accuracy two important facts. First, what materials are available to the students at present? Second, what supplies need to be purchased and in what amount? Littrell declared his thoughts on the need for an inventory when he stated, "An annual inventory is of special interest to the administration and is necessary for the teacher since it gives an accounting of equipment and supplies in each room" (4).

An effective inventory can be assured through simplicity and accuracy (2). One method used in large schools in taking inventory is through the use of inventory books containing published lists of supplies used for ordering materials. Columns in these books list all items received. Through periodic review of these lists, the instructor is able to present an accurate inventory of supplies to the administration at regular intervals. Another method is that of using the flexible card system. A card is kept on each item of material, listing how much is on hand, how much was ordered and received, and how much was used or lost, and the dates for all these dealings (7).

Two systems of inventory used by industrial arts instructors are the perpetual system and the periodic system. The perpetual system involves making a record of each item as it is used. It is advantageous in that the teacher usually knows how much he has on hand, how fast his materials are being used, and how much he needs to purchase. One student can be asked to help in recording the materials which have been issued to students, thus relieving the teacher of having to cope with that detail. With the periodic system, a count of supplies is made just before purchasing. A visual inspection is made of each item and the quantity is marked on the available form. A student can aid the instructor in this work (2). Whichever method is used, the inventory of salable supplies and materials should never be neglected.

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CHAPTER III

METHODS USED IN THE PURCHASING, STORING, BUDGETING, ACCOUNTING, DISTRIBUTING, AND INVENTORYING OF INDUSTRIAL ARTS WOODWORKING MATERIALS IN SELECTED TEXAS HIGH SCHOOLS

Contained in Chapter III is a presentation of the data pertaining to the various methods used in the purchasing, storing, budgeting, accounting, distributing, and inventorying of industrial arts woodworking materials in selected high schools in the state of Texas. Of ninety-one instruments mailed, fifty-eight responses, or 63.7 per cent of the total, were received. Thirty-six tables are presented in an attempt to facilitate interpretation of the data collected.

Presented in Table I is the number of woodworking classes taught daily by the respondents. The majority, or 37.9 per cent, of the teachers taught five classes daily. Only four instructors, or 6.9 per cent, taught one woodworking class, and only two, or 3.5 per cent, taught six woodworking classes daily.

TABLE I

NUMBER OF WOODWORKING CLASSES TAUGHT DAILY

Woodworking Classes Taught Daily	Response of Instructors	
	Number	Per Cent
1	4	6.9
2	9	15.5
3	13	22.4
4	7	12.1
5	22	37.9
6	2	3.5
No answer	1	1.7
Total	58	100.0

Table II concerns the average size of woodworking classes taught daily by the respondents. Twenty-four instructors, or

TABLE II

AVERAGE SIZE OF WOODWORKING CLASSES TAUGHT DAILY

Average Size of Class	Response of Instructors	
	Number	Per Cent
10 - 15	9	15.5
16 - 20	24	41.4
21 - 25	16	27.6
26 - 30	7	12.1
31 - 35	1	1.7
No answer	1	1.7
Total	58	100.0

41.4 per cent of the total, taught classes averaging between sixteen and twenty students. Only one teacher taught a class containing more than thirty students. Twenty-three respondents, or 39.7 per cent, taught classes averaging between twenty-one and thirty students. One instructor did not indicate the average number of students in his classes.

Data concerning the practices used in purchasing woodworking salable supplies are presented in Table III. Forty-nine of the respondents, or 76.5 per cent of the total, indicated that it was the woodworking teacher himself who purchased the supplies needed in his laboratory. Six respondents chose more than one answer, bringing the total number of responses to sixty-four. Four of these indicated that a purchasing agent was also involved in purchasing, while one teacher indicated that the department supervisor was involved along with him in the purchasing of supplies. One instructor indicated that a practice other than those listed was used in his school by specifying "purchase orders" as his answer. Only two instructors indicated that the school superintendent and the principal, respectively, were responsible for the purchase of supplies. In the case of ten respondents, or 15.6 per cent of the total, a purchasing agent was responsible for the purchase of supplies.

TABLE III

PRACTICES USED IN PURCHASING WOODWORKING SALABLE SUPPLIES

Practice Listed	Response of Instructors	
	Number	Per Cent
Purchasing agent	10	15.6
School superintendent	1	1.6
Departmental supervisor	2	3.1
Principal	1	1.6
Woodworking teacher	49	76.5
Other	1	1.6
Total	64	100.0

When asked if they considered the amount of paperwork in the purchasing of salable supplies to be excessive, forty-nine of the instructors, or 84.5 per cent, disclaimed an excessiveness, while only nine, or 15.5 per cent, affirmed. Forty-eight teachers, or 82.8 per cent, did not purchase supplies out of their own pocket, while ten, or 17.2 per cent, answered that they did. Fifty-one respondents, or 87.9 per cent, pointed out that students were allowed to furnish their own supplies, while four, or 6.9 per cent, stated that such a practice was not allowed. Three instructors, or 5.2 per cent, did not answer this question. The existence of a standardized list from which to order supplies was not used by forty-five of the instructors, or 77.6 per cent, while twelve

or 20.7 per cent, stated that a standardized list was indeed used to order supplies. One person did not answer this question. Previously drawn specifications with reference to quality which must be met by all materials purchased were not used by eight, or 13.8 per cent, of the respondents; fifty respondents, or 86.2 per cent, however, stated that specifications must indeed be met by all purchased materials.

Table IV presents data concerning the average amount of time used monthly in the purchase of materials. Fourteen of the respondents, or 23.4 per cent, indicated that two hours a month were needed to purchase supplies. Eight instructors,

TABLE IV

AVERAGE AMOUNT OF TIME USED PER MONTH IN PURCHASING MATERIALS

Average Amount of Time	Response of Instructors	
	Number	Per Cent
1 hour	9	15.0
2 hours	14	23.4
3 hours	9	15.0
4 hours	8	13.3
5 hours	4	6.7
6 hours	2	3.3
7 hours	0	0.0
8 hours	6	10.0
Other	8	13.3
Total	60	100.0

or 13.3 per cent, indicated that six hours or more were necessary. Two respondents chose two answers, bringing the total number of responses to sixty. Eight instructors chose an answer other than those listed. Of these, the majority indicated that purchasing was done only once a year and that the time used in the purchasing varied. One teacher indicated that he used a conference period to take students to a lumber yard where each student bought his own materials.

Presented in Table V are data dealing with the requisition forms used in the various schools in the purchasing of woodworking supplies. Thirty-nine of the respondents, or 64 per cent, indicated that a standard requisition form used by their

TABLE V

REQUISITION FORMS USED IN PURCHASING WOODWORKING SUPPLIES

Requisition Forms Used	Response of Instructors	
	Number	Per Cent
Standard system form	39	64.0
Dealer's form	4	6.5
Individual school form	3	5.0
Random teacher form	7	11.4
Other	8	13.1
Total	61	100.0

TABLE VI

PRACTICES USED IN PURCHASING SUPPLIES IN AN EMERGENCY

Practices Used by Instructor	Response of Instructors	
	Number	Per Cent
Purchases with later reimbursement	9	13.8
Purchases and later fills requisition forms	18	27.7
Cannot purchase unless purchasing agent called first	11	16.9
Uses emergency fund set by instructor	5	7.7
Other	22	33.9
Total	65	100.0

The only explanation which can be offered is that possibly one of the instructors did not answer both questions with the same answer. Seven respondents chose more than one answer. This brought the total number of responses to sixty-five. Three instructors indicated that the instructor purchased supplies in an emergency with later reimbursement or later filling out of requisition forms. One instructor stated he purchased with later reimbursement and also used an emergency fund he had set up. Another instructor stated he purchased and later filled out requisition forms plus using an emergency fund he

particular school system was used in purchasing supplies. Only three instructors indicated that an individual school form was used. Eight respondents indicated answers other than those listed, one example being that of placing orders by telephone, another being that of personally purchasing directly from the dealer. Three instructors chose more than two answers from those listed, bringing the total number of responses to sixty-one. Of these three, one instructor stated that both a dealer's form and a random teacher form were used, while a second instructor chose dealer's form as his answer along with an unlisted one. A third instructor declared a standard system form was used plus the use of telephone purchase orders.

Presented in Table VI are data concerning the purchase of supplies in an emergency. Only five instructors, or 7.7 per cent, indicated that an emergency fund set by the instructor was used. Only nine instructors, or 13.8 per cent, indicated that they bought supplies out of their own pocket with reimbursement received at a later date. When questioned previously as to whether or not they ever purchased supplies out of their own pocket, ten respondents, or 17.2 per cent, answered affirmatively. This discrepancy in answers cannot be explained since all responses were re-examined for accuracy.

had set. A third instructor stated he purchased and later filled out requisition forms plus he gave the unlisted answer that he could use the "room's coke fund." The majority of the respondents, or 33.9 per cent, chose answers other than those listed. One such answer was that emergency or not, the instructor must go through channels to obtain the materials needed. Several respondents indicated that an emergency purchase order could be approved by the departmental supervisor, or principal, or school accounting office. One instructor indicated that he could "charge it," while two stated that an activity fund would be used. Several instructors stated that a revolving fund could be used in emergencies. Another instructor revealed that the student needing the material could purchase the materials himself. A unique answer was that of writing a "check off" a bank account provided by the school for the department. In this case, the instructor could use this checking account whenever needed for purchase of materials.

Table VII concerns the methods used to determine the amount of woodworking materials purchased yearly. Twenty-seven respondents, or 42.7 per cent, agreed that the amount of materials purchased yearly was based on an estimation set by the teacher based on previous purchase records. In only

three, or 4.7 per cent, of the cases was the departmental supervisor involved in setting a pre-estimated limit. Five respondents chose two answers, and one chose three answers. This brought the total number of responses to sixty-four. Of these, two stated that a limit was placed by the purchasing agent on the amount of materials purchased yearly, plus also basing the amount on the estimation set by the teacher based on previous records. Another instructor indicated these same two answers plus a limit based on actual need. Yet another instructor indicated that the estimation was based on previous

TABLE VII

METHOD USED TO DETERMINE THE AMOUNT OF MATERIALS PURCHASED YEARLY

Methods Used	Response of Instructors	
	Number	Per Cent
Limit placed by purchasing agent or central office	16	25.0
Pre-estimated limit set by departmental supervisor	3	4.7
Estimation set by teacher based on previous purchase records	27	42.7
Other	18	28.1
Total	64	100.0

records plus actual need at the time. A fifth instructor declared that the amount of materials purchased was determined by a limit placed by the purchasing agent and by amount of money in the revolving fund. Eighteen instructors, or 28.1 per cent of the total, chose answers other than those listed. Of these eighteen, ten indicated that actual need was the determining factor. The rest indicated that their budget or revolving fund determined the amount of purchasing done.

