74-6030

DOBRY, Alberta M., 1937-

SELECTED CHARACTERISTICS OF MICHIGAN HOME ECONOMICS TEACHERS IN RELATION TO THE SCHOOL SITUATIONS OF THEIR EMPLOYMENT.

Michigan State University, Ph.D., 1973
Education, curriculum development

SELECTED CHARACTERISTICS OF MICHIGAN HOME ECONOMICS TEACHERS IN RELATION TO THE SCHOOL SITUATIONS OF THEIR EMPLOYMENT

By

Alberta M. Dobry

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

College of Education

1973

ABSTRACT

SELECTED CHARACTERISTICS OF MICHIGAN HOME ECONOMICS TEACHERS IN RELATION TO THE SCHOOL SITUATIONS OF THEIR EMPLOYMENT

By

Alberta M. Dobry

The general objective of the study was to investigate selected characteristics of home economics teachers in relation to the school situations in which they were employed. A more specific purpose of this study was to examine differences in selected contextual characteristics (i.e., age of the teacher, number of years of teaching experience, undergraduate major, type of teaching certificate, and degree-granting institution of the teacher) in relation to environmental factors (school size and geographical location) of full-time home economics teachers in Michigan public secondary consumer and homemaking programs. Another specific purpose was to determine the relationship between selected contextual characteristics of full-time home economics teachers in Michigan secondary consumer and homemaking programs and influence of different individuals and groups on curriculum decisions and the helpfulness of various sources for identification of home economics class content.

The study was designed to be descriptive in nature. The two independent variables, geographical location and school size, were each divided into four categories, resulting in a sixteen-cell design over subjects. The sample for this study was selected from a pool of respondents available through a larger study of the same design.[1] Subjects for the larger study were drawn from the population of all home economics teachers in Michigan public secondary (grades 7-12) schools with consumer and homemaking programs. The stratified random procedure (sampling without replacement) employed variable sampling fractions to increase uniformity among cell sizes. An added criterion for sample selection of the teachers for this study restricted the sample to full-time teachers. Thus, the sample for this study was comprised of 528 teachers.

Data for this study were collected through items from two (personal data and general information) of the four sections from the Profile of Secondary Home Economics Program questionnaire.[2] These data were analyzed using two-way chi square and corresponding post hoc analyses, one-way univariate analysis of variance, multiple regression analysis, and two-way multivariate and univariate analyses of variance. The chosen alpha level for rejection of each null hypothesis was 0.05.

Results of the null hypotheses tests showed significantly greater proportions of teachers who were Michigan State University (MSU) graduates were located in the lower

than in the upper peninsula; an exception was the Detroit area of the lower peninsula, where non-MSU graduates were predominant. Although significant differences were not found for proportion of MSU graduates with respect to school size, the data showed a trend toward a higher incidence of MSU graduates in schools of 550-1199 students.

Significantly greater proportions of vocationally certified teachers were located in the lower than the upper peninsula, again with the exception of the Detroit area, where teachers with general certification were predominant. A significantly greater proportion of vocationally certified teachers occurred in schools of 550-1199 students than in schools of other sizes, whereas a significantly greater proportion of teachers with general certification occurred in schools of 299 or fewer students than in those of other sizes; schools of 1200 or more students had the next largest proportion of teachers with general certification.

Significant differences were not found to exist in the various majors of teachers among geographical locations; however, significant differences were cited with respect to school size. A significantly greater proportion of home economics education majors existed in schools of 300-549 students than in schools of other sizes.

A significant relationship occurred between age of the teacher and amount of influence exerted by various groups and individuals on curriculum decisions. Influence of the

teacher was found to make the greatest contribution, followed by that of the department head.

A significant relationship also existed between years of teaching experience and helpfulness of various printed sources used for identification of home economics class content. The greatest contribution to the relationship came from college course materials (whose influence was inversely related to age) and from professional periodicals, popular magazines, and commercial teaching aids (all with influence directly related to age).

Finally, significant differences were found in amount of influence from various individuals and groups on curriculum decisions based on an interaction between school size and geographical location. The greatest contributions to the overall variance came from influence of the local curriculum committee, the student teacher, and other teachers in the department. An additional marginal contribution came from influence of the local advisory committee. Graphic presentations of the interactions indicated that all were disordinal in nature.

---

[1]Alberta Dobry and Norma Bobbitt, "The Development and Implementation of a Curriculum Approach for the Conceptual Reorientation of Secondary Home Economics Programs with Emphasis on Meeting Needs of Special Groups: Phase I" (unpublished report, Michigan State University, Fall, 1972).

[2]Ibid.

ACKNOWLEDGMENTS

Acknowledgment is due a number of individuals and groups for various types of assistance throughout the program of study. Appreciation is expressed to the guidance committee: Dr. Beatrice Paolucci, Dr. Norma Bobbitt, Dr. Frank Bobbitt, and Dr. Troy Stearns. Their support, encouragement, and patience have facilitated the completion of the dissertation.

A special note of gratitude is expressed to Dr. Jo Lynn Cunningham, who served in the roles of friend, neighbor, and colleague for her advice and suggestions concerning research design, procedures, and data analysis. Her constant encouragement and moral support throughout the process provided an added source of strength. In addition, her typing assistance with the copy of the first draft was invaluable.

Appreciation is also extended to Verda Scheifley for her time and effort with the computer programming and data processing throughout the study. A note of thanks is also extended to Mary Andrews, who assisted with the data processing.

Gratitude is expressed to Dr. Nancy Hook, friend and colleague, for her help prior to the guidance committee

meeting. Her perseverance in Xeroxing and collating the draft of the dissertation was greatly appreciated.

Grateful acknowledgment is extended to the Michigan Department of Education, Division of Vocational Eduation, which, in cooperation with Michigan State University, funded the larger study through which these data were collected. The contribution and support of all those involved with the larger study which made this study possible is appreciated.

Finally, there will be a life-long indebtedness to all those responsible for initiating action toward financial assistance at various points throughout the doctoral program. Grateful appreciation is extended for the Thelma Porter Alumni Scholarship from the then College of Home Economics, the Graduate Office Scholarship from the School for Advanced Studies in the College of Education, the Graduate Office Fellowship from the Department of Family Ecology in the College of Human Ecology, and the award received from the Faculty Women's Association.

TABLE OF CONTENTS

Chapter Page

LIST OF TABLES

Table | Page

LIST OF FIGURES

CHAPTER I

INTRODUCTION

The challenge for persons responsible for teacher preparation is ever increasing with the surge of the alternative school movement[1] marking the beginning of the seventies. This movement has been paralleled by the development of alternative teacher training programs.[2] Experimentation with alternative plans for the education of both students and teachers has gradually grown out of the fact that our population has become preponderantly urban.[3] The steady progression of urbanization in our society has increased the complexity of the problem of meeting the diverse needs and interests of all participants in the majority

---

[1]Donald W. Robinson, "Alternative Schools: Challenge to Traditional Education?" Phi Delta Kappan, LI (March, 1970), 374-75; and Donald W. Robinson, "Alternate Schools: Do They Promise System Reform?" Phi Delta Kappan, LIV (March, 1973), 433; and Donald W. Robinson, "Alternate Schools: Is the Old Order Really Changing?" Educational Leadership, XXVIII (March, 1971), 604-7; see also Robert R. Leeper (ed.), Curricular Concerns in a Revolutionary Era (Washington, D. C.: Association for Supervision and Curriculum Development, 1971), 241-45.

[2]John L. Parker and Richard J. Withycombe, "Mediation in an Alternate Teacher Training Program," Phi Delta Kappan, LIV (March, 1973), 483.

[3]Earl J. McGrath, "The Changing Mission of Home Economics," Journal of Home Economics, LX (February, 1968), 86.

of our educational settings. This does not mean that rural sectors no longer exist. But, it does raise a concern for the question of relevance in home economics teacher education programs.

Basis of the Problem

At its inception home economics was closely allied with agriculture and its rural orientation. Continued allegiance to this orientation has caused increasing concern among leaders in the field. As pointed out by McGrath:

> Teachers and administrators within the field, as well as individuals outside, share a concern that the content and philosophy of home economics have not adequately adjusted to population shifts from rural to urban environments....[4]

The needs and interests of students vary in different schools and communities.[5] In addition, the organizational structure of the school, the number of outside influences on curriculum, and the resources and facilities that a teacher has at her disposal also vary with the size and orientation of different schools and communities.[6] Thus the coordination of the preparation for and the placement of a teacher into a particular situation will have a great deal to do with that teacher's success in implementing a

---

[4] Ibid.

[5] Elizabeth J. Simpson, "Challenges in Curriculum Development in Home Economics," Journal of Home Economics, LX (December, 1968), 771.

[6] Olive A. Hall and Beatrice Paolucci, Teaching Home Economics (2d ed.; New York: John Wiley and Sons, Inc., 1970), p. 27.

relevant curriculum. As Ack pointed out, "The way in which a person behaves in any given situation is the product of that situation and his past experiences."[7] If one considers that teacher preparation is part of a teacher's past experience, then special attention to the nature of that experience is warranted for the promotion of optimum professional behavior. As emphasized by Ack:

> The more complex the circumstances and the more average the person, the more we can expect that his response will be dictated, in large measure, by his past rather than what is really happening now. Therefore, we must be concerned with what kind of model we present as an individual or as an institution, and what kind of experiences we expose him to."[8]

The abundance of literature in the field of teacher education provides ample evidence that teacher effectiveness and teacher behavior have been a vital concern for some time. Unfortunately, much of the literature consists of opinions unsupported by research data. Further, the existing research, focused on analyzing the success of teacher education programs, has raised more questions than it has answered. The current status of the concern has been described by Smith:

> It is barely four decades since the first empirical studies of teacher education were made.... Since that time a large number of such studies have been made. How many is anyone's guess, but enough to fill a hand-

---

[7]Marvin Ack, "Is Education Relevant?" Journal of Home Economics, LXII (November, 1970), 648.

[8]Ibid.

> book of research on teaching and to justify a revision of it. Yet we keep asking ourselves how much dependable knowledge do we have with which to build more effective programs of teacher education? Some critics, viewing the mountain of data interpreted by statistical techniques--standard deviations, coefficients of correlation, regression equations, and what have you--exclaim that there is less here than meets the eye.[9]

This general evaluation of the status of teacher education is supported by specific concerns such as the one expressed by Foster. He pointed out that "according to the latest reporting we have neither been able to educate the disadvantaged urban Negro child nor have we been able to train and retrain teachers for inner-city schools."[10] Additional concerns have been expressed throughout the literature for meeting the needs of the "culturally disadvantaged" and the "educationally disadvantaged"[11] in both rural and urban areas. McGrath elaborated on this point when he stated:

> We ought to consider the relationship between home economics and the social revolution occurring in our society. No documentation is needed to justify the statement that the causes of the present turbulent disturbances lie in the conditions of life among the underprivileged, the minority groups, the undereducated, the inadequately housed and fed, and to a large extent those who live in the center city....

---

[9]B. Othanel Smith (ed.), "Introduction," Research in Teacher Education: A Symposium (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971), p. 1.

[10]Herbert L. Foster, "The Inner-City Teacher and Violence: Suggestions for Action Research," Phi Delta Kappan, L (November, 1968), 172.

[11]Edsel L. Erickson, Clifford E. Bryan, and Lewis Walker, "The Educability of Dominant Groups," Phi Delta Kappan, LIII (January, 1972), 319.

> My purpose....here is to state unequivocally and clearly that...in the improvement of education, housing, health, welfare, the family--in all these areas of living and many others as well--the home economists have an obvious and, in some respects, a unique contribution to make.[12]

The basic concern in teacher education revolves around a reflection of relevance in the curriculum[13] for today's students. That curriculum has been criticized as being somewhat pedantic[14] suggests a need for some investigation concerning the process of curriculum planning at the local level. If changes in curriculum are to be made, then one avenue of change would be through those sources of influence on curriculum decision making.

Recent texts[15] available for use in home economics preservice education programs recommend that the secondary

---

[12]Earl J. McGrath, "The Imperatives of Change for Home Economics," Journal of Home Economics, LX (September, 1968), 509.

[13]Ack, op. cit., p. 651; and Mary Lee Hurt and Margaret Alexander, "New Challenges for Home Economics Educators," Journal of Home Economics, LXI (December, 1959), 772-73; and Lawrence E. Metcalf and Maurice P. Hunt, "Relevance and the Curriculum," Phi Delta Kappan, LI (March, 1970), 358-61; and Myrtle D. Stogner, "Challenges for Home Economics Teachers in Secondary Education," New Directions for Vocational Home Economics (Washington, D. C.: American Vocational Association, April, 1971), 21.

[14]George Overholt and Don Martin, "The Vendetta in the Schools: An Exercise in Ethnocentrism," Phi Delta Kappan, LIV (February, 1973), 409-10; and Paul N. Ylvisaker, "Beyond '72: Strategies for Schools," Saturday Review, LV (December, 1972), 33-34.

[15]Henrietta Fleck, Toward Better Teaching of Home Economics (New York: The Macmillan Company, 1968), pp. 103-5; and Hall and Paolucci, op. cit., pp. 145-52.

teacher implement a cooperative process for curriculum planning. Cooperative planning permits the interaction of various sources and types of influence in curriculum decision making. Those likely to be involved in the process include teachers, administrators, professional consultants, parents, students, and other lay citizens. Since the social and structural environment of different schools and communities varies, it is expected that the particular individuals included in cooperative curriculum decision making would vary from one situation to another. It is also expected that varying degrees of influence would be exerted on curriculum decisions by different individuals, groups, or sources whether or not cooperative planning was utilized. In addition, it is expected that teachers would gain individual perceptions of the relative strengths of various sources and degree of influence exerted by individuals or groups in local curriculum decisions. Thus, it is concluded that one prerequisite for implementing curriculum change at local levels would definitely be an identification of those influences on curriculum decisions. This information would be particularly useful when developing inservice teacher education programs. Unfortunately the specific changes needed in preservice teacher education programs are somewhat less certain.

Several proposals have been set forth for change in home economics preservice teacher education programs. Hill proposed that the selection of preservice experiences

could be based on the personal data of the prospective teacher. Each prospective teacher would be programmed into practical professional experiences appropriate for his or her individual background, abilities, and aspirations.[16] In contrast, Minot[17] has recommended that future home economics teachers be given preservice options of an in-depth concentration of work in one problem area. This approach was envisioned as a way to release the field from the trap of the status quo and free it for making changes toward the types of programs which would fulfill projected needs.

In discussing teacher education programs Ray suggested the need for a dynamic approach:

> Differentiation is needed; exploration and experimentation are to be valued; a sense of openness to change is essential. Yet what the field needs most is differences which make a difference. Needed are qualitative differences in the teaching that goes on in home economics classrooms. Needed is teaching that adds up to qualitative differences in the lives of children taught in those classrooms.[18]

---

[16]Alberta D. Hill, "The Business of Teacher Education--Teaching Teachers," Home Economics Teacher Education--the State of the Art (Washington, D. C.: American Home Economics Association, 1970), p. 3.

[17]Marion E. Minot, "To Prepare the Beginning Teacher as a Specialist," Home Economics Teacher Education--the State of the Art (Washington, D. C.: American Home Economics Association, 1970), p. 14.

[18]Elizabeth M. Ray, "Summary--the Art of the Possible," Home Economics Teacher Education--the State of the Art (Washington, D. C.: American Home Economics Association, 1970), p. 55.

Hurt attested that changes in home economics programs in secondary schools are dependent upon changes in preservice teacher education programs and expansion of in-service help for teachers.[19] Focusing on such a goal, Hill set forth a strong charge to home economics teacher educators:

> Assuming we do have a body of content and can define teaching behavior, then it seems reasonable to expect us to teach teachers to perform successfully, not to get through courses or earn credits for renewal of teaching certificates.[20]

Program change, however, is not without its frustrations. Some aspects of the problem have been expressed by Minot:

> In making a change such as this where do we start? Do we start with college classes? The program assumes that college courses must be focused upon the problems of man and his environment and that faculty teach from a multidisciplined point of view. Do we start with high school programs? It is doubtful that a restructuring of courses in the high school will evolve without teachers who have appropriate background for the new tasks created by reorganization. Do we start with certification requirements? Most states still require X number of hours in each area of home economics. Or, do we start with teacher preparation? A systematically planned change on all fronts would have the greatest impact. It is the responsibility of educators in home economics to take the necessary leadership and initiate such a change.[21]

---

[19]Hurt, op. cit., p. 773.

[20]Hill, loc. cit.

[21]Minot, op. cit., pp. 14-15.

There is no doubt that responsibility for initiating widespread program change lies with teacher preparation institutions. Further, in order to plan systematic changes in teacher education, identification of the types of school situations toward which teachers gravitate is an essential prerequisite to considerations for effective changes. It was toward such an identification that this study was directed.

Purposes of the Study

The general objective of the study was to investigate selected characteristics of home economics teachers in relation to the school situations in which they were employed. A more specific purpose of this study was to examine differences in selected contextual characteristics (i.e., age of the teacher, number of years of teaching experience, undergraduate major, type of teaching certificate, and degree-granting institution of the teacher) in relation to environmental factors (school size and geographical location) of full-time home economics teachers in Michigan public secondary consumer and homemaking programs. Another specific purpose was to determine the relationship between selected contextual characteristics of full-time home economics teachers in Michigan secondary consumer and homemaking programs and influence of different individuals and groups on curriculum decisions and the helpfulness of various

sources for identification of home economics class content. More precisely, the questions for investigation were as follows:

1. Of those graduates who acquire full-time teaching positions in Michigan public secondary consumer and homemaking programs, are there differences in the proportions of teachers who are graduates from various institutions (Michigan State University and non-Michigan State University) among the various school sizes and/or geographical locations of their employment?

2. Of those full-time teachers in Michigan public secondary consumer and homemaking programs, are there differences in the proportions of those who have different types of valid teacher certification (vocational home economics and general home economics) among the various school sizes and/or geographical locations of their employment?

3. Of the full-time teachers in Michigan public secondary consumer and homemaking programs, are there differences in the proportions of those who have varying undergraduate majors (home economics education, any area of home economics other than home economics education, any other discipline) among the various school sizes and/or geographical locations of their employment?

4. Are there differences in the ages of full-time teachers in Michigan public secondary consumer and homemaking programs who have different individuals and groups exerting the primary influence on curriculum decisions?

5. Is there a relationship between age of full-time teachers in Michigan public secondary consumer and homemaking programs and the amount of influence of various individuals and groups on curriculum decisions?

6. Are there differences in the numbers of years teaching experience of full-time teachers in Michigan public secondary consumer and homemaking programs who use different primary sources of help for identification of home economics class content?

7. Is there a relationship between number of years of teaching experience of full-time teachers in Michigan public secondary consumer and homemaking programs and the amount of help received from various sources used for identification of home economics class content?

8. Are there differences in amounts of influence of various individuals and groups on curriculum decisions among various school sizes and/or geographical locations?

Analysis of the information gathered should provide home economics teacher educators with some implications for planning the degree of emphasis in preservice education to be placed on teaching in different school sizes and geographical locations in Michigan. The extent to which accreditation and certification standards are related to current employment of full-time home economics teachers in Michigan should provide home economics leaders throughout

the state with implications for administration and planning of preservice education programs.

The findings of this study should also have significance for those involved with inservice education of secondary home economics teachers in Michigan. The extent to which various types of written materials are considered to be helpful by different teachers should suggest a basis for planning, developing, and using new inservice education materials in selected situations. In addition, the findings concerning which individuals or groups have the greatest influence on curriculum decisions should be useful information to leaders responsible for inservice education programs which focus on initiating curriculum change directly through teachers, as well as indirectly through general public education.

Definition of Terms

Pertinent terms used throughout the study have been defined to provide clarity of their conceptual meanings. For purposes of this study, relevant terms were defined as follows:

1. Michigan public secondary schools refers to those provided by law through the Michigan Constitution. They were free public schools supported by taxes including any combination of any of the grades seven through twelve.

2. School size designations were grouped into four sizes used by the Michigan Athletic Association. The categories have been grouped as follows:

a. Size one -- schools with 299 or fewer students;

b. Size two -- schools with 300-549 students;

c. Size three -- schools with 550-1199 students;

d. Size four -- schools with 1200 or more students.

3. Geographical location was divided along county lines in Michigan. Four geographical locations were grouped according to rough approximations of basic environmental settings (rural, urban, or metropolitan) as follows:

a. Zone one--Counties in the southern half of the lower peninsula with the exception of those in zone four, but including Bay and Saginaw counties;

b. Zone two--Counties in the northern half of the lower peninsula, including the "thumb" area, but excluding Bay and Saginaw counties;

c. Zone three--All counties in the upper peninsula;

d. Zone four--Detroit metropolitan area including Macomb, Oakland, and Wayne counties.

4. Consumer and homemaking programs included any combination of secondary exploratory, comprehensive, and semester areas of study pertaining to consumers and home

and family living with the exception of occupational courses leading to direct salaried employment.

5. Full-time teacher was identified as one who was employed for the entire school day throughout the school year and taught at least one secondary consumer and home-making class.

6. Michigan State University graduates were those individuals who had met the requirements for a bachelor's degree at Michigan State University which qualified them for their initial home economics teaching certificates.

7. Valid vocational teacher certification indicated the teacher met current Michigan requirements specific to type or level of certification and the vocational area designated on the certificate. This study focused on teachers who had either a vocational secondary provisional certificate to teach home economics or a vocational secondary permanent certificate to teach home economics (for which general certification was a prerequisite).

8. Valid general teacher certification indicated that the individual met general requirements to teach specified subject matter areas and grade levels in Michigan. Either a general secondary provisional certificate or a general secondary permanent certificate valid for non-vocational home economics programs was included.

9. Varying undergraduate majors constituted possible teaching majors in either a single subject area or a group subject area taken in a program of work leading to a bachelor's degree. Primary undergraduate majors considered were as follows:

a. Home economics education, which described that undergraduate program of work meeting state requirements for vocational teacher certification in Michigan;

b. Any area of home economics other than home economics education, which involved majors such as general home economics, clothing and textiles, foods and nutrition, housing and interior design, family and child sciences, or other courses of study classified as home economics or human ecology which were taken in an undergraduate program of work;

c. Any other discipline included all those potential majors outside of the field of home economics, such as psychology, sociology, art, economics, and science, which could have been taken in an undergraduate program of work.

10. Age of the teacher referred to the chronological age in years.

11. Number of years teaching experience referred to the total number of years of teaching experience a teacher had acquired.

12. Individuals and groups exerting influence on curriculum decisions indicated those who acted as either direct or indirect forces in the atmosphere of ideas toward making curriculum decisions.[22] The possibilities included the city supervisor, department head, local advisory committee, local curriculum committee, parents, school administrators, students, student teacher, teacher, other teachers in the department, and others specified by the respondents.

13. Various sources for identification of home economics class content indicated resource subject matter materials which were predominantly accessible to teachers in all teaching situations. Sources considered were college course materials, curriculum guides, State Department recommendations, textbooks, professional periodicals, popular magazines, commercial teaching aids, and others specified by the respondents.

Assumptions

This study was based on the assumption that school environments vary with size and location. It was also

---

[22]Vernon E. Anderson, Principles and Procedures of Curriculum Improvement (2d ed.; New York: The Ronald Press Company, 1965), p. 425.

assumed that printed materials are a common medium used by teachers in selecting subject matter content for teaching.

Overview

The theoretical frameworks and the review of literature related to the problem are presented in Chapter II. Chapter III consists of the design and procedures of the study, including sample selection, measurement procedures, and analysis procedures. Findings of the study are reported in Chapter IV. The summary, conclusions, limitations, discussion, and recommendations are presented in Chapter V.

CHAPTER II

REVIEW OF LITERATURE

The literature review begins with a discussion of the theoretical frameworks upon which this study was based. The two frameworks used for viewing the dynamics of a human being functioning as a teacher in the environmental setting of a school were Lewinian field theory and the theory of ecological psychology. The remaining portion of this chapter is devoted to a review of supporting literature related to each variable under investigation. These variables include geographical location, school size, teacher certification, undergraduate major, age of the teacher, extent of teaching experience, individuals and groups having influence on curriculum decisions, and curriculum sources.

Theoretical Frameworks

Throughout the history of our country the need for more reliable knowledge concerning education has never been as keenly felt as it is today.[1] The fact that the educa-

[1]Gilbert Sax, Empirical Foundations of Educational Research (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1968), p. 1.

tional process is placed in the context of the interdependent and increasingly complex systems of the school and the community intensifies the difficulty in investigating educational concerns.

An investigation must take into account that it is the whole school or environmental setting that enters into the educational process, not just the student and his teacher.[2] As pointed out by Compton and Hall, "The individual is a product of his environment with respect to his psychological and social development. If he is to realize or actualize his full potential as an individual, he must come to terms with his environment."[3] Human beings are never completely free of social and physical forces influencing them. These forces shift in their influence with time and space. As the human being responds to his environment it is, in turn, influenced by him. Therefore, life patterns tend to vary from one situation to another.[4]

The complexity and fluctuation of such phenomena may appear overwhelming to an investigator. However,

---

[2]Roger G. Barker and Paul V. Gump, Big School, Small School: High School Size and Student Behavior (Stanford, Calif.: Stanford University Press, 1964), p. 3.

