

THE DEVELOPMENT OF THREE TYPES OF  
LEARNING CENTERS FOR SELECTED  
HOMES IN PAWNEE COUNTY,  
OKLAHOMA

By

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## CHAPTER I

### INTRODUCTION

The learning center is basically an area that brings together all the elements used in home study and provides a convenient and attractive place in which to store and use them. While "Learning Center" is the term developed by professional builders and developers, it can also be called a "Study Center Room."

The Practical Builder magazine stated:

A Learning Center is a wonderful thing to promote. It is utterly new. Like Motherhood, no one can object to it. ... a Learning Center involves the entire family and offers a whole new dimension to the home.<sup>1</sup>

Today's parents must ask themselves what they can do to prepare their children for the demands of the coming age. No haphazard exposure to knowledge will equip a child to compete in a world of increasing automation, in a society where the number of college graduates will be greater than ever before.

Marie Avery points out:

Prerequisites for good learning are good physical and emotional conditions. If there is

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<sup>1</sup>"The Learning Center An Idea Becomes Reality," Practical Builder (Sept. 1967), p. 87.



confusion around your child, he himself is likely to be confused.<sup>2</sup>

In his book, Studying Effectively, Gilbert gives seven points to consider when providing physical conditions favorable to study:

1. Work in a place where noise and distractions are at a minimum. Experiments show that students can become so well adapted to a noisy environment that it will not hinder their study efficiency; however, the noisy environment requires more energy in order to concentrate.
2. Develop regular habits of study in certain places. By studying subjects in the same place and at the same time, children develop habits which make it easier to concentrate. They should loaf, play, and do recreational reading at other places in order to insure an attitude of study when sitting down to a study table or desk or other appointed places for study.
3. Sit up straight in a chair before a desk when studying. A straight spinal column and relaxed muscles are important conditions for effective study.
4. Do not study in an overheated room. A room that is a little too cool rather than too warm will stimulate better study habits.
5. Keep the desk free from distracting objects. Unnecessary articles not only are in the way, but encourage mind-wandering.
6. See that light conditions are proper. Do not directly face a light nor work in a shadow. Be sure that the light is uniform over the entire page of the book. Unequal illumination of the page will cause eye fatigue.
7. Have all necessary equipment at hand.

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<sup>2</sup>Marie L. Avery and Alice Higgins, Help Your Child Learn How to Learn (Englewood Cliffs, N. J., 1962), p. 10.

Before settling down to study, be sure to collect the necessary materials.<sup>3</sup>

Freedom and space are important in housing. The school child wants room for quiet and study, and the lack of space is a constant hindrance to education within the home.

Crawley states that: "If an entire room for study is not available, at least see that a special corner in which to study is provided."<sup>4</sup>

The space race is changing the direction of American life. Since the launching of the first Sputnik, the demand for education and new information has become important at every age level. A whole new industry of communication and teaching devices is being developed to handle this new demand.

Dan Pearlman, Roosevelt University, Chicago, says "It's a new fact of life that the demand for education is growing faster than we can keep pace with."<sup>5</sup> The result of the educational demand and technical progress means a great amount of the learning process will be transferred to the home.

The June, 1966 Practical Builder magazine, states:

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<sup>3</sup>C. Gilbert Wrenn and Robert P. Larsen, Studying Effectively (Stanford University, California, 1947), p. 27.

<sup>4</sup>S. L. Crawley, Ph.D., Studying Efficiently (New York, 1938), p. 51.

<sup>5</sup>"The Learning Center the Next Change in the American Home." Practical Builder (June, 1966), p. 91.

As teaching and curriculum move towards multimedia such as TV, taped films, and records and away from written word, the home study may be linked to a central information and resource center -- perhaps at the school, by telephone and closed circuit television. The student will be able to dial and receive information and lesson material upon request. ... Earphones and headsets are a part of the equipment in the study so that playing tapes will be possible without disturbing others.<sup>6</sup>

Education is a continuing life process. It does not end with the termination of formal schooling. The learning process involves the entire family. Adults, as well as children, are continually needing to update their knowledge and skills in their job. It is important then, that a learning center be planned and provided in the homes of today in order that the whole family may have an incentive and opportunity to continue their education.

#### Statement of the Problem

The problem in this study is to determine if a learning center is being provided for school age children in the home and to develop selected plans for learning centers for selected types of homes.

#### Objectives of the Study

The objectives of this study are as follows:

1. To determine if the structural plans of present housing provides for learning centers.

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<sup>6</sup>Ibid., p. 96.

2. To develop selected types and arrangements of learning centers for selected homes with certain limiting factors.
3. To determine the relationship between the space provided and the educational level of the parents.

#### Definition of Terms

For the purpose of this study, the following definitions shall apply:

Learning Center is an area that brings together all the elements used in home study and provides a convenient and attractive place in which to store and use them.

Stabilized Environment refers to favorable physical conditions provided for living and learning.

Income Level is the amount of money earned for a living in a year.

Educational Level is the number of years of schooling completed by the parents.

Minimum Learning Center includes the basic needs such as ample writing space, storage for some books, and adequate lighting located in a portion of some room.

Maximum Learning Center is an entire room with multiple storage work space, flexible for all types of equipment such as television, tape

recorder, typewriter, and adequate lighting.

Composite Plans are plans that include various parts or features for a learning center.

Systematic Observation will be observing to see what factors are provided in learning centers.

## CHAPTER II

### REVIEW OF LITERATURE

Research is lacking in housing specifically directed toward learning centers. This study should help to fill the need for information on the development and use of learning centers. Since no information is available from the Extension Service on learning centers, the writer hopes that this study will serve as a guideline in developing a publication on learning centers to be used in Extension Centers in Oklahoma.

Because there is so much to learn in today's world, and so little time, an individual's living environment should be planned to complement a desire for learning. A stabilized environment, which simply means favorable physical conditions for living and learning will be a major feature of future homes. A study center for learning is a place in which to exercise creativity. Learning Centers should be planned for stimulation and excitement, for variety and contrast, for color, form, interest, and proportion which will enhance the activities and lives of individuals. Learning Centers must be designed to implement an existing educational system and adapt to the changing teaching methods and growth of the educational philosophy

of today's schools.

Because of expanding knowledge of human behavior, more people will discover and utilize their housing as part of the educational process so that it will serve as a vital center for learning. Riker states:

The theories about learning are many, and the evidence regarding the factors involved is far from conclusive. Even so, the wise course of action is to experiment with housing as a factor in learning because of the over-riding importance of finding better ways to insure student success in school.<sup>1</sup>

He also states:

Housing as an educational facility rests on three fundamental assumptions. One assumption applies to Learning Centers in Homes that 'Environment Influences Behavior.' The housing structure creates a readily visible physical environment - the building with its finishes and furnishings, space, lighting, and color. Not visible are the potent physiological and psychological effects of the environment. For example, insufficient illumination, an undersized study desk, or an ill-fitting study chair may alter a student's intentions to study and drive him to other activities in or out of the building. On the other hand, a suitable combination of physical elements in a student's room can cause him to say, 'This room makes me want to study ...'<sup>2</sup>

Lighting can make a room come alive. The first job of lighting is to provide proper seeing conditions, but this is not the only purpose. Perkins stated:

Lighting must also contribute to the mood for learning, to the psychological well being of

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<sup>1</sup>Harold C. Riker, College Housing As Learning Centers, Published by The American College Personnel Association, A Division of The American Personnel and Guidance Association, Washington, D. C., 1965, p. 3

<sup>2</sup>Ibid., p. 5.

the student. It must be a stimulant. Bland, coldly uniform, 'scientifically-planned' lighting usually has the opposite effect: 'It bores and depresses.'<sup>3</sup>

Since many lessons are prepared at home and many study habits are found there, proper lighting is important for the home study center. Lighting should stimulate concentration and give plenty of illumination. The quality of a lighting installation is directly affected by the nature of the surfaces that surround a person. Surfaces are as important in efficient lighting as are the lighting fixtures and bulbs. Texture can cause light to be reflected specularly or to be diffused. The intensity of color controls the amount of light a surface reflects. The positioning, area, intensity, and relationship of light sources - fixtures and windows, to other elements of the interior, are of importance in obtaining optimum ease of seeing.