When asked if a limit was placed on the amount of materials that could be purchased for the school year, thirty-eight of the instructors, or 65.5 per cent, said there was a limitation, while twenty, or 34.5 per cent, stated such a limit did exist. Thirty-eight respondents, or 65.5 per cent, disclosed that they were allowed to purchase supplies at the end of the school year for the ensuing school year, while twenty, or 34.5 per cent, indicated that such a practice was not allowed.

Storage practices used in caring for woodworking salable supplies were delved into to determine what facilities, if any, were available to the instructors. When inquiry was made as to whether a storage area for most of their salable supplies existed in their laboratory, fifty instructors, or 86.2 per

cent, stated such an area was available; yet eight instructors, or 13.8 per cent, stated that no such storage area existed.

Contained in Table VIII are data involving storage facilities for laboratory supplies. Forty instructors, or 41.7 per cent, indicated that a store room was provided for their storage of supplies while thirty-five, or 36.5 per cent, stated that a locked cabinet was used for storage. Only two respondents, or 2.0 per cent, stated that no particular area was provided for the storage of their supplies. Thirty-eight of the respondents chose more than one answer, bringing the total number of responses to ninety-six. Of these, twenty-one indicated that both a store room and a locked cabinet were provided

TABLE VIII

STORAGE FACILITIES FOR LABORATORY SUPPLIES

Storage Area	Response of Instructors	
	Number	Per Cent
Locked cabinet	35	36.5
Store room	40	41.7
Open shop area	16	16.7
No particular place	2	2.0
Other	3	3.1
Total	96	100.0

for storage, while eight indicated that in addition to a locked cabinet and a store room, they also used the open shop area for storage of some of their supplies. Three respondents chose three answers from those listed, while two chose four answers and one chose four answers plus an unlisted one. Three respondents, or 3.1 per cent, chose an answer other than one of those listed. One stated that a storage space above his office was used; another indicated that an area above his tool room was used; and the third stated that he used his office along with the open shop area for storage.

The question of whether or not the storage area in the laboratory was conveniently located was asked. Of the respondents, forty-four, or 75.9 per cent, gave an affirmative answer, nine instructors, or 15.5 per cent, gave a negative answer, and five, or 8.6 per cent, gave no answer at all. Twenty, or 30.8 per cent, of those who answered affirmatively disclosed that the storage area was convenient to the service entrance, and forty-five, or 69.2 per cent, stated that the storage area was convenient to the shop area. Eighteen chose two answers, indicating that the storage area was convenient to both the service entrance and the shop area.

When asked if their storage area provided for separation of different types of wood, fifty-one instructors, or 87.9 per cent replied affirmatively, while seven, or 12.6 per cent indicated that no separation for the different types of wood was available. Thirty-one instructors, or 53.4 per cent, pointed out that their storage area provided ample space for wide pieces of wood, while twenty-seven, or 46.6 per cent, stated that no such space was present. Fifty respondents, or 86.2 per cent, indicated that separate storage facilities were provided for smaller supply items such as screws, nails, glue, and sandpaper, while only eight, or 13.8 per cent, denied the availability of these separate facilities. Of the respondents, thirty-eight, or 65.5 per cent, did not allow students in their store room, whereas twenty, or 34.5 per cent, did allow them there.

When inquiry was made as to whether woodworking materials were stored according to any particular system, code, or diagram, thirty-seven of the instructors, or 63.8 per cent, gave a negative answer, while only twenty-one, or 36.2 per cent, indicated that a particular system was employed. Thirty-two instructors, or 55.2 per cent, affirmed having sufficient storage space for all supplies needed for the school year;

however, twenty-six respondents, or 44.8 per cent, denied that sufficient space was available. Of the respondents, thirty, or 51.7 per cent, disclosed that they stored supplies in excess of what was necessary for the school year and twenty-eight, or 48.3 per cent, disclosed that such a practice was not the rule at their school. Forty-one instructors, or 70.7 per cent, reported that no other instructors stored supplies in their store room but themselves, but seventeen, or 29.3 per cent, reported that other instructors did indeed use their store room for storage of other supplies. Use of student assistants to help keep supplies in their store room in order was found to be true in the case of forty-three of the respondents, or 74.1 per cent, while fifteen instructors, or 25.9 per cent, declared that student assistants were not utilized. It was interesting to note that of the respondents, twenty-nine, or 50.0 per cent, declared that their storage facilities were inadequate, while an equal number, or twenty-nine, indicated that their storage facilities were adequate.

Table IX presents data concerning suggestions to remedy inadequate storage facilities. Twenty-five respondents, or 26.6 per cent, disclosed that a larger storage area would remedy storage inadequacies; fourteen, or 14.9 per cent,

TABLE IX

FACILITIES SUGGESTED TO REMEDY INADEQUATE STORAGE FACILITIES

Remedy Suggested	Response of Instructors	
	Number	Per Cent
Individual storage space	13	13.8
New location	8	8.5
Larger size	25	26.6
Smaller size	0	0.0
Separate storage	8	8.5
Cabinet space	14	14.9
No answer	26	27.7
Total	94	100.0

indicated that cabinet space was needed, while eight, or 8.5 per cent, stated that a new location or separate storage, respectively, would help. Twenty-six of the instructors, or 27.7 per cent, indicated that they had no answer to the problem. Eighteen respondents chose multiple answers to this question. This brought the total number of responses to ninety-four. Eleven of these eighteen respondents indicated that both individual storage space and a larger storage area would help; twelve indicated that the two afore-mentioned factors plus cabinet spaces would provide more adequate storage facilities. Six respondents indicated that a new location needed to be

included as a remedying factor, while seven included separate storage space along with their other answers.

An effort was made to determine the budgeting policies confronted by instructors in the various schools. When asked if a fixed annual budget for the purchase of salable supplies was established at their schools, thirty-nine, or 67.2 per cent, indicated that no such budget existed. Only sixteen, or 27.6 per cent, disclosed that such a budget did exist, while three, or 5.2 per cent did not respond.

Table X contains data pertaining to the approximate annual budget alloted for woodworking salable supplies. Fourteen, or

TABLE X

APPROXIMATE ANNUAL BUDGET FOR SALABLE SUPPLIES

Approximate budget	Responses of Instructors	
	Number	Per Cent
$ 50 - 149	0	0.0
150 - 299	1	1.7
300 - 499	13	22.0
500 - 1000	14	23.7
No answer	8	13.7
Other	23	38.9
Total	59	100.0

23.7 per cent, pointed out that their annual budget ranged between five hundred and one thousand dollars, and thirteen,

or 22.0 per cent, indicated their budget ranged between three hundred and five hundred dollars. One instructor chose two answers, stating that three hundred dollars was the budget and then specified, under other answer, that he meant three hundred dollars per class. Only one, or 1.7 per cent, revealed that their budget was between one hundred and fifty and two hundred and ninety-nine dollars. There were no budgets under one hundred and forty-nine dollars. Eight, or 13.7 per cent, gave no answer. Twenty-three, or 38.9 per cent, gave an answer other than those listed. Of these twenty-three respondents, five indicated that their budget ranged between one thousand and fifteen hundred dollars; five declared the budget between fifteen hundred and two thousand dollars; one respondent indicated the budget was allotted three hundred dollars per class; one instructor declared twenty-six hundred dollars were allotted for five classes; another instructor disclosed that four thousand dollars were alloted for seven high school and two college classes; one respondent indicated his budget was twenty-nine hundred dollars; and nine respondents declared that the budget was based on need.

Data pertaining to the factors which determine the department's budget are presented in Table XI. Eleven of the respondents, or 18.4 per cent, indicated that a fixed amount set for

TABLE XI

FACTORS WHICH DETERMINE THE DEPARTMENT BUDGET

Determining Factors	Response of Instructors	
	Number	Per Cent
Fixed amount for each student enrolled	11	18.4
Lump sum allocation	10	16.7
Previous annual budget	20	33.3
No answer	2	3.3
Other	17	28.3
Total	60	100.0

each student enrolled was the determining factor in the budget, whereas ten, or 16.7 per cent, declared that the determining factor was a lump sum allocation. A majority of twenty respondents, or 33.3 per cent, stated that a previous annual budget was the essential factor. Only two, or 3.3 per cent, had no answer. However, seventeen instructors, or 28.3 per cent, had an answer other than those listed. Of these seventeen respondents, ten declared that actual need determined the department's budget, one stated no budget was allocated, and another declared shop fees were the determining factor. Other factors revealed are as follows: anticipated enrollment, administrative decisions, current school district budget, and budget sheets prepared at the school year's end. One respondent

answered with "none." Two instructors chose more than one answer, bringing the total number of responses to sixty. Both declared that the determining factors were a previous annual budget plus a fixed amount for each student enrolled.

When asked if they checked the financial status of their woodworking laboratory, forty-nine instructors, or 84.5 per cent, indicated that they did. Two instructors, or 3.4 per cent, did not give an answer. However, seven respondents, or 12.1 per cent, did reply that they did not check the financial status of their laboratory.

Table XII presents data concerning the frequency with which the financial status of the woodworking laboratory is

TABLE XII

FREQUENCY OF CHECKING FINANCIAL STATUS OF LABORATORY

Frequency of Financial Check	Response of Instructors	
	Number	Per Cent
As needed	20	30.3
Regularly	20	30.3
Upon request	4	6.0
Annually	12	18.1
No answer	5	7.6
Other	5	7.6
Total	66	100.0

checked. Twenty respondents, or 30.3 per cent, stated that they checked on finances as needed and an equal number, or twenty, stated that they checked on finances regularly. Five instructors, or 7.6 per cent, did not answer the question. Only four respondents, or 6.1 per cent, checked shop finances upon request, and twelve, or 18.1 per cent, checked finances annually. Five respondents,or 7.6 per cent, did not answer this question. Five, or 7.6 per cent, had an answer other than those listed. Of these five respondents, two stated that the "school" and not the instructor checked on the financial status of the laboratory. One instructor stated that he checked finances semi-annually; another stated he checked finances at the end of each school year, and yet another stated he checked finances at all times to keep records as exact as possible. Seven instructors gave more than one answer. Three stated that they checked finances both regularly and as needed. One chose the aforementioned two answers plus adding a financial check upon request, too. This brought the total number of responses to sixty-six. Three chose the annual check for their answer along with a regular check, a check as needed, and a check upon request, respectively. One instructor chose a regular financial check

for his answer along with the statement that he kept his records as exact as possible at all times.

