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Scope and Method of Study: The problem of storage among students and families of the Slick, Oklahoma Community is quite a serious one. Check lists were distributed among students to be checked carefully with other family members. Home visits were made at intervals by the writer as this study progressed. Other information was acquired from various agencies such as farm clubs, local lumber companies, local carpenters, grocery stores, hardware stores and financing and suggestions from parents and relatives including the cooperation of my high school principal and Superintendent.

Findings and Conclusions: It is evident that many families in various sections of the country are living in homes where storage facilities are very limited, and little or no money is available for the improvement of these conditions. Some suggestions to other Industrial Arts teachers for improving these conditions are: That more home visits be made in surrounding communities and throughout the state to become aware of the need for improved storage in the homes and schools. That Industrial Arts teachers of Oklahoma study communities in which they work and place special emphasis on guiding students and families in improving storage facilities.

ADVISER'S APPROVAL C. R. Hall

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GUIDING STUDENTS AND FAMILIES IN A COOPERATIVE DEVELOPMENT OF BETTER STORAGE FACILITIES IN THE SLICK, OKLAHOMA COMMUNITY

by

SYLVESTER LAWRENCE COMBS

Bachelor of Science

Langston University

Langston, Oklahoma

1946

Submitted to the faculty of the Graduate
School of the Oklahoma State University
of Agriculture and Applied Sciences
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of MASTER OF SCIENCE
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Most sincere appreciation is expressed by the writer to his wife, Willa R. Combs, for her cooperation and encouragement during the time of this writing.

Sylvester Lawrence Combs

1960

TABLE OF CONTENTS

Chapter Page

CHAPTER I

THE PROBLEM AND SOURCES OF INFORMATION

Today, much emphasis is being placed on home and family living. If there is to be any improvement in this area, education must play a very important part. The writer believes that the Industrial Arts teacher may encourage families in their efforts by helping them to recognize and become aware of the need for improving family living. A specific area recognized by the writer in the Slick, Oklahoma Community, as being one area the students enrolled in Industrial Arts classes may begin to improve family living, is in the area of home and school storage. The school can play its part best by working co-operatively with the home and community.

As a result of visiting homes in the area, talking with students and parents, observing classrooms and student locker facilities, and talking with school administrators there seemed to be many improvements that could be made in improving storage facilities with little expense. The boys were asked to list items that they now have storage space for in their homes and to make separate lists of items that they need storage space for at home and at school.

Sources of Information. It is planned to obtain data from the following sources:

1. Student questionnaires
2. Visiting homes of students
3. Conferences with superintendents, principals and other teachers in the school system and in the county

4. State of Oklahoma Department of Education, Annual High School Bulletin, No. 112-z, Oklahoma City, Oklahoma, June 30, 1951
5. Popular Science magazines
6. Work Basket magazines
7. Work Bench magazines
8. Popular Mechanics magazines
9. Industrial Arts and Vocational Education magazines
10. Better Homes and Gardens magazines
11. Good Housekeeping magazines
12. The Farmer-Stockman magazines
13. The local newspapers

Limitation of the Problem. The information in this report will be secured through questionnaires completed by students and experiences with students and families in choosing storage facilities that could be improved or built during the year, with long-range plans to be added or completed as money and materials are made available.

The study is limited to the students enrolled in General Shop classes in the Slick High School, Slick, Oklahoma and their families.

Reasons for Making the Study. There have been many improvements made in the community of Slick, Oklahoma as a whole since 1950. The community and homes have taken on a new look. The county and home demonstration agents worked with farm families in improving their homes, surroundings, farms, livestock and pastures. The Homemaking departments, with the assistance of students and their families have helped to make improvements inside and outside the home.

The Farmer-Stockman gave cash awards to communities and centers making the greatest improvements and for those reaching or serving the

greatest number of people in the district and state. Some of the improvements made include painting and remodeling homes, painting mailboxes, building ponds and improving fences.

The writer believes that there has been some stimulation and progress made but he also feels that if the program is continued through other avenues with different people serving as the stimuli, the areas can be broadened to include other areas and interest more people in the improvements.

The author further believes that the students enrolled in Industrial Arts classes will create a greater appreciation for home and family as well as its surroundings if they all work cooperatively on well planned storage improvements at home and at school.

