OPINIONS FROM FOUR GROUPS OF BUSINESS AND PROFESSIONAL PEOPLE REGARDING THE AMOUNT OF EMPHASIS TO BE GIVEN CONTENT AREAS FOR A MAJOR FIELD OF STUDY CONCERNED WITH HOUSING

By

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Thesis Approved:

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Dean of the Graduate College

#### PREFACE

Congress has established a Department of Housing and Urban Development, and as a result many educational institutions are considering the possibility of "housing" as a major field of study. The purpose of this study is to obtain the professional opinions of Architects, Extension Specialists whose concern is housing, Builders, Contractors, Building Suppliers, and Public Housing Managers regarding those areas of study they believe are important to a student's preparation as a "housing specialist."

The writer wishes to express her appreciation to Dr. Maie Nygren, Professor and Head of the Department of Housing and Interior Design; Mrs. Christine F. Salmon, Associate Professor of Housing and Interior Design; and Miss Leevera Pepin, Assistant Professor of Housing and Interior Design, for their guidance in the investigation described herein. The writer also wishes to express her appreciation to Mrs. Donna Eaton and members of the Computing Staff, for processing the data, Mr. Thomas H. Callaham, Regional Director, Public Housing Administration; Mr. G. Kenneth Milliken, Secretary, Southwestern Lumbermen's Association, for their cooperation in providing listing from which sample subjects were selected; and all Extension Specialists, Public Housing Managers, Builders, Building Suppliers and/or Contractors, and Architects, who participated in the study.

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A special indebtedness is acknowledged to my husband, Gene, and to my children, Jim and Gina, for their patience and cooperation while the study was in progress and to my mother, Myrtle Hope for her assistance in time of need.

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#### CHAPTER I

#### INTRODUCTION

Congress has established a Department of Housing and Urban Development. This development has increased interest in housing. As a consequence, a number of educational institutions are considering the possibility of housing as a major field of study.

In the outline of concepts and generalizations which resulted from curriculum conferences held in 1963 and 1964 for the purpose of identifying for educational purposes major concepts related to housing, housing was perceived in many ways. It is described as:

. . fulfilling many functions for man. It is the means of modifying his environment to meet his physical needs such as comfort and safety, his psychological needs such as privacy and security, and his social needs for recognition and interaction with people. Man uses satisfaction of housing needs as a means of self-expression.

Housing performs social and economic functions for society. Many of a society's values, patterns of living, and economic, technological, and cultural developments are conveyed and manifested in housing.

The community, neighborhood, the dwelling itself, and its furnishings and equipment are all aspects of man's housing environment. Some components of housing include location, structure, design, furnishings and equipment.

Housing takes many forms including multi-family and single family dwellings, apartments, dormitories, rooms, mobile homes, tents, and retirement houses. Housing may be mobile or stable. It may be located in urban, suburban, rural or in various vacation areas.  $\!\!\!\!\!^1$ 

Justification for housing as an area of study is expressed in the following statement prepared by staff of the Department of Housing and Interior Design at Oklahoma State University:

A. Better design in housing in relation to consumer needs, values goals and resources.

B. Consumptions of housing by individual families is increasing because of population increases and higher incidence of residential mobility.

C. Construction of housing by some system of mass-production has decreased communication between architect, builders, and consumers. . .

D. Increased emphasis is being placed on helping low-income families resolve housing problems and become better consumers of housing. . .

E. Demand is increasing for M.S. and Ph.D. graduates with background in housing. . .

F. Increased attention given to national housing problems by federal and local governments portends increased need for more knowledge about every aspect of housing and its relationship to people.

G. Profession is ideally suited for homemakers who wish part time employment but require flexible working conditions.<sup>2</sup>

In discussing the opportunities for housing, Gertrude Nygren

stated that:

A housing emphasis from the interrelated humanized approach of the home economist appears to have great relevance to the improvement of the conditions of man. Considerations of man and materials should lead to professional competencies for a variety of opportunities for service. Presently certain home economists are recognized as possessing valuable

<sup>1</sup><u>Proceedings of Curriculum Conference</u>, (Mimeographed report) 1964.

<sup>2</sup>"Justification for Housing Major" (Mimeographed) Housing and Interior Design Department, Oklahoma State University. knowledge for the rehabilitation of the handicapped, but from my observations we haven't picked this up to develop a field of concentration by the selection of particular courses inside and outside our departments. The increased awareness of the needs of older people and others who are handicapped emphasized the vital role housing plays in their ability to function effectively. I should think we might use this successful experience as a model for additional fields of concentration because it demonstrates rather clearly the role and the service for which the home economist is valued.

There is a need for us to work with other health agencies, housing designers, builders, community planners, product developers, manufacturers, and retailers. It is within our grasp to have effective influence heretofore not exercised.

I'm convinced that with adequate preparation we could place personnel with builders of housing developments, both private and public, in lumber yards, in planning centers of mail-order houses and other business firms and with manufacturers of the machine or industrial houses of the future.<sup>3</sup>

At the Wisconsin Home Economics Association meeting on November 1, 1962, The Honorable Marie C. McGuire, Commissioner of Public Housing Administration presented a challenge to Home Economists. She said that housing is:

. . . to help provide leadership to plan, organize and operate a community homemaking program, capable of implementation in every town and city throughout the nation.

Assisting these people in discovering how to maintain decent standards in the physical facilities of their new environment - whether room, house, apartment, trailer, or other shelter, and its immediate surroundings. . .

Many families need consultation on homemaking problems related to housing, such as the maintenance of sanitation the operation, care, and upkeep of equipment; the selection and care of furniture and furnishings; the management of play space for children . . .

There is no question but that almost every home economist could not only help but could provide leadership in the vital

<sup>&</sup>lt;sup>3</sup>G. Nygren, "Opportunities and Services," <u>Journal of Home</u> <u>Economics</u>, 54 (December, 1962), pp. 827-829.

orientation programs needed for workers in such a Housing Center program.

There is an increasing need for varied types of education to fit the capacity of individuals. . . $^4$ 

Persons pursuing housing as an area of study could be considered as Housing Specialists. With proper preparation, these specialists might work with builders and contractors, architects or architectural firms, a public housing authority or with the Cooperative Extension Service.

Working in the Extension Service, a Housing Specialist might help consumers evaluate their needs, values, goals and resources in relation to housing. Such a specialist also would be responsible for developing and coordinating formal and informal educational programs concerned with all aspects of housing.

Working with an architect or an architectural firm, a Housing Specialist could assist clients in identifying their housing needs, and in making decisions pertaining to the design of housing. They could also participate in the design process.

Working with a public housing authority, a Housing Specialist could assist low-income families with their housing problems and help them to become better occupants and consumers of housing. The specialist might also help interpret to architects the housing needs, values, and attitudes of low-income families and their social and family characteristics.

<sup>&</sup>lt;sup>4</sup>M. C. McGuire, "Our Cities Need You," <u>Journal of Home Economics</u>, 55 (February, 1963), pp. 99-103.

In the employ of builders and contractors, a Housing Specialist could assist in designing houses in accordance with the needs, values, goals and resources of the consumer. A major role of such a Housing Specialist would be interpreting consumer housing needs to builders and contractors.

The study is intended to identify content areas of study that selected professional people deem most important to a student's preparation as a Housing Specialist.

By virtue of their practical experience, selected professional u persons are considered to have a contribution in the process of developing a curricula. At appropriate stages in curriculum planning, professional people can recommend worthwhile objectives, significant materials, and effective presentation of materials toward attainment of the objectives.

Spafford believes that alumnae and nongraduates are possible resources which can be used effectively when developing a curriculum or curricula because: "They speak from experience and are in a position to pass judgement on the strengths and weaknesses of the program. ..."<sup>5</sup>

### Statement of the Problem

What content areas do professional housing workers recommend be included in a housing curriculum?

<sup>5</sup>I. Spafford, <u>Home Economics in Higher Education</u> (Washington, D. C. 1949), p. 30.

The importance attached by business and professional personnel to concepts and skills which could constitute the educational preparation for a housing major varies according to the business or professional role of the respondent.

### Purposes of the Study

The purposes of the study are two-fold. The first is to ascertain the professional opinion of four groups of people who are working in the field of housing. The second purpose is to establish bases for future studies regarding housing as an area of study.

### Need for the Study

In discussing the status of housing education in American Colleges and Universities, Davies suggested:

. . That a need existed for further research and inquiry into the objectives, structures and content of housing education. There is an apparent trend toward the development of specialized curricula in housing in American Colleges and Universities.<sup>6</sup>

Davies maintained that in carrying out the work of housing education, educators and educational institutions should work to:

1. Educate consumers to the needs and possibilities of good housing. . .

- 2. Educate in such knowledges and understandings as
  - a. Need for government housing and slum clearance. . .
  - b. Conditions of housing of lower-income classes. . .
  - c. Justification for government participation in housing. . .

<sup>&</sup>lt;sup>6</sup>Housing Education in Universities and Colleges, University of Southern California, (Los Angeles, 1947), p. 13.

- d. Crime, disease, and delinquency arising out of slum conditions. . .
- e. Economic losses arising from lowered moral, crime, and insanity resulting from bad housing. . .
- f. Relationship of housing to business groups and other groups in the community. . .

3. Inform the public about best construction methods. . .

4. Provide information for home buyers relative to home fi-

5. Educate home owners to the need of keeping their property in repair. . .

6. Gather scientific data regarding housing. . .

7. Educate the public to realize the necessity for community planning in relation to any satisfactory housing program. . .

8. Make the public slum conscious. . .<sup>7</sup>

<sup>7</sup>J. E. Davies, <u>Fundamentals of Housing Study</u> (New York, 1938), p. 274.

#### CHAPTER II

## REVIEW OF LITERATURE

Literature related to housing is very diversified in subject matter, but material on housing as a part of a curriculum is especially minimal.

Agan and Luchsinger co-authored a book designed to provide a basis for instruction in housing. The book includes an analysis of housing needs for today in light of changes which affect a family's housing requirements. They also discuss the housing industry and its affect on housing and home ownership. They perceive the purpose for this area of study to be that of developing:

. . . an awareness of the importance of this relationship, a consciousness of choice, and an intelligence to reach decisions which will make the environment of the house - and ultimately of the community - an enjoyable one.<sup>1</sup>

Davies states that housing education in American colleges and universities consists of a wide variety of unrelated and unintegrated courses located in various departments of colleges and universities. At the time of his study, he believed there was a trend developing in regard to specialized curricula in housing. He felt a pressing need for further research and inquiry into the objectives and structures and content of housing education.<sup>2</sup>

<sup>1</sup>T. Agan and E. Luchsinger, <u>The House</u> (New York, 1965), p. v~vi.

<sup>&</sup>lt;sup>2</sup>Housing Education in Universities and Colleges, University of Southern California (Los Angeles, 1947), p. 13.

Davies' criticism regarding the dispersion of housing courses among a number of college departments identifies the weakness in education concerned with housing. It also offers justification for having a housing curriculum located in one academic unit of a university.

Bolduan gives an important justification for placing the field of housing in Home Economics Colleges. She says:

Builders are able to provide safe, durable housing units at a reasonable cost. With a little encouragement from the professionally trained homemaker, they might also provide a more emotionally satisfying home.<sup>3</sup>

Purdue University has housing located in the Home Economics College. The program leads to a Bachelor of Science degree in Home Economics with a major in Housing. The ultimate objective of the program is preparation for one of three fields:

1. Consumer Service (Advisors to builders of homes, includes contractors, and architects, real estate dealers,) consultants for homemakers to help in selection and maintenance of equipment, home advisors for public utilities and decorators.