[3]Norma H. Compton and Olive A. Hall, Foundations of Home Economics Research: A Human Ecology Approach (Minneapolis: Burgess Publishing Company, 1972), p. 21.

[4]Robert S. Woodworth, Dynamics of Behavior (New York: Holt, Rinehart and Winston, 1958), p. 162.

simplification and organization of an investigation to seek reliable information may be facilitated through the use of theory. Sax defined theory as "a unified system of principles, definitions, postulates, and observations organized in such a way as to most simply explain the interrelationships between variables."[5] In this way theories act as useful research tools for explaining phenomena.

Lewinian Field Theory

The use of field theory from the area of psychology is one system for viewing the dynamics of a human being functioning as a teacher in an environmental setting of a school. The field theorists view "man as an energy system attempting to maintain dynamic equilibrium with other energy systems which interact with him...."[6] This view conceives of man as an adaptive creature whose responses are not necessarily selected out of previously acquired responses but represent a reorganization of behavior in terms of present environmental demands.[7] Although an individual faces environmental conditions with a background of previous

---

[5]Sax, op. cit., p. 12.

[6]G. Lester Anderson, "Theories of Behavior and Some Curriculum Issues," Educational Psychology: A Book of Readings, ed. Arthur P. Coladarci (New York: The Dryden Press, Inc., 1955), p. 7.

[7]Morton Deutsch, "Field Theory in Social Psychology," Handbook of Social Psychology, Vol. I, Theory and Method, ed. Gardner Lindzey (Reading, Mass.: Addison-Wesley Publishing Company, Inc., 1954), p. 188.

experience, individual responses to similar environments do vary. Thus, according to field theorists, experience and perception are a part of a complex pattern of structure and organization.[8]

The principal characteristics of field theory may be concisely stated as follows: (1) behavior is a function of the field (life space, or total situation) which exists at the time the behavior occurs, and (2) analysis begins with the situation as a whole from which there are differentiated parts. Lewin, the originator of field theory, used the term "life space" to refer to the manifold of coexisting facts which determine an individual's behavior at any specified time. He specifically defined the field or life space as "the totality of coexisting facts which are conceived of as mutually interdependent."[9] In other words, behavior is considered a function of the life space. In turn, the life space (LS) is a product of the interaction between the person (P) and his environment (E). The symbolic representation is $B = f(LS) = f(P,E)$.[10] Field

---

[8]J. M. Stephens, Educational Psychology: The Study of Educational Growth (rev. ed.; New York: Henry Holt and Company, 1956), p. 247.

[9]Calvin S. Hall and Gardner Lindzey, Theories of Personality (2d ed.; New York: John Wiley & Sons, Inc., 1970), p. 210.

[10]Deutsch, op. cit., p. 189.

theorists define "behavior" as either the inferred or observable interaction between the person and his environment.[11]

In field theory, emphasis is placed on underlying forces or vectors acting as determiners of behavior. The conceptual properties of force include direction, strength, and point of application. They are symbolically represented by a vector and are considered as properties generated out of the environment.[12] Forces include all those action-relevant features such as individuals, groups, physical objects, or cultural objects of the environment which are capable of initiating a change in activity or behavior.[13]

While the term "environment" is frequently used to refer to the psychological environment, Lewin also used the term to refer to the objective environment. The objective environment is the stimulus situation or objective situation which is presented to an individual at a given point in time. The objective environment is that which acts upon the individual's perceptions and upon which his motor responses are made. It is in this sense that the term "environment" is appropriately interpreted when speaking of "the life space as a product of the interaction between the person and his environment."[14]

---

[11] Ibid., p. 191.

[12] Hall and Lindzey, op. cit., pp. 231-32.

[13] Deutsch, op. cit., p. 193.

[14] Ibid., pp. 189-90.

Lewin's use of the term "psychological environment" is conceived to be the environment as it exists for the person. The fact that the psychological environment is an interactive product is most evident in cases where there are perceptual distortions of the objective environment. Since the psychological environment is part of the life space, its properties are determined by both the characteristics of the objective environment and the characteristics of the person.[15]

The term "person" was used by Lewin in three somewhat overlapping ways. In one sense, he used the term to refer to the qualities of the person, including his needs, beliefs, values, and motive systems, which in interaction among themselves and with the objective environment produce the life space. In this sense it may be conceived that the person and his psychological structure comprise a life space just past which, as a consequence of the interaction with a subsequent objective environment, produce a present life space. In a second sense, Lewin used the term "person" as being equivalent to "life space." With this meaning the "person" and the "life space" are viewed as different ways of representing approximately the same psychological facts. In a third sense, Lewin used the term "person" to refer to "person in the life space." The person in the life space, which has also been described as the "behaving self," is

---

[15] Ibid., p. 190.

the individual as related to other entities in his life space. The behaving self is viewed as the individual's perception of his relations to the environment he perceives. The psychological environment and behaving self components are interdependent in the life space.[16] In any sense it may be concluded that the structure of the person is heterogeneous and complex in nature. To conceptualize such complexity, field theorists subdivide the person into separate yet intercommunicating and interdependent parts.[17]

The subdivisions or zones of a person are portrayed in a concentric manner as illustrated in the conceptual representation of the life space shown in Figure 1. The area of the person is depicted by three concentric rings. The two inner rings denote the inner personal region. This is the region in which needs, beliefs, values, and motive systems lie. The core symbolizes the cells of the central personal zone (C), which are the least accessible in the inner personal region. The central personal zone is surrounded by the cells of the peripheral parts (P) of the inner personal region. The outer ring corresponds to the motor-perceptual region (M). The dual title of this region exemplifies the idea that input from the environment to the person involves perception, and output from the person involves motor action or behavior.

---

[16] Ibid., pp. 190-91.

[17] Hall and Lindzey, op. cit., p. 215.

As illustrated in Figure 1, the vectors (V) and space outside the concentric rings represent the environment (E) and its forces. One of the properties of each boundary line is permeability.[18] In addition, the life space is affected by physical and social events which originate outside the life space.[19] Thus, the life space is an open system which consists of a network of interdependent subsystems.

The variables in the life space of the secondary home economics teacher that have been selected for investigation are presented in Figure 2. The variables from the inner personal region related to the teacher's development of needs, beliefs, values, and motive systems of professionalism lie in the zone of peripheral parts (P). These variables include (1) the degree-granting institution, (2) the academic major, (3) the type of teacher certification, (4) age of the teacher, and (5) the number of years of teaching experience. The variables originating in the environment (E) include the environmental forces (V) of (1) individuals and groups exerting influence on curriculum decisions and (2) various sources used for identification of curriculum content. The variables of (1) school size and (2) geographical location comprise the organizational

---

[18]Deutsch, op. cit., pp. 190-93.

[19]Hall and Lindzey, op. cit., pp. 215-16.

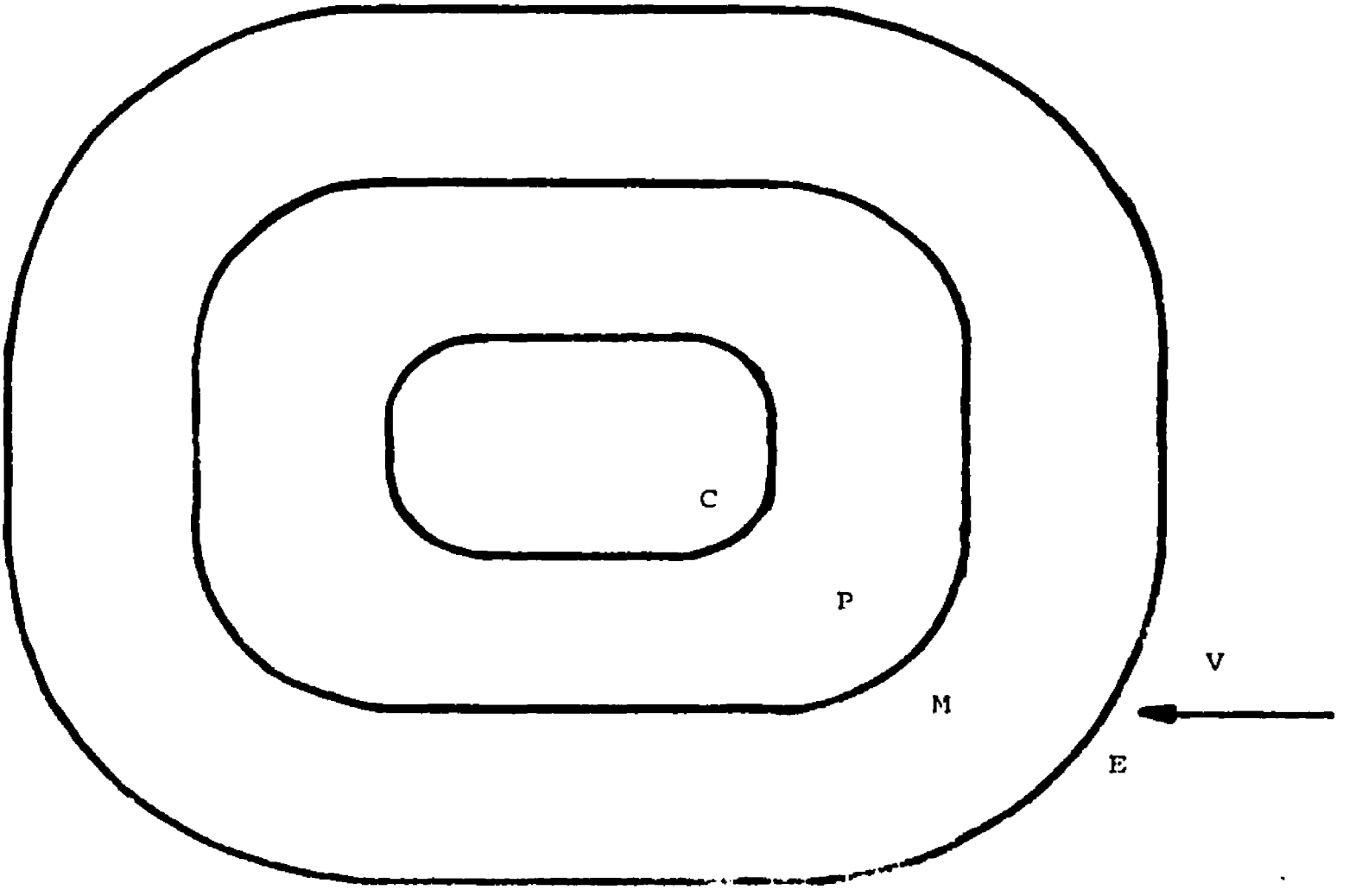

FIGURE 1

CONCEPTUAL REPRESENTATION
OF THE LIFE SPACE[20]

Symbols:

C = Central personal zone of the inner personal region
P = Peripheral parts of the inner personal region
M = Motor-perceptual region and behavior of the person
E = Psychological and/or objective environment
V = Vectors or environmental forces

---

[20]Deutsch, op. cit., p. 190.

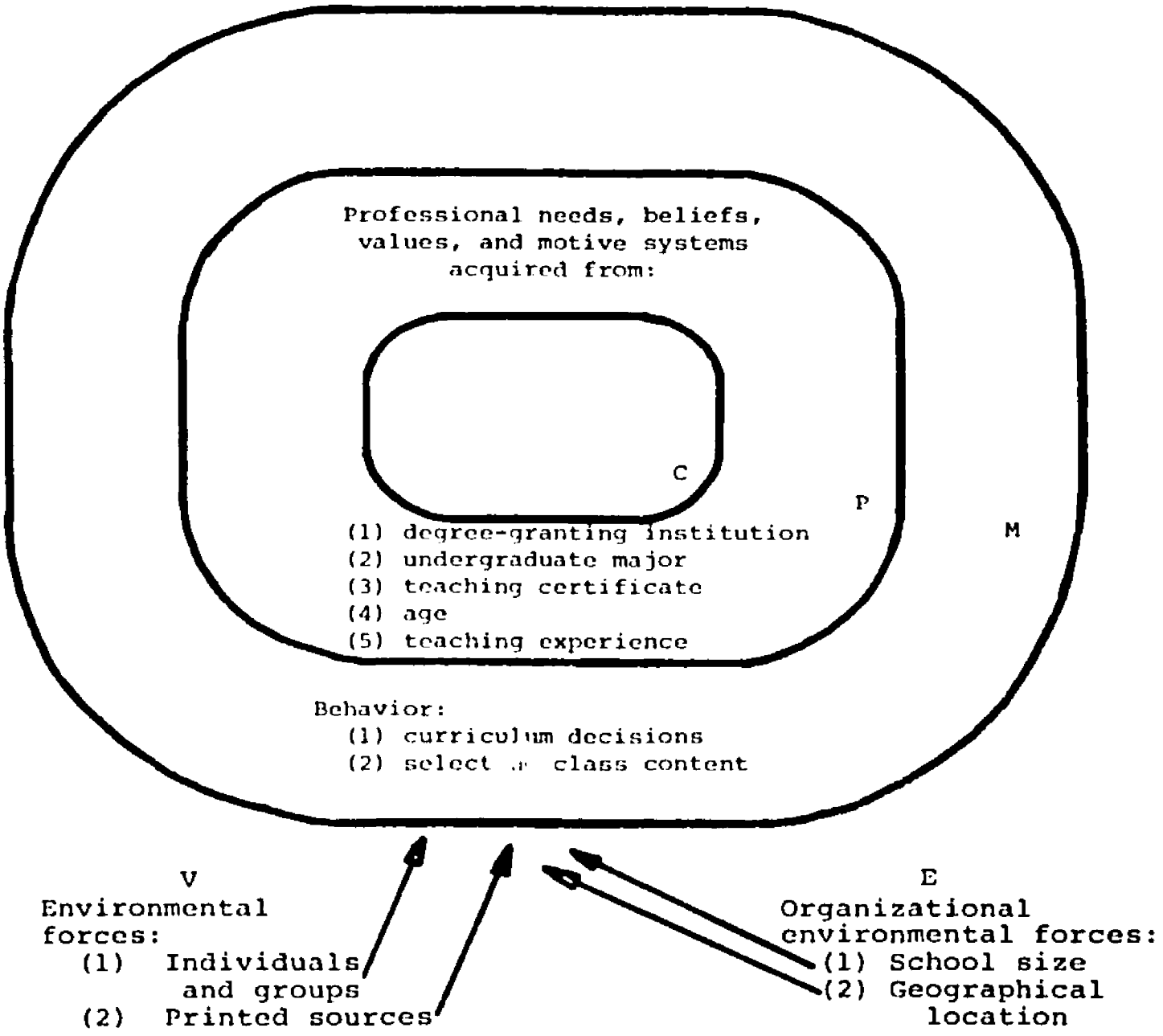

FIGURE 2

CONCEPTUAL REPRESENTATION OF THE VARIABLES IN THE LIFE SPACE OF THE SECONDARY TEACHER IN CONSUMER AND HOMEMAKING PROGRAMS

Symbols:
- C = Central personal zone of the inner personal region
- P = Peripheral parts of the inner personal region
- M = Motor-perceptual region (behavior) of the person
- E = Psychological and/or objective environment
- V = Vectors or environmental forces

Behavior: the inferred or observable interaction between the person and the environment

or global forces in the environment. Behavior, which is a function of the life space, is designated within the motor-perceptual (M) region of the person. The particular behavior of interest is the interaction between the person (teacher) and the environment (school situation) concerning secondary home economics curriculum decisions and selection of curriculum content.

Utilization of this theory views the teacher as the final decision maker for determining curriculum. Also according to field theory, one would expect that involvement in the curriculum decision process would be individually specific and unique.

Theory from Ecological Psychology

There appears to be some interdependence and overlapping between the basic components of Lewinian field theory and the theory of ecological psychology. However, the points of emphasis and positions taken by each theory vary. While Lewin focused his theory on the individual and life space phenomena, proponents of ecological psychology place their focus on the ecological environment.

The view of ecological psychology spands the entire environment-organism-environment continuum unit (E-O-E arc). The three major sectors of this circular unit are described respectively as (1) the ecological sector of objects and physical events that become stimuli, (2) the organism or

intrapersonal sector of receptive, central, and effector processes, and (3) the behavioral sector of actions and accomplishments that occur in the ecological environment.[21]

Since particular attention is given to the context in which behavior takes place, the first step in dealing with ecological psychology is to identify the natural units of the phenomenon to be investigated. As pointed out by Barker,[22] the basic properties of the units with which ecology deals remain constant whether they are biological, physical, social, or behavioral units. The essential qualities include (1) self-generation, (2) a time-space locus, and (3) an unbroken boundary separating an internal pattern from a differing external pattern. According to these criteria, a person, a school, or a city could each serve as an example of an ecological unit.

Wright and Barker[23] have been credited with originally describing the idea of an ecological unit as a behavior setting. A setting has been defined as a "homeostatic system with controls that maintain the setting intact and operating at a stable functional level under widely varying conditions."[24]

---

[21]Roger G. Barker, Ecological Psychology: Concepts and Methods for Studying the Environment of Human Behavior (Stanford, Calif.: Stanford University Press, 1968), p. 137.

[22]Ibid., p. 11.

[23]Deutsch, op. cit., p. 194.

[24]Barker and Gump, op. cit., p. 19.

There are four basic constructs in the theory of behavioral settings. As implied in the preceding definition, the first deals with the idea of stability. The controls or forces stemming from multiple and independent sources aid in providing a degree of stability to a setting. Controls may originate from both interior and exterior sources.[25] For example, a school setting has interior controls which inherently tend to coerce behavior into highly similar patterns through time schedules, regulations, and structural arrangement. Exterior conditions or controls such as financial support from the community may also be imposed on that same school setting.

The second theoretical construct deals with thing-medium relationships. The setting and the behavior episodes which compose it operate in a respective relationship of "thing" to "medium." Internally or intrinsically constrained entities are considered things. A thing is characterized by the fact that it is not easily managed since it is relatively independent of extrinsic events for its form and the distribution of energy within it. In addition, the basic components of a thing are interdependent and essential to its form. Thus there is little variety to the features of a thing. On the other hand, a medium is highly constrained by external forces that play upon it. Therefore, media are characterized as obedient in their

---

[25]Barker, op. cit., pp. 163-64.

compliance to the forces of things. The form and energy characteristics displayed by media are relatively dependent upon extrinsic events. However, the variety of uses that media can exhibit is intrinsically restricted.[26]

A medium is considered a composite of elements; however, the medium-quality is a property of the composite or manifold, not of the separate elements. The elements function independently and do not have an inherent internal arrangement. A single element of the medium composite usually has thing-properties. A book is an example of this. One book on a single topic in a library provides a very limited literary medium-quality, whereas a book of readings is slightly better, but a variety of many books provides a much better literary medium. It may be summarized that medium-quality is affected by the flexibility of the parts and by the number of elements in the medium manifold.[27]

A third theoretical construct of behavior settings is that for every homeostatic level of a setting there is an optimal number of elements in its internal, medium manifold. When the medium-quality of a component manifold is lowered within a limited range below the optimal level due to a decrease in the number of interior units, then the homeostatic mechanisms of a setting operate to maintain the

---

[26] Ibid., pp. 159-61.

[27] Ibid.

setting and keep its functional level unchanged. Under these circumstances the behavior unit and the persons providing the behavior manifold in a setting face an increase in both the strength of the forces and the variety in the direction of the forces acting upon them. Simply stated, undermanned settings differ from optimally manned settings.[28]

The last theoretical construct concerns the setting. A setting has been determined as a place which offers opportunities for its individuals. It is a place where multiple satisfactions can be achieved, and where a number of personal motives can be satisfied by most of the individuals. In addition, different clusters of satisfactions are achieved by different people in the same setting. The unity of a behavior setting does not come from a similarity of motives of the individuals. In fact, heterogeneity in personal motives of the individuals in a setting contributes to the stability of that setting.[29] Since a setting serves multiple satisfactions, maintenance forces and interlacings of individual obligations imposed by the setting serve to strengthen the total coercive power of the setting and generalize the source of its forces.[30]

---

[28] Ibid., pp. 164-65.

[29] Ibid., pp. 154-56.

[30] Roger G. Barker, "Explorations in Ecological Psychology," American Psychologist, XX (January, 1965), 11-12.

According to the theory of behavior settings, a person who functions in a setting is a component of the behavior setting. In this sense the individual is replaceable and his behavior is subject to the superordinate unit. It is acknowledged that every individual in a behavior setting is concurrently unique in his private psychological attributes. However, in a setting people as a whole tend to have common attributes. That is, individuals of identical ecological units would be expected to display a characteristic overall extra-individual pattern of behavior. In turn, individuals of different ecological units would be expected to show different overall extra-individual behavior patterns.[31]

From the theory of behavior settings it may be concluded that the ecological environment of an individual's overall behavior consists of bounded, physical-temporal locales and diversified but stable behavior patterns of people en masse.[32] Further, it may be expected that as the behavior setting decreases in size the responsibility and functional importance of the individual within the setting will increase.

In applying the theory of behavior settings to the investigation of a teacher's involvement in the curriculum

---

[31]Barker and Gump, op. cit., p. 9.

[32]Ibid.

decision process, it may be expected that the degree of involvement will vary across size of the environmental school units. A second expectation is that patterns of involvement or influence will emerge among groups of teachers from highly similar behavior settings.

The two theoretical frameworks presented set forth differing relations between the inputs, the outputs, and properties of the components. The view of Lewinian field theory comes from the basic perspective of the organism, while the theory of behavior settings takes a broader view across the environment-organism-environment unit. Considerations from both theories have supplied the basis of the hypotheses formulated for this investigation.

Supporting Literature Related to Each Variable

Literature related to each of the variables included in the hypotheses was reviewed. That which pertains to the two design variables is presented first, followed by that which pertains to the remaining six descriptive variables.

Geographical Location

Geographical location is considered as one of the environmental facts which contributes to the variability in the complexity and organization of the social and physical environment. The term geographical location may be broadly viewed as a description or characterization of

the systematic arrangement and spatial relations of constituent elements of geographic features within an area. The geographic features of a designated area involve earth and its life, including man and his industries. The distribution and organization of man and his industries is dependent upon the nature of the combined features within an area or location. Thus the nature of the social and physical environment in different geographical locations varies with the complexity and organization of the constituent elements.

Insight into the organizational structure of man and his industries within Michigan may be acquired through a description of the population distribution. A perspective on where Michigan stands in relation to the rest of the United States in terms of population was gained through a review of census data. Recent data revealed that the state of Michigan ranked seventh in the nation for highest enumerated population.[33] Over the past several decades there has been a downward trend in the number of people inhabiting Michigan rural areas. The steady reduction of population in rural areas has increased the contrast in population proportions between rural and urban areas in Michigan. Currently 73.4 percent of Michigan's population

---

[33]U. S. Department of Commerce, Bureau of the Census, The American Almanac: The U. S. Book of Facts, Statistics & Information for 1970 (New York: Grossett & Dunlap, 1969), p. 12.

resides in areas classified as urban. According to the Bureau of Census, this includes all the population residing in urban-fringe areas and in unincorporated places of two thousand five hundred people or more.[34]

A closer examination of the census data showed that the Detroit metropolitan area of Oakland, Macomb, and Wayne counties comprised almost half of the population of the entire state. Although Michigan ranked twenty-third in the United States in land area, the majority of Michigan's population resided in three metropolitan areas: the Detroit area, Flint, and Grand Rapids. Thus, there is a great imbalance in population dispersion within the state. This disproportionate population distribution reflects the expected variability in complexity and organizational structure of the social and physical environment within different geographical locations throughout the state.

Previous studies dealing with environmental facts have provided some information related to geographical location. Sharp[35] studied the relationship between participation in extracurricular activities and rural or urban background, living conditions, and part-time employment among college students. The sample of 121 juniors, including

---

[34] Ibid., p. 16.

[35] Marian Sharp, "Factors related to Participation of 121 Juniors in Extra-Curricular Activities" (unpublished Master's thesis, Ohio State University, 1956).

males and females from rural and urban backgrounds, checked their participation in a list of twenty-five activities. The finding was that students from rural backgrounds tended to remain in rural activities such as the Grange, 4-H, and the Farm Bureau. Students from urban backgrounds tended to join more generalized campus activities such as music groups, fraternities, all-campus activities, church, and political organizations.