Some of the projects started and completed by Industrial Arts students during this preliminary study were racks for shoes, guns, spices, ties, magazines, brooms, and towels. Other projects were book cases, cedar chests, towel bars, closets and cabinets, silver tray dividers and individual school lockers.

Parents always seemed proud to show projects completed by their offspring, therefore, the interest and cooperation of the parents is easily obtained and very necessary. When the plans of the improvement program is explained, this cooperation is most important because the parents usually have to furnish the finance for completing the projects.

Method Used in Collecting Data. The techniques to be used in collecting data for this report will be available information taken from textbooks on the history and philosophy of industrial arts shops. Additional information may be taken from magazines, bulletins, interviews and personal experiences. The questionnaire method will be used with

students to determine the kind of storage facilities most needed in the homes. This study is limited to a specific community therefore, there will be some limitations as to the validity of the study.

Definition of Terms. The definition of terms given in this section will represent the writer's interpretation of these terms. These definitions have been selected in light of currently accepted philosophies as noted in the review of literature.

> Education. Dewey defines education as that reconstruction or reorganization of experiences which adds to the meaning of experience and which increases the ability to direct the course of subsequent experiences. (5 - page 243)

> Industrial Arts. A group of school subjects that contribute to the attainment of the goal of general education by furnishing guided experiences in the use of tools, materials and machines, and insights into those phases of industry that have become an important part of our social culture. (14 - page 1)

> The General Shop. A shop where two or more separate types of activities are taught at the same time by the same teacher. (13 - page 25)

> Industrial Education. A general term, including all educational activities concerned with modern industry, machines, personnel and problems. It, therefore, includes both, industrial arts and vocational industrial education. (5 - page 7)

> Equipment. The physical facilities available for production machines, tools, etc. (2 - page 350)

> Inventory. To itemize or sum up stock, articles or personal qualities. (2 - page 443)

> Manual Training. Manual training serves as a means to educate the individual on many sides by giving him different angles of perspectives by familiarizing him with world materials which classroom subjects alone cannot do. (5 - page 13)

The purpose of this chapter has been to state the problem, define terms used, and discuss the techniques of research to be used to accumulate

data for analysis in a later chapter of the study. Before considering the proposed problem, an effort will be made to present the history of industrial arts education and the current viewpoints and objectives of industrial arts education.

CHAPTER II

HISTORY AND PHILOSOPHY OF INDUSTRIAL ARTS

The education of manual labor through the use of tools and the education of brain work with the aid of books have been two types of education generally considered since the beginning of time.

A history of the development of manual and industrial education will help students to formulate their own beliefs and understand the present-day problems of public education.

Part A

Early History

Industrial education as it is known today, had its beginning during the renaissance period.

The Savage was driven by hunger to seek food and by cold or heat to devise clothing and shelter for himself and his family. This education is merely unconscious imitation, and has prevailed among the royal families of Europe as a means of securing the primary necessities of life.

The Barbaric people learned manual arts through conscious imitation. The power to control fire moved civilization from Savagery to Barbarism.

The fundamental motive in ancient Jewish education was religious. Next to instruction in Law, was instruction in some trade or other vocation. These were labor and learning before the Renaissance. Sons were taught the trades of their fathers in the afternoon.

During the fifteenth century, the Protestant Reformation with its center in Germany, held the idea of "learning by doing" which led to

placing handicrafts in the schools and the children in the workshop and in the field received instruction.

Luther. Martin Luther (1483 - 1546) advocated State-supported comprehensive education for all children. Luther believed that children should attend school two hours each day, then have them learn a trade at home for the rest of the day. The curriculum included Latin, Greek and Hebrew, Logic, Mathematics, Music, History and Science. (3 - page 31) Luther was against the monastic and ecclesiastical schools.

Rabelais. (1483 - 1553) Rabelais was a member of the Catholic church. While Luther was protesting indulgences in the church, Rabelais was in constant disagreement with some of his high officials. He wove his ideas of reform with his two novels, Gargantua and Pantagruel. Here he treated his novels as children and tells how they are to be taught. Gargantua was taught to like arithmetic by learning card tricks. Painting and carving were learned on the same plane with playing games as a rainy weather occupation. Knowledge of handicrafts and industries was gained through observation. (3 - page 33)

Comenius. (1592 - 1670) Comenius was one of the most famous educational writers of the seventeenth century. Like Rabelais, he believed that instruction in words and things should go together. He divided the first twenty-four years of a scholar's life into four periods of six years each.