2. In distribution--demonstrators for various building products and household equipment; salesman for producers of building materials and advertising positions.

3. Research--technician in laboratories where new household products are being developed and tested, trying out building products and household equipment for manufacturers.<sup>4</sup>

At Florida State University, the program concerned with housing

is designed to provide the:

. . . training necessary to interior designers; housing or house planning consultants with realtors, architects, or on housing

<sup>3</sup>M. F. Bolduan, "Home Economists and the Housing Industry," Journal of Home Economics, LI (1959), p. 464.

<sup>4</sup><u>Housing Education in Universities and Colleges</u>, University of Southern California (Los Angeles, 1947), p. 43.

projects, as salespersons or consultants in house furnishings stores or departments; for establishing a business of one's own, for radio or television work in housing and interior design field; or for graduate work or research.<sup>5</sup>

The housing program at Cornell University offers courses "planned to study individual and family living, and to examine critically facts and theories of housing within the present economic and social structure."<sup>6</sup>

At a conference on the Improvement of Instruction in housing in Home Economics, held at Iowa State College in 1958, LeBaron stressed the importance of avoiding a national pattern in curricula meaning less restrictions for each institution. Basic principles in housing and consideration for changing family patterns and product development should be the concern of teachers.

The various areas of specialization represented within the broad field of housing represented at the conference are: social and economic aspects, architecture, design, furnishings and interiors, and equipment and home management. Housing as a major field of study should be an integrated course encompassing all these areas.

The conference participants agreed that:

. . . All home economics students should have knowledge of basic economics as it applies to housing and the management of the total income. They should have an awareness of total housing costs, both obvious and hidden, of the relationship of the individual's investment in housing to his earning capacity; and of the importance of the consumer's influence on costs. Students need to develop a social sensitivity that will enable them to understand legal problems of housing, aspects of urban development, slum clearance and racial issues. Sociological research

<sup>&</sup>lt;sup>5</sup>Florida State University Catalog, 1964-65, LVII (March, 1964), p. 234.

<sup>&</sup>lt;sup>6</sup>Cornell University Catalog, 1966-67, Vol. LVII (April, 1966), p. 87.

has revealed certain facts about families in general in relation to housing which should be included in a core course in order to develop an appreciation of the concept of shelter greater than of the individual family's requirements.<sup>7</sup>

Instructors in housing need to be aware of the various goals and backgrounds of all their students unless teacher concern is not possible. Nygren stated three dimensions that comprise the concept of teacher concern. They are:

- 1. Recognition the identification of the individual and the according of status.
- Understanding the knowledge of the causal factors related to the behavior of an individual.
- 3. Help the desire and the attempt to bring benefit to an individual. $^8$

As the result of a study concerned with housing imagery, Montgomery concluded that what students learn from their classes or other sources of information and how they perceive situations is affected in part by the "pictures in our heads" or images. We might say we see what we know. He says:

There can be little doubt that a person's mental picture of the kind of house he wants, expects, and is willing to strive for is the potent social and psychological force to be reckoned with. It follows that the more a professor knows about these mental filters through which his information is to be screened, the greater are his chances of achieving a seasonable degree of effectiveness.<sup>9</sup>

<sup>/</sup>E. Knowles, "Conference Considers Instruction in Housing," Journal of Home Economics, 51 (April, 1959), p. 283.

<sup>8</sup>G. Nygren, "Teacher Concern and its Measurement," <u>Journal of Home</u> <u>Economics</u>, 52 (March, 1960), pp. 177-180.

<sup>9</sup>J. E. Montgomery, "Housing Imagery and the Teaching of Housing," Journal of Home Economics, 51 (1959), pp. 446-468. Montgomery presented the following implications for housing education. He says:

- Instructors in housing need to be aware of the fact that students often come to them with fixed ideas as to what they think their future housing should be and that these mental pictures will materially affect the learning process.
- 2. Since the majority of the girls planned to start housekeeping in a rented apartment or house (usually unfurnished), it would seem highly desirable to give more attention to the problems entailed in selecting and furnishing apartments and less to the development of elaborate house plans.
- 3. Students need to become more aware of the changing, dynamic nature of their housing needs and to see more clearly that these needs vary from person to person and from time to time.
- 4. It is true that America is going suburban, and that the majority of the students included in this study expected to live in the suburbs. However, perhaps it would do no harm if those who teach housing pointed out that there was also other places to live -- the open country, villages, the suburban fringe, and the central part of cities.
- 5. Finally, those who teach housing courses need to know wherein students are realistic in their imagery and wherein students are unrealistic. For example, in the study reported here, students were probably realistic in assuming that one day they will be living in relatively new, one-story houses in the suburbs; but they were probably unrealistic in assuming that they will design and build their own house.<sup>10</sup>

A house plan developed through the cooperative effort of two home economists, a residential architect, a cost-conscious project builder and a quality conscious custom builder-architect was built and exhibited in the 1955 Wichita Parade of Homes. To demonstrate its flexibility, the house was redecorated four times during the week of display,

<sup>&</sup>lt;sup>10</sup>J. E. Montgomery, "Housing Imagery and the Teaching of Housing," Journal of Home Economics, 51 (1959), pp. 446-468.

each redecoration keyed to a different stage in the family life cycle. The cooperative effort required for that endeavor is the kind which characterizes the process of designing housing. It represents the kind of work in which a housing specialist can and should be involved. There is need for this kind of cooperative effort in not just one house for a show but in the production of all houses.

In regard to housing education, Davies said:

Housing education becomes increasingly important as communities face the problem of depreciation of housing stock, the development of slums and the need for urban redevelopment.

The increasing stake of government, private enterprise, and the citizenry general in housing, requires the competence and breadth of approach in administrative and executive posts.

There is increasing need for better understanding of the multiple effects of housing upon the individual.

There is need for further understanding of the process of homebuilding, including planning, production and distribution and the relation of these factors to housing costs.

There is need to think of housing in multiple and interrelated terms as an economic, social, financial, administrative and political entity.<sup>12</sup>

The review of literature revealed that little research has been done in regard to a housing curriculum but it indicates that a number of educators and housing authorities feel there is a great need for expanding this area of study.

<sup>11</sup>D. Schlaphoff, "The 'Study House' in the Wichita Parade of Homes," Journal of Home Economics, 48 (1956), pp. 100-102.

<sup>12</sup><u>Housing Education in Universities and Colleges</u>, University of Southern California (Los Angeles, 1947), p. 6.

## CHAPTER III

## DEVELOPING THE QUESTIONNAIRE

A questionnaire which could be mailed to a sample of respondents was deemed to be the most appropriate technique for collecting data. An instrument was developed which presented to the respondent content areas related to various economic, political, social, cultural, structural, design, health, and safety aspects of housing. Questions devoted to obtaining information concerning occupation, length of time employed in one's occupation, educational attainment, and major field of study in college were also a part of the instrument.

Most of the questions were a "check list" type, requiring the respondent to merely indicate the level of emphasis: 1) "much," 2) "some," 3) or "little," that he believed should be given each content area listed.

The instrument was pre-tested. Several items were added and the general form of the questionnaire structured so that the final instrument consisted of only one page. (See Appendix A.)

#### Selecting the Sample

Groups chosen to be included in the sample were: Extension Subject Matter Specialists assigned the area of Housing; Contractors and Building Suppliers; Architects; and Executive Directors of Public

Housing Units. Because of time and monetary limitations, it was decided to limit the size of the sample to approximately one thousand.

A listing was made of the specialists assigned to work in the area of housing for the Cooperative Agriculture Extension Service. One questionnaire was mailed to a person responsible for this area in each of the contiguous forty-eight states. A total of forty-eight questionnaires were sent and 35 were returned from Extension personnel.

For respondents involved with Public Housing a listing was obtained from the Fort Worth Regional Office. The listing included project locations in cities of the Southwest which have low-rent housing projects in the management stage of development. A fifty percent random sample was selected from those classified as Executive Directors of Projects in the Southwest area, which includes Arkansas, Kansas, Missouri, Oklahoma and Texas. The total number in the sample of Executive Directors was 117, with 30 returning the completed questionnaire.

Contractors, builders and building suppliers were selected to represent the opinions of independent builders. Contractors were chosen from the membership of the Associated General Contractors of Oklahoma. They were located in the states of Oklahoma, Texas, and Arkansas. Builders and Building Suppliers were selected from the membership of the Southwestern Lumbermen's Association which supplied a Dealer's Directory for 1965-1966. The Southwest area includes Arkansas, Kansas, Missouri, and Oklahoma. Firms having three or more yards in these states are termed line yards. All firms of this size were included in the sample. For these firms the questionnaire was directed to the person named in the directory. A fifty percent random

sample of all yards in cities having a population of 10,000 or more was also selected. The number of questionnaires mailed the contractors, builders and building suppliers was 417. Ninety-nine of the returned questionnaires were used.

Architects included in the sample were selected from the American Architects Directory, 1963. A fifty percent random sample of all architects in the five states, Arkansas, Kansas, Missouri, Oklahoma and Texas, was selected for this group. Three hundred and ninety-eight questionnaires were mailed. Sixty-three completed questionnaires were returned.

The total number of questionnaires mailed was 980 with 234 being returned. Six questionnaires were eliminated because they were incomplete. The data are compiled from 228 respondents.

#### Collecting the Data

Questionnaires were mailed to the four groups of selected professional or business people concerned with housing. A letter which interpreted the purpose of the study was mailed along with the questionnaire and a return envelope.

## Treating the Data

### The Independent Variable

The major independent variable by which the data were analyzed is the occupation of the respondent.

## The Dependent Variable

The dependent variable is the importance attached by the respondent to possible concepts and skills pertaining to housing.

## Statistical Tests

The Chi-square test was used in determining independence between the independent variable: occupation, and the dependent variable, the level of importance attached to each content area. Frequencies, percentages, and Chi-square values were obtained by using the computer in the Computing Center at Oklahoma State University.

## Characteristics of the Sample

Most of the contractors and builders, as well as architects, had been employed in their profession for over ten (10) years, whereas, three-fifths of the Public Housing Managers and two-fifths of the Extension Specialists had been employed less than ten years. (See Table I.)

#### TABLE I

<del>an an a</del>	Occupation						
Years in Present Employment	Extension Specialist	•		Architect	Total		
· ·			Percent		c=c		
Under 10	40.0	63.3	8.1	6.3	19.8		
10 to 19	40.0	33.3	24.2	42.9	33.0		
20 to 29	17.1	3,3	34.3	20.6	23.8		
30 and over	2.9	.0	33.3	30.2	23.3		
Total	100.0	100.0	100.0	100.0			

## LENGTH OF TIME EMPLOYED

As a whole, Extension Specialists and the Architects are more highly educated in that all of the former and nearly all of the latter group had a college degree. Less than one-half of the other two groups had this much education. (See Table II.)

## TABLE II

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Graduated From College	Extension Specialist	-	•	Architect	Total			
			Percent					
Yes	100.0	40.0	45.9	87.5	65.2			
No	.0	60.0	54.1	12.5	34.8			

#### EDUCATIONAL ATTAINMENT

Of the college graduates in the four groups, nearly all of the Extension Specialists were Home Economics Majors and all of the Architects had studied Architecture or Engineering. Public Housing Professionals have either Business or Arts and Science as a background. Business was the major for the largest proportion of Builders and Contractors. (See Table III.)