One of the findings in a study by Peterson[36] concerning age, teacher's role, and the institutional setting also relates to background. The primary purpose of the study was to identify the ways that teachers adjusted to age and generational differences and to one another. The random sample was stratified according to age and marital status. Data for the study were secured from comprehensive interviews of fifty-six white female public high school teachers in an urban school system within a medium-sized city of midwestern location. The tape-recorded interviews averaged two hours in length. The sample was drawn from among a distribution of high school units and high school subject fields. Approximately two-thirds of the teachers were reared in small towns and rural areas. The background of teachers in vocational

---

[36]Warren A. Peterson, "Age, Teacher's Role, and the Institutional Setting," Contemporary Research on Teacher Effectiveness, eds. Bruce J. Biddle and William J. Ellena (New York: Holt, Rinehart and Winston, 1964), pp. 264-315.

subjects was found to vary from that of teachers in "solid" subjects. The teachers who originated from small towns and rural areas and from lower-middle-class and lower-class families were more likely to be found teaching vocational subjects such as commerce and home economics. On the other hand, teachers who originated from cities and from upper-middle-class and upper-class families were more inclined to teach the traditional academic subjects.[37]

In a national study of 3,796 schools randomly selected according to a preassigned sampling fraction for each state, Coon[38] found that regions varied in the way schools with different types of home economics programs (vocational, nonvocational, and combination) were distributed among communities of different sizes. The vocational programs tended to be concentrated in the two smallest sized communities (less than 2,500 and 2,500-9,999 population) in all four regions (North Atlantic, Southern, Central, and Pacific) of the study. In general, from 54 percent to 79 percent of the programs in communities over ten thousand population were nonvocational, and 49 percent to 52 percent of those in communities under ten thousand population were vocational. The contrasts found

---

[37] Ibid., pp. 282-83.

[38] Beulah I. Coon, Home Economics in the Public Secondary Schools: A Report of a National Study (Washington, D. C.: U. S. Government Printing Office, 1962), pp. 8-10.

raise the question of whether the differences were related to the urban versus rural nature of the situations or regions.

The preceding data indicate that geographical background of individuals tended to function as a differentiating variable. Although the perspective in each of the preceding studies varied from the focus of this research, the associations found tended to suggest further investigation of the possible link between geographical location and other variables.

School Size

The relationship of the school size variable to other variables has been investigated at various educational levels. Ryans[39] directed an extensive study where approximately one hundred separate research projects were carried out involving 6,179 teachers in 837 elementary and 910 secondary schools within 446 school systems. Although the study was comprehensive in scope, a random sampling design was not possible since cooperation of each school system, school, and teacher ultimately had to remain on a voluntary basis. The fundamental purposes of the Teacher Characteristics Study were stated by Ryans as follows:

> The Teacher Characteristics Study was conducted with two possible uses of the results in mind: first,

---

[39]David G. Ryans, Characteristics of Teachers: Their Description, Comparison, and Appraisal (Washington, D. C.: American Council on Education, 1960), p. 60.

> by school systems as an aid in identifying teachers who, at the time of selection for employment or perhaps in connection with promotion, have characteristics similar to those deemed important and desirable by the particular school system and the culture it represents; and, second, by teacher education institutions as an aid to a better understanding of teacher characteristics and associated conditions, which would contribute to improved procedures for selecting teacher condidates and to the improvement of professional courses and curricula.[40]

One of the major objectives of the study was directed toward the comparison of various groups of teachers. Teacher characteristics were compared in relation to size of school, size of community, socioeconomic status of community, and the geographic area in which the teaching occurred.

Of major interest are those findings relevant to school size. Ryans defined school size according to the number of teachers constituting a teaching staff. The findings related to school size showed that elementary and secondary teachers in larger schools (seventeen or more teachers) scored significantly higher than those in smaller schools (five or fewer teachers) on scales measuring understanding and friendly classroom behavior, stimulating and imaginative classroom behavior, favorable attitudes toward administrators and other school personnel, verbal understanding, and emotional stability.

In general, the trends for size of school also held when teachers were categorized by size of community. Lower mean scores were achieved by teachers from smaller

---

[40] Ibid., p. 11.

communities than those from large communities (ranging in size from populations of five hundred thousand to one million). However, teachers from the very largest communities (those of one million or more population) scored almost as low as those teachers from the very small communities on most characteristics. One exceptional difference between teachers from the very largest and very smallest communities was found with respect to the characteristic "verbal understanding," where teachers from the very largest communities scored high and those from the very smallest communities scored low.

When teachers were classified by socioeconomic level of the community in which the schools were located, then curvilinear relationships appeared to exist between socioeconomic level and a number of the characteristics measured. A trend toward high teacher characteristic scores was attained in both socioeconomically low and high communities but not by teachers in communities of average socioeconomic level.

In terms of geographic area in which the teaching occurred, one finding was that teachers in the midwestern states tended to be lowest in stimulating classroom behavior. Also, the midwestern and the east-southern teachers tended to be more traditional in their educational viewpoints.

In summarizing the research, Ryans noted that a few of the findings appeared to be general in nature and permitted statements of principles which applied broadly across different groupings of teachers. However, he specifically pointed out that the data in the study indicated that manifestations of many teacher characteristics were specific to a particular teacher population within a cultural setting. Therefore greater confidence could be placed in the conclusions when applied to groups of teachers according to different classifications and less when applied to individual cases.[41]

Barker and Gump studied the relationship between school size and student interaction at the secondary level. The hypothesis guiding Barker and Gump's work was that "the essential equivalence of small and large high schools with respect to kinds of parts, together with their difference in number of students per part, provides a crucially different environment for students."[42] Investigations were made in high schools located in eastern Kansas with enrollments which varied from 35 to 2,287 students. Intensive studies were carried out in thirteen high schools, and special, limited investigations were conducted in thirty-nine high schools. Each of the schools in the study was selected according to a set of criteria established for the study. The

---

[41] Ibid., p. 398.

[42] Barker, op. cit., p. 195.

research focused on the nature of student participation, which took place in varieties of class and nonclass behavioral settings within different sized schools. The behavioral settings ranged from class activities such as biology and chorus to nonclass activities such as sock hops and drama club meetings. The findings revealed that, although large and small high schools had approximately the same number of behavioral settings (facilities and activities in which students participated), the average number of extracurricular activities and kinds of activities in which students participated during their four years of high school was twice as great in the small as in the large schools.

Barker and Gump's most decisive studies compared eleventh graders in four high schools of 83 to 151 students with those in a high school of 2,287 students. Findings revealed that the large high school provided its eleventh graders with a larger number and greater variety of nonclass behavior settings than the small schools. Nevertheless, the small school students participated in the same number and in more varieties of the available settings, on an average, than the large school students. Furthermore, a much larger proportion of the small school students held positions of responsibility in the nonclass behavior settings they joined, and they held these positions in a greater variety of settings than the students of the large school.

An additional finding was that the small and large school eleventh graders reported different kinds of satisfactions from their experiences in the nonclass behavior settings they entered. Specifically, eleventh graders in small schools reported more personal types of satisfactions such as development of competence and achieving value clarification concerning moral and cultural values. On the other hand, more impersonal satisfactions which were less goal directed, as learning about persons and affairs, were reported by the large school eleventh graders. The general conclusion was that the versatility and importance of students' extracurricular activities were related to the size of the school setting.[43]

In discussing factors which may effect variations in patterns of teaching in early education programs, Beller[44] pointed out that two major factors which may be singled out are the environment of an educational program and the staff variables. School size, location, activity, setting, and social climate of the program were presented as examples of environmental determinants. Staff variables were considered to include training, personality, and role concepts.

---

[43] Ibid., p. 196-97.

[44] E. Kuno Beller, "Research on Organized Programs of Early Education," Second Handbook of Research on Teaching, ed. Robert M. W. Travers (Chicago: Rand McNally & Co., 1973), pp. 583-84.

Prescott, Jones, and Kritchevsky[45] focused on the preceding variables in their observational study of the relationships between size of day care centers and teacher behavior. Four visits of approximately two hours each in length were made to each of fifty day care centers in Los Angeles County by two to three observers during each visit. The investigation focused on teacher behavior, but the differences were found to be related to the size of the day care centers. The number of children in a center constituted center size in this study. Results showed that teachers of medium-sized centers more often used encouragement as a technique; emphasized pleasure, creativity, and interaction with other children; and evidenced a low frequency of restrictive rules of social living and control of children. In contrast, teachers in large centers were found to make more frequent use of control and of direct guidance techniques to stress rules of social living.

The major difference between large and small centers concerned the effective relationship between the staff and the children. Large centers were found to have less warm and accepting relationships between staff and children. The opposite was found in small centers, where the staff

---

[45]E. Prescott, E. Jones, and S. Kritchevsky, "Group Day Care as a Child-Rearing Environment," Report to Children's Bureau, U. S. Department of Health, Education, and Welfare (Pasadena, Calif.: Pacific Oaks College, 1967).

related more closely and intimately with the children. Thus a distinct relationship between size of center and teacher behavior existed within the observed situations in the study.

Organizational characteristics of school and class size have been presented at another educational level in studies of college environments. Astin[46] and Pace[47] both summarized data which showed that size of institution had a strong negative relationship to college students' perceptions of the friendliness, cohesiveness, and supportiveness of their campuses. Students from larger colleges reported less concern for the individual student, lack of involvement in classes, little familiarity with the instructor, greater competitiveness, and lower cohesiveness. In general, the data showed that smaller-sized institutions were more supportive environments for effective group processes.

The data on school size has tended to indicate that involvement and participation are not encouraged by large and impersonal schools. Frequently, bureaucratic organization tends to be associated with large-scale institutions.

---

[46] A. W. Astin, The College Environment (Washington, D. C.: American Council on Education, 1968).

[47] C. R. Pace, Analyses of a National Sample of College Environments, Final Report, Cooperative Research Project No. 50764 (Washington, D. C.: Office of Education, U. S. Department of Health, Education, and Welfare, 1967).

In contrast, Koontz[48] found different results from his survey of selected secondary schools in Arkansas. The purpose of the study was to determine the relationship between the problems of secondary school teachers and the factors of professional education, teaching experience, sex of the teacher, and size of the school system. Sixteen Arkansas high schools (grades nine through twelve) were selected from the same general socioeconomic area on the basis of five different school size categories. School size categories were established according to average daily attendance figures as follows:

1. Very large high schools . . 800 or more;
2. Large high school . . . . . 600 - 750;
3. Medium high schools . . . . 400 - 550;
4. Small high schools . . . . 200 - 350;
5. Very small high schools . . 150 or less.

No explanation was given concerning the fact that the average daily attendance figures were not placed on a complete continuum. Neither was there an explanation for the fact that although the sample selection was based on schools, the unit of analysis was teachers.

---

[48]J. E. Koontz, "A Study of the Relationship between the Problems of Arkansas Secondary School Teachers in Certain Selected Schools and the Factors of Professional Preparation, Teaching Experience, the Sex of the Teacher, and the Size of the School System" (unpublished Doctor's dissertation, University of Arkansas, 1963).

All 229 teachers for the sixteen schools selected across the size categories responded to a written questionnaire administered by the researcher during scheduled faculty meetings. The questionnaire items focused on the particular types of problems faced by teachers. The items were classified as problems in community relations, problems in personnel relations, problems pertaining to subject fields and methods, problems pertaining to contractual matters, and problems pertaining to personal matters. Contrary to other research, the study reported that there was little evidence of a relationship between the size of school in which the teacher was employed and the types of problems encountered. The only obvious pattern that was noted occurred in medium-sized high schools, where teachers generally rated all problems slightly higher in percentage of incidence than did teachers of the other school sizes.[49]

Although the variable of school size did not appear to be a differentiating variable in every case cited, there is sufficient evidence throughout the literature to indicate further consideration of the fact that school size could function as a source of variation related to other outcomes. Thus, it was concluded that it would be desirable to control for possible variation in school size.

---

[49] Ibid., p. 97.

Teacher Certification

A variable over which educators have expressed increasing concern in recent years is the certification of teachers. The licensing of teachers to teach in a given state is referred to as teacher certification. This state license is fundamental in a teacher's legal authority to practice his profession within specified grade levels or in particular subject matter areas.[50] The underlying assumption of teacher certification is that the licensing process distinguishes those persons who are qualified to perform as teachers in public schools from those who are not qualified.[51]

Although the basic assumption upon which teacher certification rests has been questioned by some educators (e.g., Burrup[52] and Stiles[53]), some results of the state certification process are noteworthy. Since the turn of

---

[50]Jefferson N. Eastmond, The Teacher and School Administration (Boston: Houghton Mifflin Company, 1959), p. 277.

[51]Joel L. Burdin and Margaret T. Reagan (eds.), Performance-Based Certification of School Personnel (Washington, D. C.: ERIC Clearinghouse on Teacher Education and the Association of Teacher Educators, 1971), p. 5.

[52]Percy E. Burrup, The Teacher and the Public School System, (2nd ed.; New York: Harper & Row, Publishers, 1967), p. 155.

[53]Lindley J. Stiles, "Certification and Preparation of Educational Personnel in Massachusetts," Phi Delta Kappan, L (April, 1969), 478.

the century, when certification became the function of most state departments or state boards of education, two noticeable trends have emerged. First, there has been a gradual elimination of life certificates which were granted as permanent licenses to teach. Second, there has been a gradual raising of standards and requirements for all teaching certificates in all states at all levels.[54]

Since public education legally comes within state jurisdiction, the state or its designated agency has the power to prescribe the minimum qualifications necessary for all teachers within its schools. Thus the certification process functions as a lever for each state in effecting professional standards for its teachers. Certification requirements also function as a benchmark for the professional education programs in colleges and universities within the several states.[55] Although certification recommendations are established by regional and national associations of colleges and schools, each state is unique and acts independently in setting certification standards. Consequently considerable variation in proportionate time spent in general education, academic preparation, and in professional education courses continues to exist from state to state and somewhat from institution to institution within a state.

---

[54]Burrup, op. cit., pp. 236-37.

[55]Eastmond, op. cit., pp. 277-78.

Some of the variation in state certification requirements may be a result of the difficulty in measuring the many elements that make up the qualifications of a competent teacher. The National Education Association[56] has stressed that the one qualification susceptible to accurate measurement is the sum of the teacher's efforts at formal educational improvement evidenced through college credits.

The need for preparation in professional education has been empirically supported by several researchers. In a national study by the National Education Association of first-year teachers, the opinions of one thousand elementary and secondary teachers concerning their professional preparation were collected. Teachers at both levels reported that their greatest lack in needed skills and abilities was in methods of teaching.[57] Also, Livingston's[58] study of South Carolina secondary school teachers revealed that superior teachers as identified by their principals

---

[56]National Education Association, Research Division, The Postwar Struggle to Provide Competent Teachers (Washington, D. C.: National Education Association, 1957), p. 119.

[57]National Education Association, Research Division, First-Year Teachers Evaluate their Preparation for Teaching (Washington, D. C.: National Education Association, 1956), p. 3.

[58]Wilbur D. Livingston, "An Evaluation of Requirements for the Certification of Secondary School Teachers" (unpublished Doctor's dissertation, University of South Carolina, 1957).

were those with a relatively greater amount of professional education. A further conclusion was that issuing certificates on such a basis was justified.

Ostler[59] set out to determine the influence of theoretical preparation upon performance in teaching home economics at the secondary level (grades seven through twelve) in terms of teacher competencies and teaching procedures as perceived by home economics teachers in the state of New York. In identifying the descriptive aspects of the 246 respondents, she found that although all respondents had completed the baccalaureate degree, there were noticeable differences concerning the certification status of the teachers. Findings showed that 41 percent of the New York City teachers were employed without any type of certification, while only 7 percent of the upstate New York teachers were employed under the same circumstances. Thus, almost 50 percent of the secondary home economics teachers sampled were uncertified at the time of the study.[60]

The certification profile of home economics teachers in Michigan was found to be somewhat different. In a study of professional role perceptions of 192 respondents from a random sample of Michigan public high school home

---

[59]Ruth-Ellen Ostler, "A Survey of Beliefs and Practices Relative to Teaching Home Economics in New York State," Part 1 (unpublished Doctor's dissertation, Syracuse University, 1967).

[60]Ibid., pp. 247-49.

econimics teachers, McKinney[61] found that 81.3 percent held valid certificates for teaching home economics. However, it should be noted that she was unable to acquire permission from the largest city public school system in the state for inclusion of their teachers in the study. Therefore, the certification status of the Michigan home economics teachers is not completely comparable to that of the New York teachers reported in Ostler's study.

In 1964 Gerlock[62] investigated the differences between professionally and provisionally certified teachers in selected areas of personal and professional performance as judged by administrators' ratings. The study consisted of 342 white Florida secondary (grades seven through twelve) school teachers, teaching in a field for which they had been certified, who completed their first term of teaching during the 1960-61 school year. The findings revealed that professionally certified teachers were rated significantly higher than provisionally certified teachers on the teacher evaluation instrument used in the

---

[61]Carolyn Dommer McKinney, "Professional Role Perceptions of Michigan Home Economics Teachers" (unpublished Doctor's dissertation, Michigan State University, 1972), p. 75.

[62]Donald E. Gerlock, "An Analysis of Administrators' Evaluations of Selected Professionally and Provisionally Certified Secondary School Teachers," The Journal of Teacher Education, XVI (June, 1965), 240-41.

study. In another Florida study, Ellis[63] found that teachers with temporary certification were rated as deficient by their principals. Shuster[64] reached the same conclusion from his study of "untrained" beginning teachers in Virginia.

Gray[65] studied the relationship between the amount of professional preparation of beginning Florida teachers (as indicated by their certification rank) and the adequacy of that preparation (as reported by the teachers and by their principals and as measured on the Minnesota Teacher Attitude Inventory). One hundred ten teachers classified as "untrained" teachers holding temporary certificates were compared with an equal number of randomly selected teachers holding certificates and classified as "fully trained." Teachers classified as "fully trained" had significantly more ratings indicating teaching success and satisfaction with preservice programs than did the "untrained" teachers. In his conclusions, Gray stated:

---

[63]Charles M. Ellis, "Needs and Deficiencies of the Temporarily Certified Teacher in Florida" (unpublished Doctor's dissertation, University of Florida, 1955).

[64]Albert H. Shuster, Jr., "A Study of the Advantages and Disadvantages of the Collegiate Certificate in Virginia" (unpublished Doctor's dissertation, University of Virginia, 1955).

[65]Horace B. Gray, "A Study of the Outcomes of Preservice Education Associated with Three Levels of Teacher Certification" (unpublished Doctor's dissertation, The Florida State University, 1962).

> Comparisons between categories of teachers, such as elementary or secondary, suggest that "success" in teaching is a function of factors some of which reside in the teacher and his professional preparation, and some of which reside in conditions specifically associated with the teaching assignment. Varying conditions may require different patterns of operation.[66]

Similar conclusions have been reached by a group of educators involved in a national effort to change certification patterns.[67] The increasing complexity of teaching, along with the end to the teacher shortage, has caused new priorities to emerge in teacher certification and, in turn, in preservice and inservice teacher education programs.

The high production rate of teachers in Michigan has greatly assisted in overcoming the teacher shortage. The state usually ranks fifth as a producer of teachers in the United States, with Michigan State University leading the list of six Michigan institutions ordinarily included in the top sixteen institutional producers of new teachers.[68] The impact of the abundance of qualified teachers on the Michigan teacher certification code is revealed somewhat by the rate of recent certification code changes. The Michigan Certification Code which was adopted in 1967 was the first change since the 1939 version.

---

[66] Ibid., p. 163.

[67] Burdin, op. cit., p. iv.

[68] Ibid., p. 104.

Since 1967 there have been two major revisions of the certification code.

During the 1971-72 school year, when the survey for this study was conducted, it was possible for fully certified teachers in Michigan secondary public schools to hold one of two basic levels of certification: secondary provisional or secondary permanent certificates. Authorization to teach vocational home economics could appear on either certificate of those teachers who met the particular requirements for such. Although not technically correct, the distinction between those certificates with and without vocational authorization has been popularly made by referring to them as "vocational" and "general" certificates respectively. However it is identified, the vocational component of a teacher's certificate is one of the requirements to be met when a school system seeks vocational reimbursement for specified consumer and homemaking programs. Acknowledged is the fact that not all schools seek such reimbursement.

With the ample supply of fully certified teachers, it could be expected that school administrators have an opportunity to be highly selective in the recruitment and retention of teachers certified for the needs of the particular school system. Since previous research indicated that teacher certification is a differentiating variable, the

question is raised whether differences exist between schools in the occurrence of vocationally and generally certified teachers.

Undergraduate Major

Closely related to the laws governing teacher certification is the nature of the professional program of the undergraduate major. The undergraduate major in teaching developed as part of the program of universities and colleges at the turn of the century. Since that time there has been general disagreement over the nature of teacher education. Those in the universities and those outside professional education have tended to take the stance that knowledge of subject matter automatically prepared a person to teach the knowledges and skills needed in an area. The other viewpoint, primarily held by those teaching in elementary and secondary schools, has been that methods courses in how to teach were necessary in addition to subject matter courses.

Burrup has contended that "professional educators have always placed mastery of subject matter first in the order of importance in teacher preparation."[69] His contention can be supported by an examination of the manner in which most teacher education programs are designed. A

---

[69]Burrup, op. cit., p. 153.

review of college catalogs revealed that most teacher preparation programs are implemented through a major in a subject matter discipline.

The interdisciplinary nature and scope of home economics lends itself to divergence in major requirements among home economics units in colleges and universities. The primary issue of whether majors in home economics should be prepared as specialists or generalists has resulted in many and varied professional programs within institutions of higher education.

An indication of the degree of controversy on the specialist versus generalist issue has been revealed in results of a recent study. Johnson and Swope[70] surveyed a nationally representative sample of 108 four-year home economics programs in higher education to compare curricula and administrators' opinions of current issues and trends in home economics. In response to the curriculum issue, 58 percent of the administrators agreed that home economists should be prepared primarily as generalists. This indicates a definite split in philosophy among decision makers in higher education.

---

[70]Lydia Johnson and Mary R. Swope, "Facts About Curricula in Home Economics in Institutions of Higher Education," Journal of Home Economics, LXIV (February, 1972), 11-17.

The position held by the American Home Economics Association[71] is that teacher preparation programs should be planned according to the interdisciplinary nature of the field. The philosophical viewpoint of the Association suggests that a teacher prepared in a single discipline would not be equipped with the integrative perspective necessary for implementing the purpose of educational programs in home economics.

In the Johnson and Swope[72] study, it was found that 97.2 percent of the institutions offered programs for home economics education majors. Further, it was discovered that all majors were very tightly prescribed. The average proportion of elective credits among institutions in the study was 11 percent. Slightly more than 50 percent of the institutions allowed less than 10 percent of the total credits required for graduation to consist of electives. From the preceding it appears that at present there is little latitude for a student to deviate from any professional program implemented through either the specialist or generalist position in home economics units within colleges and universities throughout the country.

---

[71]Committee on Philosophy and Objectives of Home Economics, Home Economics New Directions: A Statement of Philosophy and Objectives, Dorothy D. Scott, chairman (Washington, D. C.: American Home Economics Association, 1959), p. 5.

[72]Johnson and Swope, op. cit., pp. 13-14.

At the other end of the continuum, Steidle[73] identified certain consequences of extreme flexibility in professional programs. He conducted a two-year study which focused on investigating the nature and extent of secondary-school science teacher-preparation programs in forty-seven Ohio institutions of higher education. From a total of 221 teachers who received Ohio teaching certificates in physical science during the year 1962-63, only eighteen had their first teaching field or major in the subject of physical science. Steidle also noted that figures in other fields showed a substantial increase when certification rather than first teaching field or major was considered. Although an over-supply in number of available science teachers existed, there was actually a shortage among those classified as having their first teaching major in science. Steidle noted that ambiguous certification requirements and loosely defined undergraduate majors contributed to dysfunctional patterns in teacher preparation.[74]

In the main, undergraduate teaching programs are built on the premise that one must teach something. The belief is that substance is a necessary condition of teach-

---

[73]Walter E. Steidle, "The Preparation, Certification, and Teaching Employment of Graduates of Science Education Programs in Ohio, 1961-1963" (unpublished Doctor's dissertation, The Ohio State University, 1964).

[74]Ibid., pp. 178-79.

ing, but it is also recognized that substance is not an operation. Subject matter is what one operates with or on.[75]

Research evidence supports the contention that mastery of subject matter alone is not all that is needed to be a successful teacher. One of the questions which Gray's study, reported earlier, set out to answer was "Is there a significant relationship between teaching in, or out of, the field of certification (teaching major) and 'success' in teaching?"[76] Significant differences were found to exist between teachers "in the field" and those "out of the field." The ratings on teaching success invariably were related to teachers "in the field" of certification.

Although consistently high correlations between teaching success and teachers "in the field" of certification were reported in Gray's study, it is recognized that a simple one-to-one correlation does not provide an explanation for teaching competence. The numerous variables linked to teacher performance have been well illustrated by Ryans' study, described earlier. Following a comparison of teacher characteristics in light of conditions of the teacher's

---

[75]Richard L. Turner, "Conceptual Foundations of Research in Teacher Education," Research in Teacher Education: A Symposium, ed. B. Othanel Smith (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971), p. 12.