In answer to the inquiry as to whether or not they had ever experienced a salable supplies deficit, thirty-five respondents, or 60.3 per cent, indicated that they had; twenty instructors, or 34.5 per cent, declared that they had not experienced such a deficit, while three respondents, or 5.2 per cent, gave no answer at all to this question.

Data on the management of a salable supply deficit are presented in Table XIII. A majority of thirty-one respondents,

TABLE XIII

MANAGEMENT OF SALABLE SUPPLY DEFICIT

Management Methods Used	Response of Instructors	
	Number	Per Cent
School absorbs the expense	31	51.7
Cost of student projects is hiked	13	21.7
Instructor must make up deficit	2	3.3
No answer	4	6.7
Other	10	16.6
Total	60	100.0

or 51.7 per cent, indicated that the school system absorbed the expense if a deficit was experienced. In thirteen of the

cases, or 21.7 per cent, hiking the cost of the student project was named as the remedy for the deficit. Four respondents, or 6.7 per cent, did not answer this question. Only two instructors, or 3.3 per cent, declared that they had to personally make up the deficit. Two instructors chose two answers each, bringing the total number of responses to sixty. In both of these cases, the instructors indicated that they hiked the cost of the student's projects and also that the school absorbed the expense of a deficit. Ten respondents, or 16.6 per cent, gave an answer other than those listed. Of these ten respondents, six indicated that the deficit was carried over to the ensuing year and an attempt was made to make up or balance out the deficit. Two instructors indicated once more that they had experienced no deficit. One instructor indicated that the industrial arts budget absorbed the deficit, while yet another instructor declared that the deficit percentage was figured from all the material bills and that each student was charged a per cent of the deficit on his bill.

When an inquiry was made as to whether or not a profit was usually made from salable supplies, forty-two respondents, or 72.4 per cent, replied that no such profit was made. However, sixteen respondents, or 27.6 per cent, disclosed that such a profit did indeed exist.

Table XIV presents data dealing with the various methods with which a salable supplies profit is managed. Twenty-six respondents, or 44.8 per cent, did not answer this question. Only twelve instructors, or 20.7 per cent, indicated that any

TABLE XIV

METHODS OF MANAGING PROFITS FROM SALABLE SUPPLIES

Management of Salable Supply Profit	Response of Instructors	
	Number	Per Cent
Amount is absorbed into school district fund	10	17.2
Surplus is spent on needed laboratory equipment	12	20.7
No answer	26	44.8
Other	10	17.3
Total	58	100.0

profit monies were spent on needed laboratory materials and equipment. Ten respondents, or 17.3 per cent, had answers other than those listed. Of these ten respondents, four stated once more that no profit was made, while one mentioned that little or no profit was ever made. Two instructors stated that profits were used to make their accounts balance, while two other respondents stated that if any profit was made, the money

was carried over to the ensuing year's industrial arts budget for future use.

When inquiry was made as to whether or not a record was kept of the money spent ordering salable supplies, fifty-seven, or 98.3 per cent, of the respondents gave an affirmative answer. Only one respondent, or 1.7 per cent, did not answer this question.

Presented in Table XV are the data pertaining to the type of budget provided in the schools selected. Thirty instructors,

TABLE XV

TYPE OF BUDGET PROVIDED IN THE SCHOOL

Type of Budget	Response of Instructors	
	Number	Per Cent
Fixed yearly budget	30	51.7
Flexible budget changed according to need	20	34.5
Other	8	13.8
Total	58	100.0

or 51.7 per cent, indicated that their's was a fixed yearly budget, and twenty instructors, or 34.5 per cent, indicated that they had a flexible budget changed according to need. Eight instructors, or 13.8 per cent, chose an answer other

than one of those listed. Of these eight instructors, four indicated that they had no budget for salable supplies. One instructor indicated that the budget was based on need, if the need could be justified. One instructor stated that the industrial arts department was provided a certain amount per student, but did not indicate the amount, while another instructor indicated that three dollars per student were provided. Yet another instructor indicated that a miscellaneous expense budget was provided for his department.

Forty-seven respondents, or 81.0 per cent, indicated that a separate budget was kept for maintenance of equipment, emergency requirements, and non-salable supplies; ten instructors, or 17.3 per cent, stated that in their case no such separate budget existed. One instructor, or 1.7 per cent, did not answer this inquiry. When asked if they were allowed to exceed the yearly budget as far as ordering salable supplies for their laboratory, twenty-eight instructors, or 48.3 per cent, disclosed that such a practice was allowed. However, twenty-one instructors, or 36.2 per cent, indicated that they were not allowed to exceed their yearly budget. Nine respondents, or 15.5 per cent, did not give a reply.

Data pertaining to the approximate yearly expenditures for supplies and materials are presented in Table XVI. A majority of twenty instructors, or 41.4 per cent, disclosed that their yearly expenditures ranged between six hundred and one thousand dollars. There were no yearly expenditures under

TABLE XVI

APPROXIMATE YEARLY EXPENDITURES FOR SUPPLIES AND MATERIALS

Yearly Expenditures	Response of Instructors	
	Number	Per Cent
$ 10 - 99	0	0.0
100 - 199	3	5.2
200 - 399	1	1.7
400 - 599	10	17.2
600 - 1000	24	41.4
No answer	1	1.7
Other	19	32.8
Total	58	100.0

ninety-nine dollars. Only four respondents, or 6.9 per cent, claimed their expenses ranged between one hundred and three hundred ninety-nine dollars. Nineteen instructors, or 32.8 per cent, chose an answer other than those listed. The following are the answers given instead: two instructors stated their expenditures ranged between seven hundred and one thousand dollars; two stated their expenses were slightly above

one thousand dollars; seven stated their expenses ranged between fifteen hundred and two thousand dollars; six stated their expenses were between twenty-one hundred and three thousand dollars; one stated his expenses were based on what was needed and did not indicate an amount; a last one indicated he had no budget and did not indicate the amount of expenses incurred by his laboratory.

Methods of accounting, with reference to woodworking salable supplies, used by the industrial arts woodworking teachers who participated in the study were also delved into in an effort to see just what practices were being used.

Table XVII is comprised of data regarding the practices used in the collection of money and keeping of receipt books

TABLE XVII

PRACTICES USED IN COLLECTION OF MONEY AND KEEPING OF RECEIPT BOOKS

Person Responsible	Response of Instructors	
	Number	Per Cent
Instructor	52	76.5
Student assistant	1	1.5
Clerk in administration office	6	8.8
Clerk in principal's office	9	13.2
Other	0	0.0
Total	68	100.0

in the woodworking laboratory. A majority of fifty-two respondents, or 76.5 per cent, disclosed that they were the only persons responsible for the collection of money and keeping of receipt books. Only one instructor, or 1.5 per cent, stated that a student assistant helped him in these matters. Fifteen respondents, or 22.0 per cent, indicated that a clerk in either the administration office or principal's office had anything to do with collection of money and keeping of receipt books. Eight instructors chose two answers each and one instructor chose three answers to this question. This brought the total number of responses to sixty-eight. Of these, four stated that they were responsible and also received help from the clerk in the principal's office. Three stated that they were responsible, but also mentioned that the clerk in the administration office was involved. One instructor, as mentioned, stated that he had a student assist him. The one instructor who chose three answers indicated that he was responsible for collection of money and keeping of receipt books, but he also included the clerks in both the administration office and in the principal's office as having a share in this responsibility.

Data regarding which materials students were required to pay for are presented in Table XVIII. Forty instructors, or

TABLE XVIII

MATERIALS STUDENTS ARE REQUIRED TO PURCHASE

Materials Purchased	Response of Instructors	
	Number	Per Cent
All materials used	40	66.7
Only finished project taken home	8	13.3
Only items such as lumber and finishing materials	8	13.3
Other	4	6.7
Total	60	100.0

66.7 per cent, declared that students were required to pay for all materials used. Eight instructors, or 13.3 per cent, indicated that the students were required to pay for only such items as lumber and finishing materials. Four respondents had answers other than those listed. Of these four respondents, one indicated that students were required to pay for the total project plus 10 per cent for waste, while another indicated that his students must pay for the lumber in addition to paying a shop fee. A third instructor stated that students must pay for lumber plus a little more for sandpaper. The fourth instructor stated students were required to pay for the lumber and for metal if any was used in the project. Two respondents chose more than one answer to this question, bringing the total

number of responses to sixty. One instructor indicated that his students were required to pay for both the finished project taken home and for items such as lumber and finishing materials. A second instructor stated that students needed to pay for lumber and finishing materials along with having to pay a shop fee.

When asked if they allowed students to take projects home before paying for them, thirty-five respondents, or 60.3 per cent, indicated that they did not. Twenty-three respondents, or 39.7 per cent, revealed that they did indeed allow students to take projects home before the students had paid for them.

Table XIX contains data which concerns the practices used by students in the payment of their bills. Thirteen respondents, or 20.3 per cent, indicated that students must pay for materials before they were used, while only eleven respondents, or 17.2 per cent, indicated that quarterly or weekly payments were acceptable. The majority, or 35.9 per cent, indicated that students must pay their bill in full when the project was completed. Only three instructors, or 4.7 per cent, indicated that students could pay their bills in installments after the project was completed. Fourteen respondents, or 21.9 per cent

TABLE XIX

METHODS USED FOR PAYMENT OF STUDENT MATERIALS BILLS

Payment of Bills	Response of Instructors	
	Number	Per Cent
Before materials are used	13	20.3
In full, when project is completed	23	35.9
Specific times, as weekly or quarterly	11	17.2
In installments after project completion	3	4.7
Other	14	21.9
Total	64	100.0

had an answer other than those listed. Of these fourteen respondents, four stated that students paid their bills as and/or when they could, while three stated that students paid their bills at the end of the school year. The following are some of the other answers received: at mid-term and end of year; at end of each semester; before credit can be received; before grades are released; balance over the ten dollars deposit is due before taking project home; at first of year and as year goes on if more is needed; in installments during progress of project; three dollars shop deposit is charged and collected any time it is offered. Three instructors chose two answers and one instructor chose four answers. This brought

the total number of responses to sixty-four. Of these, one instructor stated that students could pay for materials before they were used or in full when the project was completed, while another instructor stated students could pay in full when project was completed or at specific times such as weekly or quarterly. One instructor stated his students should pay before materials were used if the woods were expensive, or in full when the project was complete, or weekly or quarterly, or added that they could pay in installments during progress of the project. Another instructor indicated that students had to pay an initial fee before materials were used and all amounts over the initial fee were due before grades would be released.