# TABLE III

## MAJOR FIELD OF STUDY IN COLLEGE

	Occupation					
Major Field of Study	Extension Specialist	Public Housing Director	Contractor, Builder, Building Supplier,	Architect	Tot	
		<u>,</u>	Percent			
Business	0	50.0	62.2	0	24	
Architecture or Engineering	0	8.3	26.7	100.0	45	
Home Economics	90.3	0	0	0	20	
Education	6.5	0	0	0	1	
Agriculture	3.2	0	2.2	0	1	
Arts and Science	0	41.7	8.9	0	6	

#### CHAPTER IV

### FINDINGS

The findings of this study are presented in the following manner: A summary table for each of the eight broad areas of study is presented which shows the "much emphasis" responses, the "some emphasis" responses, and the "much" and "some" responses combined. Discussion regarding the findings follows each summary table. Complete tables of the responses made in each area comprise Appendix A. The analyses are presented according to the following areas of study: economic, political, social, skills, structure and design, interior design, health and safety, and cultural aspects of housing.

## Economic Aspects of Housing

Data regarding the economic aspects of housing reveal that all groups but the Extension Specialists believe "much emphasis" should be given to construction costs. Extension Specialists believe "some emphasis" should be given to that content area. Public Housing Directors is the only group in which a majority of the respondents indicated "much emphasis" should be given supply and demand factors.

More than one-half of the Extension Specialists indicated "some emphasis" should be given content concerned with the economic base of the community. Builders and Contractors, however, were almost

equally divided between "much" and "some emphasis" in regard to this area.

More than one-half of the Extension Specialists and Builders indicated "much emphasis" should be placed on sources of financing and upon methods of financing. Among Public Housing Directors and Architects, approximately equal proportions indicated "much" or "some emphasis" should be given these areas.

Extension Specialists and Public Housing Directors indicated more frequently than did Architects, Builders and Contractors that "much emphasis" should be given family income and housing expenditures.

In the general area of economic aspects of housing, Extension Specialists feel "much emphasis" should be placed on methods of financing, sources of financing, and on family income and housing expenditures while "some emphasis" should be placed on the economic base of the community and on construction costs. The largest proportion of Public Housing Directors feel "much emphasis" should be placed on family income and housing expenditures as well as supply and demand factors, economic base of community and construction costs. Builders and contractors believe "much emphasis" should be placed on construction costs as well as on sources and methods of financing. Architects indicated "much emphasis" should be placed on construction costs.

## TABLE IV

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		0cc	upation		
Content Item	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier	r, Architect	: Total
			Percent		
		"Much Emph	asis" Resp	onses	
Construction costs	29.4	58.6	86.7	69.8	69.6
Supply and demand factors Economic base of	12.9	67.9	35.5	30.5	35.1
community	18.8	59.3	40.4	28.8	36.3
Sources of financing	57.1	42.3	61.7	39.3	52.3
Methods of financing	61.8	40.8	66.0	45.2	56.4
Family income and housing expenditure	es 62.9	77.8	46.9	39.3	51.1
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		-	-		0 1 0
Construction costs Supply and demand	55.9	20.7	10.2	22.2	21.9
factors Economic base of	45.2	17.9	44.1	49.2	42.2
community	56.3	33.3	40.4	45.9	43.4
Sources of financing	34.3	34.6	28.7	39.3	33.3
Methods of financing Family income and	26.5	40.7	22.7	43.5	31.4
housing expenditure	es 17.1	22.2	36.5	32.8	30.8
	Combined	d "Much" an	nd "Some Em	phasis" Re	sponses
Construction costs Supply and demand	85.3	.79.3	96.9	92.0	91.5
factors Economic base of	58.1	85.8	79.6	79.7	77.3
community	75.1	92.6	80.8	74.6	79.7
Sources of financing	91.4	76.9	90.4	78.6	85.6
Methods of financing	88.3	81.4	88.7	88.7	87.8
Family income and					
housing expenditure		100.0	83.4	72.1	81.9
र्वह	N = 31 - 35	26 <b></b> 30	93 <b>-</b> 99	59-64	211 <del>-</del> 224

## SUMMARY TABLE REGARDING ECONOMIC ASPECTS OF HOUSING

\* Variable N is given because not all respondents gave a response for each item.

### Political Aspects of Housing

In relation to political aspects of housing, more than one-half of the Public Housing Directors indicated "much emphasis" should be devoted to local programs, local policies and procedures, public housing projects, building codes and housing codes, and "some emphasis" given to federal policies and procedures. Architects indicated "much emphasis" for building codes and housing codes and "some" for federal programs and procedures, and public housing projects. Builders indicated "much emphasis" for building and housing codes. By and large, Extension Specialists do not feel that content areas concerned with the political aspects of housing need "much emphasis."

Over three-fourths of all groups indicated that either "much" or "some emphasis" should be placed on federal programs. All groups agreed that "some emphasis" should be placed on federal policies and on federal procedures. The largest proportion of all four groups indicated that "much" or "some emphasis" should be placed on local policies and procedures. Extension Specialists, Builders and Contractors and Architects agreed that "little emphasis" needs to be placed on the history of federal programs or on the philosophy of federal programs. Public Housing Directors more than the other three groups, believe "much" or "some emphasis" should be given these two content areas. Public housing managers indicated "much emphasis" should be placed on public housing projects while the other groups indicated "some emphasis." Although all groups indicated that "much" or "some emphasis" should be placed on housing codes and on building codes, fewer Extension Specialists than of the other three groups indicated "much emphasis" should be given these aspects of housing.

# TABLE V

_	Occupation					
	Extension Specialist	Public Housing Director	Contrac Builder Buildin Supplie	<b>,</b> g	Tota	
ݜݡݹݭݷݓݑݱݘݜݿݩݿݯݩݾݒݜݸݿݿݖݖݾݷݾݾݿݷݕݖݖݾݭݾݬݷݕݸݖݽݿݾݶݷݾݸݷݷݬݞݷݸݞ ݞݕݹݪݩݷݑݑݱݘݜݢݩݢݯݩݾݒݜݸݿݩݖݖݾݷݾݥݤݷݵݖݖݾݪݾݬݷݕݸݖݽݿݾݵݷݾݸݷݷݬݞݷݸݞ	an da an	<u> </u>	Percent	<u>, , , , , , , , , , , , , , , , , , , </u>		
		"Much Emp	hasis" Re	sponses		
Local programs	38.2	57.7	28.7	40.0	36.	
Federal programs	27.3	42.9	44.1	35.7	39.	
Federal policies	31.3	32.0	30.0	29.6	30.	
Federal procedures	22.6	37.5	27.8	24.1	27.	
Local policies and	6 4 6 V		27.0	∠++ • ⊥	<i>41</i>	
procedures	33.3	50.0	28.1	40.0	34.	
-	38.2	44.0	42.2	26.8	37.	
Legal aspects	30.Z	44.0	42.2	20.0	57.	
History of federal	0 7	10 5		7 0	0	
programs	9.7	18.5	7.7	7.0	9.	
Philosophy of federal	15 (	20 0	0.0	10.0	1 9	
programs	15.6	32.0	8.9	10.9	13.	
Public housing project		70.4	15.7	22.4	25.	
Building codes	34.3	53.8	69.4	68.9	61.	
Housing codes	36.4	57.1	68.1	57.9	59.	
		"Some Emp	hasis" Re	sponses		
Local programs	32.4	26.9	46.8	43.3	41.	
Federal programs	54.5	46.4	34.4	50.0	43。	
Federal policies	53.1	56.0	43.3	46.3	47.	
Federal procedures	51.6	54.2	43.3	53.7	48.	
Local policies and			1010	50.1	101	
procedures	51.5	29.2	48.3	45.5	45.	
Legal aspects	41.2	32.0	37.8	44.6	39.	
History of federal	7102	J & o U	57.0	44 0	520	
programs	19.4	44.4	17.6	27.1	22.	
Philosophy of federal	1.7.04	4 ** • +	11.00	4/ o L	<i>6 2</i> <b>a</b>	
	<b>7</b> 7 E	44 0	20.0	00 1	20	
programs Bublic boucing reciped	37.5			29.1		
Public housing project		29.6		55.2		
Building codes	48.6	30.8		19.7	28.	
Housing codes	57.6	28.6				
	Combined	"Much" a	nd "Some ]	Emphasis" Res	sponse	
local programs	70.6	84.5	75.5	83.3	78.	
Federal programs	81.8	89.3		86.5	82.	
Federal policies	84.4	88.0	73.3		72.	
Federal procedures	74.2	91.7	71,1		75.	

# SUMMARY TABLE REGARDING POLITICAL ASPECTS OF HOUSING

TABLE V (Continued)

	Occupation					
	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier	• · ·	Total	
			Percent			
	Combined	"Much" an	d "Some En	phasis" Re	sponses	
Local policies and						
procedures	84.8	79.2	76.4	85.5	80.6	
Legal aspects	79.5	76.0	80.0	71.4	76.9	
History of federal						
programs	29.1	62.9	25.3	34.1	31.5	
Philosophy of federal						
programs	53.1	76.0	28.9	40.0	41.6	
Public housing projec	ts 72.7	100.0	65.1	76.6	74.4	
Building codes	82.9	84.6	94.9	88.6	90.0	
Housing codes	94.0	85.7	93.6	93.0	92.5	
* N	= 31-35	24- 28	89-98	54-61	199-220	

\* Variable N is given because not all respondents gave a response for each item.

## Social Aspects of Housing

Of the content areas classified as Social Aspects of Housing, only in regard to family life cycles and mores, values and attitudes did as many as one-half of the Extension Specialists indicate that "much emphasis" should be given and "some emphasis" on neighboring patterns. One-half or more of the Public Housing Directors believe "much emphasis" should be placed on mores, values and attitudes and upon emotional wellbeing and "some emphasis" on neighboring patterns. A consensus regarding the level of emphasis to be given social aspects of housing did not emerge in the responses of the Architects, Builders, and Contractors.

Public Housing Directors were the only group in which at least onethird think "much emphasis" should be placed on the social costs or segregation. Less than one-fifth of the other groups indicated that "much emphasis" should be given the social costs of segregation.

Extension Specialists more than any other group indicated personality development should receive "much emphasis." Extension Specialists and Public Housing Directors more than the other groups think "much emphasis" should be given to content concerned with emotional well-being of individuals.

By and large, for content areas concerned with the social aspects of housing, "some emphasis" is the level most frequently indicated.

#### Skills

For the four groups, more than one-half of each group indicated that "much emphasis" should be placed on reading plans and sketches.

## TABLE VI

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Content Item	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier		: Total
			Percent		
		"Much Emph	asis" Resp	onses	
Mores, values and					
attitudes	54.5	61.9	21.8	44.1	38.0
Neighboring patterns	18.8	37.5	28,6	45.0	32.9
Informal group					
associations	13.8	34.8	4.8	10.7	11.5
Family life cycles	55.9	40.9	10.6	20.7	24.6
Social costs of					
segregation	10.0	34.8	16.5	13.8	16.8
Personality developme	nt 34.4	23.8	10.6	14.5	17.1
Emotional well-being	46.9	50.0	18.2	32.7	30.5
	"Some Emphasis" Responses				
Mores, values and		-	-		
attitudes	39.4	28.6	49.4	37.3	42.0
Neighboring patterns	59.4	28.0 54.2	49.4	40.0	48.3
Informal group	22.4	J4°2	40.4	40.0	40 • J
associations	41.4	47.8	26.5	44.6	36.6
Family life cycles	38.2	31.8	34.1	43.1	37.2
Social costs of	50%2	01.00	97.L		J/ 3 20
segregation	46.7	47.8	38.8	32.8	39.3
Personality development		47.6	38.8	41.8	42.0
Emotional well-being	31.3	31.8	37.5	36.4	35.5
U		"Much" an			
Mores, values and	· · ·			k - · ktv	1
attitudes	93.9	90.5	71 0	Q1 /	80.0
Neighboring patterns	78.2	90.5	71.2 77.0	81.4	80.0 81.2
Informal group				85.0	81.2
associations	65.2	82.6	31.3	55.3	48.1
Family life cycles Social costs of	94.1	72.7	44.7	63.8	61.8
segregation	56.7	82.6	55.3	46.6	56.1
Personality development		71.4	49.4	56.3	59.1
Emotional well-being	78.2	81.8	55.7	69.1	66.0
0	= 29-34	21-24	83-91	56 <b>⊷</b> 60	193-207
2.4	6.J	+~~ +	UJ~71		195-207

## SUMMARY TABLE REGARDING SOCIAL ASPECTS OF HOUSING

\* Variable N is given because not all respondents gave a response for each item. Extension Specialists and Builders and Contractors are the groups in which the greatest proportion of the respondents indicated "much emphasis."