[76]Gray, op. cit., p. 135.

current employment, Ryans concluded that teacher performance appeared to be a function of the particular teaching situation.[77]

Throughout the literature the nature of the particular teaching situation has emerged as being strongly linked to certain other variables. This is to be expected since different teaching situations vary in their needs. The variability among different academic majors to meet different needs occurs not only through obvious differences in subject specialities, but also through a somewhat different focus and perspective within related subject specialities. Thus, it seems that implications for teacher education programs may be acquired through identification of the extent to which different teaching situations have employed home economics education majors to meet the needs of their home economics programs.

Age of the Teacher

Ryans observed that there has seemed to be little doubt about the existence of important differences concerning a number of teacher behaviors among teachers in varying age groups.[78] In his study, which was reported earlier, comparisons among four age classifications (under 30, 30-39, 40-54, 55 years of age and above) were made. He found that

---

[77]Ryans, op. cit., p. 322.

[78]Ibid., p. 390.

the younger teachers generally attained higher scores on emotional stability; democratic, friendly, and stimulating classroom behavior; favorable opinions of students, administrators, and other school personnel; verbal understanding; and child-centered educational viewpoints.[79] Those teachers between the ages of thirty and thirty-nine years received somewhat higher assessments than others on the one behavior pattern of warm, understanding, friendly behavior versus aloof, ego-centric, and restricted classroom behavior.[80] In general, the conclusion was that the substantially lower scores of those teachers fifty-five years of age or above identified them as being distinctly disadvantaged in comparison with younger teachers. The one exception to this was in terms of systematic and businesslike classroom behavior, where older teachers scored higher.

In McKinney's study, involving 192 Michigan home economics teachers, reported earlier, five age groupings (25 years and under, 26-35, 36-45, 46-55, and 56 years of age and over) were used. Results showed that two-thirds of the respondents were between twenty-six and fifty-six years of age. However, the percentage distribution among the first four age groups was fairly even, with a range of 17.2 percent to 24.0 percent across these categories. The

---

[79] Ibid., p. 289.

[80] Ibid., p. 129.

sharpest drop occurred for older teachers, with 9.9 percent of the teachers reported as fifty-six years of age or older.[81] Analysis of the data showed that for personal image of the home economics teacher there were significant positive correlations with both age and teaching experience.[82]

McLeish[83] surveyed educational opinions of 290 male and 291 female teachers from England, Scotland, and the United States. The sample selected was categorized according to career level, religion, political affiliation, job satisfaction, and age. Three specific age groups were classified as young, middle-aged, and older, with age ranges of twenty-five years and under, twenty-six through thirty-nine, and forty and over, respectively. The scores of the older teachers showed that they were significantly less formal, more certain, and less neurotic than the other two age groups. In addition, older teachers were slightly more radical than the younger, more opposed to corporal punishment, held greater value on workmanship, and were slightly more satisfied in their work. Young teachers tended to value new experiences more but, at the same time, they

---

[81] McKinney, op. cit., p. 72.

[82] Ibid., p. 132.

[83] John McLeish, Teachers' Attitudes: A Study of National and Other Differences (Cambridge: Cambridge Institute of Education, 1969), p. 14.

expressed a higher submission need. Findings indicated that the greatest need for power and recognition existed among the middle-aged teachers.

As described previously, Peterson[84] conducted a comprehensive interview study in which the range of inquiry included the full work career with special emphasis on age and career changes. The random sample of fifty-six white female high school teachers was stratified according to sampling ratio categories for age and marital status. At the time the sample was drawn, less than 12 percent of the teachers in the school system were under forty years of age. The final sample closely approximated this distribution. Approximately two-thirds of the teachers interviewed were single and ranged in age from thirty to seventy years.

The teachers were found to be highly sensitive about age. One of the dominant reasons for this sensitivity was identified as the student role in age-grading of teachers. It was reported that students appeared to age-grade teachers by age-distancing teachers away from them. There was considerable evidence that this process begins to be noticed by teachers in the age bracket of the thirties. Those teachers in their thirties were the most self-conscious and concerned about age-propelled changes in their relationships with students. Concern about aging was also shown by teachers

---

[84]Peterson, loc. cit.

in their late forties and fifties, but they placed less emphasis on the loss of informal student contacts and more emphasis on declining physical vigor.

In general, teachers in their early forties were found to be more secure and relaxed, less worried about their teaching, and considerably more subject to routinism. Of particular interest is the fact that those in their early forties felt greater autonomy relative to the school administration. This was also the group found to hold a greater number of professional responsibilities when compared to other age groups.

Analysis of the interview data revealed that age differences were by far the most important variable in relation to educational viewpoint. Older teachers were overwhelmingly defensively traditional. Further, progressive versus traditional ideology was found to create conflict between younger and older teachers. The conflicts typically concerned the promotion and defense of seniority privileges by older teachers and younger teachers' efforts to gain increased status for themselves.

Gulliver[85] pointed out that any analysis of social structure is concerned with the integration of social groups and the recognized network of status positions that are part

---

[85]P. H. Gulliver, "Age Differentiation," International Encyclopedia of the Social Sciences, Vol. I, ed. David L. Sills (New York: The Macmillan Company & The Free Press, 1968), pp. 157-62.

of, or cut across, those groups. Expectations in terms of interpersonal behavior patterns are formed according to the role differentiation appropriate to status distinctions. Two reference points for the ascription of status seem to be universal in all societies: sex and age. Gulliver further noted that the institutionalization of age makes it clear that cultural rather than biological factors are of major importance in determining the content of status. This factor has interesting ramifications in terms of the past trend in female teacher withdrawal patterns in Michigan.

Using basic data from annual reports of the State Department of Public Instruction and census figures for Michigan, the Teacher Education Study Group[86] analyzed factors relating to the supply and demand of teachers in the state for the 1954-1970 period. The data showed that withdrawals of women teachers were heavy between the ages of twenty-five and thirty-five due to responsibilities of family life. The findings showed that several thousand female teachers in Michigan re-enter the profession at about forty years of age.

A trend of this nature could create added intergenerational conflict, particularly in multiple-teacher departments. Situations calling for cooperation needed for

---

[86]Teacher Education Study Group, Teacher Demand and Supply in Michigan: 1954-1970 (Ann Arbor, Michigan: J. W. Edwards, Publisher, Inc., 1956), pp. 30-31.

unified curriculum efforts could be greatly affected by age-related conflicts. In general, the literature implied that investigating the possibility of a relationship between age of the teacher and the nature of the groups and individuals exerting influence on curriculum decisions could provide useful information for inservice teacher education programs. Overall, it is also apparent from the literature review that a more descriptive profile of teachers is likely to occur with age categories that follow commonly-viewed benchmarks in the aging process.

Extent of Teaching Experience

The fact that a substantial number of teachers, particularly females, drop in and out of the profession at various points in their lifetimes[87] would indicate that teaching experience would not necessarily parallel age. Despite this, the general trends found in previous research between teacher behavior and extent of teaching experience are relatively similar to those noted when teachers have been classified according to age.

Ryans reported that there was an overall tendency for less experienced teachers to score higher than teachers with extended experience on most of the teacher behaviors examined. As with the age variable, the one notable

---

[87] Ibid.

exception was in the case of "responsible, businesslike classroom behavior," where the more experienced teachers scored significantly higher than the less experienced.[88]

In analyzing teacher attitudes according to teachers' professional maturity, McLeish[89] defined professional maturity in terms of actual teaching experience. His three experience groupings were mature teachers of "some" years of experience, graduate students interning as teachers, and younger non-graduate student teachers. The pattern of results on the twenty-three variables where significant differences were found are of particular interest. Not only did the non-graduate student teachers, graduate interms, and mature teachers form a progression with regard to professional maturity, but also in terms of the discriminating variables. For attitudes on which mature teachers scored highest, the non-graduate student teachers scored lowest. The composite attitudes of the middle group of graduate students showed shifts from each of the other groups in both the high and low categories.

A variety of experience groupings have been used by different investigators. In an investigation of the relationship between amount of teaching experience and types of problems encountered by secondary teachers,

---

[88]Ryans, op. cit., pp. 390-91.

[89]McLeish, op. cit., pp. 16-17.

Koontz[90] classified teachers into four experience categories. His category ranges were based on the rationale that each division illustrated a stage of professional development. The four stages were identified as follows: years of orientation to the profession (first through second), years of professional maturation (third through ninth), years of career stability (tenth through nineteenth), and declining years (twentieth year and above). Teachers in the third through ninth years of experience category consistently noted problem items related to teaching with greater frequency than those in the other experience categories. The group which appeared least concerned with problem items were those in the first and second years of experience. This was a unique trend, since the problem items included such topics as discipline, self-confidence, and adequacy in subject matter, areas which are usually identified as primary concerns of beginning teachers. Also interesting was the fact that percentage of incidence of problems only slightly decreased among teachers with twenty or more years of experience. Thus, there was a trend toward a curvilinear relationship between years of experience and incidence of problems.[91]

---

[90]Koontz, op. cit., p. 11.

[91]Ibid., p. 95.

McKinney[92] used teaching experience categories similar to Koontz's to describe her sample of Michigan high school home economics teachers. Five experience groupings were used, including: two years or less, three through five years, six through ten years, eleven through fifteen years, and sixteen or more years. The teachers were fairly evenly distributed among experience categories with a range of 16.1 percent in the two largest (two years or less, and six to ten years.)

Gray's[93] research, described earlier, showed that years of experience was a significant factor in comparisons of the distribution of principals' ratings on teaching success. Principals rated the more experienced teachers as more successful. However, the teachers' self-ratings on success did not discriminate in this area.

In terms of ability to solve problems that professional teachers meet, Turner and Fattu[94] found significant differences in type of preparation and extent of experience among elementary teachers. Differences investigated were between those teachers who had completed a methods course and those who had not; those who had an education degree

---

[92]McKinney, op. cit., p. 77.

[93]Gray, op. cit., pp. 140-41.

[94]Richard L. Turner and N. A. Fattu, Problem Solving Proficiency among Elementary Teachers: I: The Development of Criteria, Monograph of the Institute of Educational Research (Bloomington: Indiana University, May, 1960), p. 60.

and those who had a liberal arts degree; those who had one year teaching experience and those who had none; those who had three or more years of teaching experience and those who had only one. All differences favored those with the greater professional teaching background and preparation.

Cross-sectional data have indicated that teachers' rated effectiveness at first increases fairly rapidly with experience and then levels off at five years or beyond. There has been a tendency for little change to show in rated performance of the teacher for the next fifteen to twenty years, after which there has been a tendency toward decline in effectiveness.[95]

In general, the findings indicated that differences in number of years of teaching experience existed in relation to other variables. Thus, an investigation of the possible differences between years of experience in relation to sources used for identification of home economics class content would provide teacher educators with additional information about inservice teachers. Helpful implications may be drawn from such information for leaders in the field who wish to bring about curriculum change through inservice programs.

---

[95]American Association of School Administrators, Who's a Good Teacher? (Washington, D. C.: National School Boards Association, 1961), p. 25.

Individuals and Groups Having Influence on Curriculum Decisions

The major sources of influence on curriculum decisions have shifted among various patterns of participation since the inception of American schools. Prior to the 1900's the major influences were exerted through legislation regarding which subjects to teach and textbook writers concerning content to be taught. This era was followed by a period in which curriculum development took place through national committees. During this time college professors and content specialists exerted the greatest influence on curricula. Teacher participation in curriculum development did not begin to be emphasized until the 1930's.[96] This emphasis continued until the early 1950's, when implementation of recommendations to include lay people in curriculum planning took place as a means of increasing public support for education.[97]

Since the 1950's there has been a continual rise in the type and number of forces exerting various pressures and demands on school systems concerning curricula. As a result drastic shifts in the influential groups in curriculum making have occurred in recent years. Indirect action

---

[96] Hilda Taba, Curriculum Development: Theory and Practice (New York: Harcourt, Brace & World, Inc., 1962), pp. 446-47.

[97] B. Othanel Smith, William O. Stanley, and J. Harlan Shores, Fundamentals of Curriculum Development (New York: World Book Company, 1950), pp. 649-50.

groups having no legal authority to make curriculum changes have exercised an authoritative voice in curriculum affairs. A characteristic response by school authorities has been to step up their power-decisions.[98]

Berman has supported the contention that various groups of persons have increasingly entered the arena of developing educational programs for children. She identified an increase in activity taking place among academic scholars, private industry, and government and the subsequent emergence of different roles for persons interested in curriculum. New theories and materials continue to be developed by outside specialists while, in general, those in the roles of principal, assistant superintendent, curriculum coordinator, and teacher select materials and develop the school programs.[99]

One of the major role shifts has taken place on the part of today's adolescent. In the past, children attended school as a matter of course. Today's adolescents are different in that they are speaking out and insisting on greater voice in curriculum decisions.[100] Tanner pointed

---

[98] Ibid., p. 53.

[99] Louise M. Berman, New Priorities in the Curriculum (Columbus, Ohio: Charles E. Merrill Publishing Company, 1968), pp. 16-17.

[100] William W. Wattenberg, "Youth Education: A Psychophysical Perspective," Youth Education: Problems/Perspectives/Promises, prepared by the ASCD 1968 Yearbook Committee (Washington, D. C.: Association for Supervision and Curriculum Development, NEA, 1968), p. 51.

out that as new generations of high school youth have become more sophisticated, they have increasingly made demands upon the nature of their studies.[101]

Most curriculum specialists, including Anderson,[102] Hass,[103] and Taba,[104] have promoted a democratic approach to making curriculum decisions. This approach has suggested participation of all interested citizens, parents, learners, and scholars to work at various levels of involvement with school personnel and supervisors throughout the process. Not expected, however, would be for all participants involved in the process of cooperative curriculum decision making to exert an equal amount of influence.

Responses from a study at the national level involving elementary and secondary school principals supported the idea that variation in influence exists. Principal ratings of fourteen possible sources of influence on local decisions affecting the nature of the educational program revealed that local school officials exerted the greatest influence. School faculty ranked second in amount of

---

[101]Daniel Tanner, Secondary Curriculum: Theory and Development (New York: The Macmillan Company, 1971), p. 413.

[102]Vernon E. Anderson, Principles and Procedures of Curriculum Improvement (2d ed.; New York: The Ronald Press Company, 1965), pp. 55.

[103]Glen Hass, "Who Should Plan the Curriculum?" Educational Leadership, XIX (October, 1961), 3.

[104]Taba, op. cit., p. 456.

influence, state school officials ranked third, and research studies were ranked as fourth.[105]

Sasse[106] investigated the relationships between staff perceptions of participation in decision making and curriculum development through a two-phase study of ten Wisconsin school districts. Findings disclosed that teacher decison-making behavior was relatively similar among the school systems, with a substantial proportion of the teachers experiencing little involvement in the total decision-making process. The one area of greatest teacher participation was in dealing with students. This included teacher-student relationship matters of homework, retention, and rules of conduct. Among the administrators group, the highest curriculum decision scores were achieved by principals, followed by supervisors or directors of instruction.[107]

---

[105] The Principals Look at the Schools, A Status Study of Selected Instructional Practices, A Working Paper Prepared for the Project on the Instructional Program of the Public Schools (Washington, D. C.: The National Education Association, 1962), pp. 28-29.

[106] Edward B. Sasse, "Teacher and Administrator Participation in Decision Making and Curriculum Development" (unpublished Doctor's Dissertation, The University of Wisconsin, 1966).

[107] Ibid., p. 159.

Johansen[108] explored the relationship of curriculum development activities to curriculum implementation in twenty-nine large (one hundred or more teachers) urban elementary schools in Illinois. One of his major findings was that when teachers perceived they were influential in the curriculum decision-making process the likelihood of curriculum implementation increased. Thus, the conclusion was that greater success in implementing curriculum change was achieved through total faculty involvement.

A direct relationship between initiation and implementation of curriculum change is not presumed. On the contrary, Brickell was unable to find evidence that either shared decision making or initial teacher willingness were critical factors in successful introduction to change. He found that teachers seldom evoked new working patterns for themselves.[109] Basically, changes in instructional programs were by administrators. Brickell also noted that parents and citizen groups and boards of education were not strong change agents. However, when their influence was exerted, it was decisive.[110]

---

[108]John H. Johansen, "An Investigation of the Relationships between Teachers' Perceptions of Authoritative Influences in Local Curriculum Decision-Making and Curriculum Implementation" (unpublished Doctor's dissertation, Northwestern University, 1965), pp. 197-198.

[109]Henry M. Brickell, Organizing New York State for Educational Change (Albany, New York: New York State Department of Education, 1961), p. 31.

[110]Ibid., pp. 22-24.

General dissatisfaction expressed by teachers concerning lack of professional autonomy was revealed in a recent study reported by Belok.[111] His sample included fifty-one teachers who had had only one year of teaching experience and who taught in large city schools. One of the categories in the descriptive instrument used in the study was "teacher freedom." A content analysis of the written responses indicated that many teachers did not believe they had much freedom in terms of curriculum and methodology. Their comments included the following:

> There seem to be manuals and guides for everything.
>
> Teachers have very little freedom on the job because the curriculum must be presented in a very limited way, as supervisors and other administrators have planned.
>
> Teachers are directed in all major areas of decision by local regulations, principal, P.T.A., etc.[112]

In general, the complaints made by the teachers were similar to those expressed in current literature concerning the impersonal, bureaucratic nature of large organizations. Unfortunately, comments were not also collected from teachers in small schools for purposes of comparison.

---

[111] Michael V. Belock, "Teacher Freedom--How Much?" The Journal of Teacher Education, XVI (December, 1965), 450-52.

[112] Ibid., p. 451.

In a study involving a sample of twenty St. Louis metropolitan area school systems, Moeller[113] investigated teachers' sense of power in affecting school system policy within schools of differing organizational structures. In contrast to the expected, he found that teachers in highly bureaucratic systems reported a significantly higher sense of power than those in less bureaucratic systems. His explanation was that highly visible rules, regulations, and policies appeared to provide teachers with more clear-cut opportunities for adopting an effective course of influence on decisions. In the analysis of relationships of control factors to sense of power, he stated:

> Sense of power appears to be influenced by many diverse variables lying within the teacher himself, in his past, in his social groups, in his relations with superiors, and in the organizational structure of his school.... Thus, the school system sets the general level of sense of power and the teacher varies from this level by his own personal orientation toward power.[114]

With all the different people and groups having potential influence in different school systems on curriculum decisions, it seems that information concerning the influence which various individuals and groups have on home economics curriculum decisions would be extremely helpful to home economics teacher educators. Teacher perceptions

---

[113] Gerald H. Moeller, "Bureaucracy and Teachers' Sense of Power," Administrator's Notebook, XI (November, 1962).

[114] Ibid., p. 4.

about this factor could provide implications for educational programs focused on initiating curriculum change.

Curriculum Sources

The teacher of the past relied very heavily on the textbook as a single source for identification of subject matter content. In contrast, today's modern school has a great variety of both printed and non-printed resources. Because printed material is less costly than most other educational resources, it is a widely used medium. The current problem faced by many teachers is to make wise selections from among the abundance of printed materials. In addition to hardbound textbooks, there are workbooks, classroom library books, paperbacks, periodicals, and magazines, as well as free and low-cost booklets, bulletins, and leaflets prepared by commercial companies. There are curriculum guides produced by the school system, the state, and experimental programs, and resource units produced either locally or commercially.[115]

However, as Anderson[116] pointed out, it would be erroneous to assume that because materials exist teachers know about them and how to make the best use of them. Hass[117] illustrated the need which teachers have for

---

[115] Anderson, op. cit., p. 399.

[116] Ibid.

[117] Hass, loc. cit.

scholarly assistance in an account of an incident which occurred in the early 1960's. Curriculum consultants in the area of mathematics and science found that textbooks in use at the time contained almost none of the modern concepts in these fields. Further, much of the grade placement of the material appeared inappropriate for its selected use.

Numerous studies have been undertaken analyzing the effectiveness of communication materials, particularly textbooks, for various student groups. However, there has appeared to be an absence of any reliable indication of teacher preferences among available sources for identification and communication of curriculum content. In other words, research has focused on the attributes of various media rather than in terms of the media themselves.[118]

Schwab[119] stated that there is no way to identify what curriculum changes are needed because there has been no empirical study of what facts, principles, and concept structures are conveyed. He further emphasized that a count of textbook adoptions would not provide the answer because there is no assurance of how the textbooks are being

---

[118]W. Howard Levie, "The Analysis and Application of Media," Second Handbook of Research on Teaching, ed. Robert M. W. Travers (Chicago: Rand McNally & Company, 1973), p. 860.

[119]Joseph J. Schwab, The Practical: A Language for Curriculum, Auxiliary Series, Schools for the 70's (Washington, D. C.: National Education Association Publications, 1970).

used. He also rejected the idea of checking lists of objectives, frequently found in curriculum guides, as a means of identifying curriculum content due to the ambiguity of most objectives. Since Sincock[120] found that few teachers adapt the processes and methods experienced in inservice curriculum projects, it could also be questioned whether lists of clearly stated objectives would even be a valid check on content.

Schwab concluded that "we have not the faintest reliable knowledge" of what materials are used nor how they are used.[121] Thus, information related to different sources of printed materials used by various home economics teachers in identification of home economics class content would provide implications for leaders in the field who wish to use the medium as a means of communicating curriculum innovations.

---

[120]William R. Sincock, "Teacher Reaction to Certain Practices in Curriculum Study Programs" (unpublished Doctor's dissertation, University of Chicago, 1959).

[121]Schwab, op. cit., p. 30.

Summary

From the review of the theoretical frameworks, it may be concluded that points of investigation which deal directly with the teacher may be approached from the perspective of field theory. Application of field theory focuses the center of attention on the teacher and views teacher behavior as a funtion of the life space or total situation which exists at the time the behavior occurs. From this perspective it could be expected that teacher behavior or involvement in curriculum decisions would be unique for each teacher.

On the other hand, the theory of behavior settings from ecological psychology focuses attention on the ecological environment. From this perspective the individual is considered as one of the components of the environment rather than the center of attention. Application of this theory continues to view the teacher as individually unique; however, from the broader perspective it would be expected that behavior patterns of teachers en masse in curriculum decisions would be relatively stable across similar behavior settings.

From the literature review related to each of the variables, it may be concluded that the variables chosen warrant particular consideration. Previous research indicated that both the geographical location variable and the

school size variable function as sources of variation associated with other outcomes. This led to the decision to identify these as design variables and to control the variation for each.

The complexity of organization within a geographical location was noted as a distinctive feature which characterizes the nature of the social and physical environment therein. The organization of Michigan was reflected in terms of the current population distribution, which was described as predominately urban and disproportionately dispersed within the state.

Organizational characteristics of the school size variable were reviewed for a number of educational levels. Although contradictory findings were found, in general, the larger the school the greater was the incidence of impersonalization, fewer personal types of satisfaction, more bureaucratic organization, and reduced teacher autonomy.

The literature review also included variables selected to describe the professional level of the teachers. In terms of the teacher certification variable, there was an indication that although there no longer is a teacher shortage, there still remain noticeable differences in the certification status of teachers. Thus, a question of quantity versus quality of teachers was raised. The question also occurred in terms of the undergraduate major,

since previous research showed that a substantial number of teachers did not teach in their first teaching field or major.

The existence of important differences between teachers in varying age groups was also observed. In terms of this study, the most important differences related to the consideration of influence on curriculum decisons were that (1) the progressive educational viewpoint of younger teachers was identified as a source of staff conflict when pitted against the older teachers' traditional viewpoints, and (2) middle-aged teachers were reported to have greater autonomy relative to the school administration.

Findings reported in terms of teacher behavior and age differences closely paralleled those found for years of teaching experience. Previous research also indicated that Michigan teachers were fairly well distributed among various experience categories.

A shift in patterns of participation was observed in the individuals and groups having influence on curriculum decisions. The major shift taking place was among students as an increasingly influential body on curriculum decisions. Increased influence was also noted among academic scholars, private industry, and government.

Although there were indications concerning each of the preceding variables, the review of literature failed to disclose any research dealing with identification of

sources used by teachers in selection of class content. It was noted, however, that the variety of educational resources available to teachers is growing in abundance.

The literature review led to the general conclusion that greater descriptive information concerning teachers within specified school situations may be acquired through the variables under investigation. Further, implications for preservice and inservice teacher education, as well as for general public education may be gleaned from such information.

CHAPTER III

DESIGN AND PROCEDURES OF THE STUDY

In this chapter a presentation of the design for the study is followed by a description of the various procedures used throughout the study. The second section, concerning sample selection procedures, begins with the overall sampling model and then proceeds to an explanation of the sampling procedures of the larger study from which the sample for this study was drawn. The sampling procedures section concludes with the specific sample selection for this study. The third section, dealing with the data collection procedures, includes description of the questionnaire used in the study along with the procedures of its administration. The final section, analysis procedures, contains the stated hypotheses, operational definitions, and treatment of the data.

Design of the Study

The study was designed to be descriptive in nature to reach the objectives stated in Chapter I. The two independent variables, geographical location and school size,

were each stratified into four descriptive categories resulting in a sixteen-cell design over subjects; subjects were 528 full-time secondary home economics teachers in Michigan public secondary schools, as shown in Table 1.