When asked what procedures were followed when a student's bill remained unpaid, forty-one respondents, or 54.0 per cent, indicated that the student's grade was withheld, while twenty-five respondents, or 32.9 per cent, indicated that the student's project was retained. Four instructors, or 5.3 per cent, indicated that an unpaid bill was simply considered a loss; one instructor, or 1.3 per cent, did not give an answer. In none of the cases was a student suspended for not paying his bill. One respondent, or 1.3 per cent, indicated that a student's grade was never withheld. Yet one more respondent, or 1.3

per cent, declared that a student's project was never retained. Three instructors, or 3.9 per cent, had an answer other than one of those listed. Of these three instructors, one declared that he made an attempt to sell the project to someone else; a second instructor disclosed that the principal and the student made a private agreement with regards to when and how the bill would be paid; a third instructor stated that he did not give a student his final exam until he had paid his bill. Sixteen instructors chose two answers from those listed, while one instructor chose three answers from those listed. Fifteen, of the sixteen instructors who chose two answers, indicated that they withheld both the student's grade and his project if the student did not pay his bill; one instructor indicated that the student's grade was withheld and the unpaid bill was considered a loss. The instructor who chose three answers indicated that when a student did not pay his bill, his grade and project were withheld and the unpaid bill was considered a loss.

When asked if students were allowed to enroll in class even if they were unable to pay for materials, forty-three respondents, or 74.2 per cent, indicated that such students were indeed allowed in woodworking laboratory. However, thirteen respondents, or 22.4 per cent, disclosed that such

students were not permitted in the class. Two instructors, or 3.4 per cent, did not answer this question. An inquiry was made as to whether or not any student accounts remained unpaid. Thirty-one respondents, or 53.5 per cent, indicated that some student accounts did remain unpaid, while twenty-five respondents, or 43.1 per cent, indicated that no accounts ever remained unpaid. Two instructors, or 3.4 per cent, did not answer this question.

When questioned, fifty-six respondents, or 96.6 per cent, indicated that students were required to make a bill of materials; only two instructors, or 3.4 per cent, disclosed that students were not required to make a bill of materials. In response to the question as to whether instructors kept a copy of the student's bill of materials, forty-two instructors, or 72.4 per cent, answered in the affirmative, while fifteen or 25.9 per cent, answered negatively. One instructor, or 1.7 per cent, did not answer this question. When the instructors were asked if they sold materials at cost, thirty-one instructors, or 53.5 per cent, stated that they did and twenty-seven instructors, or 46.5 per cent, stated that they did not.

Whether or not shop tickets were used in their schools was another question asked. Forty-six respondents, or 79.3 per cent, disclosed that shop tickets were not used; however, twelve instructors, or 20.7 per cent, indicated that shop tickets were indeed used. Thirty-two instructors, or 55.2 per cent, stated that a laboratory fee was collected from all students; however, twenty-six, or 44.8 per cent, disclosed that no laboratory fees were collected from students.

When inquiry was made as to whether a safety deposit box was available in the shop area for safe keeping of money collected from students, forty-seven instructors, or 81.0 per cent, disclosed that no such safe box existed; only eleven instructors, or 19.0 per cent, indicated that a safety deposit box was available. When asked, fifty-two respondents, or 89.7 per cent, stated that they did indeed collect money during class time. Only six instructors, or 10.3 per cent, stated that they collected no money during class time.

Presented in Table XX are data concerning the approximate amount of class time used weekly in the keeping of student materials records. Twenty respondents, or 36.2 per cent, indicated that only two per cent of class time was needed weekly in the keeping of these records. Twenty-six respondents, or

TABLE XX

APPROXIMATE AMOUNT OF CLASS TIME USED WEEKLY IN KEEPING STUDENT MATERIALS RECORDS

Amount of Class Time	Response of Instructors	
	Number	Per Cent
2%	21	36.2
5%	15	25.9
10%	11	19.0
20%	2	3.4
50%	0	0.0
No answer	4	6.9
Other	5	8.6
Total	58	100.0

44.9 per cent, indicated that the amount of class time used in keeping student records ranged from 5 to 10 per cent. Only two instructors, or 3.4 per cent, indicated it took 20 per cent of class time a week for record keeping. Four instructors, or 6.9 per cent, did not indicate an answer. Five instructors, or 8.6 per cent, gave an answer other than those listed. Of these five instructors, two indicated that they did not use class time at all for record keeping, while one stated he utilized five minutes per class to this process. Another instructor stated he used approximately 8 per cent of class time on a per year basis for keeping of records. One instructor indicated that he dedicated time to record keeping every six weeks, but he did not indicate the amount of time.

Data concerning the approximate amount of time required daily for the keeping of material records are presented in Table XXI. A majority of thirty-four respondents, or 58.6 per cent, disclosed that it took them approximately thirty

TABLE XXI

APPROXIMATE AMOUNT OF TIME REQUIRED DAILY IN KEEPING MATERIALS RECORDS

Amount of Time	Response of Instructors	
	Number	Per Cent
30 minutes	34	58.6
1 hour	7	12.0
2 hours	2	3.5
3 hours	0	0.0
4 hours and longer	0	0.0
No answer	2	3.5
Other	13	22.4
Total	58	100.0

minutes daily to keep materials records. Only nine instructors, or 15.5 per cent, indicated that it took over one hour to keep records. There were no respondents who indicated it took three hours or more daily to keep records. Two respondents, or 3.5 per cent, gave no answer. Thirteen respondents, or 22.4 per cent, gave an answer other than those listed. Of these thirteen respondents, six indicated that they did not spend any time at all daily for record keeping, while four

indicated that it took them between ten and fifteen minutes daily. One instructor stated it took him approximately four hours a year to keep records; two other instructors stated they spent time on records whenever they received money but did not indicate the amount of time used doing it.

Table XXII presents data concerning the frequency with which the instructor must turn money collected into the office.

TABLE XXII

FREQUENCY WITH WHICH MONEY MUST BE TURNED INTO OFFICE

Frequency	Response of Instructors	
	Number	Per Cent
Daily	10	16.9
Weekly	7	11.9
Monthly	3	5.1
No answer	1	1.7
Other	38	64.4
Total	59	100.0

Ten respondents, or 16.9 per cent, stated they turned money in daily, while seven respondents, or 11.9 per cent, stated they must turn money in weekly. One instructor did not respond to this question. Thirty-eight instructors, or 64.4 per cent, had an answer other than those listed. Of these thirty-eight respondents, eleven stated that they could

turn money into the office at any time, while six indicated they turned it in as it was collected. Five instructors stated they had nothing to do with collection of money, as money was collected from students at the office. Four instructors stated they turned money in whenever they had it. The following are the various other answers received as to when money was turned into the office: when there is a need; whenever necessary, usually when collection exceeds one hundred dollars; when needed for safekeeping; required at end of year but turned in one hundred-dollar increments as collected; whenever sizable amount collected; whenever over five dollars are collected; deposited in bank whenever necessary. One instructor chose two answers, bringing the total number of responses to fifty-nine.

Presented in Table XXIII are data concerning the methods used for collection of money from students. Thirty-nine respondents, or 61.9 per cent, indicated that the money was turned into the office whenever a sizable amount was collected. Thirteen instructors, or 20.6 per cent, indicated that the money was collected by the teacher and turned into the office at the end of each day. One instructor, or 1.6 per cent, indicated that the money was collected and kept by the teacher until the end of the semester. Two respondents, or 3.2 per

TABLE XXIII

METHODS USED FOR COLLECTION OF MONEY FROM STUDENTS

Methods Used	Response of Instructors	
	Number	Per Cent
Collected and kept by teacher until end of semester	1	1.6
Collected by teacher and turned into office at end of day	13	20.6
Turned into office whenever sizable amount is accumulated	39	61.9
No answer	2	3.2
Other	8	12.7
Total	63	100.0

cent, did not answer this question. Eight instructors, or 12.7 per cent, had an answer other than those listed. Of these eight instructors, five indicated once more that all money was collected at the office, while one instructor indicated the money was turned into the office weekly. Another instructor stated that money was collected and kept for deposit in the bank. Yet another instructor stated that a clerk in the principal's office collected money and issued shop cards to the students. Two instructors chose two answers from those listed, while one instructor chose four answers from those

listed. This brought the total number of responses to sixty-three. Of the instructors who chose two answers, both indicated that they collected the money from the students and turned it into the office at the end of the day or turned it into the office whenever a sizable amount was collected. The instructor who chose four answers indicated that either of the three choices listed could apply in his case and in addition stated that the ideal answer would be to turn in all the money collected into the office at the end of each day.

Data concerning the disposition of money collected from students are presented in Table XXIV. Thirty-five respondents,

TABLE XXIV

DISPOSITION OF MONEY COLLECTED FROM STUDENTS

Disposition of Money	Response of Instructors	
	Number	Per Cent
Placed in general fund and not available to the teacher	15	25.9
Placed in shop fund and drawn upon as needed	35	60.3
No answer	1	1.7
Other	7	12.1
Total	58	100.0

or 60.3 per cent, indicated that money collected from students was placed in a shop fund and drawn upon as needed. In the case of fifteen respondents, or 25.9 per cent, the money collected was placed in a general fund and was not available to the teacher. One instructor, or 1.7 per cent, did not answer the question. Seven instructors, or 12.1 per cent, chose an answer other than those listed. Of these seven instructors, two disclosed that the money was placed in a general fund and was available to the teacher when needed: another instructor stated that the money was placed in a general industrial arts fund for the entire school district; a third instructor declared that the money was placed in an activity fund; yet another instructor stated that the money was placed in a revolving fund in a banking account; the seventh instructor stated the money was turned into the office and from there it was sent to the administration building.

An inquiry was made as to whether or not a breakage fee was required from students. Only six respondents, or 10.3 per cent, stated that a breakage fee was required. Forty-eight, or 82.8 per cent, disclosed that no such fee was required from students. Four instructors, or 6.9 per cent, did not answer this question.

Table XXV contains data regarding the management of shop fees and breakage fees. Surprisingly, twenty-one instructors, or 36.2 per cent, did not answer this question. Eighteen respondents, or 31 per cent, declared that the fees were absorbed

TABLE XXV

MANAGEMENT OF SHOP AND BREAKAGE FEES

Management of Fees	Response of Instructors	
	Number	Per Cent
A refund is made of unused amount	4	6.9
Fee is carried into next term	3	5.2
Fee is absorbed into district's general fund	18	31.0
No answer	21	36.2
Other	12	20.7
Total	58	100.0

into the district's general fund, while only four, or 6.9 per cent, indicated that a refund was made of the unused amount collected from fees. Twelve respondents, or 20.7 per cent, gave an answer other than those listed. Of these twelve respondents, ten indicated that no shop or breakage fees were collected from students. One instructor indicated that any unused fees were applied to the cost of the last project made

by the students. Another instructor stated that unused fees were placed in the general shop fund.