1. The infant school in every home for children up to six years of age.
2. The vernacular school, or public elementary school, in every village or community for children from six to twelve years of age.
3. The Gymnasium, or secondary school, in every province, for selected students from twelve to eighteen years of age.

4. A university in every kingdom or large province for young men who would continue their education beyond the age of eighteen years of age. (3 - page 37)

Comenius agreed with Luther that all children of both sexes should be sent to school.

Erhard Weigel, (____ 1699) in his "School of Virtue" used handiwork "for the purpose of sweetening the process of learning." He wished children to be instructed to build with small boards and blocks, to make figures out of paper or pasteboard, to form models out of paper and wood, to construct sundials, to measure heights and distances. In these requirements there is expressed the necessity of activity for the youth, as well as an appreciation of the kind of instruction which should be established to fulfill this need. (3 - page 73)

Rousseau, (1712 - 1778) was an advocator of internal practices and spirit, also writer of The Social Contract, which has been blamed for the French Revolution, and "Emile" which caused an upheaval in educational thinking and caused Rousseau to leave France to avoid arrest, but was just the kind of force needed to break down the walls of educational formalism. Rousseau believed in the economic value of industrial training, that a trade is the best means of making a living. In the later years of the life of Rousseau there were many followers and believers of Rousseau's "Emile" and The Social Contract. One of those was Pestalozzi. (3 - page 86)

Pestalozzi, (1746 - 1827) grew up with a sister, brother and mother after the death of his father when Pestalozzi was six years of age. When Pestalozzi left law school and went to agriculture, influenced by Rousseau's writings, a school was established called Neuhof, which was devoted entirely t agriculture. Later another school was started by Pestalozzi in Switzerland

to help poor children. His work pointed toward education for all children, poor or rich and toward education by new school methods --- the methods that have found fuller development under the influence of modern psychology. Pestalozzi believed there were two ways of instructing, "Either we go from words to things or from things to words. Mine is the second method." (3 - page 119) During the later years of Pestalozzi, he and Fellenburg worked together.

The invention of the spinning jenny, the steam engine, the loom, and the cotton gin and other labor saving devices caused the apprenticeship method of instruction to become obsolete. It was this period that brought about child labor laws and labor reforms.

The Sloyd Movement. The movement for this type of instruction in manual arts originated in Germany. Into these schools went a regular professional teaching of handwork and crafts. The purpose of these crafts was to produce useful objects in the homes, both for home use and for sale. Also, it provided something to do during the long winter evenings when outside employment was impossible. The sloyd movement, which once flourished, started to decline when the invention of the steam engine provided power for mass production for these articles formerly made by hand in the home. This left the men and boys with nothing to do in the long winter evenings but visit taverns. By 1846, this situation forced the people to organize associations to combat these evils of leisure. These associations convinced the leaders in national politics of the importance of sloyd.

The Swedish Government took action in 1872 by granting an annual appropriation of 2,500 crowns, and later increased the amount to 2,700 crowns, to stimulate interest and instruction in sloyd. The school had a curriculum of carpentry, carving, turning, blacksmithing, saddlery,

stonecutting, painting, drawing, mechanics, mathematics, and physics. The school used seven hours each day for sloyd and three hours for other instruction. The developments were so rapid that by 1909 about forty percent of all eligible students took part in some form of manual training instruction.

The systems of education in Europe had great influence that spread to all sections of the world, and especially to the United States.

Industrial Arts in the United States. The first schools in the United States grew out of the church as a direct result of the Protestant Revolt in Europe. The early settlers came to this country for freedom of worship, so the establishment of parochial schools was to be expected. In 1642, laws were passed in Massachusetts which laid the foundation for all the American public school systems. These had to do with compulsory education, standards set and enforced by the state. As early as 1685, Thomas Budd proposed a plan for public education to include art or trade to be selected by the student. While this plan was not carried out, it shows a trend of thinking in the early colonial day.