TABLE 1

DESIGN MATRIX

	Geographical location				
School size	Zone 1: Southern lower peninsula	Zone 2: Northern lower peninsula	Zone 3: Upper peninsula	Zone 4: Detroit area	Totals
Size 1: 299 or fewer students	14	26	22	2	64
Size 2: 300 - 549 students	33	41	10	16	100
Size 3: 550 - 1199 students	54	36	39	51	180
Size 4: 1200 or more students	55	24	4	101	184
Totals	156	127	75	170	528

Sample Selection Procedures

The sample for this study was selected from a pool of respondents available through a larger study.[1] Subjects for the larger study were drawn from a population which included all home economics teachers in public secondary schools in Michigan having any combination of any of the grades seven through twelve with consumer and homemaking programs during the 1971-72 school year.[2] The total population included 1,072 public secondary schools in Michigan with 1,986 teachers in consumer and homemaking programs. The sample of schools was drawn from this population according to a stratified random selection procedure without replacement.[3] Using the cluster sample approach, all part-time and full-time teachers involved in consumer and homemaking programs within the selected schools were included as subjects for the larger study.

To meet the objectives of the present study, an additional criterion was established for sample selection.

---

[1]Alberta Dobry and Norma Bobbitt, "The Development and Implementation of a Curriculum Approach for the Conceptual Reorientation of Secondary Home Economics Programs with Emphasis on Meeting Needs of Special Groups: Phase I" (unpublished report, Michigan State University, Fall, 1972).

[2]Information for the sample selection was compiled by the Michigan Department of Education.

[3]The population and sample cell sizes for the larger study are given in Table 21 and Table 22 respectively in Appendix A.

The sample of teachers for this study was restricted to those subjects who were employed as full-time teachers. Thus the unit of analysis for the larger study was schools, whereas the individual teacher was used as the unit of analysis for this study.

Selection and Description of the Strata

A stratified sampling procedure was chosen to insure a representative sample of schools throughout Michigan. The strata consisted of geographical zones and school sizes.

Michigan was divided into four geographical areas using county lines as natural boundaries for each zone. Each area was determined according to rough approximations of the basic population distribution throughout the state. The initial decision was to divide the state into three geographical classifications indicating the urban to rural pattern from south to north in the state. However, further consideration of the unique characteristics of the Detroit area led to the decision to treat that area as a separate zone.

Justification for the zone divisions was based on the following observations:

1. The southern portion of the state is characterized with clusters of urban settings.

2. In general, as one proceeds north on into the upper peninsula there is a noticeable decline in population density.

3. The tri-county area of Macomb, Oakland, and Wayne counties (Detroit area) is densely populated, containing approximately one-half of Michigan's total population. Thus, as shown in Appendix B, the geographical areas were grouped by counties into the following zones:

1. Zone one included counties in the southern half of the lower peninsula with the exception of those in zone four. The adjoining counties of Bay and Saginaw, although located more in the northern lower peninsula, were also included in zone one because of their relatively high population density.

2. Zone two included counties in the northern half of the lower peninsula including the "thumb" area, but excluding Bay and Saginaw counties.

3. Zone three included all counties in the upper peninsula.

4. Zone four encompassed Detroit and the surrounding metropolitan area of Macomb, Oakland, and Wayne counties.

School size was also stratified into four groups. The four school size divisions used by the Michigan Athletic Association were chosen because of the common acceptance of that categorization. Therefore school sizes were

grouped according to the following ranges in student population:

1. Size one schools included those with 299 or fewer students.
2. Size two schools included those with 300 through 549 students.
3. Size three schools included those with 550 through 1199 students.
4. Size four schools included those with 1200 or more students.

The stratification process of selecting the sample according to geographical location and school size was chosen to ensure that cases in each of the different strata were included in the sample in proportion to their relative numerical importance in the total population.[4] Stratification also decreased some of the variability of the environmental elements and insured greater homogeneity of schools within each stratum.[5]

Sampling Procedure for the Larger Study

Preparation for drawing the sample began by coding pertinent information on each teacher in the population and transferring that information to data-processing cards.

---

[4]W. J. Reichmann, Use and Abuse of Statistics, A Pelican Book (Baltimore: Penguin Books Inc., 1964), p. 252.

[5]Gilbert Sax, Empirical Foundations of Educational Research (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1968), p. 135.

The population was first machine-sorted by zone, and then sorted by school size within each zone. This was followed by hand-sorting the data-processing cards alphabetically by school, and then by teacher within each school. The final roster was then mechanically listed for sample selection.

As expected, the particular characteristics of the strata led to considerable differences among the sixteen cells in the design matrix. Because of the large variation in cell sizes, variable sampling fractions were used to increase uniformity among the size of the cells.[6] Due to the possibility of alphabetizing the schools within the cells, a systematic sampling procedure was followed for each cell. Since six was the largest spread for selecting cases in any cell, a die was rolled to determine the first school to be sampled. This procedure was repeated for each cell to avoid bias in determining the systematic sample.[7]

Once the sample of schools used in the larger study was selected, then the cluster of home economics teachers within each school was identified. All home economics teachers within the sample of schools were included on the questionnaire mailing list to insure

---

[6]Alan Stuart, Basic Ideas of Scientific Sampling, Griffin's Statistical Monographs and Courses, No. 4 (New York: Hafner Publishing Company, 1968), pp. 47-48.

[7]Sax, op. cit., p. 140.

complete representation of total home economics programs within each school. A proportion of 38 percent of the schools was drawn in the sample of the larger study. This involved 35 percent of all teachers in secondary consumer and homemaking programs within the public schools. The result was an original sample of 403 schools with 696 teachers, as shown in Table 21 located in Appendix A.

Sampling Procedure for this Study

The multi-stage[8] or cluster[9] sampling procedure for selection of teachers within the sample of schools from the larger study was believed to result in a representative reflection of the population of interest for this study. Therefore the subjects for this study were selected from the pool of teachers available through the larger study using these procedures.

The objectives of this study required one additional selection criterion: The selected secondary home economics public school teachers must be identified as full-time teachers (employed for the entire school day throughout the school year). A total of 528 respondents met the sample criterion for purposes of this study.

---

[8] Reichmann, loc. cit.

[9] Ibid., pp. 141-42.

Data Collection Procedures

Data for this study were collected through the Profile of Secondary Home Economics Program questionnaire developed by Dobry and Bobbitt,[10] as shown in Appendix C. The objectives of this study did not necessitate use of the entire instrument.

The Questionnaire

The instrument contains four sections; these include personal data, general information, profile of 1971-72 home economics class periods, and home economics class content information.[11] Ten of the twenty-seven items located within the first two sections of the instrument supplied the information needed for this study.

Initial development of the questionnaire involved submitting items to a panel of experts in the field, including city supervisors, state supervisors, and teacher educators in home economics in Michigan. The structured questionnaire was tested through a pilot study to insure that the items and their wording yielded the information needed.[12]

---

[10] Dobry and Bobbitt, loc. cit.

[11] The complete instrument is given in Appendix C.

[12] Dobry and Bobbitt, loc. cit.

Psychometric indices were reported for the questionnaire through the larger study from which it was developed. Content validity for the instrument was established through a panel of experts. The test-retest method of establishing reliability was conducted with a limited number of respondents, but revealed a high degree of reliability (above 0.80).

Administration of the Questionnaire

Data collection associated with conducting this study involved three progressive phases. Basically these were seeking needed permission to include teachers in the study, distribution of the questionnaire, and follow-up to non-respondents.

Special permission for data collection was required by three different school systems of those selected. These included the Detroit, Flint, and Grand Rapids public school systems. Permission was sought and granted by each of these school systems. Because of school policy, data gathering from teachers in the Detroit public schools drawn in the sample was handled separately.

A cover letter, a questionnaire, and a self-addressed, stamped envelope for returning the completed questionnaire were prepared for each teacher identified in the sample. Ultimately usable returns from 82 percent of

the full-time teachers sampled were received. Each of the various follow-up steps contributed to the final percentage of returns as described below.

Questionnaire packets were first sent on February 1, 1972, directly to all teachers in the sample with the exception of those in the Detroit public school system. The initial proportion of completed returns received from full-time teachers was 41 percent. A follow-up post card to non-respondents on the initial mailing was sent on February 16, 1972. This resulted in an additional proportion of 10 percent returns. A second mailing of the questionnaire packets was sent on February 28, 1972, to the remaining non-respondents from the initial mailing list. This yielded a 14 percent increase in returns from full-time teachers.

In compliance with Detroit Public School's policy, questionnaire packets to be distributed to the secondary home economics teachers were sent to the central administration of that system during the first week in March, 1972. School principals of Detroit Public Schools distributed the questionnaire packets to teachers involved in the sample. An initial proportion of 71 percent of the Detroit teachers included on the distribution list returned completed questionnaires. The follow-up procedure to determine whether or not questionnaires had been received by non-respondents

in the Detroit group consisted of a letter with an enclosed self-addressed post card which was to be returned. The question concerning receipt of the questionnaire was stated on the post card along with a request that teachers respond by checking "yes" or "no" to the question. No response was ever received from eighteen of the Detroit teachers sampled. However, a return of an additional 1 percent completed questionnaires was received along with the post cards. These procedures netted a 72 percent return from the Detroit teachers, which constituted a proportion of 15 percent additional returns from all full-time teachers within the sample.

Missing data from an additional 3 percent of the teachers in the schools sampled were acquired through a final telephone follow-up. A remaining 1 percent of the returned questionnaires were incomplete and unusable. Thus, data from 82 percent of the full-time teachers were completed in usable form.

Data from the forty-six part-time teachers were not included in this study. As noted earlier, data for consideration in this study were limited to those from full-time teachers in Michigan public secondary consumer and homemaking programs.

Analysis Procedures

The general objective of this study was to investigate selected characteristics of home economics teachers in relation to the school situations of their employment. The underlying purpose of this investigation was to arrive at implications for planning home economics preservice and inservice teacher-education programs and general public education.

Hypotheses

In the review of literature related to the teacher characteristics under consideration in this study, it was disclosed that contradictory findings existed concerning some of the variables while a lack of directly applicable evidence existed for others. This led to the testing of the following null hypotheses:

Ho I: There are no differences in the proportions of teachers who are graduates from various institutions (Michigan State University and non-Michigan State University) and have acquired full-time teaching positions in Michigan public secondary consumer and homemaking programs with respect to the various school sizes and/or geographical locations of their employment.

Ho II: There are no differences in the proportions of full-time teachers in Michigan public secondary consumer and homemaking programs who have different types of valid teacher certification (vocational home economics and general home economics) with respect to the various school sizes and/or geographical locations of their employment.

Ho III: There are no differences in the proportions of full-time teachers in Michigan public secondary consumer and homemaking programs who have varying undergraduate majors (home economics education, any area of home economics other than home economics education, any other discipline) with respect to the various school sizes and/or geographical locations of their employment.

Ho IV: There are no differences in the ages of full-time teachers in Michigan public secondary consumer and homemaking programs who have different individuals and groups exerting the primary influence on curriculum decisions.

Ho V: There is no relationship between age of full-time teachers in Michigan public secondary consumer and homemaking programs and the amount of influence of various individuals and groups on curriculum decisions.

Ho VI: There are no differences in the numbers of years of teaching experience of full-time teachers in Michigan public secondary consumer and homemaking programs who use different primary sources of help for identification of home economics class content.

Ho VII: There is no relationship between number of years of teaching experience of full-time teachers in Michigan public secondary consumer and homemaking programs and the amount of help received from various sources used for identification of home economics class content.

Ho VIII: There are no differences in the amounts of influence of various individuals and groups on curriculum decisions with respect to various school sizes and/or geographical locations.

Operational Definitions

The design variables were operationally defined as follows:

1. School size categories were grouped into four size classifications as follows:

a. Size one = Schools with 299 or fewer students;

b. Size two = Schools with 300-549 students;

c. Size three = Schools with 550-1199 students;

d. Size four = Schools with 1200 or more students.

2. Geographical location was divided into four zone categories as follows:

a. Zone one = All counties in the southern half of the lower peninsula with the exception of those in zone four and inclusion of Bay and Saginaw counties;

b. Zone two = All counties in the northern half of the lower peninsula including the "thumb" area, excluding Bay and Saginaw counties;

c. Zone three = All counties in the upper peninsula;

d. Zone four = The tri-county area of Macomb, Oakland, and Wayne counties.

The descriptive variables under consideration in this study were operationalized according to the following:

1. Proportion of full-time teachers were those who taught at least one consumer and homemaking class and were employed for the entire day throughout the school year in Michigan public secondary schools having any combination of the

grades seven through twelve. The symbolic representation for this is P.

a. Certifying institution

MSU = Michigan State University
NMS = Non-Michigan State University

$$P_{MSU} = \frac{MSU}{N} \quad \text{and} \quad P_{NMS} = \frac{NMS}{N}$$

b. Valid certification

VC = Vocational certification (includes provisional and permanent)
GC = General certification (includes provisional and permanent)

$$P_{VC} = \frac{VC}{N} \quad \text{and} \quad P_{GC} = \frac{GC}{N}$$

c. Undergraduate major

HEE = Major in home economics education
AHE = Major in any area of home economics other than HEE
OD = Major in any other discipline than HE

$$P_{HEE} = \frac{HEE}{N} \text{ and } P_{AHE} = \frac{AHE}{N} \text{ and } P_{OD} = \frac{OD}{N}$$

2. Age of the teacher referred to the chronological age in years as reported to the school district by the teacher.

3. Number of years teaching experience referred to the total number of years of full-time teaching experience in consumer and homemaking programs as reported by the teacher.

4. Individuals and groups exerting influence on curriculum decisions included potential influential bodies from local and state levels. The amount of influence for each was rated according to one of three categories: little or none (L), moderate (M), and great (G). The index of influence was (1)L or N + (2)M + (3)G. Greatest influence was indicated separately by writing the letter of the one choice.

5. Various sources for identification of home economics class content referred to printed materials available to teachers. The helpfulness of each item was rated according to one of four categories: none (N) some (S), moderate (M), and very (V). The index of helpfulness was: (0)N + (1)S + (2)M + (3)V. The most helpful source was indicated separately by writing the letter of the one choice.

Treatment of the Data

Data secured from items on the Profile of Secondary Home Economics Program questionnaire were hand-coded and quality checked. Data were then key-punched from the coding forms and mechanically verified. Data processing cards were transformed from the original deck for analysis procedures.

The nature of the different hypotheses developed in this study called for various statistical tests for significance. The chosen alpha level for each hypothesis test

was 0.05. The Control Data Corporation (CDC) 6500 model computer was used to perform the computations for the analysis.

Hypotheses I, II, and III focused on differences in proportions of the particular dependent variables occurring with respect to the independent variables of school size and geographical location. Using separate two-way designs, the chi square statistic was used to test for differences from expected proportions in the sample distribution. Post hoc analysis procedures were also applied to the first three hypotheses to identify specifically where any significant differences existed.[13] Since no assumptions need be made about normality of the distribution for a chi square test,[14] this test was considered to be a useful and appropriate choice for the first three hypotheses dealing with discrete data expressed in frequencies.

Hypothesis IV concerned the differences in the dependent variable of age for teachers with different primary influences on curriculum decisions. In this hypothesis, "primary influences" functioned as an independent variable. A corresponding structure existed in Hypothesis VI, where

---

[13] William L. Hays, Statistics for Psychologists (New York: Holt, Rinehart and Winston, 1963), pp. 459-60.

[14] N. M. Downie and R. W. Heath, Basic Statistical Methods (2d ed.; New York: Harper & Row, Publishers, 1965), p. 160.

the "number of years teaching experience" was the dependent variable and "primary sources of help" functioned as the independent variable. Including the category of "other," a total of eleven possible individuals or groups exerting influence on curriculum decisions and eight possible sources of help for selecting class content were considered in the investigation. The analysis of variance technique was considered because the dependent variables were continuous. The three assumptions to be met with the analysis of variance technique are equal variance, normal distribution, and independence of errors.[15] Since there was no reason to believe these assumptions were not met, the one-way analysis of variance was chosen for both Hypotheses IV and VI.

Hypotheses V and VII approached the same variables as occurred in the two preceding hypotheses but from the standpoint of possible relationships rather than differences. In addition, "amounts of influence" and "usefulness of sources" were under consideration rather than the "primary influence" or "primary source" as was the case in Hypotheses IV and VI. Thus the point of interest for Hypotheses V and VII was the association or correspondence between the independent variables of age and years of

---

[15]Gene V. Glass and Julian C. Stanley, Statistical Methods in Education and Psychology (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970), p. 369.

teaching experience to the respective dependent variables of amount of influence and primary sources. The F ratio was used to test significance for the multiple regression analysis with eleven dependent variables in Hypothesis V and eight dependent variables in Hypothesis VII. In both cases the contribution of each dependent variable was also considered.

Hypothesis VIII concerned differences in amount of influence on curriculum decisions with respect to various school sizes and geographical locations. In this hypothesis the amounts of influence exerted by the eleven individuals and groups on curriculum decisions comprised the dependent variable, while school size and geographical location were the independent variables. The two-way multivariate analysis of variance was used to determine the difference between groups in relation to the independent variables. The corresponding univariate analyses of variance were applied to identify specifically where any significant differences existed.

Summary

Basically, the nature of the study was descriptive, with two factors stratified on four levels each, resulting in a sixteen-cell design over subjects. The 528 subjects were sampled from a pool of teachers available through a larger study.

Eight null hypotheses were generated from the theoretical frameworks and review of literature. A summary of the statistical procedures for data analysis appears in Table 2. The alpha level was set at 0.05 for testing each null hypothesis and for considering the univariates.

TABLE 2

SUMMARY OF DATA ANALYSIS

Hypothesis	Independent variable(s)	Dependent variables	Statistical test	Chosen alpha level
Ho I	Geographical location School size	Certifying institution	Two-way chi square analyses	0.05
Ho II	Geographical location School size	Type of certification	Two-way chi square analyses	0.05
Ho III	Geographical location School size	Undergraduate major	Two-way chi square analyses	0.05
Ho IV	Primary influence on curriculum decisions	Age	One-way univariate analysis of variance	0.05
Ho V	Age	Influences on curriculum decisions	Multiple regression analysis	0.05
Ho VI	Primary source for identification of class content	Years of teaching experience	One-way univariate analysis of variance	0.05
Ho VII	Years of teaching experience	Sources for identification of class content	Multiple regression analysis	0.05
Ho VIII	Geographical location School size	Influences on curriculum decisions	Two-way multivariate and univariate analyses of variance	0.05

CHAPTER IV

FINDINGS OF THE STUDY

This chapter contains the statement of each null hypothesis along with the results of each statistical test. The sequential presentation of the eight hypothesis statements is followed by a composite of the findings of the study.

Results of Each Hypothesis Test

Throughout the discussion concerning the results of each hypothesis test, any reference to the term "teachers" refers to full-time teachers in Michigan public secondary (grades seven through twelve) consumer and homemaking programs. Also to be noted is that the term "certification" refers to that which was initially issued by the state of Michigan for a minimum of five years with validity which was current at the time of the study.

Null Hypothesis I

> There are no differences in the proportions of teachers who are graduates from various institutions (Michigan State University and non-Michigan State University) and have acquired full-time teaching positions in Michigan public secondary consumer and homemaking programs with respect to the various school sizes and/or geographical locations of their employment.

This hypothesis focused on the differences in the category of certifying institution of the full-time teachers in consumer and homemaking programs across school sizes and geographical locations in Michigan. The frequency distribution of teachers, both those who achieved certification through Michigan State University (MSU) and those from institutions other than Michigan State University (non-MSU), with the independent variable of various geographical locations is shown in Table 3. A chi square value of 22.939 with 3 degrees of freedom led to the rejection of the null hypothesis for geographical location at the 0.001 alpha level. Therefore, the conclusion was that differences existed in the proportions of MSU graduates and non-MSU graduates in the various geographical locations in Michigan.

The post hoc procedure for the chi square test consisted of all possible pair-wise contrasts for geographical locations. Significant differences were found for each of the contrasts. Analysis of the contrasts across geographical zones showed that there was a significantly greater proportion of full-time teachers who were MSU graduates located in the northern lower peninsula (zone two) than in any other zone. A significantly greater proportion of MSU graduates was teaching in the southern lower peninsula (zone one) than in the upper peninsula (zone three) or the Detroit area (zone four); the contrast between the latter

TABLE 3

CHI SQUARE ANALYSIS FOR HOME ECONOMICS TEACHERS BY CATEGORIES OF INSTITUTION AND GEOGRAPHICAL LOCATION

Institution	Geographical location				
	Zone 1: Southern lower peninsula	Zone 2: Northern lower peninsula	Zone 3: Upper peninsula	Zone 4: Detroit area	Totals
Michigan State University	45	43	11	23	122
Non-Michigan State University	111	84	64	147	406
Totals	156	127	75	170	528

Chi square = 22.939
Degrees of freedom = 3
Alpha < 0.001

two proportions indicated that there were relatively more MSU graduates in zone three than zone four.

As would be expected, each of the contrasts between zones was also found to be significant for teachers who were non-MSU graduates in the post hoc procedure for the chi square test. There was a significantly greater proportion of full-time teachers who were non-MSU graduates located in the Detroit area (zone four) than in any other geographical zone. The analysis also showed a significantly greater proportion of teachers who were non-MSU graduates located in the upper peninsula (zone three) than in the southern lower peninsula (zone one) or the northern lower peninsula (zone two); the contrast between the latter two proportions indicated that there were relatively more non-MSU graduates in zone one than zone two.

Hypothesis I also focused on the differences in proportions of teachers graduating from MSU and other institutions respectively in relation to the independent variable of school size. The frequency distribution of teachers who achieved certification through MSU and non-MSU institutions respectively for each of the levels of the independent variable of school size is shown in Table 4. Results of the chi square test showed a value of 4.729 with 3 degrees of freedom; the resultant 0.20 alpha level led to the rejection of the null hypothesis in terms of school size.

TABLE 4

CHI SQUARE ANALYSIS FOR HOME ECONOMICS TEACHERS
BY CATEGORIES OF INSTITUTION AND SCHOOL SIZE

	School size				
Institution	Size 1: 299 or fewer students	Size 2: 300 - 549 students	Size 3: 550 - 1199 students	Size 4: 1200 or more students	Totals
Michigan State University	17	28	44	33	122
Non-Michigan State University	47	72	136	151	406
Totals	64	100	180	184	528

Chi square = 4.729
Degrees of freedom = 3
Alpha < 0.20

Therefore, the conclusion was that no significant differences existed in the proportions of teachers who were MSU and non-MSU graduates between the various school sizes.

Null Hypothesis II

> There are no differences in the proportions of full-time teachers in Michigan public secondary consumer and homemaking programs who have different types of valid teacher certification (vocational home economics and general home economics) with respect to the various school sizes and/or geographical locations of their employment.

Hypothesis II concerned the differences in type of Michigan teacher certification held by teachers in relation to the independent variables of school size and geographical location. Noted is the fact that the sample size was 506 rather than 528 for this hypothesis. Because the focus of interest was on patterns of fully certified teachers with valid Michigan certificates, those with ninety-day or other special certificates were not included in this analysis.

The results of testing this hypothesis in terms of the geographical location variable showed a chi square value of 13.765 with 3 degrees of freedom, resulting in rejection at the 0.01 alpha level. This led to the conclusion that differences beyond those found by chance existed in the distributions of teachers with vocational and general certification respectively across geographical locations. The frequency distribution for teachers with

full vocational and general certification in the various geographical locations is shown in Table 5.

As with the first hypothesis, the post hoc procedure for the chi square test consisted of all possible pair-wise contrasts for each of the independent variables. Significant differences were found for all geographical zone contrasts of proportions of vocationally certified teachers except that between the southern lower peninsula (zone one) and the northern lower peninsula (zone two). The highest proportions of the full-time teachers who held full vocational certification in consumer and homemaking programs were found to be located in zone one and zone two. As indicated by the additional contrasts, a significantly greater proportion of fully certified teachers was found in zone one than in either the upper peninsula (zone three) or the Detroit area (zone four). The same pattern was found to be true for zone two. That is, a significantly greater proportion of vocationally certified teachers was indicated in zone two than in zone three or zone four. Further, there was a significantly greater proportion of vocationally certified teachers in zone three than in zone four.

A post hoc procedure was also conducted for the teachers with general certification in regard to the independent variable of geographical location. Significant

TABLE 5

CHI SQUARE ANALYSIS FOR HOME ECONOMICS TEACHERS BY TYPE OF CERTIFICATION AND GEOGRAPHICAL LOCATION

Type of certification[a]	Geographical location				
	Zone 1: Southern lower peninsula	Zone 2: Northern lower peninsula	Zone 3: Upper peninsula	Zone 4: Detroit area	Totals
Vocational	107	84	47	87	325
General	43	35	27	76	181
Totals	150	119	74	163	506

[a]Analysis included only fully certified teachers; therefore, twenty-two teachers having special certification were excluded from this analysis.