According to Architects and Builders and Contractors, analyzing and estimating costs should receive "much emphasis" while Public Housing Directors were equally divided between "some" and "much" responses. The largest proportion of Extension Specialists indicated "some emphasis" should be given this content area.

The ability to make census surveys was not perceived by any of the four groups as a content area requiring either "much" or "some emphasis." Less than one-third of any group indicated "much emphasis" and less than one-half indicated "some emphasis."

Whereas less than two-fifths of each group think "much emphasis" should be given to reviewing specifications, from one-third to approximately one-half of each group think "some emphasis" should be given to developing this skill.

## Structure and Design

All groups indicated that "much emphasis" should be given functional design and site planning. Extension Specialists indicated either "much" or "some emphasis" should be given to all but three content areas related to structure and design. Either "much" or "some emphasis" for nine of the fifteen areas concerned with structure and design was indicated by Public Housing Directors and by Builders, while Architects indicated ten areas should receive this much emphasis.

Extension Specialists and Architects indicated "much emphasis" should be given aesthetic design while Public Housing Directors and

## TABLE VII

# SUMMARY TABLE REGARDING SKILLS

	Occupation						
	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier	-	: Total		
			Percent				
		"Much Emph	nasís" Resp	onses			
Drawing and rendering Reading plans and	26.5	29.2	55.2	45.2	44.9		
sketches	77.1	57.1	83.2	65.6	74.0		
Writing specification	s 14.7	33:3	70.5	42.6	.49.5		
Analyzing and estimat	ing						
costs	23.5	40.7	77.6	60.3	59.9		
Making census surveys	18.8	37.0	9.6	21.4	17.7		
Reviewing							
spe <b>c</b> ifications	37.5	32.1	34.7	28.3	33.0		
	"Some Emphasis" Responses						
Drawing and rendering Reading plans and	52.9	33.3	32.3	33.9	36.1		
sketches	11.4	39.3	11.6	21.3	17.8		
Writing specification	s 47.1	25.0	22.1	37.7	30.8		
Analyzing and estimat	ing						
costs	44.1	40.7	19.4	34.9	30.2		
Making census surveys Reviewing	21.9	37.0	42.6	39.3	37.8		
specifications	31.3	53.6	51.6	41.7	46.0		
	Combined	"Much" ar	nd "Some Em	phasis" Re	sponses		
Drawing and rendering Reading plans and	74.9	62.5	87.5	79.1	81.0		
sketches	88.5	96.4	94.8	86.9	91.8		
Writing specification	s 61.8	58.3	92.6	80.3	80.3		
Analyzing and estimat							
costs	67.6	81.4	97.0	95.2	90.1		
Making census surveys Reviewing	40.7	74.0	52.2	60.7	55.5		
specifications	68.8	85.7	86.3	70.0	79.0		
Ň	= 32-35	24-28	94-98	56-63	209-222		

\* Variable N is given because not all respondents gave a response for each item.

Builders as a whole indicated "some emphasis." The four groups were in agreement that "much emphasis" should be placed on functional design. All groups believe that "much emphasis" should be given to structural materials except Extension Specialists who indicated the area should receive "some emphasis." In regard to structural processes, Extension Specialists and Architects indicated "some emphasis" while the greatest proportion of builders indicated "some" or "much" and about equal proportions of public housing managers indicated these two levels of emphasis.

Extension Specialists more than the other three groups consider lighting as a content area needing "much emphasis." Builders and Contractors were approximately equally divided in indicating "much" or "some emphasis." Whereas the largest proportion of Public Housing Directors think "much emphasis" should be given lighting, the largest proportion of Architects think the emphasis should be "some." All groups except the Public Housing Directors indicated acoustics should have "some emphasis" and all groups indicated that either "much" or "some emphasis" should be placed on finishing materials.

Extension Specialists and Architects indicated "much" while Public Housing Directors and Builders indicated "some emphasis" should be placed on orientation. All groups indicated "some emphasis" should be placed on landscaping. In regard to maintenance, Public Housing Directors indicated that much emphasis should be placed on this content area while Builders and Architects indicated "some" and Extension Specialists were about equally divided between all three levels of

# TABLE VIII

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	Occupation					
	Extension	Public Housing	Contracto Builder, Building			
Content Item	Specialist	Director	Supplier	Architect	Total	
			Percent			
		"Much Emph	asís" Resp	onses		
Aesthetic design	60.0	31.8	28.9	68.3	45.9	
Functional design	85.7	64.3	61.5	70.5	68.2	
Structural materials	27.3	53.8	64.2	42.9	51.2	
Structural processes	28.1	32.0	47.8	35.6	39.3	
Lighting	73.5	53.8	47.9	28.3	47.2	
Plumbing	26.5	55.6	50.0	21.7	39.2	
Heating and cooling	26.5	48.1	51.5	23.3	39.4	
Acoustics	32.4	24.0	24.7	16.7	23.6	
Finishing materials	48.6	37.0	48.9	33.3	43.1	
Site planning	52.9	66.7	67.0	77.0	67.6	
Neighborhood planning		52.0	49.0	68.9	51.6	
Orientation	53.1	20.8	17.6	48.3	32.4	
Landscaping	27.3	25.9	22.3	33.9	26.9	
Maintenance	30.3	75.0	33.3	32.8	38.1	
Environmental	50.5	, , , , , , , , , , , , , , , , , , , ,	00.0	0210	0012	
influences	38.2	46.2	12.8	42.6	29.3	
	30.2					
		-	asis" Resp			
Aesthetic design	17.1	54.5	48.9	26.7	37.7	
Functional design	2.9	28.6	29.2	23.0	23.2	
Structural materials	63.6	23.1	25.3	39.7	35.0	
Structural processes	50.0	36.0	38.9	45.8	42.2	
Lighting	14.7	19.2	43.8	60.0	40.7	
Plumbing	70.6	18.5	41.7	61.7	48.8	
Heating and cooling	64.7	25.9	41.2	60.0	48.2	
Acoustics	55.9	28.0	56.7	61.7	54.6	
Finishing materials	34.3	29.6	40.4	48.3	40.3	
Site planning	32.4	26.7	26.8	16.4	24.8	
Neighborhood planning		36.0	40.6	24.6	38.1	
Orientation	34.4	58.3	57.1	36.7	47.8	
Landscaping	54.5	44.4	55.3	50.0	52.3	
Maintenance	36.4	14.3	45.2	50.8	41.4	
Environmental						
influences	44.1	38.5	50.0	31.0	42.3	

# SUMMARY TABLE REGARDING STRUCTURE AND DESIGN

TABLE VIII (Continued)

and a second and an element of the second and the second and second and second and second and second and second	Occupation					
Content Item	Extension Specialist	Public Housing Director	Contract Builder, Building Supplier	•	Total	
			Percent			
	Combined	"Much" ar	nd "Some En	mphasis" Re	sponses	
Aesthetic design	77.1	86.3	77.8	95.0	83.6	
Functional design	88.6	92.9	89.7	93.5	91.4	
Structural materials	90.9	76.9	89.5	82.6	86.2	
Structural processes	78.1	68.0	86.7	81.4	81.5	
Lighting	88.2	73.0	91.7	88.3	87.9	
Plumbing	97.1	74.1	91.7	83.4	88.0	
Heating and cooling	91.2	74.0	92.7	83.3	87.6	
Acoustics	88.3	52.0	81.4	78.4	78.2	
Finishing materials	82.9	66.6	89.3	81.6	83.4	
Site planning	85.3	93.4	93.8	93.4	92.4	
Neighborhood planning	5 84.9	88.0	89.6	93.5	89.7	
Orientation	87.5	79.1	74.7	85.0	80.2	
Landscaping	81.8	70.3	77.6	83.9	79.2	
Maintenance	66.7	89.3	78.5	83.6	79.5	
Environmental						
influences	82.3	84.7	62.8	73.7	71.6	
* N	1 = 32-35	24-30	90⇔97	5 <b>9</b> ∝6 <b>3</b>	206-222	

\* Variable N is given because not all respondents gave a response for each item.

emphasis. All groups indicated "much" or "some emphasis" on environmental influences, builders were less concerned with this content area than were the other three groups.

#### Interior Design

As a whole, this general content area was not deemed as important by the respondents as were the areas discussed heretofore. Extension Specialists indicated "much emphasis" for elements of design, principles of design, and values and goals. Builders indicated "much" for principles of design, and materials, while Architects indicated "much" for elements of design, principles of design and materials and "some emphasis" for furniture arrangement. Public Housing Directors feel "some emphasis" should be given furniture arrangement. It is interesting to note that none of the Public Housing Directors assigned a level of emphasis higher than "some" to the content area concerned with furniture arrangement and furniture design. This finding is especially noteworthy in view of the fact that a study reported in 1945 by the U. S. Federal Public Housing Authority showed out-of-scale furniture as one of the primary factors creating problems for Public Housing tenants.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>U. S. Federal Public Housing Authority. <u>The Livability Problems</u> of 1,000 Families. Bulletin 28, Washington: U. S. Government Printing Office, 1945.

#### TABLE IX

	Occupation					
	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier		Tota	
			Percent			
		"Much Emph	asis" Resp	onses		
Elements of design	65.7	48.0	46.9	56.5	52.	
Principles of design	71.4	48.1	55.3	65.0	59.	
faterials	44.1	39.3	56.3	52.4	51.	
'urniture arrangement		0	17.0	16.7	18.	
Values and goals	65.7	32.0	22.7	31.6	-33.	
Furniture selection	43.8	4.2	10.8	13.6	15	
Furniture constructio		8.3	9.9	10.7	11	
Furniture renovation	15.2	12.5	2.2	5.3	6	
Furniture design	42.4	0	6.7	15.8	14	
Accessory constructio		12.0	14.1	3.6	10	
finishing procedures	18.2	16.7	39.6	15.3	26	
Ferminology	30.3	16.0	27.0	22.0	24	
i et mano rogy	5015		asis" Resp		211	
	1/ 2	-			n/.	
Elements of design	14.3	32.0	42.9	32.3	34	
Principles of design	8.6	33.3	34.0	28.3	28	
Materials	38.2	25.0	33.3	41.3	35	
Furniture arrangement	40.6	33.3	34.0	60.0	42	
Values and goals	40.0	28.0	38.6	45.6	.36.	
Furniture selection	37.5	33.3	39.8	37.5	40	
Furniture constructio		29.2	28.6	25.0	29	
Furniture renovation	36.4	29.2	25.8	21.1	26	
Furniture design	36.4	33.3	31.1	29.8	31	
Accessory constructio		36.0	38.0	43.6	37	
Finishing procedures	42.4	41.7	36.3	37.3	38	
[erminology	45.5	52.0	39.3	49.2	44.	
	Combined	l "Much" ar	nd "Some En	nphasis" Res	ponse	
Elements of design	80.0	80.0	89.8	88.8	86	
Principles of design	80.0	81.4	89.3	93.3	87.	
Materials	82.3	64.3	89.6	93.7	86	
Furniture arrangement	81.2	33.3	51.0	76.7	61	
Values and goals	85.7	60.0	61.3	77.2	69.	
Furniture selection	81.3	37.5	50.6	61.1	56.	
Furniture constructio	n 60.6	37.5	38.5	35.7	41	

# SUMMARY TABLE REGARDING INTERIOR DESIGN

TABLE IX (Continued)

Occupation					
Content Item	Extension Specialist	Public Housing Director	0	r, Architect	Total
			Percent		
	Combined	"Much" ar	nd "Some Em	phasis" Re	sponses
Furniture renovation	51.6	41.7	20.0	26.4	<b>3</b> 3.0
Furniture design	78.8	33.3	37.8	45.6	46.1
Accessory construction	on 39.4	48.0	52.1	47.2	48.3
Finishing procedures	60.6	58.4	75.9	52.6	64.8
Terminology	75.8	68.0	66.3	71.2	69.5
*N	u = 32-35	<b>24-</b> 28	83∽98	55⇔63	203-221

\* Variable N is given because not all respondents gave a response for each item.