The Smith-Hughes Act of 1917 started the vocational programs in the United States by federal subsidizing of the fields of agriculture, home economics, and trade and industrial education. There was some clashing of ideas and opinions between industrial arts and vocational industrial education, as there is a close relationship and overlapping of teaching. These difficulties were soon overcome. Industrial arts is a part of general education, whereas vocational education trains students for a definite job or for a specific occupation. They are similar, as some of the same equipment, teaching methods, and materials are used.

A true picture of industrial education aims may be shown by using the objectives of secondary schools as a base. They are the seven cardinal principles listed as follows:

1. Health
2. Command of the fundamental processes
3. Worthy home membership
4. Vocation
5. Civic intelligence
6. Worthy use of leisure
7. Ethical appreciation and development (15 - page 21)

Industrial arts activities are based on handwork in the elementary grades. The children become acquainted with the raw materials used in industry by making selected projects. In junior high school, industrial arts has become a part of the educational program. Activities are usually centered around making useful objects for the home. In high school, the objectives are broadened to include welding, machine shop, woodworking, automobile mechanics and others. These courses can help in the early selection of a vocation for students who do not plan to continue their education. Students also acquire skills, appreciations, worth-while attitudes and preparation for trade schools and colleges.

The General Shop. The students have the opportunity of gaining experiences in more than one phase of shopwork. The advantages of the general shop as stated by Newkirk include:

1. It is well adapted to the organization of industrial arts content in the light of the general education, exploration, and guidance aims of the junior high school.
2. It permits students to be treated as individuals with due respect for their differences in interest and capacity.
3. It enables a student to discover his abilities and aptitudes through manipulation of a wide range of materials, tools and the processes that go with them.

4. It offers an economical way to gain experience in many activities.

5. It makes possible an adequate industrial arts program for the small school.

6. It stimulates the setting up of a well-planned shop and a carefully organized teaching content.

7. It increases teacher efficiency. (13 - page 19)

The number of general shops has increased rapidly during the last decade. To be properly prepared, the general shop teacher should have training in a variety of courses such as woodwork, plumbing, printing, electricity, automobile mechanics, finishing, drawing, plastics, design, and others.

Part B

Personal Philosophy

Many workers are employed in some phase of industry in the United States. Experiences in Industrial Arts teaching reveals that students become greatly interested in the industrial courses because these courses enable the student to develop creative abilities and potentialities. These students, many of them, will become industrial workers.

To build an effective industrial arts program, it is necessary for the teacher, students and parents to work co-operatively in setting up goals. The teacher must be alert to needs, interests, and abilities of students as they work toward the achievement of these goals and should provide learning experiences in the classroom which can be extended into the homes of the students to arouse the interest of family members as well as other people in the community.

One of the most effective ways by which education may promote growth in individuals is to help them to think through and solve their

personal, family and group problems and to develop broad principles or understandings they can and do apply in daily living. In order to do this, the teacher needs to have command of a wide variety of teaching techniques and to be able to use them effectively in guiding students.

CHAPTER III

THE STUDY OF STORAGE FACILITIES

Information was needed to help determine what storage facilities the students and their families considered necessary. A questionnaire was given to each student participating. Many questions were asked including the kind of storage facilities needed in the home, the amount of storage space provided, storage facilities already on hand, and other questions pertaining to storage in the home. Students were given time to discuss storage problems with other family members. The questionnaires were returned with varied responses. After discussing the combined decisions of the families of the community, it seemed that a storage improvement project would help many students and their families.

A brief history of the Slick, Oklahoma community will give some background of how the community came into existance. Information was gathered from a number of senior citizens of the community, past and present school officials, city officials and records from the county offices.

Part A

History of the Community

The community of Slick, Oklahoma of which School District number 75 is a part, came into being because a few farm families were attracted to this area by the rich lands. Before statehood a post office had been

established and by the time of statehood enough of these farm families had settled in the area, that a school was necessary. A school district was organized and a building of one room was constructed. The building served as a place for church and Sunday School and other social affairs as well as for educational purposes. Approximately fifteen families composed the district of nine and one-half square miles. Most of these families had come from other states.

In 1918, oil was discovered in the Slick area. This caused a rapid growth of the town. The roads were poor and automobiles were few. Travel was done principally by horse and buggy. The Oklahoma Southwestern Railroad was built from Bristow through Slick and on to Nuyaka in Okmulgee County.