Chi square = 13.765
Degrees of freedom = 3
Alpha < 0.01

differences in proportions of teachers with general certification were reflected by each of the pair-wise contrasts for geographical zones. A significantly greater proportion of teachers with general certification was found to be located in the Detroit area (zone four) than in any other geographical zone. In addition, a significantly greater proportion of teachers with general certification was located in the upper peninsula (zone three) than in the southern lower peninsula (zone one) or the northern lower peninsula (zone two); the contrast between the latter two proportions indicated that there were relatively more teachers with general certification in zone one than zone two.

The second null hypothesis also concerned the differences in proportions of teachers with different types of certification across the various levels of the independent variable of school size. The frequency distribution for this variable is shown in Table 6. Results of the chi square test revealed a value of 9.528 with 3 degree of freedom; the resultant 0.05 alpha level led to the rejection of the null hypothesis in regard to school size. The conclusion was that significant differences existed in the proportions of teachers with vocational and general certification respectively within various school sizes.

TABLE 6

CHI SQUARE ANALYSIS FOR HOME ECONOMICS TEACHERS BY TYPE OF CERTIFICATION AND SCHOOL SIZE

Type of certification[a]	School size				
	Size 1: 299 or fewer students	Size 2: 300 - 549 students	Size 3: 550 - 1199 students	Size 4: 1200 or more students	Totals
Vocational	31	63	127	104	325
General	27	34	49	71	181
Totals	58	97	176	175	506

[a]Analysis included only fully certified teachers; therefore, twenty-two teachers having special certification were excluded from this analysis.

Chi square = 9.528
Degrees of freedom = 3
Alpha < 0.05

The contrasts in the post hoc procedures for the chi square test for teachers by type of certification disclosed that significant differences existed between school sizes for each contrast. A significantly greater proportion of teachers with full vocational certification was found in schools with 550 through 1199 students (size three) than in any other size. The remaining contrasts showed a significantly greater proportion of teachers with vocational certification in schools of 300 through 549 students (size two) than in schools of 299 or fewer students (size one) or in those of 1200 or more students (size four). In addition, there was a significantly greater proportion of vocationally certified teachers in size four than in size one schools.

For teachers with general certification in the different school sizes, contrasts revealed that there was a significantly greater proportion from this group in those schools of 299 or fewer students (size one). The other contrasts showed a significantly greater proportion of generally certified teachers in schools with 1200 or more students (size four) than in schools with 300 through 549 students (size two) or in schools with 550 through 1199 students (size three); there was also a significantly greater proportion of generally certified teachers in size two than size three schools.

Null Hypothesis III

> There are no differences in the proportions of full-time teachers in Michigan public secondary consumer and homemaking programs who have varying undergraduate majors (home economics education, any area of home economics other than home economics education, any other discipline) with respect to the various school sizes and/or geographical locations of their employment.

This hypothesis pertained to the differences in the primary undergraduate major of full-time teachers in consumer and homemaking programs with regard to various school sizes and geographical locations within Michigan. The frequency distribution of teachers by their primary undergraduate majors for the various geographical locations is shown in Table 7. A chi square value of 8.302 with 3 degrees of freedom resulted in an alpha at the 0.50 level, indicating that the null hypothesis could not be rejected in terms of geographical location. This led to the conclusion that significant differences did not exist in the majors of teachers among geographical locations. However, examination of Table 7 revealed that the lowest frequency of teachers with home economics education majors occurred in the upper peninsula, although it was the only geographical location which did not have any teachers with non-home economics majors. In addition, approximately two-fifths of the teachers in the sample were those with undergraduate majors other than home economics education.

TABLE 7

CHI SQUARE ANALYSIS FOR HOME ECONOMICS TEACHERS BY UNDERGRADUATE MAJOR AND GEOGRAPHICAL LOCATION

Undergraduate Major	Geographical location				
	Zone 1: Southern lower peninsula	Zone 2: Northern lower peninsula	Zone 3: Upper peninsula	Zone 4: Detroit area	Totals
Home economics Education	96	84	38	97	315
Other home economics areas	56	41	37	70	204
Non-home economics areas	4	2	0	3	9
Totals	156	127	75	170	528

Chi square = 8.302
Degrees of freedom = 6
Alpha < 0.50

Hypothesis III also dealt with the differences in proportions of teachers with each undergraduate major for the independent variable of school size. The frequency distribution for this variable is found in Table 8. The chi square value for this analysis was 14.072 with 6 degrees of freedom, resulting in a 0.05 alpha level. This formed the basis for rejection of the null hypothesis in terms of school size and the conclusion that differences existed in the proportions of the three undergraduate majors among the various school sizes.

The post hoc procedure again involved all possible pair-wise contrasts across school sizes. Each of the school size contrasts concerning teachers with home economics education undergraduate majors was found to be significant. The contrasts between school size categories showed that a significantly greater proportion of full-time teachers with home economics education majors was teaching in schools with 300 through 549 students (size two) than in any other size. Other contrasts revealed that a significantly greater proportion of teachers with home economics education majors taught in schools with 1200 or more students (size four) than in schools of 299 or fewer students (size one) or in schools of 550 through 1199 students (size three). A significantly greater proportion of home economics education majors also taught in size three than in size one schools.

TABLE 8

CHI SQUARE ANALYSIS FOR HOME ECONOMICS TEACHERS
BY UNDERGRADUATE MAJOR AND SCHOOL SIZE

Undergraduate Major	School size				
	Size 1: 299 or fewer students	Size 2: 300 - 549 students	Size 3: 500 - 1199 students	Size 4: 1200 or more students	Totals
Home economics education	33	66	104	112	315
Other home economics areas	31	29	74	70	204
Non-home economics areas	0	5	2	2	9
Totals	64	100	180	184	528

Chi square = 14.072
Degrees of freedom = 6
Alpha < 0.05

All pair-wise contrasts of school size for teachers with majors in areas of home economics other than home economics education were also found to be significant. Inspection of the contrasts disclosed that a significantly greater proportion of teachers with other home economics majors was teaching in school sizes of 299 or fewer students (size one) than in any other school size. Contrasts also disclosed that a significantly greater proportion of teachers with other home economics majors taught in schools of 550 through 1199 students (size three) than in schools of 300 through 549 students (size two) or schools of 1200 or more students (size four). A significantly greater proportion of teachers with other home economics majors were found in size four than in size two schools.

The post hoc procedure of pair-wise contrasts between school sizes for the few teachers in the sample who had non-home economics undergraduate majors disclosed two significant contrasts. The contrasts between school sizes two and three and between sizes two and four revealed that there was a significantly greater proportion of teachers with non-home economics majors in schools of 300 through 549 students (size two) than in schools either of 550 through 1199 students (size three) or of 1200 or more students (size four). As noted in Table 8, there were no teachers from this group in schools of 299 or fewer students (size one).

Null Hypothesis IV

> There are no differences in the ages of full-time teachers in Michigan public secondary consumer and homemaking programs who have different individuals and groups exerting the primary influence on curriculum decisions.

This hypothesis dealt with differences in age of the teacher (the dependent variable) with respect to various primary influences on curriculum decisions (the independent variable) indicated by the respondents. In the univariate analysis of variance, the F value was 0.2851 with 10 and 517 degrees of freedom; the alpha level of 0.9845 led to the conclusion that the null hypothesis for differences in ages could not be rejected. Thus, age was not significantly different for teachers with different primary influences on curriculum decisions. Information which supported this conclusion is shown in Table 9. The cell means and standard deviations, identified in Table 10, indicate the potential overlap among age means. The several responses and ratings to the category of "others" are noted in Table 23 in Appendix A.

Null Hypothesis V

> There is no relationship between age of full-time teachers in Michigan public secondary consumer and homemaking programs and the amounts of influence of various individuals and groups on curriculum decisions.

Hypothesis V focused on the relationship between age and amount of influence exerted by the various

TABLE 9

ANALYSIS OF VARIANCE FOR AGE OF THE TEACHER WITH RESPECT TO PRIMARY INFLUENCE ON CURRICULUM DECISIONS

Variable	Degrees of freedom	Mean square	F ratio	Alpha less than
Age of teacher	10 and 517	44.3177	0.2851	0.9845

Influence categories: city supervisor, department head, local advisory committee, local curriculum committee, parents, school administrators, students, student teacher, teacher, other teachers, and others.

TABLE 10

CELL SIZES, MEANS, AND STANDARD DEVIATIONS FOR TEACHERS' AGE IN RELATION TO GROUPS OR INDIVIDUALS EXERTING PRIMARY INFLUENCE ON CURRICULUM DECISIONS

Primary influence	Number of teachers	Mean age (in years)	Standard deviation
City supervisor	7	39.428	11.267
Department head	31	36.645	12.440
Local advisory committee	2	32.000	9.899
Local curriculum committee	15	38.000	10.508
Parents	3	37.666	10.214
School administrators	40	38.650	12.690
Students	37	39.567	12.439
Student teacher	1	45.000	0.000
Teacher	361	38.670	12.625
Other teachers	21	36.857	10.417
Others	10	41.500	13.778

individuals and groups on curriculum decisions. The null hypothesis was rejected on the basis of the multivariate regression analysis F value of 1.8545 at the 0.0430 alpha level. Therefore, it was concluded that a relationship existed between age of the teacher and amount of influence exerted by various groups and individuals on curriculum decisions. Inspection of the univariate alpha levels divulged that two variables, amounts of influence of the teacher and of the department head, made the greatest contributions to the multivariate alpha level. Each reached the chosen level of significance, with alpha levels of 0.0435 and 0.0283 respectively, as noted in Table 11.

Null Hypothesis VI

> There are no differences in the numbers of years of teaching experience of full-time teachers in Michigan public secondary consumer and homemaking programs who use different primary sources of help for identification of home economics class content.

The focus of this hypothesis was on differences in years of teaching experience (the dependent variable) among teachers with various primary sources used in identification of class content as indicated by the teachers (the independent variable). The null hypothesis was not rejected on the basis of the univariate analysis of variance F value of 1.5925 with 7 and 520 degrees of freedom, resulting in an alpha level of 0.1351. Therefore the conclusion was that number of years of teaching experience was not significantly different among teachers whose primary sources

TABLE 11

REGRESSION ANALYSES FOR ASSOCIATION BETWEEN INFLUENCES ON CURRICULUM AND AGE OF THE TEACHER

Variable	Raw regression coefficient	F ratio	Alpha less than
Multivariate Analysis (11 and 516 degrees of freedom)			
Influences on curriculum		1.8545	0.0430
Univariage Analysis (1 and 526 degrees of freedom)			
Teacher	- 0.0038	4.0979	0.0435
Department head	- 0.0085	4.8386	0.0283
Curriculum committee	- 0.0031	0.8647	0.3529
City supervisor	- 0.0002	0.0101	0.9201
School administrators	- 0.0023	0.8103	0.3685
Student teacher	- 0.0038	1.6734	0.1964
Students	- 0.0031	1.4765	0.2249
Advisory committee	- 0.0021	0.5957	0.4406
Parents	- 0.0005	0.0576	0.8105
Other teachers	- 0.0049	1.4282	0.2327
Others	- 0.0029	1.6767	0.1960

used for identification of home economics class content differed. This conclusion was supported by the data in Table 12. The relatively small amount of variation in the cell means and standard deviations for years of experience which led to the lack of significant differences is displayed in Table 13. Identification and tabulation of the specific responses to the "others" category are listed in Table 24 in Appendix A.

Null Hypothesis VII

> There is no relationship between numbers of years of teaching experience of full-time teachers in Michigan public secondary consumer and homemaking programs and the amounts of help received from various sources used for identification of home economics class content.

This hypothesis concerned the relationship between years of teaching experience and the amount of assistance from various sources for identification of class content. The conclusion to reject the null hypothesis was based on the multivariate regression analysis F value of 4.4109 with 8 and 519 degrees of freedom, which was significant beyond the 0.0001 alpha level.

As noted in Table 14, significance at or beyond the chosen alpha level was reached by college course materials at the 0.0203 alpha level, professional periodicals at the 0.0001 alpha level, popular magazines at the 0.0049 alpha level, and commercial teaching aids at the 0.0500 alpha

TABLE 12

ANALYSIS OF VARIANCE FOR YEARS OF TEACHING EXPERIENCE WITH RESPECT TO PRIMARY SOURCE FOR IDENTIFICATION OF CLASS CONTENT

Variable	Degrees of freedom	Mean square	F ratio	Alpha less than
Years of teaching experience	7 and 520	112.1632	1.5925	0.1351

Source categories: college course materials, curriculum guides, State Department recommendations, textbooks, professional periodicals, popular magazines, commercial teaching aids, and others.

TABLE 13

CELL SIZES, MEANS, AND STANDARD DEVIATIONS FOR YEARS OF TEACHING EXPERIENCE IN RELATION TO PRIMARY SOURCES FOR IDENTIFICATION OF CLASS CONTENT

Primary source	Number of teachers	Mean years	Standard deviation
College course materials	69	7.014	7.252
Curriculum guides	120	8.950	7.570
State Department recommendations	22	10.363	8.742
Textbooks	151	10.205	8.721
Professional periodicals	46	11.434	9.523
Popular magazines	17	10.470	10.494
Commercial teaching aids	73	9.712	9.188
Others	30	8.333	6.666

TABLE 14

REGRESSION ANALYSES FOR ASSOCIATION BETWEEN SOURCES FOR IDENTIFICATION OF CLASS CONTENT AND YEARS OF TEACHING EXPERIENCE

Variable	Raw regression coefficient	F ratio	Alpha less than
Multivariate Analysis (8 and 519 degrees of freedom)			
Sources for class content		4.4109	0.0001
Univariate Analysis (1 and 526 degrees of freedom)			
College course materials	- 0.0106	5.4267	0.0203
Professional periodicals	0.0190	15.7551	0.0001
Textbooks	0.0045	1.3134	0.2524
Curriculum guides	0.0068	2.6431	0.1047
Commercial teaching aids	0.0087	3.8603	0.0500
State Department recommendations	0.0084	3.1673	0.0758
Popular magazines	0.0121	8.0044	0.0049
Others	- 0.0048	1.1832	0.2773

level. Thus the greatest contribution to the multivariate alpha level came from these variables. Analysis of the data showed that a negative relationship existed between years of teaching experience and use of college course materials as a source for identification of class content.

Null Hypothesis VIII

> There are no differences in the amounts of influence of various individuals and groups on curriculum decisions with respect to various school sizes and/or geographical locations.

Hypothesis VIII dealt with differences in influence on curriculum decisions exerted by various individuals and groups in regard to school size and geographical location. The multivariate test to determine the significance of interaction between the independent variables, school size and geographical location, produced an F value of 1.2501 with 99 and 3551.5554 degrees of freedom, resulting in an alpha level of 0.0495. Therefore, the null hypothesis was rejected with the conclusion that there were differences in amount of influence based on an interaction between school size and geographical location. Inspection of the univariate alpha levels supported the conclusion of significant interaction between school size and geographical zone. Significant univariate alpha levels are found in Table 15 for the following variables: influence of the local curriculum committee at the 0.0251 alpha level; influence of the student teacher at the 0.0280 alpha level; influence of other teachers at the 0.0154 alpha level. An additional marginal level of

TABLE 15

ANALYSES OF VARIANCE FOR INFLUENCES ON CURRICULUM DECISIONS WITH RESPECT TO SCHOOL SIZE AND GEOGRAPHICAL LOCATION

Variable	Mean square	F ratio	Alpha less than
Multivariate Analysis (99 and 3551.5554 degrees of freedom)			
Influences on curriculum decisions		1.2501	0.0495
Univariate Analysis (9 and 512 degrees of freedom)			
City supervisor	0.6238	1.3161	0.2255
Department head	0.4639	0.4694	0.8953
Advisory committee	1.0473	1.8455	0.0580
Curriculum committee	1.7107	2.1373	0.0251
Parents	0.2673	0.6955	0.7133
School administration	0.4264	0.8176	0.6002
Students	0.6968	1.2967	0.2358
Student teacher	1.3656	2.1006	0.0280
Teacher	0.1217	0.4351	0.9162
Other teachers	2.1890	2.3017	0.0154
Others	0.1736	0.4199	0.9247

significance occurred for one other variable, the influence of the local advisory committee, at the 0.0580 alpha level.

Observation of the cell means revealed that three significant variables (influence of the local advisory committee, the student teacher, and other teachers) and one marginally significant variable (influence of the local curriculum committee) made the greatest contributions to the overall variance among groups and individuals exerting influence on curriculum decisions with respect to school size and geographical location. The graphic presentation of the cell means in Figure 3 clearly shows the disordinal nature of the interaction between school size and geographical zone for the influence of the local advisory committee on curriculum decisions. The plotted means indicated that school sizes two and three appear to have had relatively greater homogeneity occurring across geographical zones in terms of extent to which existing local advisory committees exerted influence on curriculum decisions. School sizes three and four showed a tendency to have a somewhat similar pattern of influence within each geographical zone in terms of trends from one zone to the next; however, the greatest amount of influence occurred in zone one for school size three and in zone three for school size four. Although the amount of influence values for sizes one and four were close in both zones one and four, the pattern of influence of the

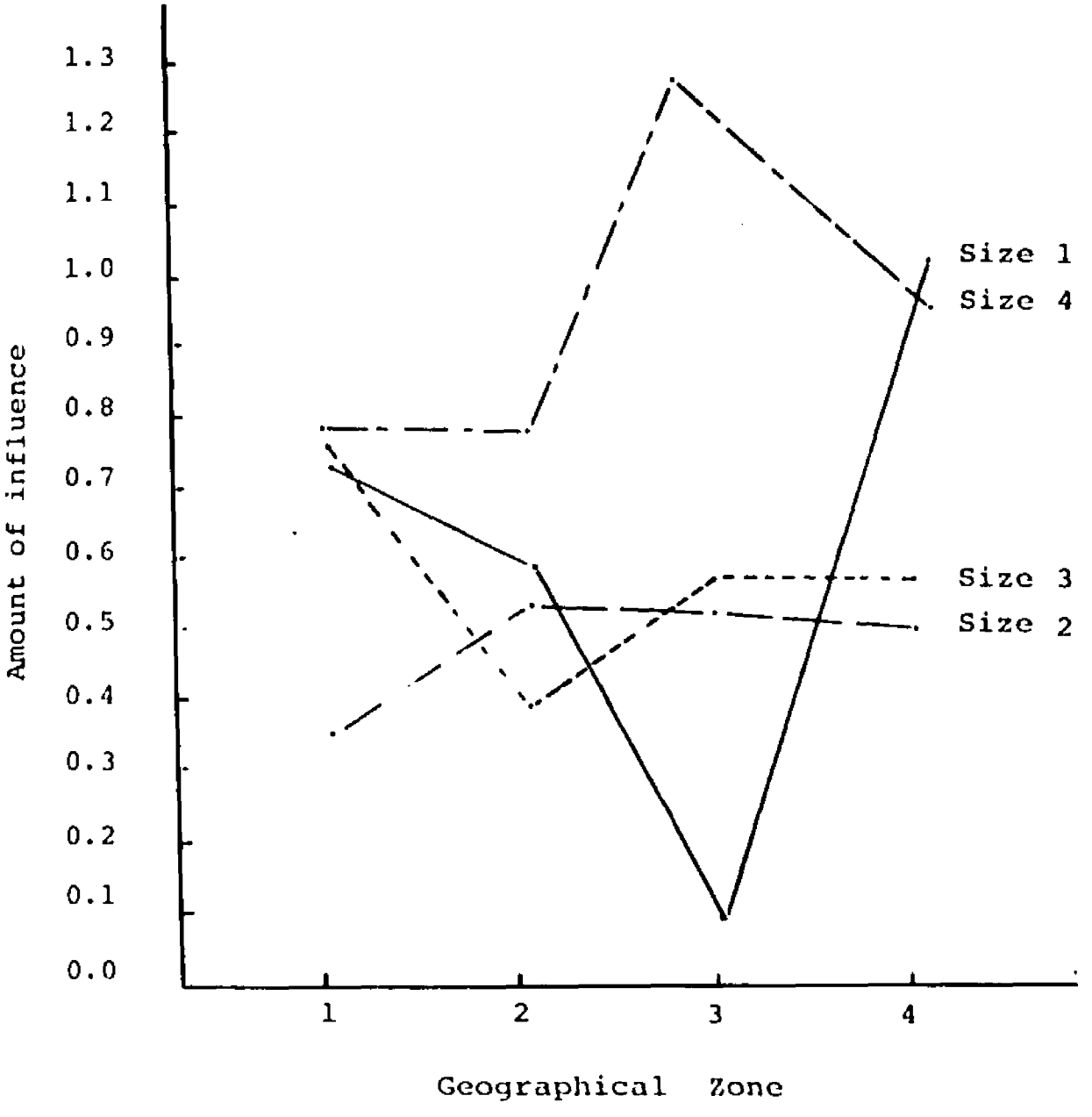

FIGURE 3

INTERACTION BETWEEN SCHOOL SIZE AND GEOGRAPHICAL LOCATION IN RELATION TO EXTENT OF INFLUENCE OF THE LOCAL ADVISORY COMMITTEE ON CURRICULUM DECISIONS

local advisory committee is reversed in zones one, two, and three. The greatest influence of the local advisory committee for size four schools occurred in zone three, where the least amount of influence was exerted for size one schools. Indicated also is that school sizes one and two tended to have reversed patterns of influence from zone to zone in a seesaw fashion.

Noted also is that the existence of local advisory committees for teacher use tended to vary somewhat between cells. The respective cell proportions are reported in Table 16.

The graphic presentation of the disordinal interaction between school size and geographical location for influence of student teachers on curriculum decisions is depicted in Figure 4. Although the plotted cell means for school sizes three and four were different in each geographical zone, the general seesaw pattern of extent of influence by student teachers on curriculum decisions was somewhat similar across geographical zones. The extent of influence across geographical zones in school size one also followed the same general pattern that occurred in school sizes three and four with the exception of geographical zone four where student teachers were not present. Compared to school size one, the pattern of amount of influence was reversed for school size four in each of the geographical zones.

TABLE 16

PERCENTAGES OF TEACHERS WHO HAVE LOCAL ADVISORY COMMITTEES FOR EACH SCHOOL SIZE AND GEOGRAPHICAL LOCATION

School size	Geographical location			
	Zone 1: Southern lower peninsula	Zone 2: Northern lower peninsula	Zone 3: Upper peninsula	Zone 4: Detroit area
Size 1: 299 or fewer students	50.0 %	42.4 %	9.1 %	100.0 %
Size 2: 300 - 549 students	21.3 %	41.5 %	30.0 %	43.8 %
Size 3: 550 - 1199 students	51.9 %	27.8 %	41.1 %	49.1 %
Size 4: 1200 or more students	45.5 %	62.5 %	100.0 %	70.3 %

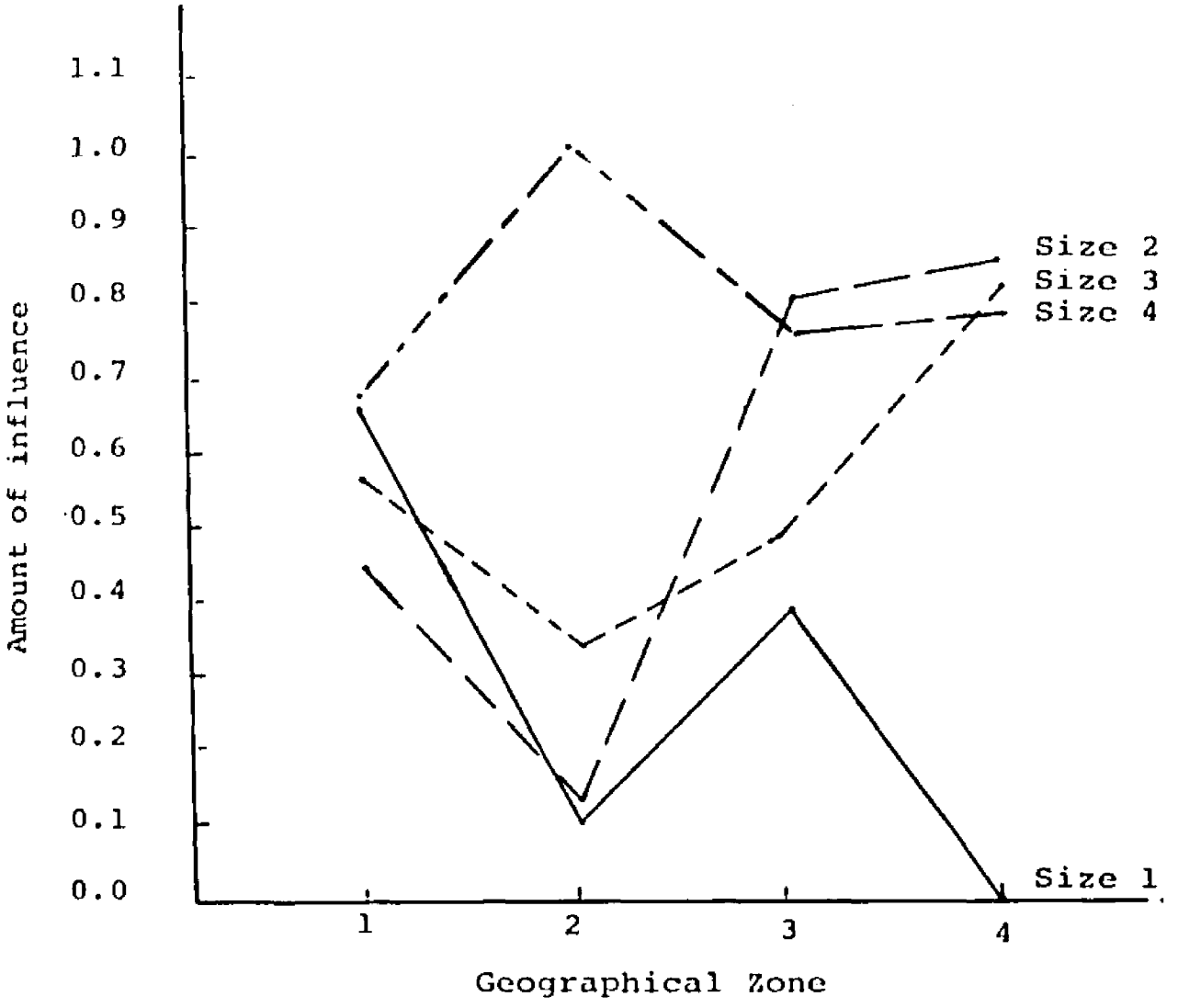

FIGURE 4

INTERACTION BETWEEN SCHOOL SIZE AND GEOGRAPHICAL LOCATION IN RELATION TO EXTENT OF INFLUENCE OF THE STUDENT TEACHER ON CURRICULUM DECISIONS

The presence of student teachers varied from cell to cell. The specific percentage representations for each cell are listed in Table 17.