#### Health and Safety in Housing

Builders and Contractors did not indicate that health and safety should be given a high level of emphasis. Public Housing Directors feel all categories should have "much emphasis." Architects feel that design influences should be given "much emphasis" and Extension Specialists indicated that safety regulations should have "much emphasis." When the "much" and "some" responses are combined, over seventy-five percent of all groups indicated "much" or "some emphasis" should be placed on all content areas classified as Health and Safety in Housing.

#### Cultural Aspects of Housing

In the general area of cultural aspects of housing, no group indicated that "much emphasis" should be given to any of the various content areas in this general category. Extension Specialists indicated that racial characteristics, ethnic characteristics and regional characteristics should all be given "some emphasis." Public Housing Directors, Architects and Builders and Contractors feel that variations in living patterns should be given "some emphasis." When "much" and "some" responses are combined, however, in only one instance did less than one-half of the group indicate either "much" or "some emphasis." Builders' responses to ethnic characteristics indicated they feel "little emphasis" should be given this area.

#### TABLE X

#### SUMMARY TABLE REGARDING HEALTH AND SAFETY IN HOUSING

	Occupation				
	Extension Specialist	Public Housing Director	Ģ	r, Architect	Total
			Percent		
		"Much Emph	asis" Resp	onses	
Design influences Specific physical need Health codes Safety regulations	48.6 1s 45.7 38.2 51.4	55.6 62.1 60.7 79.3	26.6 37.0 37.0 48.9	55.7 40.0 35.0 46.8	41.9 42.6 39.7 52.8
		"Some Emph	asis" Resp	onses	
Design influences Specific physical need Health codes Safety regulations	37.1 1s 40.0 41.2 28.6	33.3 31.0 35.2 20.7	45.7 36.7 40.2 35.9		39.6 43.5 41.6 33.9
	Combined	"Much" an	d "Some Em	phasis" Re	sponses
Design influences Specific physical need Health codes Safety regulations N	79.4 80.0	88.9 93.1 96.4 100.0 27-30	42.3 83.7 77.2 84.8 9 <b>2-</b> 95	81.7 87.1	81.5 86.1 81.3 86.7 214-223

\* Variable N is given because not all respondents gave a response for each item.

#### TABLE XI

# SUMMARY TABLE REGARDING CULTURAL ASPECTS OF HOUSING

	Occupation					
	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier	Architect	Total	
⋽⋓⋺⋑⋺⋽⋽⋳⋺⋽⋑⋻⋛⋻⋹⋺⋽⋺⋲⋛⋳⋹ <sub>⋳</sub> ⋛⋳⋵⋛⋺⋵⋛⋳⋳ <sub>⋛</sub> ⋳⋳⋺⋻⋺⋹⋛⋳∊ <u>⋺</u> ⋺⋺⋹⋛⋻⋇⋛⋽⋇⋛⋽⋇⋛⋽∊⋧⋛⋳⋲⋛⋻⋳∊⋛⋑⋲⋧⋳			Percent	and the state of the	n an	
		"Much Emph	asis" Resp	onses		
Family variations Variations in living	37.1	44.4	23.2	35.5	31.5	
patterns	45.7	23.1	17.2	26.2	25.1	
Racial characteristics	s 12.1	41.7	16.3	23.3	20.6	
Ethnic characteristics Regional character-	s 12 <b>.</b> 1	33.3	9.1	22.0	16.2	
istics	14.3	34.6	19.4	33.9	24.5	
	"Some Emphasis" Responses					
Family variations Variations in living	48.6	48.1	52.6	48.4	50.2	
patterns	40.0	69.2	51.6	50,8	51.6	
Racial characteristics	s 51.5	41.7	37.0	38.3	40.2	
Ethnic characteristic: Regional character-	\$ 57.6	41.7	37.5	49.2	44.6	
istics	60.0	42.3	41.9	41.9	44.9	
	Combined	l "Much" an	nd "Some En	nphasis" Re	sponses	
F <i>a</i> mily variations Variations in living	85.7	92.5	95.8	83.9	81.9	
patterns	85.7	92.3	68.8	77.0	76,7	
Racial characteristics		83.4	53.3	61.6	60.8	
Ethnic characteristics Regional character-		75.0	46.6	71.2	60.8	
istics	74.3	76.9	61.3	75.8	69.4	
* N	= 33-35	24 - 27	88-95	59-62	204-21	

\* Variable N is given because not all respondents gave a response for each item.

#### CHAPTER V

#### SUMMARY, CONCLUSIONS, AND IMPLICATIONS

#### Summary

Since Congress has established a Department of Housing and Urban Development, many colleges and universities are considering the offering of a housing major. Business and professional workers whose occupations are related to housing are logical sources of advice regarding what should constitute the background of a person being trained to enter a housing profession.

The study seeks to discover what content areas should be included in a curriculum for housing majors. Because they are in occupations concerned with housing: Extension Specialists; Public Housing Directors; Builders, Contractors and Building Suppliers; and Architects are feasible resources for identifying specific concepts related to house design, construction, economic, political, social, cultural, skills, health and safety aspects of housing, which might be incorporated into curricula concerned with housing.

The hypothesis of the study is that: the amount of emphasis that business and professional personnel recommend be given to concepts and skills related to housing varies according to the business or professional role of the respondent.

A questionnaire which could be distributed by mail was devised and used in obtaining the data. Of the 980 questionnaires mailed, 234 were returned and 228 were usable for analysis. The data were subjected to Chi-square analyses to determine if differences exist in the degree of emphasis which professionally employed persons and business people feel should be given each content area that might conceivably constitute background for housing as a major field of study. Computations were made on an electronic high speed computer in the Computing Center at Oklahoma State University.

Over two-thirds of all four groups indicated "much" or "some emphasis" for each content area in the category of economic aspects of housing. Within the category identified as political aspects of housing, over two-thirds of all groups indicated "much" or "some" responses for all content areas except history of federal programs. Extension Specialists, Builders and Contractors and Architects did not support much emphasis being given to the philosophy of federal programs and Builders and Contractors did not support a "much emphasis" level concerning public housing projects.

Over two-thirds of Public Housing Directors indicated a "much" or "some emphasis" for all content areas classified as social aspects of housing, while Extension Specialists followed this pattern except for social costs of segregation. Contractors, Builders, Building Suppliers and Architects indicated "much" and "some" responses only for content areas concerned with mores, values and attitudes and neighboring patterns. Architects gave these responses to the content area concerned with emotional well-being.

Less than two-thirds of the Extension Specialists indicated either "much" or "some" should be given to making census surveys and writing specifications. Less than two-thirds of the Public Housing Directors indicated "much" or "some emphasis" should be given drawing and rendering, and writing specifications. Contractors, Builders and Building Suppliers, and Architects as a whole do not believe "much" or "some emphasis" needs to be devoted to preparing a student for making census surveys.

Only two content areas concerned with structure and design, failed to receive a "much" or "some" level of response from two-thirds of all four groups. The two exceptions were concerned with acoustics and environmental influences. Less than two-thirds of the Public Housing Directors gave these responses for acoustics and this proportion of Contractors and Builders did not support environmental influences.

In none of the four groups did as many as two-thirds of the respondents indicate a "much" or "some emphasis" for content concerned with furniture construction, renovation and accessory constructions. In general this content area is not deemed as important by the respondents as are the other areas.

More than two-thirds of all four groups, with one exception, indicated "much" or "some emphasis" for all content areas classified as health and safety aspects of housing. The exception was Contractors and Builders who did not feel that design influences should receive these levels of emphasis.

Combined "much" and "some emphasis" responses comprised over twothirds of the Public Housing Directors' responses regarding cultural aspects of housing. Over one-half of the Extension Specialists and

Architects gave these levels of response for all content areas in this general category. Family variations and variations in living patterns were the only content areas for which as many as two-thirds of the Builders and Contractors indicated "much" or "some emphasis" should be given.

#### Conclusions

From the analysis of the data, the following conclusions are drawn relative to the hypothesis of the study.

The relationship between an individual's business or professional role and the degree of emphasis he assigns each content area is supported.

A pattern is established regarding the degree of emphasis attached to content areas by business and professional housing workers. This pattern can serve as a foundation for establishing a curriculum or for several curricula concerned with housing.

Content areas for which over one-half of the total group indicated "much emphasis" should be given might be perceived as the basis for a curriculum core. These content areas would be:

	Percent
Reading plans and sketches	74.0
Construction costs	69.6
Functional design	68.2
Site planning	67.6
Building codes	61.8
Analyzing and estimating costs	59.9
Principles of design	59.7
Housing codes	59.0
Methods of financing	56.4
Safety regulations	52.8
Elements of design	52.7
Sources of financing	52.3
Neighborhood planning	51.6

Structural materials	51.2
Family income and housing	
expenditures	51.1
Materials	51.1

A person who would be an Extension Specialist should take additional courses which would provide understandings regarding:

Lighting	73.5
Values and goals	65.7
Aesthetic design	60.0
Family life cycles	55.9
Mores, values and attitudes	54.5
Orientation	53.1

In addition to the core content identified above, students who aspire to be Public Housing Directors should elect courses directed toward understanding:

Maintenance	75.0
Public Housing projects	70.4
Supply and demand factors	67.9
Specific physical needs	62.1
Mores, values and attitudes	61.9
Health codes	60.7
Economic base of the community	59.3
Local programs	57.7
Plumbing	55.6
Design influences	55.6
Lighting	53.8
Emotional well-being	50.0
Local policies and procedures	50.0

Students anticipating working with Builders, Contractors, and Building Suppliers need to add to the core content areas, courses designed for understandings concerning:

Writing	spec	cifications	70.5
Drawing	and	rendering	55.2
Heating	and	cooling	51.5
Plumbing	3		50.0

In order to serve an Architect, a Housing Specialist should add to the core content through courses concerned with:

Aesthetic design	68.3
Design influences	55.7

These summarizations are recommendations for housing curricula.

#### Implications

Research related to curriculum planning in relation to housing should be continued to establish more valid bases for maintaining or for making changes in established curricula.

In a more lengthy study, other factors in a respondent's background which might be relevant to responses regarding curricula and therefore need to be investigated also are: educational attainment, length of time in employment, and the respondent's college major. Continuing research on housing curricula will add to basic knowledge concerning preparation for a particular professional role.