When study lamps are used, they should be small lamps of the pin-up type attached to the wall on either side of the desk or a larger table lamp placed on the left side of the desk for a right-handed person or on the right side for a left-handed person to prevent shadows. Other lighting units in the room should be turned on when the study lamps are in use in order that the general level of lighting will be adequate, with no harsh shadows or high

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<sup>3</sup>Lawrence B. Perkins, Work Place for Learning (New York, 1957), p. 37.



brightness differences.

Seagers states:

If two pin-up lamps are used, each should have a six-inch diffusing bowl or disc beneath a 100-watt lamp. The lamps should be approximately thirty inches apart and the lower edges of the shades should be about fifteen inches above the desk top. If a large table or study lamp is used, it should have a large diffusing bowl or disc beneath a 150-watt lamp and the lower edge of the shade should be fifteen inches (at eye-level) above the desk top. The shades should be white inside and translucent to the extent that, when viewed from a distance, the top and bottom edges of the shade do not appear markedly brighter than the shade itself. Ordinary white bulbs should be used. Tinted bulbs are intended for decorative effects where the lower lighting levels are satisfactory.<sup>4</sup>

Whatever the type of lighting, the colors on the ceiling and walls are important factors in illumination of a room intended for study. It is important to choose color schemes that are soft and warm but not dazzling. The muted schemes are best; the decorative accessories, books, and magazines provide the bright colors.

Appropriate colors are important factors in providing visibility as an aid to study, as well as in creating an environment that is conducive to study and to promote physical and mental health. Too many study rooms are depressing places. Nervousness, irritability, and lack of interest in learning can often be traced to improper color in the study or room where studying is done. The psychological effect of color is produced by the hue (red, blue,

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<sup>4</sup>Paul U. Seagers, Light, Vision, and Learning (New York, 1963), p. 75.

yellow) as well as by the value of the color (lightness or darkness). The selection of color and its application should be handled with the utmost discretion. Hatje states:

Colors exert a decisive effect up a room, especially as their influence cannot be easily controlled. The effect of color in the home can be judged from two different angles. First there is its psychological effect. Warm colors are stimulating: red energetic and active, yellow gay, orange vital. Green is refreshing without being aggressive. Cool and distant colors include turquoise and most shades of blue. Besides the psychological effect of colors, certain architectural considerations must be borne in mind. Colors not only transmit definite moods, they also provide different spatial effect. ... These spatial properties are attributed to the colors as permanent qualities by the optics of the eye.<sup>5</sup>

Continuous reading and writing tire the eyes, and it is necessary at certain intervals for a person to turn away from the paper or book. To shift the gaze from a white paper to a white or near-white wall provides no relief. However, turning from a white sheet to a dark surface is anything but restful. Shifting the eyes back and forth between very light and very dark surfaces means that they have to make extreme adjustments which, if repeated often, are injurious. Only a medium tone can provide eye comfort after a period of concentration on reading or writing. For the ceiling, white is desirable because it reflects maximum light. It cannot be

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<sup>5</sup>Gerd and Ursula Hatje, Design for Modern Living (New York, 1962), p. 28.

psychologically negative because a person does not look at the ceiling. The right use of color is important or otherwise the walls will be either too dark and absorb too much light, or they will be too light and create blinding glare.

In constructing and decorating a room in which to learn, it is important to create the atmosphere and the environment that contribute most to the full growth of each person's mental, physical, and spiritual potentials. Cheskin states:

When we realize the psychological factors in color, we recognize that a school boy's or girl's study should be given a color treatment different from that of other rooms. It should be apparent that each room should be treated in relation to the character of its occupants, to the activities carried on in the room, to the room's dimensions, and to its light source. Rooms for children should be planned to meet their psychological needs, not to please the parents' personal taste.<sup>6</sup>

There must be greater emphasis on the accommodation of technological aids in learning centers in homes. Television, tape recordings, and teaching machines are relatively recent inventions, and it is difficult to predict their future development. The potential of invention, the possibility of adapting or improvising mechanical and electronic equipment, makes the learning center a vital link to the school. The June 1966 Practical Builder magazine states:

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<sup>6</sup>Louis Cheskin, How to Color-Tune Your Home (Chicago, 1962), p. 72.

As teaching and curriculum move towards multi-media such as TV, taped films, and records and away from written word, the home study may be linked to a central information and resource center -- perhaps at the school, by telephones, and closed circuit television. The student will be able to dial and receive information and lesson material upon request. ... Earphones and headsets are a part of the equipment in the study so that playing tapes will be possible without disturbing others.<sup>7</sup>

Learning centers need to stimulate intellectual activity and serve to raise a student's standard of academic excellence. As technological equipment is developed and accepted for educational uses, housing may assume primary importance as a place for the exchange and interplay of ideas.

More machines are inevitable as the Space Age progresses with new equipment and refined techniques. Of significance is automatic data processing equipment which already enables scientists to design research projects that would have been impossible a few years ago. The prediction is that computers will eventually perform at the speed of light. This equipment will undoubtedly alter radically the materials in the learning process. Conceivably, more equipment for study purposes will be needed by students where they live.

Books and technological aids to learning need to be readily accessible within the house. Obviously, some degree of flexibility must be built into homes to provide for

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<sup>7</sup>"The Learning Center The Next Change in The American Home." Practical Builder (June 1966), p. 91.

these factors. Although in planning, it cannot be known what equipment may eventually be used, some provisions need to be made where installation of equipment could be provided. The objective is to develop learning centers for intellectual activity which will stimulate the student to quality performance.

The September 1967 Practical Builder magazine lists three main types of Learning Centers:

... the basic home study unit, the integrated learning center, and the family learning center.

The basic home study unit is not a room in itself but a portion of another such as a family room, den, or bedroom. The unit should provide for the basic needs of writing space, storage for reference books, and a typewriter.

The integrated Learning Center is also a portion of a room, but is partitioned from the usual function of the room. It can be carrells in the children's bedroom, or a study alcove in a family room. The storage provisions are more elaborate and there is more consideration to individual privacy. Besides book shelves, bulletin board, work area and good lighting, the integrated center should have cabinets, counter space, and sound conditioning.

The family Learning Center is the most ambitious. An entire room is used for the study area. Multiple work spaces are provided, semi-isolated from one another and each with shelf and cabinet space to store reference works and equipment. The room may also have a hobby corner or dark room.<sup>8</sup>

The learning center is basically an area that brings together all the elements used in home study and provides a convenient and attractive place in which to store and use

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<sup>8</sup>"The Learning Center An Idea Becomes Reality." Practical Builder (September 1967), p. 82.

them. The writer has considered lighting, color, and technological advancements as three factors that affect the planning of a learning center. Various types of families, the price range of the home, available space, and the nature of the local educational process will also affect the type of learning center best suited for a particular home.

The thoughtful and imaginative consideration of factors essential to learning centers will add a new dimension to planning housing for the future. As housing becomes more closely related to the teaching-learning process, learning centers will and must be planned for use in homes.

## CHAPTER III

### METHODOLOGY

In the development of the methodology, several types of questions were considered with the possibility of mailing the instrument to the respondents. After pre-testing, an interview technique was selected as the best means to acquire the essential data.

#### Developing the Instrument

A questionnaire was developed which was used by the interviewer. Most of the questions were a "check list" type indicating the answer applying to the family. It was decided that an interview would yield information of greater depth than a mailed questionnaire particularly because of the three economic levels of the respondents and it would also provide the interviewer an opportunity to become acquainted with people in the county in which she worked.