A representation of the disordianl interaction between school size and geographical location for influence of the other teachers in the department on curriculum decisions is shown in Figure 5. Observation of the graphic illustration revealed that a relatively similar see-saw pattern for influence from other teachers existed in school sizes two and four across all geographical zones. It should also be noted that there was a larger proportion of multiple-teacher departments in the largest (size four) schools.

The same general pattern of influence which occurred in school sizes two and four also existed in school size three in each geographical zone; an exception was zone four, where 100 percent of the teachers were in multiple-teacher departments. School size one had a complete reversal for extent of influence in each of the geographical zones when contrasted to each of the other school sizes.

Variation in proportion of teachers within multiple-teacher departments existed across school size and geographical location. The specific percentages are reported in Table 18.

As shown in Figure 6, a disordinal interaction between school size and geographical location for influence

TABLE 17

PERCENTAGES OF TEACHERS WHO HAVE STUDENT TEACHERS FOR EACH SCHOOL SIZE AND GEOGRAPHICAL LOCATION

School size	Geographical location			
	Zone 1: Southern lower peninsula	Zone 2: Northern lower peninsula	Zone 3: Upper peninsula	Zone 4: Detroit area
Size 1: 299 or fewer students	42.8 %	11.5 %	27.3 %	0.0 %
Size 2: 300 - 549 students	24.3 %	12.2 %	50.0 %	56.3 %
Size 3: 550 - 1199 students	44.5 %	27.8 %	30.8 %	49.1 %
Size 4: 1200 or more students	43.7 %	70.9 %	50.0 %	49.6 %

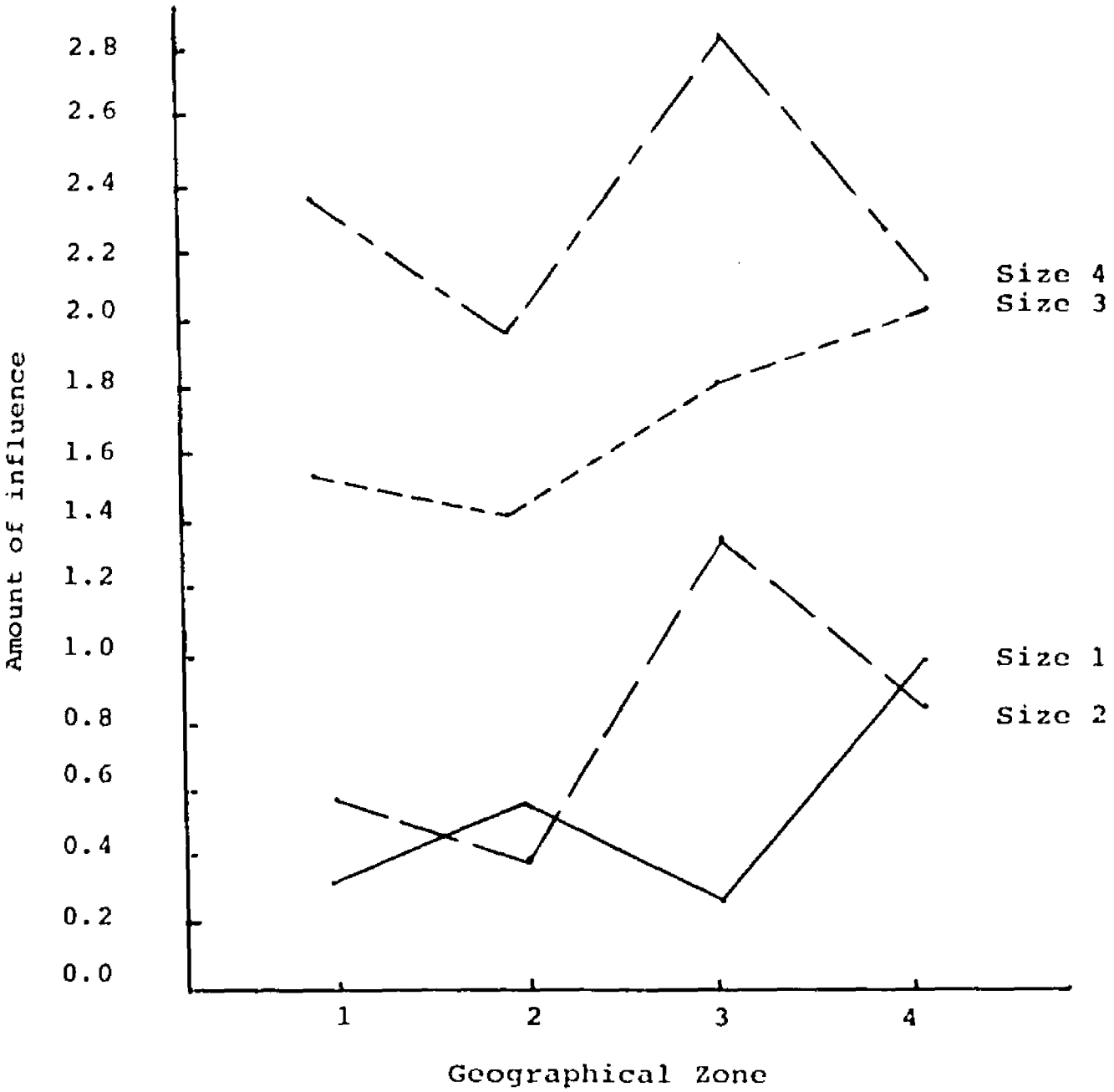

FIGURE 5

INTERACTION BETWEEN SCHOOL SIZE AND GEOGRAPHICAL LOCATION IN RELATION TO EXTENT OF INFLUENCE OF OTHER TEACHERS IN THE DEPARTMENT ON CURRICULUM DECISIONS

TABLE 18

PERCENTAGES OF TEACHERS WHO ARE IN MULTIPLE-TEACHER DEPARTMENTS FOR EACH SCHOOL SIZE AND GEOGRAPHICAL LOCATION

School size	Geographical location			
	Zone 1: Southern lower peninsula	Zone 2: Northern lower peninsula	Zone 3: Upper peninsula	Zone 4: Detroit area
Size 1: 299 or fewer students	21.5 %	27.0 %	13.7 %	100.0 %
Size 2: 300 - 549 students	30.4 %	19.6 %	50.0 %	43.8 %
Size 3: 550 - 1199 students	68.6 %	61.2 %	74.4 %	80.4 %
Size 4: 1200 or more students	98.2 %	87.5 %	100.0 %	93.1 %

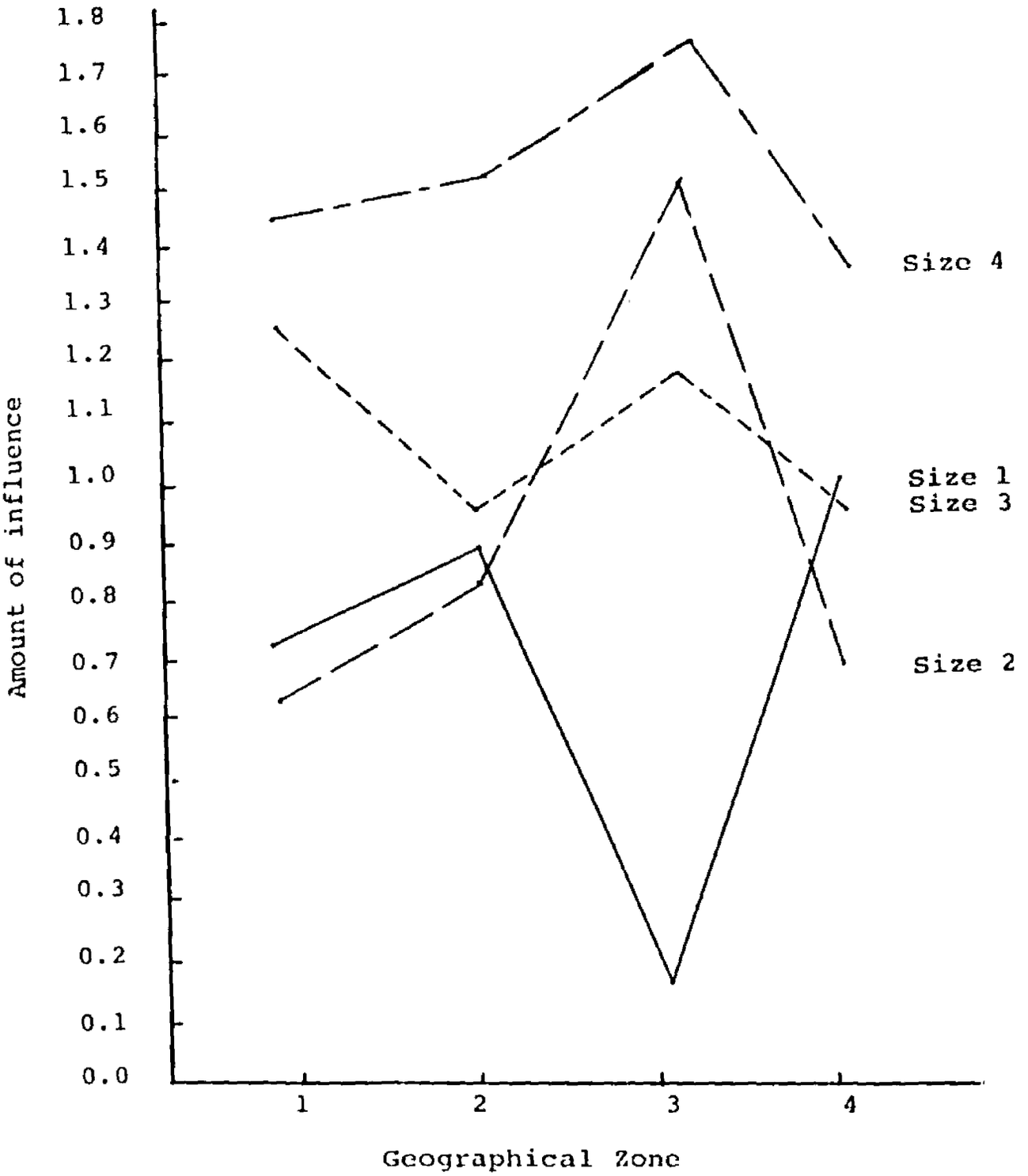

FIGURE 6

INTERACTION BETWEEN SCHOOL SIZE AND GEOGRAPHICAL LOCATION IN RELATION TO EXTENT OF INFLUENCE OF THE LOCAL CURRICULUM COMMITTEE ON CURRICULUM DECISIONS

of local curriculum committees on curriculum decisions was also found to exist. Examination of the graphic illustration disclosed that a somewhat similar seesaw pattern of influence existed for school sizes two and four within each geographical zone. The same general trend was also found for school size three in each geographical zone except zone one. When school size one was compared to size three the pattern of influence was reversed across the geographical zones although the cell means were almost identical for both school sizes in zones two and four.

Different proportions of teachers who had local curriculum committees were found to exist from cell to cell. The respective cell percentages are reported in Table 19. Evidence of interaction between geographical location and school size made it impossible to consider the test for main effects of these variables.

Summary of the Findings

A summary of the statistical tests and results for each corresponding null hypothesis is presented in Table 20. As stated earlier, an alpha of 0.05 was set for rejection of each null hypothesis. The same alpha level was also used for considering univariates.

Significant differences expressed in chi square values were found for the following: teachers' institution of certification with respect to geographical location;

TABLE 19

PERCENTAGES OF TEACHERS WHO HAVE LOCAL CURRICULUM COMMITTEES FOR EACH SCHOOL SIZE AND GEOGRAPHICAL LOCATION

School size	Geographical location			
	Zone 1: Southern lower peninsula	Zone 2: Northern lower peninsula	Zone 3: Upper peninsula	Zone 4: Detroit area
Size 1: 299 or fewer students	50.0 %	57.7 %	18.2 %	100.0 %
Size 2: 300 - 549 students	39.4 %	56.1 %	60.0 %	56.3 %
Size 3: 550 - 1199 students	79.7 %	58.4 %	66.7 %	64.8 %
Size 4: 1200 or more students	81.9 %	75.0 %	100.0 %	81.2 %

TABLE 20

SUMMARY OF THE NULL HYPOTHESIS TESTS

Hypothesis	Independent variables	Dependent variables	Statistical procedure	Value of test statistic	Degrees of freedom	Alpha less than	Decision
Ho I	Geographical location	Certifying institution	Chi square	22.939	3	0.001	Reject Ho
	School size	Certifying institution	Chi square	4.729	3	0.20	Do not reject Ho
Ho II	Geographical location	Type of certification	Chi square	13.765	3	0.01	Reject Ho
	School size	Type of certification	Chi square	9.528	3	0.05	Reject Ho
Ho III	Geographical location	Undergraduate major	Chi square	8.302	6	0.50	Do not reject Ho
	School size	Undergraduate major	Chi square	14.072	6	0.05	Reject Ho
Ho IV	Primary influence on curriculum decisions	Age	Univariate analysis of variance	0.285	10 and 517	0.98	Do not reject Ho
Ho V	Age	Influences on curriculum decisions	Multiple regression	1.855	11 and 516	0.04	Reject Ho

TABLE 20 (CONTINUED)

Hypothesis	Independent variables	Dependent variables	Statistical procedure	Value of test statistic	Degrees of freedom	Alpha less than	Decision
Ho VI	Primary source for identification of class content	Years of teaching experience	Univariate analysis of variance	1.593	7 and 520	0.14	Do not reject Ho
Ho VII	Years of teaching experience	Sources for identification of class content	Multiple regression	4.411	8 and 519	0.0001	Reject Ho
Ho VIII	Geographical location by school size interaction	Influences on curriculum decisions	Multivariate and univariate analyses of variance	1.250	99 and 3551.6	0.05	Reject Ho

teachers' type of certification with respect to geographical location and with respect to the school size of employment; and teachers' undergraduate major with respect to the school size of employment. Significant relationships expressed in F values were observed between age of the teacher and amounts of influence of various individuals and groups on curriculum decisions, and between number of years of teaching experience and various sources reported as helpful in identification of class content. In addition, multivariate F test results indicated significant interaction between school size and geographical location for amounts of influence of various individuals and groups on curriculum decisions. The univariate values showed that influence of local advisory committees, student teachers, and other teachers were the greatest contributors to the overall variance among groups and individuals exerting influence on curriculum decisions with respect to school size and geographical location.

CHAPTER V

SUMMARY

Chapter V is organized in the following manner. The general conclusion corresponding to each null hypothesis is stated, followed by the limitations in interpreting the results of the study. A general discussion concerning the conclusions precedes the implications. The final section of the chapter deals with several recommendations for further study.

Conclusions

The general focus of the study was on an investigation of selected home economics teacher characteristics in relation to the school situations of their employment. The basic intention was to interpret the findings in a manner which would be useful to teacher educators in planning and implementing programs for preservice and inservice teacher education, as well as general public education.

The conclusions of the study were based on the findings from the various statistical procedures chosen for each of the different null hypotheses. These statistical procedures included the two-way chi square and corresponding post hoc analyses, one-way univariate analysis of

variance, multiple regression analysis, and two-way multivariate and univariate analyses of variance. Summary tables for the results of the various statistical tests from which the conclusions were drawn were presented in Chapter IV.

The conclusions were as follows:

1-a. Significant differences existed in the proportions of home economics teachers who were MSU and non-MSU graduates respectively among the various geographical locations in Michigan.

1-b. No significant differences existed in the proportions of teachers who were MSU and non-MSU graduates respectively among the various school sizes.

2-a. Differences beyond those expected by chance existed in the distribution of teachers with vocational and general certification respectively across geographical locations.

2-b. Significant differences existed in the proportions of teachers with vocational and general certification respectively among the various school sizes in Michigan.

3-a. Significant differences did not exist in the proportions of teachers with home economics education majors, majors in other areas of home economics, and non-home economics majors respectively among the various school sizes.

3-b. Significant differences existed in the proportions of teachers with home economics education majors,

majors in other areas of home economics, and non-home economics majors respectively among the various school sizes.

4. Age of the teacher was not found to be significantly different for teachers having different individuals and groups as the primary influence on curriculum decisions.

5. A relationship beyond that expected by chance was found to exist between age of the teacher and amounts of influence exerted by various groups and individuals on curriculum decisions.

6. Number of years of teaching experience was not significantly different among teachers whose primary sources used for identification of home economics class content differed.

7. A significant relationship was found to exist between years of teaching experience and the amounts of assistance from various sources used for identification of home economics class content.

8. There are significant differences among teachers in amount of influence exerted by various individuals and groups on curriculum decisions based on an interaction between school size and geographical location.

Limitations

The basic limitation of this study is that statistical generalization of the results should be confined

to full-time home economics teachers in secondary (grades seven through twelve) public school consumer and homemaking programs in Michigan. Further limitations include the following:

1. Since the instrument used in the study was a mailed questionnaire calling for highly individualistic data, accuracy of the data is limited to the credibility of each respondent's answers.

2. Due to the school policy of one of the city systems involved in the sampling process, it was necessary to distribute a portion of the questionnaires through the central administration; therefore, there was a lack of control in distribution and subsequent follow-up to some of the subjects.

3. The non-orthogonal design and small cell sizes placed some limitation on the analysis procedures.

4. The relatively liberal alpha level of 0.05 undoubtedly allows for some Type I errors.

5. The alpha level of 0.05 was an hypothesis alpha; therefore, the experiment-wise alpha was actually much higher.

Discussion

MSU graduates constituted 23.1 percent of the teachers in the sample. When considering the number of teachers who were MSU graduates in relation to the total

number of all teachers for each geographical location, the post hoc analysis revealed that a greater proportion of MSU graduates were located in the northern lower peninsula (zone two) than in any other geographical location. However, when considering the distribution of MSU graduates along, the highest absolute frequency occurred within the southern lower peninsula (zone one), although the frequency in the northern lower peninsula (zone two) was a close second high.

Since MSU is also located in the southern lower peninsula (zone one), the fact that the highest absolute frequency of MSU graduates is found within this geographical location is of particular interest. The fact that teachers who are MSU graduates tended to locate in or near the area in which MSU is located may or may not be a unique phenomenon, since the frequency distribution describes what existed but does not provide an explanation of the reason for the distribution. However, speculation concerning possible causes of the phenomenon leads to a question concerning the basis upon which students choose an institution of higher learning. Whether the choice is based on nearness to home, type of program offered, tuition fees and cost of living expenses, a combination of these and/or other factors remains a question for future consideration.

When reviewing the results of the post hoc analysis, the one clearly obvious fact is that MSU graduates tended

to avoid location in either the upper peninsula (zone three), which is considered predominantly rural, or in the Detroit area (zone four) which is highly urban. The greatest proportion of the teachers who were non-MSU graduates was shown by the post hoc analysis to be located in the Detroit area (zone four), followed by the upper peninsula (zone three). When considering the distribution of MSU and non-MSU graduates in relation to the number of teaching positions possible, however, the Detroit area (zone four) does have a slightly larger number of teaching positions than the southern lower peninsula (zone one), but only by a relatively small margin.

Although significant differences were not found in the proportions of teachers who were MSU and non-MSU graduates between the various school sizes, the absolute frequencies of each are of some interest. The highest absolute frequency of MSU graduates occurred in schools of 550 through 1199 students (size three), whereas the largest absolute number of non-MSU graduates was found in schools of 1200 or more students (size four). Since a larger number of the schools located in geographical zone one (where relatively more MSU graduates were located than in any other zone) are size three schools, while the larger number of schools in zone four (where most non-MSU graduates were located) are size four schools, the question is raised whether teaching situations were chosen on the basis of geographical

location, school size, a combination of both factors, and/or other factors. Since there were no differences between MSU and non-MSU graduates with respect to school size, yet there were significant differences between the two with regard to geographical location, it could be speculated that teaching positions were primarily chosen on the basis of geographical location.

The significant differences found in the proportions of teachers with vocational and general certification respectively across geographical locations, as well as among the various school sizes, pertained to those teachers who were fully certified (the 22 teachers with special certificates were excluded from this analysis). The proportion of vocationally certified teachers constituted 64.2 percent of the fully certified teachers.

In identifying where the significant differences occurred in terms of geographical location, results of the post hoc analysis showed that the greatest proportions of vocationally certified teachers were located in the southern lower peninsula (zone one) and the northern lower peninsula (zone two), with no significant difference in the contrast between the two zones. An interesting notation is that five institutions, including MSU, accredited for preparation of vocational home economics teachers are located in zone one. In contrast, the Detroit area (zone four), which has three vocationally accredited institutions, was

found to have the greatest proportion of teachers with general certification. Thus it seems that the predominance of teachers with general certification in the Detroit area may be due to either an insufficient supply of vocationally certified teachers in that area or a low demand for such teachers for the existing programs. Since vocational certification denotes qualification for implementing a balanced secondary program, there is an indication that total program purposes are not being fulfilled throughout the state.

Determination of where the significant differences existed in proportions of teachers with vocational and general certification among the various school sizes was disclosed in the post hoc analysis. The greatest proportion of teachers with general certification was found in schools of 299 or fewer students (size one). The post hoc analysis also showed that the greatest proportion of the teachers who were vocationally certified occurred in schools of 550 through 1199 students (size three). From examination of the data there appeared to be a relationship between the occurrence of the dominance in absolute frequency of vocationally certified teachers in size three schools and the dominance in absolute frequency of teachers who were MSU graduates in size three schools. Noted is that all teachers from MSU are initially certified vocationally, but some MSU graduates fail to maintain their vocational status following expiration of the initial certificate.

Whether the relationship between teachers with vocational certification and those who are MSU graduates in size three schools occurred due to some unique characteristic of the teachers, the school situations, a combination of both, and/or other factors remains for further investigation.

Also of interest is the comparison of the proportion of Michigan teachers found to be vocationally certified in this sample compared to that of a sample drawn a year earlier by McKinney.[1] As stated in the review of literature, McKinney found 81.3 percent of the teachers were vocationally certified compared to 61.6 percent of the teachers in this study. Whether this difference is due to the fact that Detroit teachers were not included in McKinney's sample, that the sample sizes varied, a combination of both and/or other factors is not certain. However, the predominance of generally certified teachers in the Detroit area presents a strong indication that the explanation lies in that fact that this group of teachers was missing from her sample.

Lack of differentiation of the various undergraduate majors (home economics education, other home economics, any

---

[1]Carolyn Dommer McKinney, "Professional Role Perceptions of Michigan Home Economics Teachers" (unpublished Doctor's dissertation, Michigan State University, 1972), p. 75.

other discipline) among geographical locations revealed information somewhat contrary to that expressed through popular opinion. Since significant differences were not found for majors across geographical locations, comments concerning lack of adequately prepared home economics teachers in particular areas such as the upper peninsula and Detroit are apparently unfounded on the basis of undergraduate major. If it is appropriate to assume that home economics education majors are the best prepared for the task and they are proportionately distributed across locations, then any one area does not appear to have an advantage over another in terms of teachers with various majors.