Presented in Table XXVI are data which concern the financial management of the materials wasted in the process of construction of projects by students. Twenty-six instructors,

TABLE XXVI

METHODS USED IN MANAGEMENT OF WASTE MATERIALS

Management Methods	Response of Instructors	
	Number	Per Cent
A percentage is charged on shop bill	26	44.8
Flat amount is charged to shop bill	7	12.1
Waste is ignored	3	5.2
Compensation is made by marking up price of project	18	31.0
Other	4	6.9
Total	58	100.0

or 44.8 per cent, declared that a percentage was charged on the shop bill to pay for any waste materials. Eighteen instructors, or 31.0 per cent, indicated that compensation for waste materials was made by marking up the price of the project. Only three instructors, or 5.2 per cent, stated that waste was ignored. Four respondents, or 6.9 per cent, chose an answer

other than those listed. Of these four instructors, three stated that students bought the lumber piece by piece, paying for all the lumber whether waste resulted or not. The fourth instructor stated that compensation was made by charging 10 per cent over the cost of the material.

Table XXVII presents data dealing with the various forms or books used in accounting for salable supplies. Twenty-six

TABLE XXVII

METHODS USED FOR ACCOUNTING OF SALABLE SUPPLIES

Methods Used	Response of Instructors	
	Number	Per Cent
Receipt books	26	30.2
Bill of materials	24	27.9
Shop record book	20	23.3
No record kept	4	4.7
Student planning sheet	8	9.3
School required form	1	1.2
Other	3	3.4
Total	86	100.0

respondents, or 30.2 per cent, indicated that they used receipt books, while twenty-four respondents, or 27.9 per cent, disclosed that they employed a bill of materials. Twenty instructors, or 23.3 per cent, indicated they used shop record books. Only one instructor, or 1.2 per cent, indicated that a form

required by the school was used. Four instructors, or 4.7 per cent, indicated that no record was kept. Three instructors, or 3.4 per cent, chose answers other than those listed. Of these three instructors, one stated he used his own form, while another stated that he used a school requisition form. The third instructor stated that he used a "materials form" but did not elaborate any further. Eleven instructors chose two answers from those listed, and three instructors chose three answers; three instructors chose four answers each. This brought the total number of responses to eighty-six.

Data concerning the procedures followed when shop supplies are used by other departments are presented in Table XXVII. Twenty-three instructors, or 39.0 per cent, indicated that a charge was made to the corresponding department and the bill was settled at the office. Eighteen respondents, or 30.5 per cent, stated that a charge was made to that particular department and payment for supplies used was expected immediately. Only nine, or 15.3 per cent, stated that the bill was charged off to a loss. One instructor had no answer. Eight instructors, or 13.5 per cent, gave an answer other than those listed. Of these eight instructors, three indicated that use of laboratory supplies by another department was not allowed, while

TABLE XXVIII

PROCEDURES FOLLOWED FOR USE OF INSTRUCTIONAL SUPPLIES BY OTHER DEPARTMENTS

Procedure Followed	Response of Instructors	
	Number	Per Cent
Charge is made to particular department and payment is expected immediately	18	30.5
Charge is made to department and bill settled at office	23	39.0
Bill is charged off to loss	9	15.3
No answer	1	1.7
Other	8	13.5
Total	59	100.0

two others stated that a shop bill was presented to them the same as was presented to students. One instructor stated he traded his shop materials for materials of equal worth from the other departments. Two instructors stated that payment for supplies was expected before they were taken or used by any other department. One instructor chose two answers, bringing the total number of responses to fifty-nine.

Table XXIX contains data regarding the procedures followed with students who cannot afford to pay for shop materials. Twenty-five respondents, or 41.0 per cent, indicated that

TABLE XXIX

PROCEDURES FOLLOWED WITH STUDENTS WHO CANNOT PAY FOR SHOP MATERIALS

Procedure Followed	Response of Instructors	
	Number	Per Cent
Student is allowed to make project paid for by a school organization or a teacher	25	41.0
Student is not allowed to enroll in shop class	7	11.5
Student is allowed to enroll free of charge	11	18.0
No answer	3	4.9
Other	15	24.6
Total	61	100.0

students who could not pay for shop materials were allowed to construct a project with the shop bill being paid for by a school organization or another teacher. Only seven instructors, or 11.5 per cent, disclosed that students unable to pay for materials were not allowed to enroll in the class. Three instructors did not answer this question. Fifteen respondents, or 24.6 per cent, chose an answer other than those listed. Of these fifteen respondents, two indicated that the school absorbed the cost; two declared that the student could sell the project in order to pay the bill; and two stated that they had never had the experience of knowing a student who could not

afford to pay his shop bill. The following are the other answers received from the instructors in answer to what means were provided in case a student could not pay his bill: the student builds a project for the physical education department or the like; the student enrolls but does not work; the student is encouraged to build a very small project; the industrial arts teacher and best students build a project for profit and pay the bill; the teacher salvages material from a lumber company which the student can use; the student builds a project on order, usually making a profit from which he pays his bill; the student's shop bill is paid by anyone who would like to help out; the expense is eventually made up by the other students; the student is allowed to "work it out"; the student can build a project paid for by the school or someone else. Three instructors chose two answers each, bringing the total answers received to sixty-one.

Data concerning the approximate number of student accounts which remain unpaid at the end of the school year are presented in Table XXX. A majority of twenty-three respondents, or 39.7 per cent, indicated that 2 per cent of student accounts remained unpaid. Only one instructor, or 1.7 per cent, disclosed that 20 per cent of student accounts remained unpaid. Three

TABLE XXX

APPROXIMATE PERCENTAGE OF STUDENT ACCOUNTS WHICH REMAIN UNPAID AT END OF SCHOOL YEAR

Percentage	Response of Instructors	
	Number	Per Cent
2%	23	39.7
5%	9	15.5
10%	4	6.9
20%	1	1.7
50%	0	0.0
No answer	3	5.2
Other	18	31.0
Total	58	100.0

respondents gave no answer to this inquiry. Eighteen instructors, or 31.0 per cent, had answers other than those listed. Of these eighteen instructors, eleven indicated that no student accounts were left unpaid. Three respondents indicated that only 1 per cent of student accounts remained unpaid. One instructor stated that less than 1 per cent of the student accounts were never paid for, while another instructor stated that only ten or fifteen dollars were not paid for at year's end. Another instructor stated that the only accounts which remained unpaid were those of students who dropped out of class. One instructor gave the unusual answer that whether student accounts remained unpaid depended on the type of students in the class at the time.

When asked if they were satisfied with their present shop accounting arrangements, forty-five instructors, or 77.6 per cent, indicated that they were indeed satisfied. Thirteen instructors, or 22.4 per cent, indicated that they were not satisfied.

In response to the inquiry as to whether they had taken a college bookkeeping or accounting course, forty-five respondents, or 77.6 per cent, disclosed that they had not. Only thirteen respondents, or 22.4 per cent, indicated that they had taken such a course. However, when asked if they believed such a course would be beneficial, only twenty-five instructors, or 43.1 per cent, believed it would be beneficial. A majority of instructors, or 51.7 per cent, stated such a course would not be beneficial. Three instructors, or 5.2 per cent, did not answer this question.

Practices employed in distribution of materials to students were also investigated. Contained in Table XXXI are data regarding the approximate amount of time required daily for distribution of supplies. Twenty-six respondents, or 44.8 per cent, indicated that approximately 5 per cent of daily class time was required for distribution of materials to students. Only four instructors, or 6.9 per cent, stated that 25 per cent

TABLE XXXI

APPROXIMATE PERCENTAGE OF CLASS TIME REQUIRED DAILY FOR DISTRIBUTION OF SUPPLIES

Percentage	Response of Instructors	
	Number	Per Cent
5%	26	44.8
10%	18	31.0
25%	4	6.9
No answer	2	3.5
Other	8	13.8
Total	58	100.0

of daily class time was required for this matter. Two instructors gave no answer. Eight respondents, or 13.8 per cent, gave an answer other than those listed. Of these eight respondents, three stated that only 2 per cent of class time was needed. One respondent indicated that 1 per cent of class time was required, while another disclosed that the amount of time needed was "unknown" to him. Still another instructor disclosed that materials were only distributed every two weeks, while another indicated that the time needed was "very little." One instructor failed to indicate the amount of time needed and simply stated that he distributed materials as the need arose.

Table XXXII presents data concerning the time allotted for distribution of supplies to students. A majority of

TABLE XXXII

TIME ALLOTTED FOR DISTRIBUTION OF SUPPLIES TO STUDENTS

Time	Response of Instructors	
	Number	Per Cent
When class is in session	12	19.7
At specific time during class period only	6	9.8
At random throughout class period	38	62.3
Other	5	8.2
Total	61	100.0

thirty-eight respondents, or 62.3 per cent, indicated that supplies were issued at random throughout the class period. Only six respondents, or 9.8 per cent, disclosed that only specific times during the class period were allotted for distribution of supplies. Five instructors, or 8.2 per cent, chose an answer other than those listed. Of these five instructors, all indicated that they distributed materials whenever the need presented itself. Three instructors chose two answers each, bringing the total answers received to sixty-one. Two instructors stated that they distributed materials both when the class was in session and at random throughout the class period. One instructor indicated that he distributed materials when

class was in session, but only at specific times during the class period.

Presented in Table XXXIII are data dealing with who is responsible for the distribution of supplies to students. Twenty-eight respondents, or 42.4 per cent, indicated that

TABLE XXXIII

RESPONSIBILITY FOR DISTRIBUTING SUPPLIES TO STUDENTS

Person Responsible	Response of Instructors	
	Number	Per Cent
Instructor	28	42.4
Student helper	3	4.5
Instructor with help of student assistant	14	21.2
Students help themselves under supervision	17	25.8
Students help themselves as need arises	4	6.1
Other	0	0.0
Total	66	100.0

the instructor himself was the person responsible for issuing all supplies to the students. Only three instructors, or 4.5 per cent, indicated that a student helper alone was responsible for material distribution, while four, or 6.1 per cent, indicated that the students helped themselves to the supplies as the need arose. Eight instructors chose two answers each

from those listed, thus bringing the total number of responses to sixty-six.