The instrument was pre-tested. Several items were added and the general form of the questionnaire structured so that the final instrument consisted of twenty questions (see Appendix A) plus opportunity for observation.

The instrument included questions designated to

obtain information regarding the education of the parents, composition of the family, employment of the household, approximate income level, length of time in present home, type of dwelling, study habits, whether own or rent, and equipment in learning center. Each of the twenty-seven respondents was interviewed individually in their own home.

### Selection of Participants

Twenty-seven families with school age children in Pawnee County were selected from seventy-five families equally divided into three classified income levels.

The twenty-five families in each of the three income groups were selected by personal observation and assistance from the Welfare Department, Community Action and Economic Opportunity Offices. From the twenty-five names, the writer selected nine names in each income group at random which were personally interviewed. The income levels were classified as follows:

Low Income	\$3,000 or below
Middle Income	\$3,000 to \$8,000
High Income	\$8,000 or above.

Two limitations guided the selection of the families: One, the income level and two, that there were school age children in the family.

The interviewer called at the home of each of those selected for the sample and interviewed the mother of the



children. If the mother was not at home, the interviewer returned at another time.

A systematic observation and personal interview was used with twenty-seven families with school age children in Pawnee County to determine (1) if learning centers are currently located in homes, (2) if the educational level of the parents affects whether a learning center is provided, and (3) the type of equipment presently in learning centers.

#### Collection of Data

All data were collected by the investigator through the personal interview method. Prior to the direct questioning, the investigator introduced herself and briefly explained the purpose of the study.

#### Treatment of Data

Upon completion of the interviews, each schedule was edited, responses were recorded and tabulated. Findings are presented in Chapter IV.

## CHAPTER IV

### FINDINGS AND OBSERVATIONS

The findings describe the socio-economic status of the family, the educational level of the father and mother, whether learning centers were provided and the types of equipment in the learning center.

#### Educational Level

Data in Table I shows the educational level of the mother and father, the socio-economic status of the family and whether a learning center was provided in the home.

Data regarding the educational level of the mother and father revealed that in the low income families one mother completed the seventh grade, two mothers and one father completed the eighth grade, four mothers and three fathers had one to three years of high school, with two mothers and three fathers completing four years of high school. Compared with the middle income mothers and fathers educational level, one father completed five to six grades, one mother completed the eighth grade, three fathers had one to three years of high school, six mothers and three fathers completed four years of high school, two mothers and one father had one to three years of college,

TABLE I  
EDUCATIONAL LEVELS AND LEARNING CENTERS PROVIDED

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Educational Level of Mother			
School years completed	\$3,000 and Below	\$3,000 to \$8,000	\$8,000 and Above
1-4 years			
5-6 years			
7 years	1		
8 years	2	1	
1-3 years high school	4		
4 years high school	2	6	3
1-3 years college		2	4
4 years or more of college			2

Educational Level of Father			
School years completed	\$3,000 and Below	\$3,000 to \$8,000	\$8,000 and Above
1-4 years			
5-6 years		1	
7 years			
8 years	1		
1-3 years high school	3	3	
4 years high school	3	3	1
1-3 years college		1	1
4 years or more of college		1	7

Learning Centers Provided in Homes of Respondents			
Provided	\$3,000 and Below	\$3,000 to \$8,000	\$8,000 and Above
Yes	3	4	9
No	6	5	

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and one father completed four or more years of college. In the high income, three mothers and one father completed four years of high school, four mothers and one father completed one to three years of college, and two mothers and seven fathers completed four or more years of college. From these findings, it appears that the educational level is related to the income level of the family.

#### Learning Centers Provided

In the low income, three of the nine homes had learning centers as compared to four of the nine homes in the middle income and all nine homes in the high income provided at least one learning center and three homes had as many as three in one home. It appears that higher educated people tend to put more emphasis on education and encourage their children to do better school work by providing learning centers in their homes.

#### Location of Learning Centers

All of the students did at least some of their studying at home. The location where they studied varied greatly. In the low income, five homes used the dining room, two homes the bedroom area, one home the living room, and one home the kitchen as compared to the middle income, one home used the dining room, five homes the bedroom area, and three homes the kitchen. In the high income all studying in the nine homes was done in the bedroom area.

## Lighting

In lighting of the learning centers or area where the student studied, only two homes in the high income had lamps that have been recommended for studying, only four homes in the high income used the high intensity lamp plus a ceiling fixture, three homes in the low income, three in the middle income and four in the high income used non-recommended lamps. Only four homes in the low income had a ceiling fixture with a diffusion bowl as compared with eight in the middle income and all nine in the high income. Five homes in the low income had ceiling fixtures without diffusion bowls as compared to one in the middle income and one in the high income.

Good lighting is important for the learning center because of the direct effect on the eyesight of the children. Surveys showed that twelve of the thirty-six school age children in the low income wore glasses as compared with three of the eighteen in the middle income and eight of the eighteen in the high income.

## Amount of Storage

The amount of storage in the learning centers varied with the income level of the family with more storage being provided in the higher income group. The storage varied from shelves, tables, files and drawers.

### Equipment

The telephone was located in the learning centers of some of the high income group. There were seven telephones in the low income group, nine in the middle income and twelve in the high income. All homes had at least one television which was located in or near the study area with the high income group having sixteen televisions. Two homes in the low income group had typewriters, four in the middle income, and seven in the high income.

### Color

The colors of the walls used in the learning centers were restful. In the low income families, two had green walls, one beige, two had pink, three blue, and one had yellow walls. In the middle income families, four had white walls, two beige, two wood paneling, and one had painted yellow walls.

### Ownership of Residence

The ownership of the home indicated by the respondents showed six in the low income owned their homes and three families rented unfurnished homes. In the middle and high income families, eight were home owners. One rented unfurnished in the high income and in the middle income one home was owned by the State.

### Length of Residence

The length of residence is shown in Table II; each group is very similar although the low income families moved more frequently. The reason the length of residency was short in the middle and high income was they had built new homes in which to live and the age of the parents makes a difference. In the low income families, five had under five years of occupancy, three had five to fifteen years, and one had over fifteen years. In the middle income families, six had under five years occupancy and three over fifteen years. In the high income, three had under five years, five had five to fifteen years, and one had over fifteen years.

### Type of Dwelling

All twenty-seven families lived in either a single-family one-story home or a single-family multi-story home. In the low and middle income families, there were seven in a single-family one-story and two in a single-family multi-story. In comparison, five of the high income families had single-family one-story and four had single-family multi-story dwellings.

### Adequacy of Dwelling

The respondents were asked the question "Do you feel your house is adequate for your family's needs?" In the low income, six families answered yes, three answered no.

TABLE II

FAMILY OWNERSHIP, LENGTH OF RESIDENCE,  
AND TYPE AND ADEQUACY OF DWELLINGS

---

Family Ownership of House As Indicated By Respondents

Ownership of House	\$3,000 and Below	\$3,000 to \$8,000	\$8,000 and Above
Owned	6	8	8
Rent furnished completely			
Rent furnished partly			
Rent Unfurnished	3		1
Other (owned by State)		1	

Length of Residence By Respondents in Present House

Length of Residence	\$3,000 and Below	\$3,000 to \$8,000	\$8,000 and Above
Under 5 years	5	6	3
5-15 years	3		5
Over 15 years	1	3	1

Type of Dwelling of Respondents

Dwelling	\$3,000 and Below	\$3,000 to \$8,000	\$8,000 and Above
Single-family one-story	7	7	5
Single-family multi-story	2	2	4
Trailer			
Duplex			
Multi-family row			
Multi-family apartment			
Other (specify)			

Response By Respondents of Adequacy of Dwelling

Adequacy	\$3,000 and Below	\$3,000 to \$8,000	\$8,000 and Above
Yes	6	4	8
No	3	5	1

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In the middle income four families answered yes, five no. In the high income, eight families answered yes and one no. The number of children in comparison to the number of rooms shown in Table III indicate the reason for some of the above answers.