In a short while, banks, hotels and theaters were built. Many new homes were built of stone and brick. A new school building was built after the population increased. The High School came into existance in 1921. The character of students of the new school differed greatly to those of the first school. Their experiences varied.

When the oil gave out, the town decreased in population rapidly in a few years from a city of three thousand to a village of 500. There still remain a few of the early settlers that have seen the city spring up, spread, grow, and flourish. They have also seen a greater part of it pass away like a dream. This once thriving community has almost vanished in a short time. Today only three stores, three service stations, a church, a cafe, a post office and a school remain. The people of Slick do many things to satisfy their own needs or wants as well as the needs of others outside the town of Slick. They use the

doctors, hospitals, lawyers, and movies of neighboring communities. The telephone company and the post office provide communication while the busses, private automobiles and trucks provide transportation for passengers and freight. Slick has its own water system and most of the homes are modern. The Oklahoma Gas and Electric Company supplies the town with electricity.

Slick School at Present. Although the attendance of the school is small as compared with the oil boom days of Slick, the teaching staff has been reduced to eight teachers, other school facilities have been expanded. The administrative area has been doubled in size. Transportation is provided for most of the pupils living within the administrative area and also to students of four adjoining districts, both high school and grade school students. The school is a member of the County Film Library Association, operates a school lunch program, assists with the county 4-H club program and books and magazines are available for public use.

The school at the present time is serving directly or indirectly 140 families. Several of these families do not have children in school. All of these families, some farmers, others oil field workers, and others engaged in other kinds of useful occupations seem to make use of and enjoy learning, living, playing and working together.

During the school year 1955 - 1956 there was exchange of classes with the Slick High School and the L'Ouverture High School at Slick, Oklahoma. During the school year 1956 - 1957 the two schools were totally integrated. New courses were added to the curriculum, among them Psychology, Industrial Arts, Geometry, and Home Economics.

A History of Industrial Arts in the Slick School. The teaching of Industrial Arts at the Slick school was started in 1937, with approximately forty students enrolled. Two units were offered, Shop I and Shop II. The periods were fifty-five minutes long. Most of the tools purchased during this year were hand tools. One jig saw and one small lathe were purchased the following year. The furniture for the shop included seven work tables and one small desk and a few chairs. All of these items were purchased from Central State College at Edmond, Oklahoma for approximately one hundred twenty-five dollars. A few tools were added later. These courses were taught for eight years with Mr. Richard E. Fisher as the first Industrial Arts instructor.

The Present Program of Industrial Arts in the Slick School. The following Industrial Arts courses were made available and taught in the Slick School in 1956: Shop I, Shop II, Shop III, and Mechanical Drawing. Some new equipment has been purchased. Boys enrolled in Shop I receive training in many areas of woodworking. Some of these include reading and making working drawings, squaring operations, project selections, assembling and finishing projects.

The planning for the experience of improving storage facilities at home and in the school at Slick led to the general assumption that simple practical storage for the moderate and low income home may be planned so that storage space may be added at little expense.

Part B

Proposed Plan of Work

In order to guide such a study, the teacher believed that he needed

to know what storage facilities were available and proposed the following plan of work:

1. Make a brief survey of storage facilities available and make home visits that might reveal storage practices and needs
2. Learn what were immediate desires of family members for storage, also needs of school
3. Develop a limited unit in general shop classes dealing with storage suitable for owned homes, rented homes and the school shop
4. Enlist all members of the families concerned as well as school administrators in the project
5. Extend the project to include families in the community who were not directly connected with the school
6. Keep a record of storage achievements and practices
7. Secure written stories or reports of specific projects
8. Encourage participants in continued effort to make improvements in storage facilities
9. Interpret progress
10. Evaluate or appraise results

Since many of the observable results would come as a result of the unit of work taught in class, the teacher made an effort to use teaching techniques that were both effective and interesting, such as:

1. Prepare an attractive and analytical bulletin board that would capture the interest of students
2. Collect illustrations and articles showing various types of storage and present them to the class in an interesting and challenging way

3. Start a scrapbook showing ideas for storage
4. Encourage students to contribute and add to teacher selected material
5. Collect drawings and directions for making various types of storage equipment
6. Contact lumber companies and other business places to locate suitable materials for possible work to be done
7. Enlist the co-operation of superintendent, principal, other teachers and students
8. Enlist the aid of sales people in giving demonstrations related to storage problems
9. Devise record forms for organizing and summarizing findings
10. Plan trips to see results
11. Interpret results
12. Draw conclusions

Attractive bulletin boards were arranged by the students and teacher to stimulate further interest and to get new ideas for improving storage. Books, magazines, scrapbooks and other resource materials were made available for browsing. Small discussion groups brought out important points learned about storage from magazines and field trips. In general class discussion, the subjects discussed were:

1. Provide some storage for all articles that need to be stored.
2. Discard articles that are no longer useful.
3. Plan storage space for clothing and for personal articles near the place they are used.