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# APPENDIX A

#### TABLE XII

# ECONOMIC ASPECTS OF HOUSING

			· · ·		
		0c	cupation		•
Level of Emphasis	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier	or, Archltect	Total
			Percent		
Construction costs <sup>1</sup> Much emphasis Some emphasis Little emphasis	29.4 55.9 14.7 N = 34	58.6 20.7 20.7 29	86.7 10.2 3.1 98	69.8 22.2 7.9 63	69.6 21.9 8.5 224
Supply and demand					
factors <sup>2</sup> Much emphasis Some emphasis Little emphasis	$12.9 \\ 45.2 \\ 41.9 \\ N = 31$	67.9 17.9 14.3 28	35.5 44.1 20.4 93	30.5 49.2 20.3 59	35.1 42.2 22.7 211
Economic base of					
community <sup>3</sup> Much emphasis Some emphasis	18.8	59.3 33.3	40.4 40.4	28.8 45.8	36.3 43.4
Little emphasis	25.0 N = 32 4	7.4 27	19.1 94	25.4 59	20.3 212
Sources of financin Much emphasis Some emphasis Little emphasis	g 57.1 34.3 8.6 N = 35	42.3 34.6 23.1 26	61.7 28.7 9.6 94	39.3 39.3 21.3 61	52.3 33.3 14.4 216
Methods of financin	5 8				
Much emphasis Some emphasis Little emphasis	61.8 26.5 11.8 N = 34	40.7 40.7 18.5 27	66.0 22.7 11.3 97	45.2 43.5 11.3 62	56.4 31.4 12.3 220
Family income and	6				
housing expenditure Much emphasis Some emphasis Little emphasis	s 62.9 17.1 20.0 N = 35	77.8 22.2 0 27	46.9 36.5 16.3 98	39.3 32.8 27.9 61	51.1 30.8 18.1 221
<sup>1</sup> Chi-square 46	.683 6df	22.46	p.001		
<sup>2</sup> Chi-square 24	.3015 6df	22.46	p.001		
<sup>3</sup> Chi-square 13	.4849 6df	12.59	p.05		
<sup>4</sup> Chi-square 11	.2291 6df	12.59	p.05		
<sup>5</sup> Chi-square 11		12.59	p.05		
<sup>6</sup> Chi-square 18	.9957 6df	16.81	p.01		

#### TABLE XIII

#### POLITICAL ASPECTS OF HOUSING

		000	upation				
Level of Emphasis	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier	or, Architect	Total		
		· · · · · · · · · · · · · · · · · · ·	Percent		<u> </u>		
Local programs <sup>1</sup>							
Much emphasis	38.2	57.7	28.7	40.0	36.9		
Some emphasis	32.4	26.9	46.8	43.3	41.1		
Little emphasis	29.4	15.4	24.5	16.7	22.0		
	N = 34	26	94	60	214		
Federal programs <sup>2</sup>							
Much emphasis	27.3	42.9	44.1	35.7	39.0		
Some emphasis	54.5	46.4	34.4	50.0	43.3		
Little emphasis	18.2	10.7	21.5	14.3	17.6		
2	N = 33	28	93	56	210		
Federal policies <sup>3</sup>							
Much emphasis	31.3	32.0	30.0	29.6	30.3		
Some emphasis	53.1	56.0	43.3	46.3	47.3		
Little emphasis	15.6 N = 32	12.0 25	26.7 90	24.1 54	22.4 201		
4		23	50	54	201		
Federal procedures	00 (						
Much emphasis	22.6	37.5	27.8	24.1	27.1		
Some emphasis Little emphasis	51.6 25.8	54.2 8.3	43.3 28.9	53.7 22.2	48.7 24.1		
LICCIE ampliasis	N = 31	24	20.9 90	54	199		
Local policies and procedures <sup>5</sup>	•						
Much emphasis	33.3	50.0	28.1	40.0	34.8		
Some emphasis	51.5	29.2	48.3	45.5	45.8		
Little emphasis	15.2	20.8	23.6	14.5	19.4		
	N = 33	24	89	55	201		
Legal aspects <sup>6</sup>							
Much emphasis	38.2	44.0	42.2	26.8	37.6		
Some emphasis	41.2	32.0	37.8	44.6	39.5		
Little emphasis	20.6	24.0	20.0	28.6	22.9		
	N = 34	25	90	56	205		
History of federal							
programs <sup>7</sup>			<b>-</b> -				
Much emphasis	9.7	18.5	7.7	7.0	9.2		
Some emphasis	19.4 71.0	44.4 37.0	17.6 74.7	21.1 71.9	22.3 68.4		
Little emphasis	N = 31	27	74.7 91	57	206		
Philosophy of feder programs <sup>8</sup>							
Much emphasis	15.6	32.0	8.9	10.9	13.4		
Some emphasis	37.5	44.0	20.0	29.1	28.2		
Little emphasis	46.9	24.0	71.1	60.0	58.4		
	N = 32	25	90	55	202		
Public housing proj	9 ect = 9						
Much emphasis	18.2	70.4	15.7	22.4	25.1		
Some emphasis	54.5	29.6	49.4	55.2	49.3		
Little emphasis	27.3	0	34.8	22.4	25.6		
	N = 33	27	89	58	207		

# TABLE XIII (Continued)

			000	upation		
Level of Emphasis	Extensi Special		Public Housing Director	Contracto Builder, Building Supplier	r, Architect	Total
enne - The contract of the second states of the second states of the second states of the second states of the			ing yang menangkan pangkan pangkan bangkan	Percent		<u></u>
Building codes <sup>10</sup> Much emphasis Some emphasis Little emphasis	34.3 48.6 17.1 N = 35	5	53.8 30.8 15.4 26	69.4 25.5 5.1 98	68.9 19.7 11.5 61	61.8 28.2 10.0 220
Housing codes <sup>11</sup> Much emphasis Some emphasis Little emphasis	36.4 57.6 6.1 N = 3	5	57.1 38.6 14.3 28	68.1 25.5 6.4 94	57.9 35.1 7.0 57	59.0 33.5 7.5 212
<sup>1</sup> Chi-square 10	.0471	6df	12.59	p.05		
<sup>2</sup> Chi-square 7	.2548	6df	12.59	p.05		
<sup>3</sup> Chi-square 3	.6483	6df	12.59	p.05		
<sup>4</sup> Chi-square 5	.8430	6d£	12.59	p.05		
<sup>5</sup> Chi-square 6	.8086	6df	12.59	p.05		
<sup>6</sup> Chi-square 4	.5624	6df	12.59	p.05		
<sup>7</sup> Chi-square 17	.6101	6df	15.03	p.02		
<sup>8</sup> Chi-square 21	.8726	6df	16.81	p.01		
<sup>9</sup> Chi-square 38	.7827	6df	22.46	p.001		
<sup>10</sup> Chi-square 18	.0197	6df	16.81	p.01		
<sup>11</sup> Chi-square 13		6df	12.59	p.05		

#### TABLE XIV

#### SOCIAL ASPECTS OF HOUSING

***************************************	Occupation					,
Level of Emphasis	Extensio Speciali		lic sing ector	Contracto Builder, Building Supplier	•	Total
a an an an tha an				Percent		<u>_</u>
Mores, values and attitudes <sup>1</sup>						
Much emphasis	54.5		1.9	21.8	44.1	38.0
Some emphasis Little emphasis	39.4 6.1		8.6 9.5	49.4 28.7	37.3 18.6	42.0 20.0
•	N = 33	2	1	87	59	200
Neighboring pattern:	s <sup>2</sup>			00.0	45.0	
Much emphasis Some emphasis	18.8 59.4		7.5 4.2	28.6 48.4	45.0 40.0	32.9 48.3
Little emphasis	21.9		8.3	23.1	15.0	18.8
-	N = 32	2	4	91	60	207
Informal group						
associations <sup>3</sup> Much emphasis	13.8	3	4.8	4.8	10.7	11.5
Some emphasis	41.4		7.8		44.6	36.6
Little emphasis	44.8		7.4	68.7	44.€	51.8
4	N = 29	2	3	83	56	191
Family life cycles	55 0		0.9	10.6	20.7	74. 6
Much emphasis Some emphasis	55.9 38.2		1.8	10.6 34.1	20.7 43.1	24.6 37.2
Little emphasis	5.9		7.3	55.3	36.2	38.2
	N = 34	2	2	85	58	199
Social costs of						
segregation <sup>5</sup> Much emphasis	10.0	3	4.8	16.5	13.8	16.8
Some emphasis	46.7		7.8	38.8	32.8	39.3
Little emphasis	43.3		7.4	44.7	53.4	43.9
	N = 30	2	3	85	58	196
Personality development						
Much emphasis	34.4	2	3.8	10.6	14.5	17.1
Some emphasis	46.9		7.6	38.8	41.8	42.0
Little emphasis	18.8 N = 32		8.6 1	50.6 85	43.6 55	40.9 193
Emotional well-being		2	*	05		173
Much emphasis	46.9	5	0.0	18.2	32.7	30.5
Some emphasis	31.3	3	1.8	37.5	36.4	35.5
Little emphasis	21.9		8.2	44.3	30.9	34.0
	N = 32	Z	2	88	55	197
<sup>1</sup> Chi-square 22.		6df	16.81	p.01		
<sup>2</sup> Chi-square 10	.0364	6df	12.59	p.05		
<sup>3</sup> Chi-square 29		6df	22.46	p.001		
<sup>4</sup> Chi-square 40.	5183	6df	22.46	p.001		
<sup>5</sup> Chi~square 11	.9382	6d£	12.59	p.05		
<sup>6</sup> Chi-square 15	.6648	6df	15.03	p.02		
<sup>7</sup> Chi-square 16.	. 30 5 8	6df	15.03	p.02		

SKILLS

	Occupation							
Level of Emphasis	Extension Specialist	Public Housing	Contracto Builder, Building	Architect	Total			
******			Percent					
Drawing and renderi	.ng <sup>1</sup>							
Much emphasis	26.5	29.2	55.2	45.2	44.9			
Some emphasis	52.9	33.3	32.3	33.9	36.1			
Little emphasis	N = 34	37.5 24	12.5 96	21.0 62	19.0 216			
Reading plans and sketches <sup>2</sup>				• •				
Much emphasis	77.1	57.1	83.2	65.6	74.0			
Some emphasis	11.4	39.3	11.6	21.3	17.8			
Little emphasis	11,4	3.6	5.3	13.1	8.2			
· -	N = 35	28	95	61	219			
Writing specificati	ons <sup>3</sup>							
Much emphasis	14.7	33.3	70.5	42.6	49.5			
Some emphasis	47.1	25.0	22.1	37.7	30.8			
Little emphasis	38.2	41.7	7.4	19.7	19.6			
· · · · · · · · · · · · · · · · ·	N = 34	24	95	61	214			
Analyzing and estim costs <sup>4</sup>	ating							
Much emphasis	23.5	40.7	77.6	60.3	59.9			
Some emphasis	44.1	40.7	19.4	34.9	30.2			
Little emphasis	32.4	18.5	3.1	4.8	9.9			
	N = 34	27	98	63	222			
Making census surve	eys <sup>5</sup>							
Much emphasis	18.8	37.0	9.6	21.4	17.7			
Some emphasis	21.9	37.0	42.6	39.3	37.8			
Little emphasis	59.4	25.9	47.9	39.3	44.5			
-	N = 32	27	94	56	209			
Reviewing specifications <sup>6</sup>								
Much emphasis	37.5	32.1	34.7	28.3	33.0			
Some emphasis	31.3	53.6	51.6	41.7	46.0			
Little emphasis	31.3	14.3	13.7	30.0	20.9			
	N = 32	28	95	60	215			
<sup>1</sup> Chi-square 15	.9747 66	lf 15.03	p.02					
<sup>2</sup> Chi-square 17	.2912 6d	lf 16.81	p.01					
<sup>3</sup> Chi-square 44	.2982 60	lf 22.46	p.001		•			
<sup>4</sup> Chi-square 47	.3207 60	lf 22.46	p.001					
<sup>5</sup> Chi-square 16	6809 60	lf 15.03	p.02					
<sup>6</sup> Chi-square 10	.3923 66	lf 12.59	p.05					