#### Number of Children

Table III indicates the total number of children at home and the number in school of each income group. In the low income families, there was a total of forty-nine children in nine families which would average 5.4 children per family. Thirty-six of the forty-nine children were of school age. In the middle income, there were twenty-two children in the nine families or an average of 2.4 children per family. Eighteen of the twenty-two children were of school age. In the high income, there were nineteen children in the nine families which would average 2.1 children per family. Eighteen of these were of school age.

#### Number of Rooms in Dwelling

In the low income families, two had homes with four rooms, two with five rooms, three with six rooms, one with seven rooms, and one with eight or more rooms. In the middle income, three families had homes with four rooms two with five rooms, three with six rooms and one with eight or more rooms. In the high income families, four

TABLE III

## EMPLOYMENT, NUMBER OF CHILDREN, AND NUMBER OF ROOMS

---

Number of Children Living at Home of Respondents			
Children	\$3,000 and Below	\$3,000 to \$8,000	\$8,000 and Above
Total Number at Home	49	22	19
Total Number in School	36	18	18

Number of Rooms in Dwelling of Respondents			
Number of Rooms	\$3,000 and Below	\$3,000 to \$8,000	\$8,000 and Above
3 or less			
4 rooms	2	3	
5 rooms	2	2	
6 rooms	3	3	4
7 rooms	1		4
8 or more	1	1	1

Employment			
Extent of Employment	\$3,000 and Below	\$3,000 to \$8,000	\$8,000 and Above
Full-time <sup>a</sup>	2-F - 2-M - 1-O	9-F - 2-M	9-F
Part-time <sup>b</sup>	2-F - 1-M - 1-O	2-M - 1-O	3-M
Not employed	3-F - 6-M	5-M	6-M

a - Refers to 35 hours per week or more

b - Less than 35 hours per week

F - Father

M - Mother

O - Other

---

had homes with six rooms, four with seven rooms, and one with eight or more rooms.