Inventory procedures practiced by industrial arts woodworking instructors were also studied. When asked if they took inventory of supplies during class time, thirty-six respondents, or 62.1 per cent, indicated that they did not, while twenty-two respondents, or 37.9 per cent, disclosed that they did.

Contained in Table XXXIV are data regarding the percentage of class time used in taking inventory of supplies. Twenty-two respondents, or 37.3 per cent, indicated that approximately

TABLE XXXIV

PERCENTAGE OF CLASS TIME USED FOR INVENTORY OF SUPPLIES

Percentage	Response of Instructors	
	Number	Per Cent
5%	22	37.3
10%	2	3.4
15%	1	1.7
20%	0	0.0
25%	1	1.7
No answer	17	28.8
Other	16	27.1
Total	59	100.0

5 per cent of class time was used for this inventory. Only one instructor, 1.7 per cent, declared that inventorying took 25 per cent of class time. Seventeen instructors did not answer this inquiry. Sixteen respondents, or 27.1 per cent, chose an answer other than one of those listed. Of these seventeen instructors, seven indicated that they did not take inventory during class time, while one indicated that it took approximately 1 per cent of class time to inventory supplies. Another instructor stated that inventorying took 2 per cent of class time, whereas another indicated that it took "ten minutes a year." Other answers received about the amount of class time required to take inventory of supplies are as follows: inventory time comes once annually in February; inventory is taken once a year and usually takes one or two periods; inventory is taken only when needed; when supplies in an area are low, an inventory is taken of that area, such as sandpaper, glue, screws, or nails, and supplies are reordered. No specific amount of time was given in the last two cases. One instructor chose two answers, bringing the total responses received to fifty-nine.

Table XXXV presents data dealing with the amount of time other than class time required to take an inventory. Nine

TABLE XXXV

AMOUNT OF TIME OTHER THAN CLASS TIME REQUIRED FOR INVENTORY

Time	Response of Instructors	
	Number	Per Cent
30 minutes	8	13.6
1 hour	6	10.2
2 hours	9	15.2
3 hours	8	13.6
4 hours	9	15.2
No answer	2	3.4
Other	17	28.8
Total	59	100.0

instructors, or 15.2 per cent, indicated that it took four hours, other than class time, to inventory supplies. Two instructors gave no answer. Twenty-three instructors, or 49.0 per cent, indicated that it took anywhere from one to three hours, other than class time, for inventorying. Seventeen instructors, or 28.8 per cent, gave an answer other than those listed. Of these seventeen instructors, ten indicated that no time other than class time was needed for inventory, while one indicated that the time varied between four and six hours. The following are other answers received concerning this matter: about seven hours; all the time needed after school is out; at end of school and involving all classes; as required;

eight hours annually; four hours for annual inventory. One instructor chose two answers, bringing the total responses up to fifty-nine.

When asked if they considered the time required to take inventory to be excessive, fifty-two respondents, or 89.7 per cent, indicated that the time was not excessive. Only six respondents, or 10.3 per cent, considered the amount of time required to take an inventory to be excessive.

In response to the inquiry as to whether they had a standard inventory list to follow, twenty-nine instructors, or 50.0 per cent, indicated that no such inventory list existed; an equal number of instructors, or twenty-nine, indicated that such a standard inventory list was indeed followed.

When asked if their supplies were classified under specific code numbers, fifty-three instructors, or 91.4 per cent, disclosed that such was not the case, while only five instructors, or 8.6 per cent, indicated that classification of supplies under specific code numbers was indeed practiced. Only fifteen respondents, or 25.9 per cent, indicated that they believed classification of supplies under specific code numbers would facilitate inventory. Forty-two instructors, or 72.4 per cent, disclosed that such classification of supplies would not

facilitate an inventory. One instructor, or 1.7 per cent, did not answer this question.

Inquiry was made as to whether instructors were required to file copies of their inventory with school officials. Thirty-nine respondents, or 67.3 per cent, indicated that they were indeed required to file their inventory with school officials. Nineteen instructors, or 32.7 per cent, indicated that filing inventory copies with school officials was not required of them.

Presented in Table XXXVI are data involving the destination of inventory copies. A majority of twenty-nine instructors, or 35.4 per cent, indicated that a copy of their

TABLE XXXVI

PLACEMENT OF INVENTORY COPIES

Placement of Copies	Response of Instructors	
	Number	Per Cent
Principal's office	29	35.4
Superintendent's office	15	18.3
Consultant's office	4	4.9
Purchasing agent's office	12	14.6
No answer	7	8.5
Other	15	18.3
Total	82	100.0

inventory had to be filed at the principal's office, while twelve instructors disclosed that a copy had to be kept at the purchasing agent's office. Seven instructors, or 8.5 per cent, did not answer this inquiry. Fifteen respondents, or 18.3 per cent, indicated an answer other than one of those listed. Of these fifteen respondents, nine disclosed that the only place where a copy of the inventory was kept was in the office of the instructor. Four instructors stated that no copies of the inventory were kept at all. One respondent stated that a copy was kept in the supervisor's office, while another respondent indicated that a copy was kept in the "industrial arts building." Ten instructors chose two answers each and seven instructors chose three answers each, bringing the total number of responses to eighty-two.

An inquiry was made as to whether or not the instructors believed their method of inventory to be concise. Forty-three instructors, or 74.1 per cent, indicated that the method they used was concise. However, fifteen instructors, or 25.9 per cent, disclosed that the method they used for inventorying was not concise. When asked if the arrangement of supplies in their laboratory was such that it facilitated the taking of an inventory, thirty-six respondents, or 62.1 per cent, gave

an affirmative answer; twenty instructors, or 34.5 per cent, indicated that no such arrangement of supplies existed. Two instructors, or 3.4 per cent, did not answer this question.

Thirty-two instructors, or 55.2 per cent, indicated that they did allow students to assist them in taking their inventory, whereas twenty-six respondents, or 44.8 per cent, disclosed that they did not allow this.

The instructors were asked if their inventory of salable supplies included a section for the smaller items, such as nails, screws, and sandpaper. Thirty-six respondents, or 62.1 per cent, disclosed that their inventory did not include a section for the smaller items; twenty-two respondents, or 37.9 per cent, indicated that such a section was indeed included in their inventory of salable supplies.

When inquiry was made as to whether the instructors kept a copy of each inventory for reference at a later date, forty-five respondents, or 77.6 per cent, disclosed that they did; twelve instructors, or 20.7 per cent, indicated that they did not keep a copy of their inventory for future reference. One instructor, or 1.7 per cent, did not give an answer to this question.

Only ten respondents, or 17.2 per cent, did not believe an inventory to be advantageous. A majority of forty-seven respondents, or 81.1 per cent, indicated that they did indeed believe an inventory to be advantageous. One instructor, or 1.7 per cent, did not answer this question.

In summary, fifty-eight instructors participated in this study. The data collected were recorded, presented in tabular form, and discussed. Findings, conclusions, and recommendations were formulated as a result of these data.

Presented in Chapter V is a summary of the study plus the findings, conclusions, and recommendations formulated.

CHAPTER IV

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study was concerned with the methods used in the purchasing, storing, budgeting, accounting, distributing, and inventorying of industrial arts woodworking materials by instructors in selected secondary schools in the state of Texas. In essence, the primary aims of this study were as follows:

1. To determine the most frequently used methods employed in the purchasing of industrial arts woodworking materials.

2. To identify the practices used by the industrial arts teachers in the storing of woodworking materials.

3. To bring to the fore the budgeting policies to which the industrial arts instructors must adhere.

4. To identify the accounting practices confronted by the industrial arts teacher in the selected Texas schools.

5. To determine the methods used to distribute woodworking supplies to the students.

6. To present the practices used in the inventory of woodworking salable supplies.

The study was limited to the industrial arts woodworking area of geographically dispersed secondary schools in the state of Texas.

The data for this study were collected through an instrument containing questions pertinent to the phases of laboratory operation involving the purchasing, storing, budgeting, accounting, distributing, and inventorying of industrial arts woodworking materials. Of ninety-one instruments mailed to geographically dispersed secondary schools in the state of Texas, fifty-eight responses, or 63.7 per cent, were received. This study was compiled from the data thus collected, recorded, and analyzed.

Presented in Chapter I is the introduction to the study, the statement of the problem, and the background and significance of the study. Also contained in this chapter are the following: definition of terms, limitations of the study, related studies, and sources of data. Procedures of the study and organization of the study are also included in this chapter.

Contained in Chapter II are various and important facts related to the purchasing, storing, budgeting, accounting, distributing, and inventorying of woodworking materials, with emphasis placed on those factors which might enable an instructor to accomplish successfully each of these procedures.

Chapter III consists of a presentation of the methods used in the purchasing, storing, budgeting, accounting, distributing, and inventorying of industrial arts woodworking materials in selected Taxes high schools. Thirty-six tables are presented which contain the numerous data collected from fifty-eight instructors. These tables present data dealing with the following, to name a few: number and size of woodworking classes taught daily; practices and amount of time used in purchasing woodworking salable supplies; storage facilities for laboratory supplies; annual budgets for salable supplies; factors which determine the budget; management of student bills; amount of time required in keeping records; management of shop and breakage fees; methods used for accounting of salable supplies; percentage of class time required for distribution of supplies; and amount of time required for inventory of supplies.

Findings

The following findings are based on limited data presented in the study:

1. The instructor is the person usually responsible for the purchasing of woodworking supplies, as was shown by 76.5 per cent of the respondents.

2. According to 77.6 per cent of the instructors, there was no standardized list from which to order supplies in a majority of Texas high schools.

3. All materials purchased must meet previously drawn specifications in a majority of the schools as indicated by 86.2 per cent of the respondents.

4. A majority of instructors did not believe purchasing materials required an excessive amount of time or paperwork.

5. Sixty-four per cent of the respondents stated that a standard requisition form must be used in purchasing woodworking supplies.

6. A total of 42.7 per cent of the respondents indicated that the teacher estimated the amount of materials purchased yearly from previous purchase records.

7. A majority, or 75.9 per cent, of the respondents claimed that a conveniently located storage area was available for their salable supplies; either a storeroom or a cabinet were the most frequently used storage facilities.

8. A majority of the respondents indicated that storage facilities were available for separation of different types of wood and smaller items.

9. A total of 63.8 per cent of the instructors indicated that woodworking materials were not stored according to any particular system.

10. A total of 74.1 per cent of the respondents indicated that they used student assistants to help keep storeroom supplies in order.