STRUCTURE AND DESIGN

	Occupation						
Level of Emphasis	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier	Architect	Tota		
			Percent				
1			1 01 0 0.10				
Aesthetic design <sup>1</sup>	60 0	21 0	00.0	(0.2			
Much emphasis	60.0	31.8	28.9	68.3	45.		
Some emphasis	17.1	54.5	48.9	26.7	37.		
Little emphasis	22.9	13.6	22.2	5.0	16.		
	N = 35	22	90	60	207		
Functional design <sup>2</sup>							
Much emphasis	85.7	64.3	61.5	70.5	68.		
Some emphasis	2.9	28.6	29.2	23.0	23.		
Little emphasis	11.4	7.1	9.4	6.6	8.		
areere anphabro	N = 35	28	96	61	220		
	ંગ	20		01	-20		
Structural material	S						
Much emphasis	27.3	53.8	64.2	42.9	51.		
Some emphasis	63.6	23.1	25.3	39.7	35.		
Little emphasis	9.1	23.1	10.5	17.5	13.		
	N = 33	26	95	63	217		
	_4						
Structural processe Much emphasis	28.1	32.0	47.8	35.6	39.		
		36.0	38.9	45.8	42.		
Some emphasis	50.0						
Little emphasis	21.9	32.0	13.3	18.6	18.		
- <sup>-</sup>	N = 32	25	90	59	206		
Lighting <sup>5</sup>							
Much emphasis	73.5	53.8	47.9	28.3	47.		
Some emphasis	14.7	19.2	43.8	60.0	40.		
Little emphasis	11.8	26.9	8.3	11.7	12.		
	N = 34	26	96	60	216		
6							
Plumbing <sup>6</sup>		/			• •		
Much emphasis	26.5	55.6	50.0	21.7	39.		
Some emphasis	70.6	18.5	41.7	61.7	48.		
Little emphasis	2.9	25.9	8.3	16.7	12.		
	N = 34	27	96	60	217		
Heating and cooling	7						
Much emphasis	26.5	48.1	51.5	23.3	39.		
Some emphasis	64.7	25.9	41.2	60.0	48.		
Little emphasis	3.8	25.9	7.2	16.7	12.		
LACCIE emphasis	N = 34	27	97	60	218		
0	M - 74	27	21	00	210		
Acoustics <sup>8</sup>							
Much emphasis	<b>3</b> 2.4	24.0	24.7	16.7	23.		
Some emphasis	55.9	28.0	56.7	61.7	54.		
Little emphasis	11.8	48.0	18.6	21.7	21.		
-	N = 34	25	97	60	216		
Ninistina	9						
Finishing materials	4.0.4	27 0	40.0	<b></b>	10		
Much emphasis	48.6	37.0	48.9	33.3	43.		
Some emphasis	34.3	29.6	40.4	48.3	40.		
Little emphasis	17.1	33.3	10.6	18.3	. 16.		
	N = 35	27	94	60	216		
Site planning <sup>10</sup>							
Much emphasis	52.9	66.7	67.0	77.0	67.		
Some emphasis	32.4	26.7	26.8	16.4	24.		
-		6.7	6.2		7.		
Little emphasis	14.7	0.1	0.2	6.6	1.		

TABLE XVI (Continued)

·	Occupation						
Level of Emphasis	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier	r, Architect	Total		
		······································	Percent				
Neighborhood plannin	, 11		2 C2 O CHO				
Much emphasis	27.3	52.0	49.0	68.9	51.6		
Some emphasis	57.6	36.0	40.6	24.6	38.1		
Little emphasis	15.2	12.0	10.4	6.6	10.2		
12	N = 33	25	96	61	215		
Orientation <sup>12</sup>							
Much emphasis	53.1	20.8	17.6	48.3	32.4		
Some emphasis	34.4	58.3	57.1	36.7	47.8		
Little emphasis	12.5 N = 32	20.8 24	25.3 91	15.0 60	19.8 207		
13	10 52	2-7	71	00	207		
Landscaping <sup>13</sup>	27 3	25 0	22.3	22 0	26.0		
Much emphasis Some emphasis	27.3 54.5	25.9	22.3 55.3	33.9 50.0	26.9 52.3		
Little emphasis	18.2	29.6	22.3	16.1	20.8		
	N = 33	27	94	62	216		
Maintenance <sup>14</sup>							
Much emphasis	30.3	75.0	33.3	32.8	38.1		
Some emphasis	36.4	14.3	45.2	50.8	41.4		
Little emphasis	33.3	10.7	21.5	16.4	20.5		
	N = 33	28	93	61	215		
Environmental							
influences <sup>15</sup>							
Much emphasis	38.2	46.2	12.8	42.6	29.3		
Some emphasis Little emphasis	44.1	38.5 15.4	50.0 37.2	31.1 26.2	42.3		
MILLIC CAPAGDIO	N = 34	26	94	61	215		
<sup>1</sup> Chi-square 32.	.8270 6d	f 22.46	p.001				
-		1 22.40	p.001				
<sup>2</sup> Chi-square 11.		f 12.59	p.05				
<sup>3</sup> Chi-square 22.	.9728 6d	f 22.46	p.001				
<sup>4</sup> Chi-square 8.	2761 6d	f 12.59	p.05				
<sup>5</sup> Chi-square 29.	9424 6d	f 22.46	p.001				
<sup>6</sup> Chi-square 31.	.0905 6d	f 22.46	p.001				
<sup>7</sup> Chi-square 24.	2590 6d	f 22.46	p.001				
<sup>8</sup> Chi-square 16.	1847 6d	f 15.03	p.02				
<sup>9</sup> Chi-square 11.	2403 6d	f 12.59	p.05				
<sup>10</sup> Chi-square 7.	2336 6d	£ 12.59	p.05				
<sup>11</sup> Chi-square 15.	4855 6d	f 15.03	p.02				
<sup>12</sup> Chi-square 24.	0450 6d	£ 22.46	p.001				
<sup>13</sup> Chi-square 4.	3129 6d	f 12.59	p.05				
<sup>14</sup> Chi-square 22.	.8424 6d	f 22.46	p.001				
<sup>15</sup> Chi-square 24.	7627 6d	f 22.46	p.001				
wir-syuare 44	1041 00		h*00T				

#### TABLE XVII

#### INTERIOR DESIGN

		000	upation		
Level of Emphasis	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier	r, Architect	Total
			Percent		<u>, ,,,,,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Elements of design <sup>1</sup>					
Much emphasis	65.7	48.0	46.9	56.5	52.7
Some emphasis	14.3	32.0	42.9	32.3	34.1
Little emphasis	20.0	20.0	10.2	11.3	13.2
	N = 35	25	98	62	220
			20	• #	
Principles of design	1				
Much emphasis	11.4	48.1	55.3	65.0	59.7
Some emphasis	48.6	33.3	34.0	28.3	28.2
Little emphasis	20.0	18.5	20.6	6.7	12.0
	N = 35	27	94	60	216
Materials <sup>3</sup>					
Much emphasis	44.1	39.3	56.3	52.4	51.1
Some emphasis	38.2		33.3	41.3	35.3
		25.0	10.4	41.3 6.3	13.6
Little emphasis	17.6	35.7			
	N = 34	28	96	63	221
Furniture arrangemen	nt <sup>4</sup>				
Much emphasis	40.6	0	17.0	16.7	18.6
Some emphasis	40.6	33.3	34.0	60.0	42.4
Little emphasis	18.8	66.7	48.9	23,3	39.0
	N = 32	24	94	60	210
5		_,			
Values and goals <sup>5</sup>					
Much emphasis	65.7	32.0	22.7	31.6	33.7
Some emphasis	20.0	28.0	38.6	45.6	36.1
Little emphasis	14.3	40.0	38.6	22.8	30.2
	N = 35	25	88	57	205
Furniture selection	5				
Much emphasis	43.8	4.2	10.8	13.6	15.9
	37.5	33.3	39.8	47.5	40.9
Some emphasis		62.5	49.5	39.0	43.3
Little emphasis	18.8 N = 32	24	49.5 93	59	208
		24	95	72	200
Furniture constructi	.on/				
Much emphasis	18.2	8.3	9.9	10.7	11.3
Some emphasis	42.4	29.2	28.6	25.0	29.9
Little emphasis	39.4	62.5	61.5	64.3	58.8
*	N = 33	24	91	56	204
	0				
Furniture renovation	1		0 0	- 0	<i>с і</i>
Much emphasis	15.2	12.5	2.2	5.3	6.4
Some emphasis	36.4	29.2	25.8	21.1	26.6
Little emphasis	48.5	58.3	71.9	73.7	67.0
-	N = 33	24	89	57	203
Furniture design <sup>9</sup>					
Much emphasis	42,4	0	6.7	15.8	14.2
Some emphasis	36.4	33.3	31.1	29.8	31.9
Little emphasis	21.2	66.7	62.2	54.4	53.9
. and are any allowed	N = 33	24	90	57	204
,		c=−1	~~	<i></i>	20 T
Accessory constructs	.on <sup>10</sup>				
Much emphasis	12.1	12.0	14.1	3.6	10.7
Some emphasis	27.3	36.0	38.0	43.6	37.6
Little omphasis	60.6	52.0	47.8	52.7	51.7
Little emphasis	00.0	52.0	-7.0	77.12	71.1

# TABLE XVII (Continued)

Level of Emphasis	Extens Specia		Public	Contracto Builder,	r.	
		list	Housing Director	Building Supplier	Architect	Tota
	• • ·			Percent		
Finishing procedure Much emphasis	es <sup>11</sup> 18.	<b>•</b>	16.7	39.6	15.3	26.
Some emphasis	42.	-	41.7	36.3	37.3	38.
Little emphasis	39.		41.7	24.2	47.5	35.
-	N = 33		24	91	59	207
Terminology <sup>12</sup>						
Much emphasis	30.	3	16.0	27.0	22.0	24.
Some emphasis	45.		52.0	39.3	49.2	44.
Little emphasis	24. N = 33	2	32.0 25	33.7 89	28.8 59	30. 206
1					<del>,</del>	
<sup>1</sup> Chi-square 11		6df	12.59	p.05		
<sup>2</sup> Chi-square 12		6df	12.59	p.05		
<sup>3</sup> Chi-square 16	9267	6df	15.03	p.02		
<sup>4</sup> Chi-square 33	3.7134	6df	22.46	p.001		
<sup>5</sup> Chi-square 25	5.2825	6df	22.46	p.001		
<sup>6</sup> Chi-square 20	3.1315	6df	22.46	p.001		
7 <sub>Chi-square</sub> 6	5.5607	6df	12,59	p.05		
<sup>8</sup> Chi-square 12	2.4317	6df	12.59	p.05		
<sup>9</sup> Chi-square 34	.3302	6df	22.46	p.001		
10 Chi-square	.9445	6df	12.59	p.05		
<sup>11</sup> Chi-square 16	5.8134	6df	16.81	p.01		
12 Chi-square		6d£	12.59	p.05		