### Employment Status

The respondents were asked who in the household was employed full-time or part-time either in or out of the home. Full-time meaning thirty-five or more hours per week and part-time referring to less than thirty-five hours per week. In the nine low income families, two fathers, two mothers, and one other person in the household were employed full time as compared with the middle income nine fathers and two mothers were employed full-time. In the high income, the nine fathers were employed full-time. In the low income families, two fathers, one mother and one other person in the household were employed part-time as compared with two mothers and one other person in the household of the middle income and three mothers in the high income. Three fathers and six mothers were not employed in the low income as compared with five mothers in the middle income and six mothers in the high income.

### Observations

The following nine plans represent the area used as learning centers in three homes in each of the income groups studied.

Plans labeled  $A_2$ ,  $A_3$ , and  $A_5$  are learning centers in

the low income homes. B<sub>2</sub>, B<sub>6</sub>, and B<sub>8</sub> represent the middle income and C<sub>2</sub>, C<sub>5</sub>, and C<sub>6</sub> represent the high income homes. The sub-number designation corresponds with the interview numbering system used in the study.

Group A shows that consistent use of study space combined with other activities such as eating and sleeping. Two of the plans show the use of the dining room table as a study desk. The third plan shows a study desk located in the dining area. There was no storage provided in the learning centers.

Group B shows the learning center in two homes located in the bedroom area with a study desk provided. The third plan shows the study space combined with the activities of meal preparation and eating.

Group C shows the consistent use of study space located in the bedroom area in the three plans. There was adequate storage of drawers and shelves provided in each area.

In Chapter V, composites of three plans with modifications constitute use of space recommended for each of the three income groups.

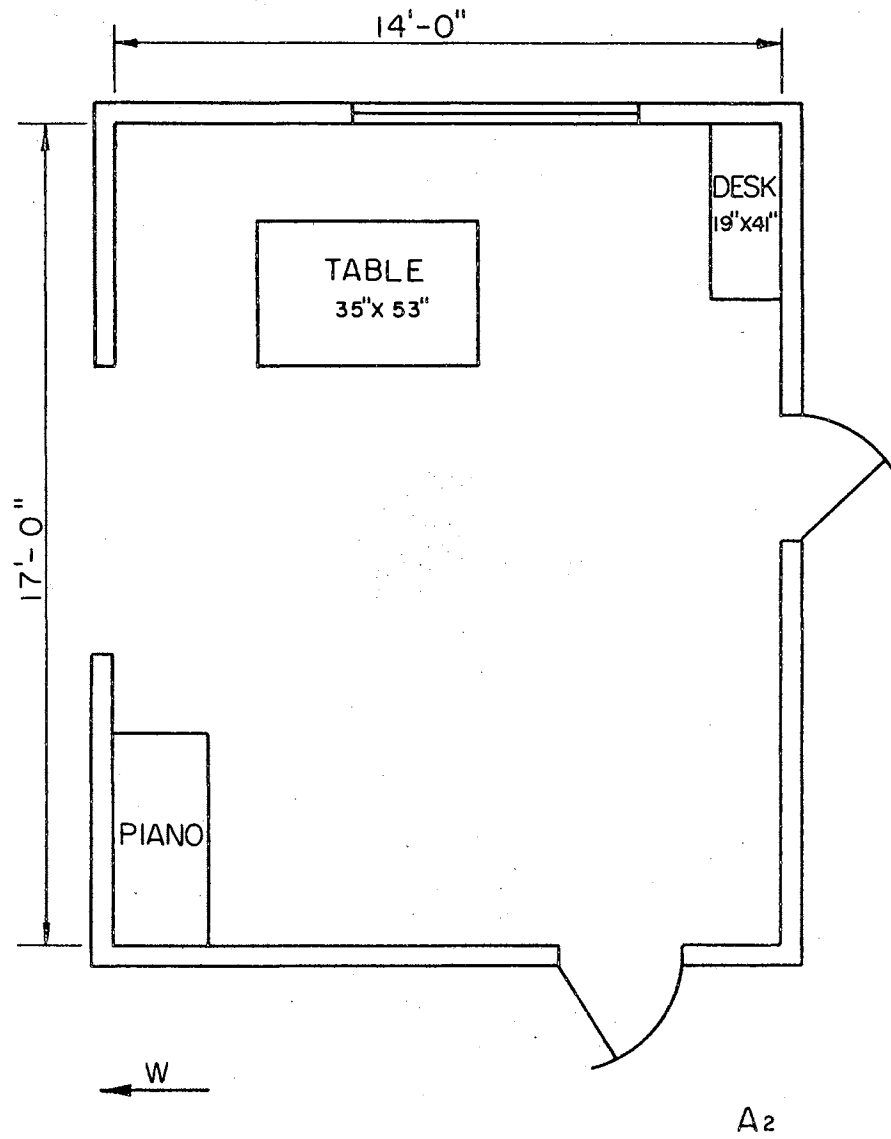
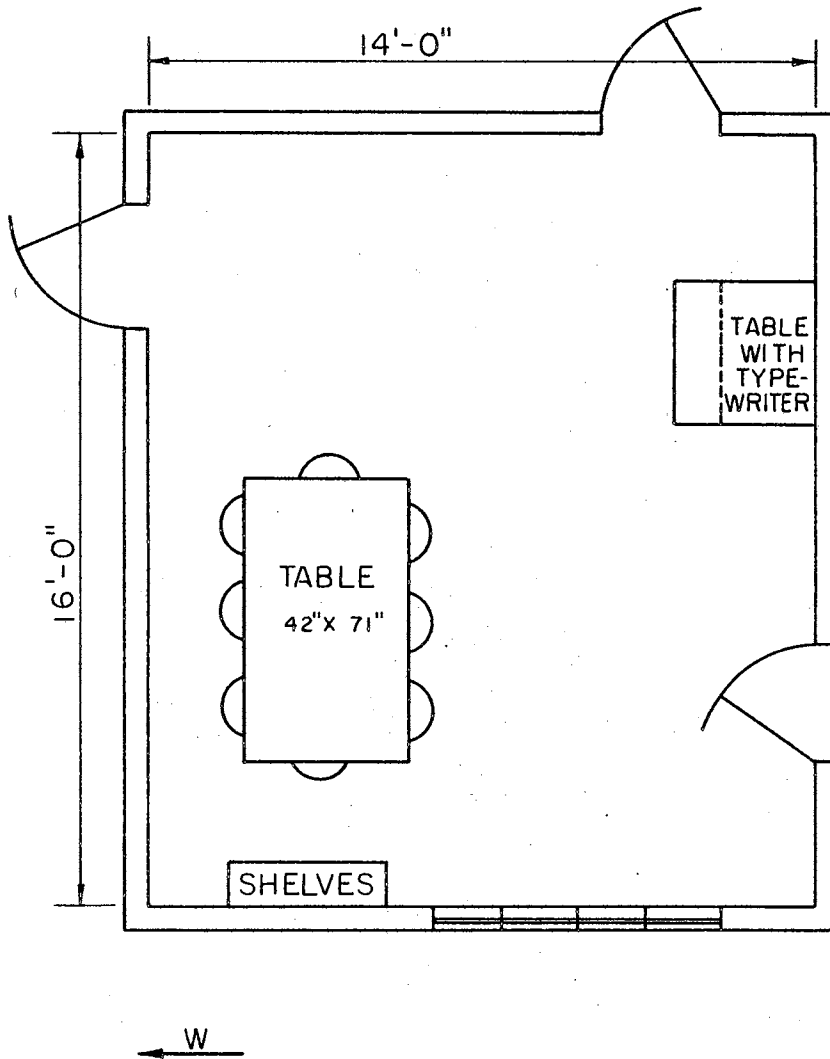
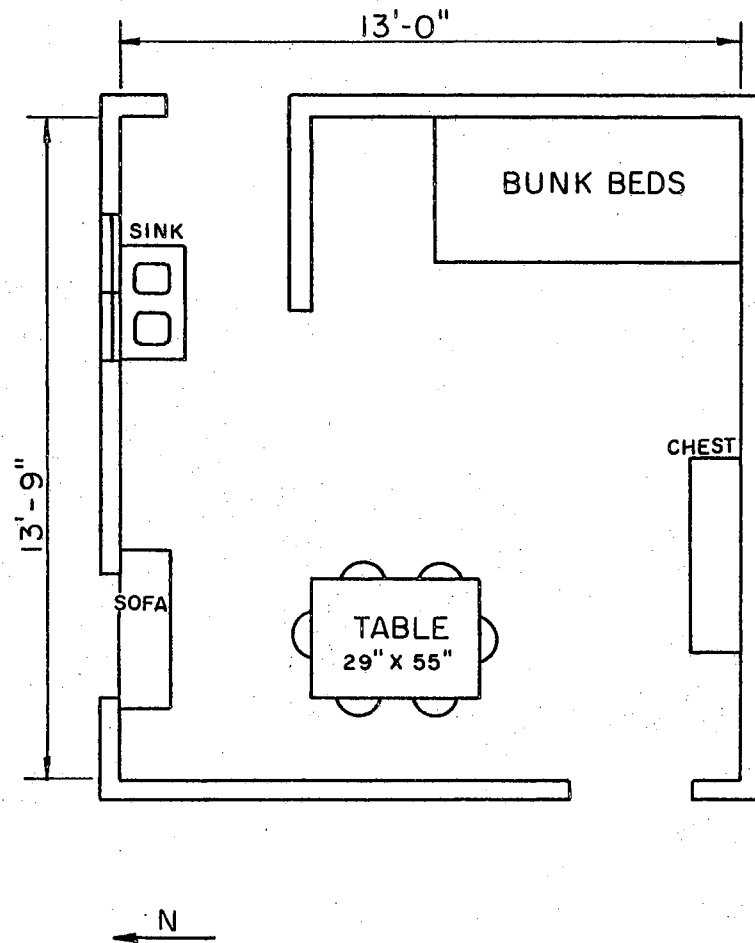