11. The respondents were equally divided in their opinion about whether adequate storage facilities were available to them.

12. Only thirty-nine of the respondents, or 67.2 per cent, indicated that a fixed yearly budget existed at their schools.

13. A total of 38.9 per cent of the respondents indicated that their annual budget for salable supplies exceeded one thousand dollars.

14. The data collected revealed that a majority of the instructors checked the financial status of their laboratory regularly and/or as needed.

15. A total of 60.3 per cent of the respondents indicated that they had experienced at one time or another a salable supplies deficit.

16. Thirty-one respondents, or 51.7 per cent, indicated that the school system absorbed the expense in case a deficit was experienced.

17. A total of 72.4 per cent of the instructors indicated that a profit on supplies was never experienced.

18. A majority of 98.3 per cent of the respondents indicated that they kept a record of all money spent in ordering salable supplies.

19. A total of 51.7 per cent of the instructors disclosed that they had a fixed yearly budget.

20. Forty-seven respondents, or 81.0 per cent, indicated that a separate budget was kept for maintenance of equipment, emergency requirements, and non-salable supplies.

21. A total of 41.4 per cent of the instructors had an approximate yearly expenditure of six hundred to one thousand dollars.

22. A majority of fifty-two respondents, or 76.5 per cent, disclosed that the person responsible for the collection of money and keeping of receipt books was the instructor himself.

23. A total of 60.3 per cent of the instructors indicated that students were not allowed to take projects home before paying for them.

24. Forty-one respondents, or 54.0 per cent, indicated that a student's grade was withheld when his bill remained unpaid.

25. A total of 74.2 per cent of the respondents indicated that students who were unable to pay for materials were still allowed to enroll in a woodworking class.

26. A total of 53.5 per cent of the respondents indicated that some student accounts did remain unpaid.

27. The study revealed that fifty-six respondents indicated that students were required to make a bill of materials.

28. A total of 72.4 per cent of the respondents indicated that they kept a copy of the student's bill of materials.

29. A majority, or 79.3 per cent, of the respondents indicated that shop tickets were not used.

30. A total of 81.0 per cent of the instructors disclosed that no safety deposit boxes were available in the shop area for safekeeping of money collected from students even though fifty-two respondents, or 89.7 per cent, stated that they collected money during class time.

31. The study revealed that a majority of the instructors used 2 to 5 per cent of weekly class time in keeping student materials records and approximately thirty minutes daily.

32. The data collected revealed that the majority, or 64.4 per cent, of the instructors were not required to turn money into the office at any particular time; instead, this matter was left entirely up to the instructor.

33. A majority of thirty-nine respondents, or 61.9 per cent, indicated that all money was collected by the teacher and turned into the office whenever a sizable amount was collected.

34. A total of 60.3 per cent of the instructors indicated that money collected from students was placed in a shop fund and drawn upon as needed by the instructor.

35. It was found that 82.8 per cent of the instructors did not collect a breakage fee from the students.

36. Only twenty-six instructors, or 44.8 per cent, indicated that a percentage was charged on the shop bill to cover the cost of waste.

37. The study revealed that a receipt book, a bill of materials, or a shop record book were the three main means used in accounting for salable supplies.

38. A total of 41.0 per cent of the instructors indicated that students who could not afford to pay for shop materials were allowed to make a project paid for by a school organization or another teacher.

39. The data collected revealed that the largest percentage of student accounts which remained unpaid at the end of

the school year ranged from 2 to 5 per cent of the total collections.

40. A majority of forty-five instructors, or 77.6 per cent, indicated that they were satisfied with their present shop accounting arrangements.

41. Forty-five respondents, or 77.6 per cent, disclosed that they had not taken a college bookkeeping or accounting course; yet, when asked if they believed such a course would be beneficial, 51.7 per cent stated that they did not believe so.

42. A total of 44.8 per cent of the respondents indicated that the approximate percentage of daily class time required for distribution of supplies was 5 per cent.

43. The most frequently used method for distribution of materials to students was found to be distribution at random throughout the class period by the instructor himself.

44. It was found that a majority, or 62.1 per cent, of the instructors did inventorying of supplies during class time.

45. The study revealed that 89.7 per cent of the instructors did not believe the time required to take inventory to be excessive.

46. Fifty-three instructors, or 91.4 per cent, disclosed that their supplies were not classified under specific code numbers.

47. A total of 67.3 per cent of the respondents indicated that they were required to file inventory copies with school officials; the majority of these copies were filed in the principal's office.

48. Revealed by the study was the fact that forty-three instructors, or 74.1 per cent, believed their method of inventory to be concise.

49. A majority of respondents, or 77.6 per cent, disclosed that they kept a copy of each inventory for reference at a later date, and the majority believed an inventory to be advantageous.

Conclusions

Based on the findings of the study, the following conclusions are presented:

1. In the majority of the cases, the instructor was the person essentially responsible for most phases of laboratory operation involving the purchasing, storing, budgeting, accounting, distributing, and inventorying of industrial arts woodworking materials.

2. There is little, if any, standardization of procedures involved in the purchasing, storing, budgeting, accounting, distributing, and inventorying of woodworking supplies.

3. Since a majority of the instructors did not believe any of these phases of operation took an excessive amount of their time, it can be assumed that the majority of the respondents spend a satisfactory amount of time on actual classroom instruction.

4. The majority of the instructors are conscientious about the collection of money, checking of shop finances, keeping of records, and ordering of supplies in their laboratories.

5. The fact that a majority of the respondents had a salable supplies deficit did not keep students who could not pay for their supplies from enrolling in a woodworking class. This points out the fact that in the majority of the cases, no discrimination is made against the poorer students as far as being given an equal educational opportunity in the woodworking laboratories of the participating Texas schools.

6. Unless they have devised a means other than a safety deposit box for the safekeeping of money collected from students during the day, the majority of the instructors are left with the responsibility of carrying an unknown amount of money on their person for an unknown amount of time each day.

7. A majority of the instructors were given a "carte blanche" as far as collection of money from students and when this money was to be turned into the office or the like.

8. As shown by the responses of the instructors, a majority of the woodworking laboratories in the participating Texas schools appear to have adequate purchasing arrangements, inventorying and budgeting systems, and shop accounting arrangements.

9. Taking a college bookkeeping or accounting course could prove to be beneficial to the majority of respondents who indicated that they had not taken such a course.

10. The instructors who had nothing to do with collection of money from students, appeared to have more time to devote to other operational procedures in their laboratory.

Recommendations

The following recommendations are based upon the findings of the study:

1. An extensive study should be made as to the feasibility of adopting standards of operational procedures for industrial arts laboratories in the entire state of Texas.

2. A study should be made of how teachers would accept and/or react to the standardization of operational procedures in the industrial arts laboratory.

3. A study should be made to determine if financial problems such as salable supply deficits are more common in areas where a larger number of students come from low income families.

4. A study should be made of the possibilities of implementing a standard financial procedure whereas students could pay all shop bills in the school office, leaving the industrial arts instructor free of the responsibility of collecting any money.

5. A study should be made of the need and feasibility of placing a safety deposit box in the woodworking laboratory for safeguarding of monies collected from students.

APPENDIX A

APPENDIX A

2301 Dalford
Fort Worth, Texas 76111
September 12, 1972

Dear Industrial Arts Teacher:

I am presently engaged in a Master's degree program in the area of industrial arts at North Texas State University. My research study is concerned with the current trends of operating procedures used in the industrial arts laboratories at the secondary level in the State of Texas. The purpose of the study is to determine the various practices used by industrial arts teachers and to provide insight in improving those procedures.

I am soliciting your assistance in helping me conduct the study. A checklist is enclosed for your use which I trust you will complete and return at your earliest convenience.

Be assured that you and your school will remain anonymous. Only the data provided will appear in the body of the study.

I thank you in advance for your interest and cooperation in providing me with the requested information.

Sincerely,

Hervey Gomez
Graduate Student

Enclosure: Checklist

APPENDIX B

APPENDIX B

TO DETERMINE PRACTICES USED IN THE PURCHASING, STORING, BUDGETING, ACCOUNTING, DISTRIBUTING, AND INVENTORYING OF SALABLE SUPPLIES IN THE WOODWORKING LABORATORY

General Information:

Instructor's name _____

Number of woodworking classes taught per cay _____ Average class size _____

Instructions:

Listed below are some questions and practices used in the purchasing, storing, budgeting, accounting, distributing, and inventorying of salable supplies in the woodworking laboratory. Indicate the practice used by placing a check mark (✓) in the appropriate place.

I. PURCHASING PRACTICES

A. Indicate the practice used in purchasing woodworking salable supplies for your laboratory:
   ( ) 1. A purchasing agent authorized by the administration
   ( ) 2. The superintendent of schools
   ( ) 3. The departmental supervisor
   ( ) 4. The principal
   ( ) 5. The woodworking teacher
   ( ) 6. Other (specify) _____

	Yes	No
B. Do you consider the amount of paperwork involved in the purchasing of salable supplies to be excessive?	( )	( )

		Yes	No
C.	Do you purchase supplies out of your own pocket?	( )	( )
D.	Are students allowed to furnish their own supplies?	( )	( )
E.	Do you have a standardized list from which to order supplies?	( )	( )
F.	Do all materials purchased for your laboratory have to meet previously drawn specifications with reference to quality?	( )	( )

G. Average amount of time used per month in purchasing materials:
( ) 1 hour ( ) 2 hours ( ) 3 hours ( ) 4 hours
( ) 5 hours ( ) 6 hours ( ) 7 hours ( ) 8 hours
Other (specify) _____

H. The form used in purchasing supplies is:
( ) 1. Standard requisition form used by school system
( ) 2. Requisition form issued by the dealer from which supplies are bought
( ) 3. Form issued by individual school
( ) 4. Random form provided by teacher
( ) 5. Other (specify) _____

I. If supplies are needed in an emergency:
( ) 1. The instructor purchases supplies out of his own pocket with reimbursement at a later date
( ) 2. The instructor is allowed to purchase supplies and fill out requisition form at later date
( ) 3. The instructor must call purchasing agent before any purchase
( ) 4. An emergency fund set up by instructor is used to purchase materials
( ) 5. Other (specify) _____

J. The amount of materials purchased for the year is determined by:
( ) 1. Limit placed on purchasing by the central purchasing agent or office
( ) 2. A pre-estimated limit on materials set by the departmental supervisor
( ) 3. An estimation set by the instructor based on previous records of purchase
( ) 4. Other (specify) _____

	Yes	No
K. Are you limited as to the amount of materials that can be purchased for the school year?	( )	( )
L. Are you allowed to purchase supplies at the end of the school year for the ensuing school year?	( )	( )