#### TABLE XVIII

੶ <u>ੑੑੑੑੑੑੑੑਫ਼ੑਫ਼ੑੑੑੑਫ਼ੑਫ਼ੑਫ਼ੑਫ਼ੑਫ਼ੑਫ਼ੑਫ਼ੑਫ਼ਫ਼ੑਫ਼ਫ਼ੑਫ਼ਫ਼ੑਫ਼</u>	<del>а, да до до до се со до се с</del> оди от одо		and the second secon			
	Compared and the Compared and Com	Occupation				
Level of Emphasis	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier	Architect	Total	
			Percent			
Design influences <sup>1</sup> Much emphasis Some emphasis Little emphasis	48.6 37.1 14.3 N = 35	55.6 33.3 11.1 27	26.6 45.7 27.7 94	55.7 34.4 9.8 61	41.9 39.6 18.4 217	
Specific physical m Much emphasis Some emphasis Little emphasis	needs <sup>2</sup> 45.7 40.0 14.3 N = 35	62.1 31.0 6.9 29	37.0 46.7 16.3 92	40.0 46.7 13.3 60	42.6 43.5 13.9 216	
Health codes <sup>3</sup> Much emphasis Some emphasis Little emphasis	38.2 41.2 20.6 N = 34	60.7 35.7 3.6 28	37.0 40.2 22.8 92	35.0 46.7 18.3 60	39.7 41.6 18.7 214	
Safety regulations <sup>4</sup> Much emphasis Some emphasis Little emphasis	51.4 28.6 20.0 N = 35	79.3 20.7 0 29	48.9 35.9 15.2 92	46.8 40.3 12.9 62	52.8 33.9 13.3 218	
<sup>1</sup> Chi-square 19	.1346 6d	lf 16.81	p.01	9949-0949-0949-0949-0949-0949-0949-0949	# <u>1</u> 99-0	
<sup>2</sup> Chi-square 6		lf 12.59	p.05			
<sup>3</sup> Chi-square 8	.6224 6d	lf 12.59	p.05			
4 Chi-square 12	.5072 6d	lf 12.59	p.05			

# HEALTH AND SAFETY IN HOUSING

#### TABLE XIX

#### CULTURAL ASPECTS OF HOUSING

######################################	Occupation					
Level of Emphasis	Extension Specialist	Public Housing Director	Contracto Builder, Building Supplier		Total	
			Percent			
	37.1 48.6 14.3 N = 35	44.4 48.1 7.4 27	23.2 52.6 24.2 95	35.5 48.4 16.1 62	31.5 50.2 18.3 219	
Variations in living	2					
Much emphasis Some emphasis Little emphasis	45.7 40.0 14.3 N = 35	23.1 69.2 7.7 26	17.2 51.6 31.2 93	26.2 50.8 23.0 61	25.1 51.6 23.3 215	
Racial characteristi	cs <sup>3</sup>					
Much emphasis Some emphasis Little emphasis	12.1 51.5 36.4 N = 33	41.7 41.7 16.7 24	16.3 37.0 46.7 92	23.3 38.3 38.3 60	20.6 40.2 39.2 209	
Ethnic characteristi Much emphasis Some emphasis Little emphasis	$cs^4$ 12.1 57.6 30.3 N = 33	33.3 41.7 25.0 24	9.1 37.5 53.4 88	22.0 49.2 28.8 59	16.2 44.6 39.2 204	
Regional characteris Much emphasis Some emphasis Little emphasis	tics <sup>5</sup> 14.3 60.0 25.7 N = 35	34.6 42.3 23.1 26	19.4 41.9 38.7 93	33.9 41.9 24.2 62	24.5 44.9 30.6 216	
<sup>1</sup> Chi-square 8.	4333 6df	12.59	p.05			
<sup>2</sup> Chi-square 17.	2226 6df	16.81	p.01			
<sup>3</sup> Chi≕square 13.	2478 6df	12.59	p.05			
4 Chi~square 19.		16.81	p.02			
<sup>5</sup> Chi-square 11.		12.59	p.05			

# APPENDIX B

.

Listed below are areas of study having relevance to housing. Some of these may be more important to the preparation of housing majors than others. Would you please indicate the emphasis which you feel should be given each content area by circling the number which represents one of the following levels of emphasis: 1) Much emphasis 2) Some emphasis

- 3) Little emphasis

ECONOMIC ASPECTS OF HOUSING		AND DESIGN
1 2 3 Construction costs	123	
1 2 3 Supply and demand factors	123	
1 2 3 Economic base of community		Structural materials
1 2 3 Sources of financing	123	Structural processes
1 2 3 Methods of financing	123	Lighting
1 2 3 Family income and housing	123	Plumbing
expenditures		Heating and cooling
•		Accoustics
POLITICAL ASPECTS OF HOUSING	123	Finishing materials
1 2 3 Local programs		Site planning
123 Federal programs	123	
1 2 3 Federal policies	123	Orientation
1 2 3 Federal procedures	123	Landscaping
1 2 3 Local policies and		Maintenance
procedures	123	
1 2 3 Legal aspects		
1 2 3 History of federal	INTERIOR	DESIGN
programs		Elements of design
1 2 3 Philosophy of federal		Principles of design
programs		Materials
1 2 3 Public housing projects		Furniture arrangement
1 2 3 Building codes		Values and goals
1 2 3 Housing codes		Furniture selection
1 2 3 Housing codes		Furniture construction
COCTAL ACEPCATE OF HOUSTNG		Furniture renovation
SOCIAL ASPECTS OF HOUSING		Furniture design
1 2 3 Mores', values and		
attitudes		Accessory construction
1 2 3 Neighboring patterns	123	Finishing procedures
123 Informal group associations	1 4 3	Terminology
1 2 3 Family life cycles		D CATHERY IN HOUCING
1 2 3 Social costs of segregation	and the second s	D SAFETY IN HOUSING
1 2 3 Personality development		Design influences
1 2 3 Emotional well-being		Specific physical needs
		Health codes
SKILLS	123	Safety regulations
1 2 3 Drawing and rendering		ACTION OF MOLECULE
1 2 3 Reading plans and		ASPECTS OF HOUSING
sketches		Family variations
1 2 3 Writing specifications	123	Variations in living
1 2 3 Analyzing and estimating		patterns
costs		Racial characteristics
1 2 3 Making census surveys	123	Ethnic characteristics
1 2 3 Reviewing specifications	123	Regional characteristics
Plance fill in the following information		. *
Please fill in the following information:		
1. What is your occupation?		
2. Length of time employed in this occup	ation?	Vears
		,3443
3. Are you a college graduate? (circle)	Yes No	Major



#### OKLAHOMA STATE UNIVERSITY . STILLWATER

Department of Housing and Interior Design FRontier 2-6211, Ext. 343

74075

Since Congress has established a Department of Housing and Urban Affairs, many educational institutions are considering the possibility of "housing" as a major field of study. Persons studying in such a field might be termed a HOUSING SPECIALIST.

With the proper training, such a specialist might work with public housing authorities assisting low-income families with their housing problems and in becoming better occupants and consumers of housing. Such a specialist would also play an important role in interpreting to architects the housing needs, values, and attitudes of low-income families and their social and family characteristics.

The attached questionnaire is intended to obtain your professional opinion regarding those areas of study which you believe are important to a student's preparation as a housing specialist. Your cooperation in completing and returning this questionnaire will help provide a more valid basis for designing a curriculum. I will be most grateful if you will take the few minutes necessary to complete the questionnaire and return it to me in the enclosed envelope no later than April 10.

Sincerely,

(Mrs.) Merlene Lyman



### OKLAHOMA STATE UNIVERSITY . STILLWATER

Department of Housing and Interior Design FRontier 2-6211, Ext. 343 74075

Since Congress has established a Department of Housing and Urban Affairs, many educational institutions are considering the possibility of "housing" as a major field of study. Persons studying in such a field might be termed a HOUSING SPECIALIST.

With the proper training, such a specialist might work with architects or architectural firms in assisting clients to identify their housing needs and in designing residential homes.

The attached questionnaire is intended to obtain your professional opinion regarding those areas of study which you believe are important to a student's preparation as a housing specialist. Your cooperation in completing and returning this questionnaire will help provide a more valid basis for designing a curriculum. I will be most grateful if you will take the few minutes necessary to complete the questionnaire and return it to me in the enclosed envelope no later than April 10.

Sincerely,

Merlenetyman

(Mrs.) Merlene Lyman



Department of Housing and Interior Design FRontier 2-6211, Ext. 343 74075

Since Congress has established a Department of Housing and Urban Affairs, many educational institutions are considering the possibility of "housing" as a major field of study. Persons studying in such a field might be termed a HOUSING SPECIALIST.

With the proper training, such a person might work as an extension specialist in helping consumers evaluate their needs, values, goals and resources in relation to housing. Such a specialist would be responsible for developing and coordinating formal and informal educational programs concerned with all aspects of housing.

The attached questionnaire is intended to obtain your professional opinion regarding those areas of study which you believe are important to a student's preparation as a housing specialist. Your cooperation in completing and returning this questionnaire will help provide a more valid basis for designing a curriculum. I will be most grateful if you will take the few minutes necessary to complete the questionnaire and return it to me in the enclosed envelope no later than April 10.

Sincerely,

MerleneTyman

(Mrs.) Merlene Lyman



# OKLAHOMA STATE UNIVERSITY . STILLWATER

Department of Housing and Interior Design FRontier 2-6211, Ext. 343 74075

Since Congress has established a Department of Housing and Urban Affairs, many educational institutions are considering the possibility of "housing" as a major field of study. Persons studying in such a field might be termed a HOUSING SPECIALIST.

With the proper training, such a specialist might work with builders and contractors in designing homes in accordance with the needs, values, goals, and resources of the consumer. A major role of the housing specialist would be to interpret consumer housing needs to builders and contractors.

The attached questionnaire is intended to obtain your professional opinion regarding those areas of study which you believe are important to a student's preparation as a housing specialist. Your cooperation in completing and returning this questionnaire will help provide a more valid basis for designing a curriculum. I will be most grateful if you will take the few minutes necessary to complete the questionnaire and return it to me in the enclosed envelope no later than April 10.

Sincerely,

Merlene Lyman

(Mrs.) Merlene Lyman

#### VITA

#### Merlene Hope Lyman

#### Candidate for the Degree of

Master of Science

Thesis: OPINIONS FROM FOUR GROUPS OF BUSINESS AND PROFESSIONAL PEOPLE REGARDING THE AMOUNT OF EMPHASIS TO BE GIVEN CONTENT AREAS FOR A MAJOR FIELD OF STUDY CONCERNED WITH HOUSING

Major Field: Housing and Interior Design

Biographical:

- Personal Data: Born in Barnsdall, Oklahoma, May 18, 1939, the daughter of Charles Merle and Myrtle L. Hope. Married December 2, 1961, to Eugene S. Lyman. Mother of two children, one son, James L. Lyman, born January 14, 1963, and one daughter, Gina Hope Lyman, born November 21, 1964.
- Education: Attended grade school in Barnsdall, Oklahoma; graduated from Barnsdall High School in 1957; received the Bachelor of Science degree in Home Economics from Oklahoma State University, with a major in Housing and Interior Design, in May, 1961; completed requirements for a Master of Science degree, with a major in Housing and Interior Design, July, 1966.
- Professional Experience: Worked as Home Economics Agent for Edwards County, Kinsley, Kansas, representing the Kansas Cooperative Extension Service, 1961-1962. At present, Assistant Home Demonstration Agent for Texas County, Guymon, Oklahoma, representing the Cooperative Oklahoma Extension Service.