Figure 1. Learning Center No. 1 -  
Low Income Group



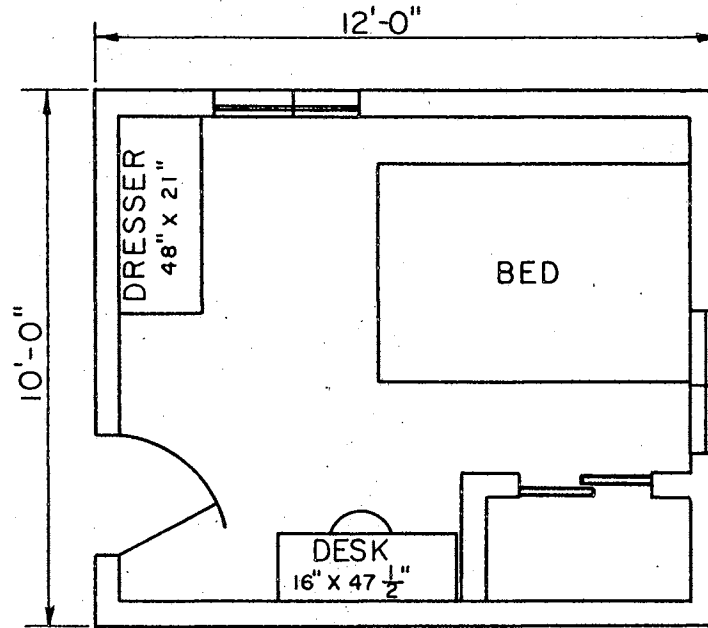
A3

Figure 2. Learning Center No. 2 -  
Low Income Group



A5

Figure 3. Learning Center No. 3 -  
Low Income Group



B<sub>2</sub>

Figure 4. Learning Center No. 1 - Middle Income Group



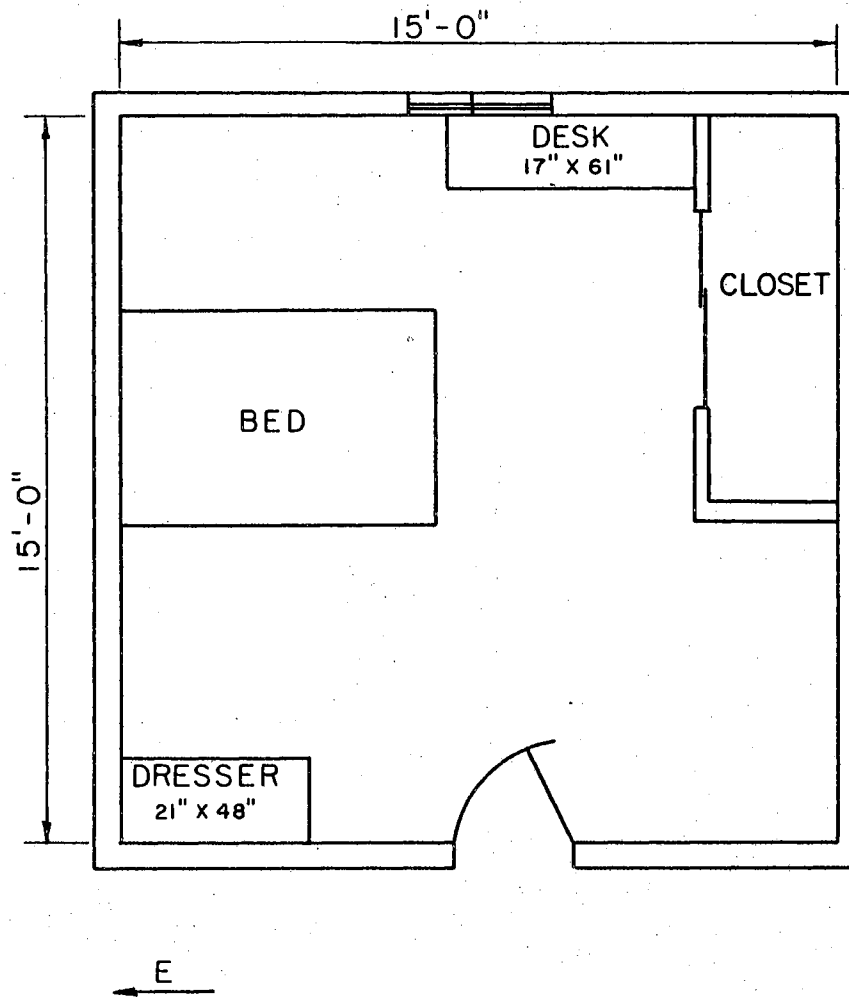
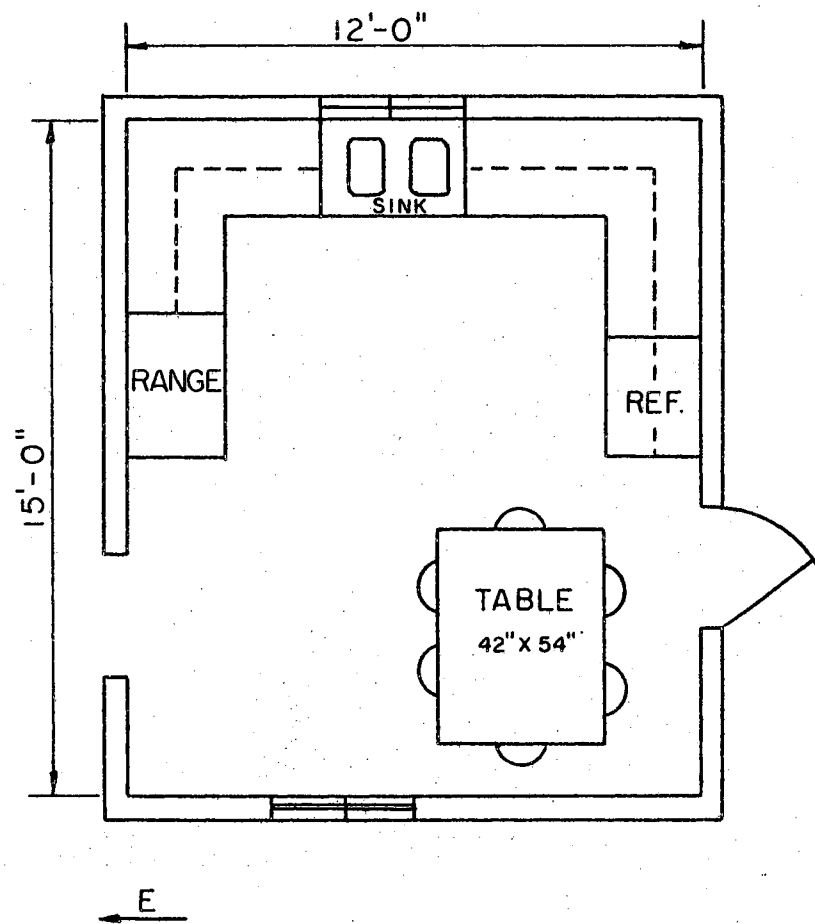
B<sub>6</sub>