II. STORAGE PRACTICES

A. Do you have a storage area for most all salable supplies?	( )	( )

B. Indicate where your laboratory supplies are kept:
( ) 1. In a locked cabinet
( ) 2. In a store room
( ) 3. In the open shop area
( ) 4. In no particular place
( ) 5. Other (specify) _____

C. Is your storage area conveniently located? . . .	( )	( )

If yes, is it conveniently located to:
( ) 1. The service entrance
( ) 2. The shop work area
( ) 3. Inconveniently located to service and work shop area
( ) 4. Other (specify) _____

D. Does your storage area provide for separation of different types of wood?	( )	( )
E. Does your storage area provide ample space for wide pieces of wood, such as plywood?	( )	( )

		Yes	No
F.	Are separate facilities provided for smaller items such as screws, nails, glue, and sandpaper?	( )	( )
G.	Are students allowed in the store rooms at random?	( )	( )
H.	Are your materials stored according to any particular system, code, or diagram?	( )	( )
I.	Do you have sufficient storage space for all supplies needed for the school year?	( )	( )
J.	Do you store supplies in excess of what is necessary for the school year?	( )	( )
K.	Do other instructors share storage supplies for their classes in your store room?	( )	( )
L.	Do you use student assistants to help keep supplies in store room in order?	( )	( )
M.	Do you consider your storage facilities inadequate?	( )	( )

N. If inadequate, check items necessary to remedy the situation:

( ) 1. Individual storage space
( ) 2. New location
( ) 3. Larger size
( ) 4. Smaller size
( ) 5. Separate storage
( ) 6. Cabinet space

III. BUDGETING PRACTICES

		Yes	No
A.	Do you have a set or fixed annual budget for the purchase of salable supplies?	( )	( )

Yes No

C. What are the factors which determine the department budget?
( ) 1. Fixed amount for each student enrolled in industrial arts
( ) 2. Lump sum allocation
( ) 3. Previous annual budget
( ) 4. Other (specify) _____

D. Do you check the financial status of your laboratory? . . . . . ( ) ( )

E. How often do you check the financial status of your laboratory?
( ) 1. As needed
( ) 2. Regularly
( ) 3. Upon request
( ) 4. Annually
( ) 5. Other (specify) _____

F. Have you experiences a salable supplies deficit? ( ) ( )

G. How is a salable supplies deficit managed?
( ) 1. The school absorbs the expense
( ) 2. The cost of the student project is hiked
( ) 3. Instructor is required to make up for deficit
( ) 4. Other (specify) _____

H. Is a profit usually made from salable supplies? ( ) ( )

I. How is the profit from salable supplies managed?
( ) 1. The amount is absorbed into school district funds
( ) 2. The surplus is spent on needed laboratory materials and equipment
( ) 3. Other (specify) _____

J. Is a record kept of how much money is spent ordering salable supplies? . . . . . ( ) ( )

Yes No

K. What type of budget is provided in your school?
( ) 1. A fixed yearly budget
( ) 2. A flexible yearly budget changed according to need
( ) 3. Other (specify) _____

L. Is a separate budget kept for maintenance of equipment, emergency requirements, and non-salable supplies? . . . . . ( ) ( )

M. Are you allowed to exceed the yearly budget as far as ordering salable supplies is concerned? ( ) ( )

N. What is the approximate amount of money spent on supplies and materials during the school year?

( ) 1.	$ 10 - $ 99	( ) 4.	$400 - $599
( ) 2.	$100 - $199	( ) 5.	$600 - $1000
( ) 3.	$200 - $399	( ) 6.	Other (specify) _____

IV. ACCOUNTING PRACTICES

A. The collection of money and keeping of receipt books is done by:
( ) 1. Instructor
( ) 2. Student assistant
( ) 3. Clerk in administrative office
( ) 4. Clerk in principal's office
( ) 5. Other (specify) _____

B. Students are required to pay for:
( ) 1. All materials used, including waste
( ) 2. Only finished project taken home
( ) 3. Only items such as lumber and finishing materials
( ) 4. Other (specify) _____

C. Do you allow students to take projects home before paying for them? . . . . . ( ) ( )

		Yes	No
D.	Students are required to pay their bill: ( ) 1. Before materials are used ( ) 2. In full, when project is completed ( ) 3. At specific times, such as weekly or quarterly ( ) 4. In installments after project is completed ( ) 5. Other (specify) _____		
E.	When a bill is unpaid:		
	1. Is the grade held until bill is paid	( )	( )
	2. Student project is retained by the school	( )	( )
	3. Student is suspended until payment is received	( )	( )
	4. Considered a loss	( )	( )
	5. Other (specify) _____		
F.	Are students who are unable to pay material costs allowed in your class?	( )	( )
G.	Are there student accounts which remain unpaid?	( )	( )
H.	Are students required to make a bill of materials?	( )	( )
I.	Do you, the instructor, keep a copy of the students' bill of materials?	( )	( )
J.	Do you sell materials at cost?	( )	( )
K.	Are shop tickets used in your school?	( )	( )
L.	Is a laboratory fee collected from all students?	( )	( )
M.	Do you have a safe deposit box in your shop area for money collected?	( )	( )
N.	Do you collect money during class time?	( )	( )

If yes, the approximate amount of class time utilized per week in keeping student materials records is:

( ) 1. 2% ( ) 3. 10% ( ) 5. 50%
( ) 2. 5% ( ) 4. 20% ( ) 6. Other (specify) _____

Yes No

O. The approximate daily amount of time, other than class time, required in keeping students' material records:

( ) 1. 30 minutes
( ) 2. 1 hour
( ) 3. 2 hours
( ) 4. 3 hours
( ) 5. 4 hours
( ) 6. Other (specify) _____

P. How often are you required to turn in collected money?

( ) 1. Daily
( ) 2. Weekly
( ) 3. Monthly
( ) 4. Other (specify) _____

Q. How is money collected from students handled?

( ) 1. Collected and kept by teacher until end of semester
( ) 2. Collected by teacher and turned into office at end of day
( ) 3. Turned into office whenever sizable amount is accumulated
( ) 4. Other (specify) _____

R. Money collected from students is:

( ) 1. Placed in general fund and not available to teacher
( ) 2. Placed in shop fund and drawn upon as needed
( ) 3. Other (specify) _____

S. Is a breakage fee required from students? . . . ( ) ( )

T. How are shop and breakage fees managed?

( ) 1. A refund is made of unused amount
( ) 2. The fee is carried into next term
( ) 3. Fee is absorbed into district's general fund
( ) 4. Other (specify) _____

Yes No

U. How are waste materials managed?
( ) 1. A percentage is charged on shop bill
( ) 2. Flat amount is charged to shop bill
( ) 3. Waste is ignored
( ) 4. Compensation is made by marking up price of project
( ) 5. Other (specify) _____

V. What form is used for accounting of salable supplies?
( ) 1. Receipt book
( ) 2. Bill of materials
( ) 3. Shop record book
( ) 4. No record kept
( ) 5. Student planning sheet
( ) 6. School required form
( ) 7. Other (specify) _____

W. What procedures are followed for use of shop supplies by other departments?
( ) 1. Charge is made to particular department and payment expected immediately
( ) 2. Charge is made to department and bill settled at office
( ) 3. Bill is charged off to loss
( ) 4. Other (specify) _____

X. What procedures are followed for students who cannot pay?
( ) 1. Student is allowed to make project paid for by a school organization or a teacher
( ) 2. Student is not allowed to enroll in shop class
( ) 3. Student is allowed to enroll free of charge
( ) 4. Other (specify) _____

Y. Approximately what percentage of student accounts remain unpaid at year's end?
( ) 1. 2%
( ) 2. 5%
( ) 3. 10%
( ) 4. 20%
( ) 5. 50%
( ) 6. Other (specify) _____

	Yes	No
Z. Are you satisfied with the present shop accounting arrangement?	( )	( )
Z1. Have you taken a college bookkeeping or accounting course?	( )	( )
Z2. Do you believe such a course would be beneficial?	( )	( )

V. DISTRIBUTION PRACTICES

A. Approximate percentage of class time required daily for distribution of supplies:

( ) 1. 5%
( ) 2. 10%
( ) 3. 25%
( ) 4. Other (specify) _____

B. When are supplies issued to students?

( ) 1. When class is in session
( ) 2. At specified time during class period only
( ) 3. At random throughout class period
( ) 4. Other (specify) _____

C. Who is responsible for distributing supplies to students:

( ) 1. Instructor issues all supplies
( ) 2. Student helper issues all supplies
( ) 3. Instructor with help of student assistant
( ) 4. Students help themselves under supervision
( ) 5. Students help themselves as the need arises
( ) 6. Other (specify) _____

VI. INVENTORY PRACTICES

A. Do you take inventory during class time? . . . . ( ) ( )

Yes No

B. Percentage of class time used in taking inventory of supplies:

( ) 1. 5%
( ) 2. 10%
( ) 3. 15%
( ) 4. 20%
( ) 5. 25%
( ) 6. Other (specify) _____

C. Time other than class time required to take inventory:

( ) 1. 30 minutes
( ) 2. 1 hour
( ) 3. 2 hours
( ) 4. 3 hours
( ) 5. 4 hours
( ) 6. Other (specify) _____

D. Do you consider the time required to take inventory to be excessive? . . . . . ( ) ( )

E. Do you have a standard inventory list to follow? ( ) ( )

F. Are your supplies classified under specific code numbers? . . . . . ( ) ( )

G. Do you believe classification of supplies under specific code numbers would facilitate inventory? . . . . . ( ) ( )

H. Are you required to file copies of the inventory with school officials? . . . . . ( ) ( )

I. A copy of the inventory is kept in the office at the:

( ) 1. Principal
( ) 2. Superintendent
( ) 3. Consultant
( ) 4. Purchasing agent
( ) 5. Other (specify) _____

J. Is your method of inventory concise? . . . . . ( ) ( )

K. Is the arrangement of supplies in your laboratory such that it facilitates inventory? . . . . ( ) ( )

L. Do you allow students to assist you in taking inventory? . . . . . ( ) ( )

		Yes	No
M.	Does your inventory of salable supplies include a section for the smaller items, such as nails, screws, sandpaper?	( )	( )
N.	Do you keep a copy of each inventory for reference at a later date?	( )	( )
O.	Do you believe an inventory to be advantageous?	( )	( )

If you would like to have a copy of the results of this study, please check. ( )

If yes, please list mailing address.

Name _____

Mailing address _____

_____

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