4. Plan the kind of storage that is suitable for the items to be stored.
5. Keep everything in the areas planned for them as follows:
   a. Keep shoes on rack or in shoe bag on wall of closet door.
   b. Have hat boxes or shelves for hats.
   c. Keep gloves, handkerchiefs, belts and other such articles in a box or divided drawer planned for that purpose.
   d. Place soiled clothes in a hamper or other place provided for that purpose.
   e. Keep cuff links and other jewelry and toiletries in special divided areas near place of use.
   f. Where can sports equipment be stored?
   g. How may guns be stored safely?
   h. Where and how may fishing equipment be stored?
   i. Would cedar chests give ample storage space for seasonal bedding and clothing?
   j. How should farm equipment be stored when not in use?
   k. What kind of storage space is necessary for foods, canned and fresh?
   l. Are barns considered storage areas?
   m. What should be done with extension cords when not in use?
   n. How can the shop classes help increase individual locker storage space at school?
   o. Can an inexpensive lumber rack be built in the shop along with space for storing drawing equipment?

p. Are bookcases and magazine racks expensive to make?

q. What about storage space for younger children's toys?

r. Divided drawer space and boxes make the storage of small articles simple.

A check list, starting on the next page, when filled out, presented a survey of the individual families and the storage facilities they now have, those they need, and those they plan to improve or build.

At the close of the period designated for the study, it is believed that many storage improvements will be made for cleaning supplies and equipment; seasonal bedding; seasonal clothing; farm tools; books; magazines; foods; toys; guns and other sports equipment; shop equipment; and personal storage at school. The teacher and students are planning open house to display projects completed by the students. There are some major storage improvements started that the boys seem especially proud of that cannot be displayed at school. Plans are being made for a tour of these homes where major jobs are being done.

Some of the agencies and individuals, whose co-operation were enlisted, include: (a) farm clubs, (b) local lumber companies, (c) local carpenters, (d) local grocery stores, (e) hardware stores, (f) financing and suggestions from parents and relatives.

CHECK LIST

STORAGE FACILITIES AND PRACTICES

OF INDUSTRIAL ARTS STUDENTS

IN THE SLICK HIGH SCHOOL

SLICK, OKLAHOMA

Please check each item carefully with other family members.

1. Name _____ Date _____

2. Number in family _____ Boys _____ Girls _____

3. Ages of boys in family _____

4. Give ages of others in home _____

5. List occupations of others in the home _____

_____

6. Number of children in school _____

7. Number of children in home not in school _____

8. List storage improvements needed in your home _____

_____

9. List storage improvements which you could make with little or no money _____

10. List storage improvements you would like to make most _____

_____

11. Check the kind of storage you have in your home now.

Food storage:

Fresh foods _____ Frozen foods _____

Potatoes _____ Cabbage _____

Flour _____ Cereals _____

Bread _____ Coffee _____

List other foods and tell where they are stored _____

_____

_____

Clothing storage:

Closets _____ Number of closets _____

No closets at all _____ Closets without doors _____

Closets with doors _____

Rods across corners _____

Other places _____

Where do you store your shoes? _____

Where are cooking utensils stored? _____

Dishes _____

Silverware _____

Glassware _____

Linen storage _____

Towels _____

Tablecloths _____

Sheets and pillow cases _____

Other _____

Seasonal bedding:

Blankets _____

Quilts _____

Seasonal clothing:

Coats _____

Boots _____

Formal dress clothing _____

Others _____

Miscellaneous:

Books _____

Magazines _____

Toys _____

Guns _____

Sporting equipment _____

_____

Rain gear _____

Farm tools:

Small tools _____

Major equipment _____

Garden tools _____

Other materials and equipment to be stored _____

_____

_____

_____

A compilation of the returned questionnaire resulted in the following list of desired storage spaces:

(a) Storage space for sports equipment

(b) Storage space for guns

(c) Storage space for raincoats and boots

(d) Storage space for hats and shoes

(e) Storage space for Dad's mower, rakes, hoes, water hose and other small equipment

(f) Storage space for socks, handkerchiefs and other small articles, convenient when needed

(g) Storage space for tractors, plows, hay bales and balers, trailers, and other farm tools

(h) Storage space for the many things Mother has to store for the entire home and family such as: card tables, large trays, food, books, clothing, table covers, bed linens, blankets, out-of-season clothing, magazines, newspapers, jewelry, dishes, cooking utensils, electric appliances, picnic equipment, house cleaning equipment, sewing equipment and accessories

(i) Storage space for personal things at school

(j) Storage space for books and magazines in the individual classrooms

(k) More storage space for equipment and lumber, especially the short pieces for the school shop

(l) Storage space for small projects when completed

(m) Storage space for drawing equipment

(n) Storage space for shop coveralls and aprons

Many students listed major storage needs such as a garage for the car and a double car port for the car and the truck. It is believed that a great interest in discovering storage needs was aroused. Evidence of this belief was shown by projects completed since the beginning of this study, which includes: (a) racks for guns, ties, magazines, basket balls, towels, shoes and cooking utensils, (b) bookcases for home and school rooms, (c) book shelves for school library books and newspapers, and for home use, (d) shelf-alls, to be used as room dividers and storage units, (e) handy kits for spices and other small items, (f) note boxes, (g) book ends, (h) napkin holders, (i) cedar chests, (j) book case head board for bed, (k) built cabinet in shop for storage of small projects, (l) built storage unit for coveralls and aprons, (m) installed student locker units on two walls of school building, (n) built single wall book cases for classroom use, (o) two new barns were built, (p) in-door and out-door storage units for home use. Many students have expressed a desire to continue storage projects during the next school year. Some have made plans for building cabinets, closet construction and other useful projects for improving storage facilities.

CHAPTER IV

SUMMARY AND RECOMMENDATIONS

With student and parent cooperation, many of the family storage problems have been solved in the home, school and community of Slick, Oklahoma. These accomplishments were made possible through careful planning and management on the part of each family member participating and school officials.

Summary

The purpose of this study has been to assist students and families in providing adequate storage facilities for their home and for the school.

The writer believed that good storage facilities are vital and that making storage facilities at home and school serve human needs is a challenge to the Industrial Arts teacher.

It is evident that many families in various sections of the country are living in homes where storage facilities are very limited, and little or no money is available for the improvement of these conditions.

In view of the reasons previously stated, the author believed that a study of this kind would be valuable. The study originated from the idea that contributions could be made to the school and to the community of which the author is a part. It was also hoped that the writing might inspire other Industrial Arts teachers to become interested and conduct similar experiments in communities in which they work or teach Industrial Arts.

Making visits in the community, personal interviews with the school superintendent and principal, and the completion of check lists by the students enrolled in Industrial Arts classes provided the basis for this study.

Recommendations

In view of the previous conclusions, the following recommendations are made:

1. That more visits be made in surrounding communities and throughout the state by other Industrial Arts teachers to become aware of the need for improved storage in the homes and schools.
2. That Industrial Arts teachers of Oklahoma study the communities in which they work and place special emphasis on guiding students and families in improving storage facilities.
3. That teachers continue to give consideration to co-operative planning of better storage facilities to include students, school, home and community experiences.
4. That records be kept of similar studies or surveys to note any progress made over a period of years.
5. That Industrial Arts teachers continue to study various techniques that will stimulate students to become aware of their needs which will encourage them to make improvements in their home, school, and community at large.
6. That other studies of similar nature be made. The writer believes that this recommendation is particularly important because many desirable solutions for the problem of storage facilities occurred to the author, but due to the time limit for making the study, it was impossible to include and complete many of them.

Many parents and students, who were not enrolled in Industrial Arts classes, visited the shop. They expressed satisfaction for improvements made at home and commented on the attractiveness of the lockers in the school building and other projects being completed in the shop. A number stated that they hoped more money could be invested in the Industrial Arts department for more machinery and equipment.

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