Figure 5. Learning Center No. 2 -  
Middle Income Group



Ba

Figure 6. Learning Center No. 3 -  
Middle Income Group

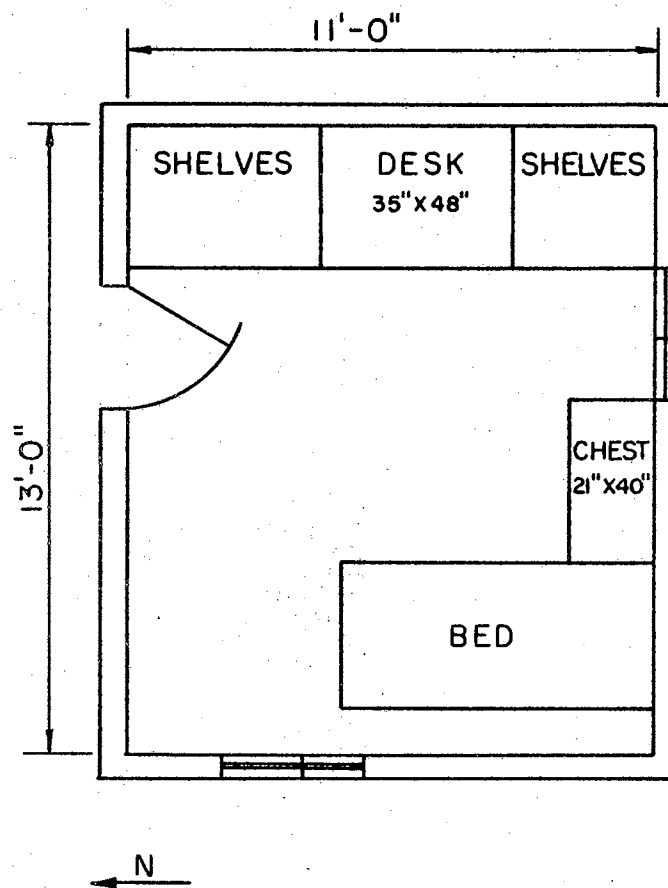
C<sub>2</sub>

Figure 7. Learning Center No. 1 -  
High Income Group

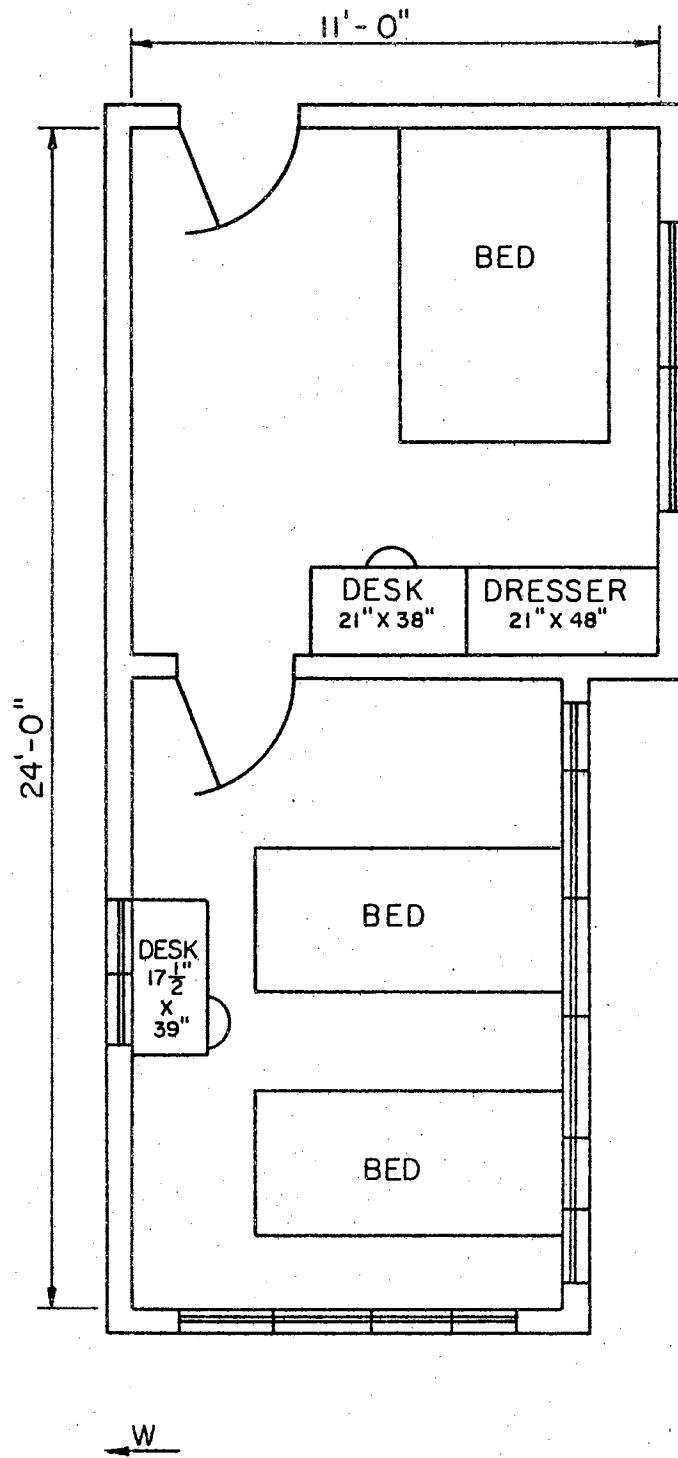
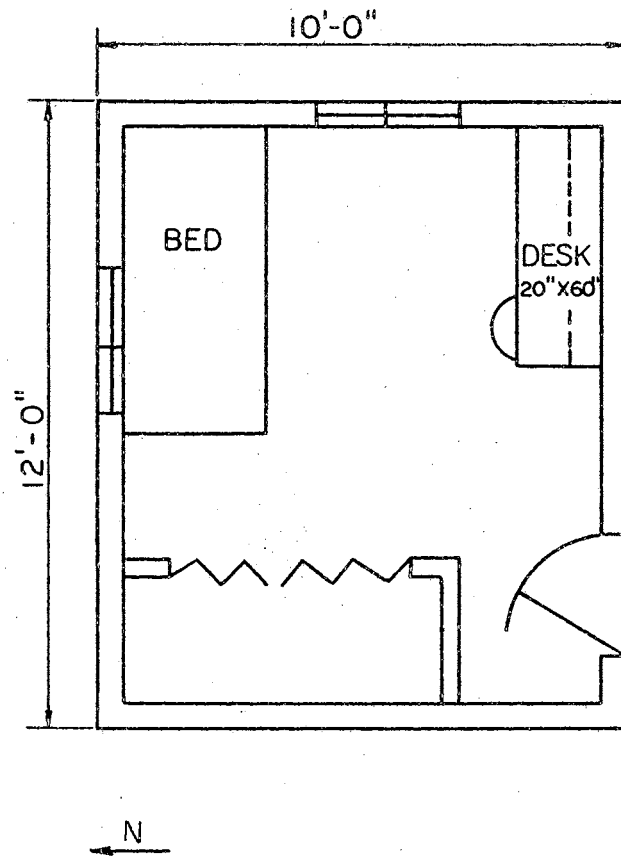


Figure 8. Learning Center No. 2 - High Income Group



C6

Figure 9. Learning Center No. 3 -  
High Income Group

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The purposes of this study were to: (1) determine whether or not the structural plans of present housing provide for learning centers, (2) develop selected types and arrangements of learning centers for selected homes with certain limiting factors, (3) determine the relationship between the space provided and the parents educational level.

Seventy-five families with school age children in Pawnee County were selected; these were equally divided into three classified income levels. From the seventy-five, a total of twenty-seven families were selected with nine families from each of the three classified income groups which were:

Low income	\$3,000 or below
Middle income	\$3,000 to \$8,000
High income	\$8,000 or above.

Personal interviews and systematic observations were used to obtain the data. The instrument used for the interviews consisted of twenty questions. The investigator

interviewed the mothers of the selected homes and tabulated the data.

### Conclusions

From the analysis of the data, the following conclusions are drawn:

1. Since all of the school age children do some of their studying at home, they find a place to study. The type of learning center provided in the home varies greatly according to the income of the family. Seventeen of the twenty-seven homes provided some type of learning center.
2. The higher the educational level of the family, the higher the income level, which did have an influence on the type of learning center provided in the home. It appears that higher educated people tend to put more emphasis on education and encourage their children to do better school work by providing learning centers in their home.
3. The higher the educational level and income of the family, the more private was the learning center and the more adequate the dwelling according to the space

provided, the type of dwelling, and the number of children in the family. This group also provided better lighting, more storage and equipment in the learning center.

4. From comments made by the mothers, the conclusion was drawn that the older the school age child the more they preferred a private place to study.

#### Recommendations

The writer submits the following recommendations relative to further studies directed toward planning learning centers for homes for school age children:

1. A larger study be made with different age groups of children to determine if there is a particular age at which learning centers should be provided.
2. More planning be done with families of school age children in order to improve learning centers or areas in which children study.
3. This study be combined with other studies in housing to further develop plans and information for learning centers in homes to be used by parents, architects, extension service, and others.
4. The following plans have been developed as



recommendations for utilization of space  
in home learning centers for each of the  
three income levels in the study.

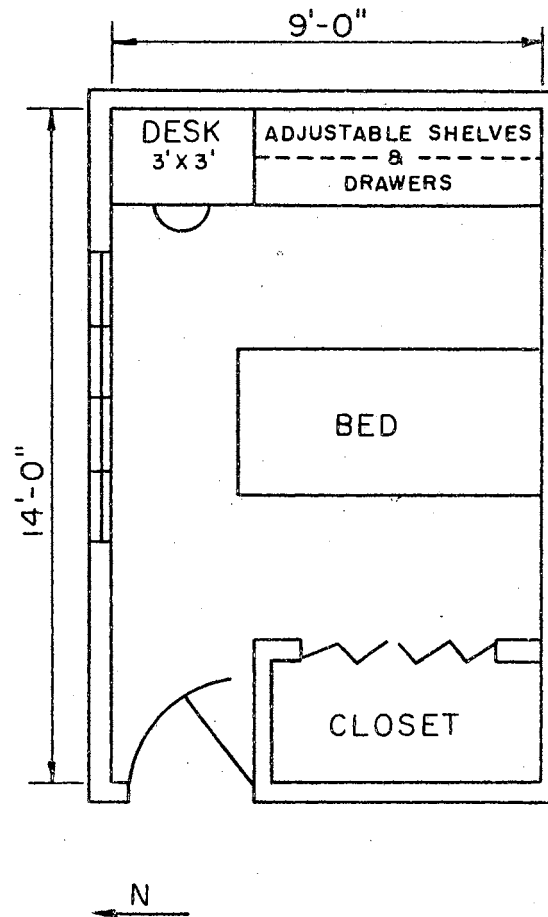


Figure 10. Recommendation for  
Low Income  
Learning Center

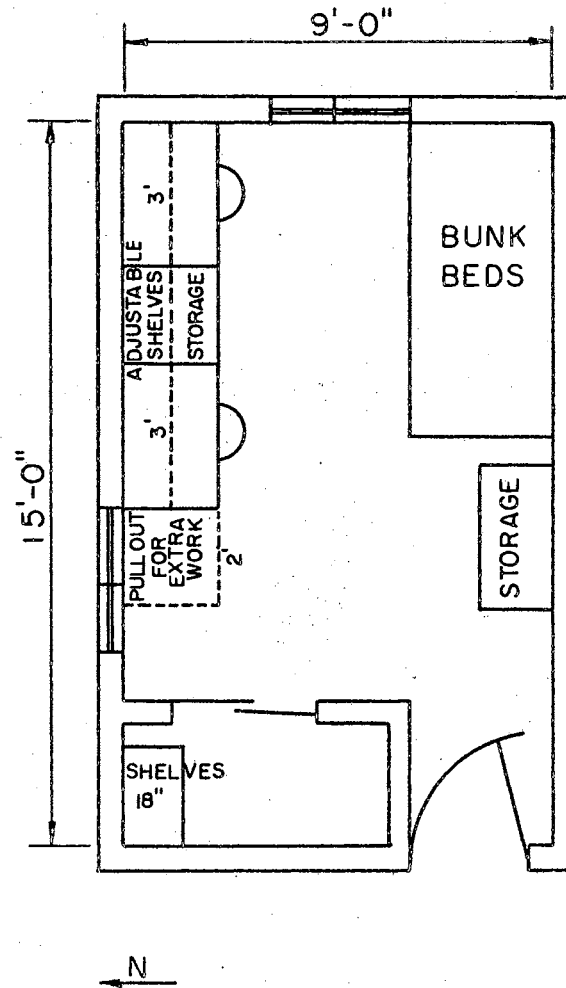


Figure 11. Recommendation for  
Middle Income  
Learning Center

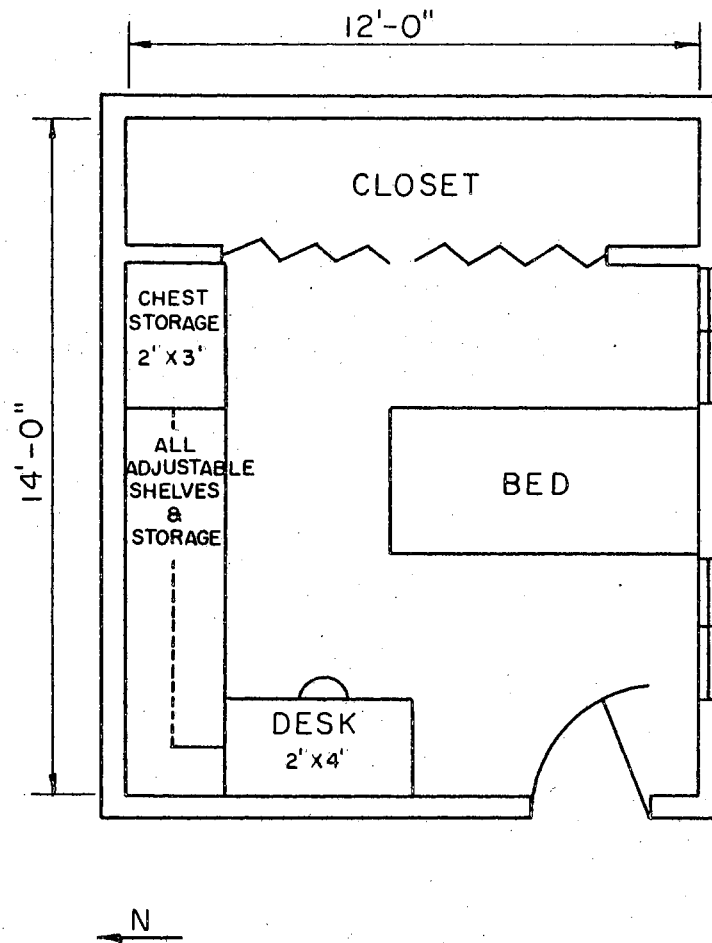


Figure 12. Recommendation for  
High Income  
Learning Center

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APPENDIX A

INSTRUMENT



1. Will you tell me who lives here?

Husband \_\_\_\_\_  
 Wife \_\_\_\_\_  
 Children \_\_\_\_\_  
 Other children (Specify Relationship) \_\_\_\_\_  
 Other Adults (Specify Relationship) \_\_\_\_\_

If children, ask Sex and Age

Boys: Ages \_\_\_\_\_  
 Girls: Ages \_\_\_\_\_

2. How long have you lived in your present house?

Under 5 years \_\_\_\_\_  
 5 - 15 years \_\_\_\_\_  
 Over 15 years \_\_\_\_\_  
 Don't know \_\_\_\_\_

3. Would you tell me who in this household is gainfully employed part-time or full time, either in or out of the home?

Full-time (35 hours or more)

Husband \_\_\_\_\_  
 Wife \_\_\_\_\_  
 Other \_\_\_\_\_

Part-time (less than 35 hours a week)

Wife \_\_\_\_\_  
 Husband \_\_\_\_\_  
 Other \_\_\_\_\_

Not employed

Husband \_\_\_\_\_  
 Wife \_\_\_\_\_  
 Other \_\_\_\_\_

4. Do you feel your house is adequate for your family's needs?
5. Do your children have a space to study?
6. Would you tell me where they do most of their studying?
7. May I see where they study?

Checklist

Height of Desk \_\_\_\_\_  
 Height of Chair \_\_\_\_\_  
 Width of Desk \_\_\_\_\_  
 Length of Desk \_\_\_\_\_

## Lighting Provided

Recommended lamp \_\_\_\_\_ Height \_\_\_\_\_  
 High intensity lamp plus ceiling  
 fixture \_\_\_\_\_

Non-recommended lamp \_\_\_\_\_ Height \_\_\_\_\_  
 Ceiling fixture with diffusion  
 bowl \_\_\_\_\_

High intensity lamp only without  
 ceiling fixture \_\_\_\_\_  
 Ceiling fixture without diffusion  
 bowl \_\_\_\_\_

## Storage Provided

Shelves \_\_\_\_\_

Table \_\_\_\_\_

File \_\_\_\_\_

Other \_\_\_\_\_

Location of Telephone \_\_\_\_\_

Location of Windows \_\_\_\_\_

Location of Television \_\_\_\_\_

Color of Study Area \_\_\_\_\_

Typewriter \_\_\_\_\_

Location of Study Area \_\_\_\_\_

8. How many school age children are in the family? \_\_\_\_\_
9. How tall is your child? \_\_\_\_\_
10. How much does he/she weigh? \_\_\_\_\_
11. Does he/she wear glasses? \_\_\_\_\_
12. Would you tell me the last grade of school you completed?

1st to 4th grade \_\_\_\_\_

5th to 6th grade \_\_\_\_\_

7th grade \_\_\_\_\_

8th grade \_\_\_\_\_

1 to 3 years high school \_\_\_\_\_

4 years high school \_\_\_\_\_

1 to 3 years college \_\_\_\_\_

4 years college or more \_\_\_\_\_

13. Would you tell me the last grade of school your husband completed?

1st to 4th grade \_\_\_\_\_

5th to 6th grade \_\_\_\_\_

7th grade \_\_\_\_\_

8th grade \_\_\_\_\_

1 to 3 years high school \_\_\_\_\_

4 years high school \_\_\_\_\_

1 to 3 years college \_\_\_\_\_

4 years college or more \_\_\_\_\_

14. Is this house/apartment owned by you or rented?

Owned \_\_\_\_\_  
 Rented furnished completely \_\_\_\_\_  
 Rented furnished partly \_\_\_\_\_  
 Rented unfurnished \_\_\_\_\_  
 Other (specify) \_\_\_\_\_

15. Income Category

\$3,000 or below \_\_\_\_\_  
 \$3,000 to \$8,000 \_\_\_\_\_  
 \$8,000 or above \_\_\_\_\_

16. Type of dwelling

Single family - one story \_\_\_\_\_  
 Single family - multi-story \_\_\_\_\_  
 Trailer \_\_\_\_\_  
 Duplex \_\_\_\_\_  
 Multi-family row \_\_\_\_\_  
 Multi-family apartment \_\_\_\_\_  
 Other (specify) \_\_\_\_\_

17. How many rooms are in your home? \_\_\_\_\_

18. Are there any comments you would like to make about study facilities?

19. When he/she studies at home, at what times of the day does he/she study?

Before school \_\_\_\_\_  
 After school \_\_\_\_\_  
 After evening meal \_\_\_\_\_  
 Late at night \_\_\_\_\_  
 Other (specify) \_\_\_\_\_

20. Would you say your child does most of his/her studying

Home \_\_\_\_\_  
 School \_\_\_\_\_  
 A Friend's House \_\_\_\_\_

VITA

Martha Joyce Tarpey

Candidate for the Degree of  
Master of Science

Thesis: THE DEVELOPMENT OF THREE TYPES OF LEARNING  
CENTERS FOR SELECTED HOMES IN PAWNEE COUNTY,  
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