The teachers who were home economics education majors constituted 59.6 percent of the sample. This overall phenomenon seems to be somewhat similar to that found by Steidle[2] in his study of Ohio science teachers. It may be recalled from the review of literature that he found an over-supply in numbers of science teachers but an under-supply among those classified according to preparation for such. This situation raises the question of whether or not there is a shortage in quality of teachers across all

---

[2]Walter E. Steidle, "The Preparation, Certification, and Teaching Employment of Graduates of Science Education Programs in Ohio, 1961-1963" (unpublished Doctor's dissertation, The Ohio State University, 1964), p. 178-79.

geographical locations although there is an oversupply in quantity.

The significant differences found in proportions of the three undergraduate majors among the various school sizes placed a unique focus on this aspect of the null hypothesis. When the number of teachers who were home economics education majors was considered in relation to the total number of all teachers for each school size, the post hoc analysis showed that a greater proportion of home economics education majors was teaching in schools of 300 through 549 students (size two).

The post hoc analysis process for other home economics majors revealed that a greater proportion of these teachers was found in schools of 299 or fewer students (size one). This finding indicated that a relationship may exist between proportion of teachers with general certification and proportion of those with other home economics majors in size one schools. If the contention that home economics education majors are the best prepared for teaching is accepted, then there appears to be a serious limitation in the distribution of quality across school sizes. Further, since there were no differences in majors across geographical locations, then there is an indication that the limitation also exists across all geographical locations.

One of the most important findings in terms of initiating curriculum change was the significant relationship found between age of the teacher and amount of influence exerted by various groups and individuals on curriculum decisions. Not only did the results show that the influence of the teacher made the greatest contribution to the overall alpha level, but it was a positive relationship which indicated that influence increased with age. This was contrary to Johansen's[3] findings in a related study. As reported in the review of literature, he found that local school officials exerted the greatest influence with school faculty in second rank. Since Johansen's study pertained to elementary school situations, there is the possibility that the school level may have contributed to the difference in findings. It is also possible that since home economics is frequently an elective course and stereotyped as a female related subject that school administrators who are predominantly male do not intervene to any extent in this area.

Since the teacher does have the greatest amount of influence on curriculum decisions, the sources used for identification of class content take on an important function in terms of program planning. Thus, of importance also was

---

[3]John H. Johansen, "An Investigation of the Relationships Between Teachers' Perceptions of Authoritative Influences in Local Curriculum Decision-Making and Curriculum Implementation" (unpublished Doctor's dissertation, Northwestern University, 1965), pp. 197-98.

the significant relationship found between years of teaching experience and amount of assistance from various sources used for identification of home economics class content. The greatest contribution to the relationship came from the amounts of assistance from college course materials, professional periodicals, popular magazines, and commercial teaching aids. Each of the relationships was positive except for the assistance from college course materials, which had a negative relationship to years of experience. If one assumes that, in general, as years of teaching experience increase, relevance of previously acquired college course materials decreases, then it is somewhat reassuring to note the negative relationship between years of teaching experience and use of outdated college course materials. On the other hand, the data are somewhat distressing if teachers who continue to enroll in college courses do not make use of the materials from these courses. As reported in the review of literature, the related situation found by Sincock[4] was that very few teachers made use of their inservice education experiences. Thus, consideration for seeking suggestions directly from inservice teachers concerning the ways in which the college or university could serve them to a better advantage seems warranted.

---

[4]William R. Sincock, "Teacher Reaction to Certain Practices in Curriculum Study Programs" (unpublished Doctor's dissertation, University of Chicago, 1959).

While a significant relationship between years of experience and sources used for identifying class content existed, there was no significant difference in number of years teaching experience among teachers who used different primary sources. This finding was somewhat unexpected. The expectation was that beginning teachers would have used college course materials as a primary source for identifying class content. It was also expected that teachers with more years of experience would have become more selective in types of sources used for identification of class content and, therefore, would have revealed certain preferences. Since there were no differences found, the question might be raised whether different teaching situations call for such different types of materials that primary sources would not vary with years of experience but rather with school size and/or geographical location. Another possibility might be that teachers constantly use such a variety of sources that no one source surfaces as being primary.

Examination of the responses to the "others" category to the list of sources revealed that sources provided which were rated as "very helpful" included films, extension service, newspapers, gas company demonstrations, and "own background knowledge." Nine respondents supplied this last item listed, which was more than double the tally for any other item added by the respondents.

Although significant relationships between age and influence on curriculum decisions were found, a significant difference in age among teachers having different primary influences was not found. Thus, age of the teacher was not a discriminating factor in terms of a single influence on curriculum decisions.

There were significant differences found in amount of influence of various individuals and groups on curriculum decisions based on an interaction between school size and geographical location. The findings revealed that the greatest contributions to the overall variance came from the influence scores for the local curriculum committee, the student teacher, and other teachers. An additional marginal contribution stemmed from the variable of influence of the local advisory committee. The graphic presentations showing the interaction between school size and geographical location in relation to each of the variables exerting the greatest influence showed all the interactions to be disordinal in nature. One of the interesting trends throughout the interaction patterns was the relatively low influence from all four of these sources that was found in the upper peninsula (zone three) and schools of 299 or fewer students (size one). The one exception was for school size one in zone three, in which student teachers showed a somewhat greater amount of influence compared to the other

variables. It is possible that the smaller number of cases falling in this category may have some impact on this interaction pattern. The complete reverse was true for the interaction pattern across the influence variables for the Detroit area (zone four) and schools of 550 through 1199 students (size three). The greatest amounts of influence were shown for all but the student teacher variable, which dropped into second place for school size three in zone four.

The most restricted range of influence for all school sizes occurred in relation to the influence of the student teacher in the southern lower peninsula (zone one), where a relatively medium extent of influence was shown. This phenomenon may be due to the greater uniformity in percentages of teachers having student teachers for this geographical zone across school sizes. The larger number of teacher education institutions, increasing the need for student teacher placement within zone one, might account for the more equal distribution of student teachers across school sizes.

Inspection of the graphic presentations illustrating the interaction effect also showed a tendency for schools of 300 through 549 students (size two) and of 550 through 1199 students (size three) across all zones to reflect a middle range of influence from the four variables making

the greatest contributions to the significant interaction. In addition, school sizes two and three showed a tendency to remain fairly close together on extent of influence across zones, although the disordinal pattern prevailed throughout the graphic presentations. This would seem to indicate that school situations for these two sizes were more homogeneous.

In summary, the findings of the study indicated that the teacher characteristics of non-MSU institutional affiliation and general certification were predominantly found in the Detroit area (zone four). Those who were MSU graduates and had vocational certification were predominantly located in the southern lower peninsula (zone one) and the northern lower peninsula (zone two). Teachers with general certification and other home economics majors were predominant in schools of 299 or fewer students (size one), whereas teachers who were MSU graduates and had home economics education majors were dominant in schools of 300 through 549 students (size two).

Although years of experience was not significantly different among teachers whose primary sources used for identification of home economics class content differed, there was a significant relationship between years of experience and extent to which various sources were used. College course materials (which had a negative relationship),

professional periodicals, popular magazines, and commercial teaching aids were found to make the greatest contribution to the relationship.

Age of the teacher was significantly related to the amount of influence exerted on curriculum decisions, with influence of the teacher making the greatest contribution to the relationship, followed by that of the department head. However, age was not found to be significantly different among teachers with different individuals and groups exerting the primary influence on curriculum decisions. An additional finding was that differences existed in relative amount of influence of various groups based on an interaction between school size and geographical location.

Implications

Results of the study provide implications in terms of the theoretical frameworks, as well as for teacher education programs. In a general sense, the theories used as frameworks for this study served as useful guides in formulating the hypotheses. As stated in Chapter II, field theory indicated that the teacher would be the dominant decision maker for curriculum. This viewpoint was supported in testing Hypothesis V. Field theory also indicated that influences on curriculum decisions would be individually specific and unique. This was found to be the case in

testing Hypothesis IV. An individually specific phenomenon was further found for years of experience in terms of primary sources used in identification of class content, as tested in Hypothesis VI.

Insight into expectations was also acquired from the theory of behavior settings from the field of ecological psychology. Application of this theory indicated patterns of influence on curriculum decisions would emerge and vary among different behavior settings. In the main, this phenomenon was found to exist as depicted by the disordinal interactions between school sizes and geographical locations in connection with Hypothesis VIII.

A pattern for teachers en masse also emerged in testing Hypothesis VII, where a relationship between years of experience and amount of assistance from various sources used in identifying class content was found to exist. Also patterns of selected characteristics of teachers in relation to school size and geographical locations were found in testing Hypotheses I, II, and III. In brief, there is little doubt that the combined use of the field theory and the theory of behavior settings functioned as useful tools for viewing the teacher both from an individual perspective and within the context of her environmental situation.

In a more specific sense, the findings of this study provide some implications regarding home economics teacher

education programs at both the preservice and inservice levels, as well as for broader general public education. Each of the teacher education levels is considered as a distinct step in the professional development of teachers and so will be considered separately.

Preservice Programs

When considering preservice education programs for home economics teachers, it appears that undergraduate program planning in terms of teacher certification requirements is of primary importance. With the current trend in Michigan leading toward performance-based teacher certification, this consideration will take increased precedence in undergraduate program planning. Since such preparation for home economics teachers is acquired through a major in home economics education, the fact that approximately two-fifths of the teachers in the sample were non-home economics education majors leads to the consideration of the adequacy of the current certification standards. Since cooperation from institutions for teacher preparation is necessary for supplying qualified teachers, there is the implication that teacher educators should be involved in establishing teacher certification requirements.

The fact that approximately two-fifths of the teachers in the sample were non-home economics education majors also leads to consideration of the adequacy of career counseling

during the undergraduate program. Inquiry into the reasons why non-education majors seek teaching positions after graduation should provide some insight into an explanation of these circumstances. There is the possibility that realistic perceptions in terms of the nature of other careers are not acquired until graduates are faced with the actual task. Another possibility is that positions in some other careers are not as available as those in teaching. A need for further exploration is implied to provide additional information concerning counseling or advising needs of undergraduates at the preservice level.

That teachers who are MSU graduates tend to cluster toward the middle range of school sizes indicates existence of one or more unique factors. First, the clustering phenomenon implies that there is a need to review the current undergraduate program to evaluate the nature of the orientation which preservice teachers receive. The unique clustering of MSU graduates could be indicative of preparation for a restricted range of school size situations. The fact that home economics education courses are currently considered as somewhat of a capstone to the undergraduate program and taken toward the end of the program may contribute to a lack of opportunity to provide an adequate orientation to the range of teaching career possibilities. There is an indication for a need to reach the student who is a

teaching major at the outset of the undergraduate program. Exposure to and exploration of a variety of situations early in the undergraduate program would provide the preservice teacher with an expanded reference base for the later education courses. Undergraduate teaching majors tend to restrict their viewpoint of teaching situations to that which they experienced as students. Early orientation of the student to various types of teaching opportunities both within and outside of the formal school setting would provide the opportunity to broaden the career perspective of the undergraduate teaching major.

Along with this, a further consideration is the degree of impact which the student teaching situation has on the preservice teacher's selection of a first teaching situation. Thus, an extended study of the nature of the requests made by preservice teachers for student teaching centers and subsequent placement of them along with reasons for the choice and attitudes toward the student teaching assignment could provide insightful information of the extent to which this factor contributes to the clustering phenomenon.

Also, there is an indication that the pattern or method of recruiting undergraduates into the program should be reviewed. If there is the tendency for students to return to situations similar to their hometown, as indicated

by sociologists,[5] then a broader base of undergraduate majors may need to be recruited from geographical locations which would include more individuals inclined toward seeking positions in school systems outside the medium size range. This indicates a need for recruiting from both the small rural locations and from larger metropolitan situations.

Inservice Programs

One of the most important implications for inservice teacher education programs stems from the finding that the teacher held the greatest influence in terms of curriculum decisions. This finding supports the need for teacher preparation in the area of curriculum development and implementation. If secondary programs are to keep pace with the changing needs of today's students, then teachers must have competency with the dynamics of the curriculum process. Further, there is a need for new and increased efforts in making direct contact with teachers to keep them abreast of new developments in the field. Since influence of the teacher on curriculum increases with age, special considerations and means (e.g., through educational television programs) should be used for reaching those teachers who have completed their formal education as required by the

---

[5]Walter Buckley, Sociology and Modern Systems Theory (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967), pp. 23-36.

certification code. The majority of these teachers do not need additional course credits; thus, new types of contacts need to be made through efforts other than formalized courses and workshops held on campus. Also, follow-up measures to determine extent of impact which inservice educational activities have on teachers and programs need to be carried out to serve as future directives for program planning.

The relatively large proportion of non-vocationally certified teachers may be partly a result of failure of those teachers working toward permanent or continuing certification to meet the specific course requirements needed for vocational endorsement of the certificate. Frequency of the course offerings and convenience of the commuting distance would be contributing factors in meeting the vocational course requirements held by Michigan State University or other certifying institutions. Thus, there is an implication of a need for systematically investigating the needs of teachers seeking vocational certification, coordinating course offerings according to the needs, and publicizing the offerings. Career Education Planning Districts (CEPD's), the alumni association, or publications (e.g., the "Interaction 'Eco'") could be utilized as avenues for such an investigation.

One of the findings of the study revealed definite differences in the amount of influence exerted by other teachers in terms of curriculum decisions. Further investigation concerning the nature of the differences may provide additional information useful in initiating curriculum changes. In addition to the presence of other teachers in a department, the unique variation in extent of influence of other teachers on curriculum decisions may be due to added factors such as personality characteristics of the teachers, status in terms of tenure, age differences, and/or philosophical differences.

The findings relevant to cources useful for identification of class content showed that one of the significant sources was commercial teaching aids. Since much of this type of material is for promotion of a product, the nature of the content tends to take a somewhat narrow perspective in many instances. Thus, there is a need for assisting inservice teachers in acquiring skill in evaluating commercially prepared materials in light of their objectives. There is also a further implication that teacher educators need to become familiar with the popular aids, provide consultation services in preparation of such aids, exercise leadership in analyzing the material, and promote appropriate action toward revision where needed.

Other significant sources found useful in identification of class content were college course materials, professional periodicals and popular magazines. This implies that current efforts in keeping teachers informed through the first two should be continued and intensified. There is also support for a renewed need for home economists with journalism skills to provide quality input to both professional periodicals and popular magazines.

General Public Education

Final implications extend beyond teacher education programs to education of the general public. There is an underlying indication that leaders in home economics ought not to confine their writing efforts to professional sources. Increased consideration should be given to writing for popular magazines geared to the general public. With the trend toward increasing control and influence being exercised by the public at local levels concerning all phases of education, there is a need to increase communication with people outside the professional ranks through all means available, including television, radio, and newspapers, as well as popular magazines.

Additional encouragement for the teacher to make relevant curriculum changes may be gained through local advisory committees and local curriculum committees in situations where influence of these groups on curriculum

decisions tends to be relatively high. This provides further support for the earlier implication that leaders in the field should make a concerted effort toward communicating secondary program purposes and needs to the general public.

Recommendations for Further Study

Results from this descriptive study suggested the possibility of further study concerning a number of topics. Specifically, investigation of the following are recommended:

1. That a systematic analysis of the needs of different communities be conducted to determine if differences in school size and/or geographical location warrant different teacher competencies.

2. That the inservice educational needs of teachers from various school situations be identified.

3. That there be inquiry into the nature of individuals who choose home economics teaching as a profession, including information such as home and family background, motivations, interests, perceptions concerning socialized roles, and interpersonal relationships.

4. That a longitudinal study of various characteristics of home economics education majors be developed, beginning with declaration of the major and continuing through student teaching, beginning teaching, and several years of experience.

5. That a follow-up study be carried out concerning the career choices of various home economics majors with particular emphasis placed on an analysis of the reasons for the choice of major and subsequent reasons for the employment decision.

6. That an investigation be conducted concerning the relationship between the background of the preservice teacher and the nature of the student teaching center for which application is made.

7. That an examination be made of the relationship between the school setting of the student teaching experience and the school setting selected for the first year of teaching.

8. That there needs to be inquiry into the reasons for choice of the teaching position, including considerations such as availability of the position, family ties, nature of the task, location, and salary.

9. That there be inquiry into the social interaction patterns of teachers in multiteacher departments in relation to influence of other teachers in the department on curriculum decisions.

10. That identification be made of the various professional periodicals and popular magazines used by teachers, followed by a content analysis of each for comparison of emphasis in philosophy, conceptual base, and subject areas being promoted through each category.

APPENDICES

APPENDIX A

TABLE 21

CELL SIZES FOR POPULATION OF SCHOOLS AND TEACHERS INVOLVED IN CONSUMER AND HOMEMAKING PROGRAMS IN MICHIGAN

School size	Geographical Zone									
	Zone 1: Southern lower peninsula		Zone 2: Northern lower peninsula		Zone 3: Upper peninsula		Zone 4: Detroit area		Totals	
	Schools	Teachers	Schools	Teachers	Schools	Teachers	Schools	Teachers	Schools	Teachers
Size 1: 299 or fewer students	15	15	32	33	25	26	1	2	73	76
Size 2: 300 - 549 students	33	36	49	49	8	10	12	17	102	112
Size 3: 550 - 1199 students	48	81	27	43	27	44	40	70	142	238
Size 4: 1200 or more students	32	87	9	31	2	5	43	145	86	268
Totals	128	219	117	156	62	85	96	236	403	694

TABLE 22

CELL SIZES FOR STRATIFIED RANDOM SAMPLE OF SCHOOLS AND TEACHERS INVOLVED IN CONSUMER AND HOMEMAKING PROGRAMS IN MICHIGAN[a]

School size	Geographical Zone								Totals	
	Zone 1: Southern lower peninsula		Zone 2: Northern lower peninsula		Zone 3: Upper peninsula		Zone 4: Detroit area			
	Schools	Teachers	Schools	Teachers	Schools	Teachers	Schools	Teachers	Schools	Teachers
Size 1: 299 or fewer students	14	14	32	33	25	26	1	2	72	75
Size 2: 300 - 549 students	33	35	47	48	8	10	12	17	100	110
Size 3: 550 - 1199 students	38	55	27	43	27	42	32	56	124	196
Size 4: 1200 or more students	27	56	9	28	2	5	37	104	75	193
Totals	112	160	115	152	62	83	82	179	371	574

Variable sampling fractions were used to increase uniformity among cell sizes.

[a]Sample used in Dobry and Bobbitt, loc. cit.

TABLE 23

RESPONSES TO THE CATEGORY OF "OTHER" FOR INDIVIDUALS AND GROUPS EXERTING INFLUENCE ON CURRICULUM DECISIONS

Influence	Number of helpfulness ratings			Total number
	Some	Moderate	Very	
Community resource people	0	2	2	4
Conferences and meetings	2	0	1	3
Extension service	0	3	1	4
Gas companies	0	0	3	3
Newspapers	0	2	1	3
Own background knowledge	0	1	8	9
Visual aids (movies, filmstrips)	1	2	1	4
Totals	3	10	17	30

TABLE 24

RESPONSES TO THE CATEGORY OF "OTHER" FOR SOURCES USED IN IDENTIFICATION OF CLASS CONTENT

Source	Number of helpfulness ratings			Total number
	Little or none	Moderate	Great	
Former students	0	2	0	2
School board members	0	0	2	2
School counselors	0	1	1	2
State supervisor	0	0	2	2
University consultant	0	1	0	1
Vocational director	0	0	1	1
Totals	0	4	6	10

APPENDIX B

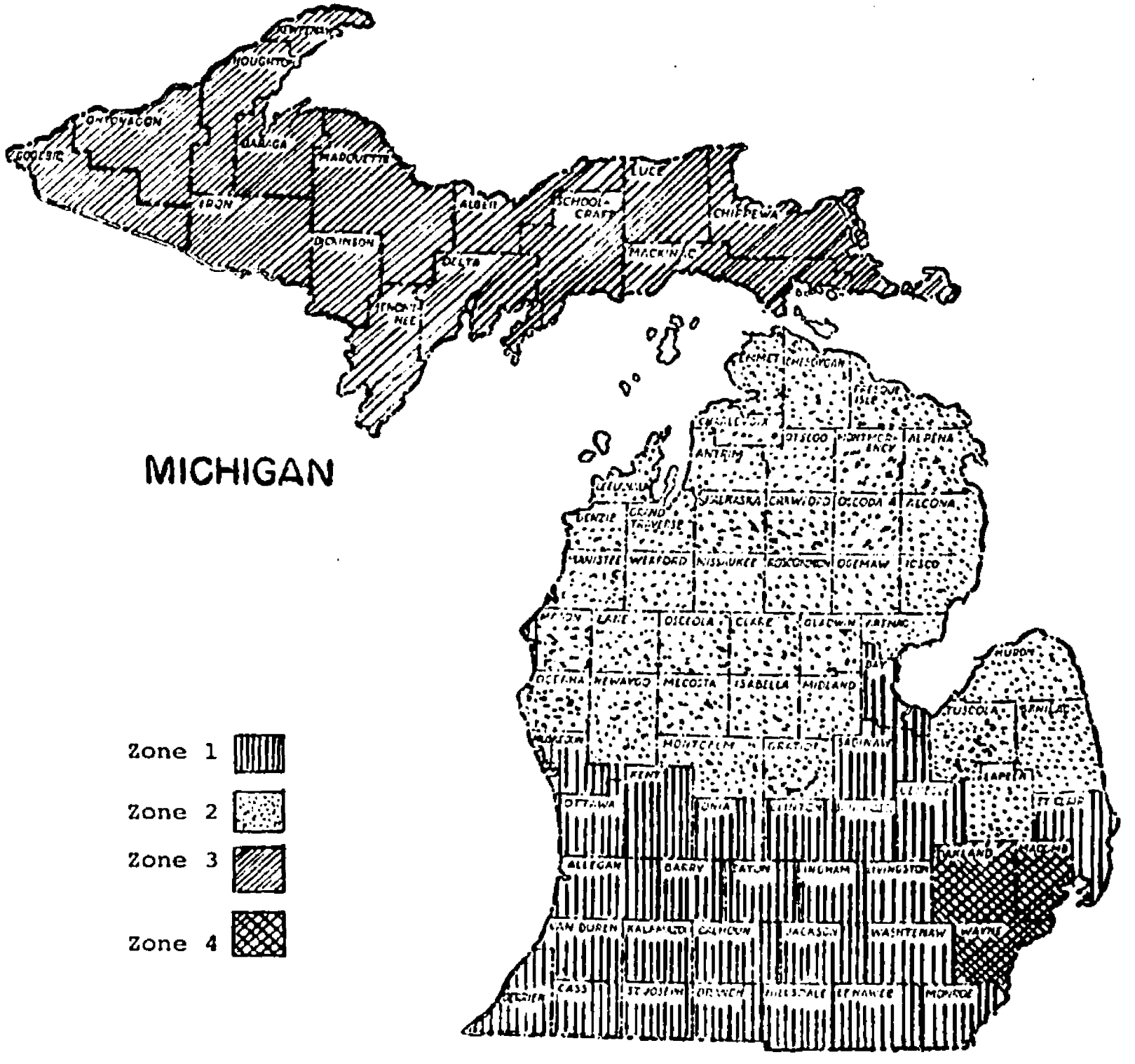

FIGURE 7

MAP OF MICHIGAN DEPICTING
THE FOUR GEOGRAPHICAL
ZONE CATEGORIES

APPENDIX C

Please complete this questionnaire, place it in the stamped self-addressed envelope, and return it by

2/72

PROFILE OF SECONDARY HOME ECONOMICS PROGRAM

Name of school_____

Reminders:

1. Your cooperation in this study will be most appreciated.
2. Information supplied in the questionnaire will not be used to identify you or your school.
3. Your school, written in above, has been selected for this study. If you teach in any other school, then information for that school does not need to be supplied.
4. Please remember to complete all items on the questionnaire.
5. Happiness is a completed questionnaire.

Glossary of terms used in the questionnaire:

Period or Class Period - A group of students taught together according to a given time allocation within a school schedule.

Class - A sequence of study in a school subject, e.g., a class could be a year of Homemaking I, or it could be a semester of Child Development.

Content Category - A topic or potential topic for study within a home economics class.

Descriptive Aspects - Selected units of study or subtopics related to a given content category.

PROFILE OF SECONDARY HOME ECONOMICS PROGRAM

PERSONAL DATA

DIRECTIONS: This section of information is for summary data only. It will not be used to identify you or your school. PLEASE COMPLETE EACH OF THE FOLLOWING ITEMS.

1. How many years of full-time home economics teaching experience have you had? _____

2. How many years of part-time home economics teaching experience have you had? _____

3. Including this year, how many years have you been in your present teaching situation? _____

4. What is the time equivalence of your current teaching position? PLEASE MARK (X) ONE.

   _____ (a) Full-time

   _____ (b) Part-time

5. Including this year, have you ever had responsibility for student teachers? PLEASE MARK (X) ONE.

   (a) _____ No

   (b) _____ Yes

→ 6. From which institutions have your student teachers been sent? PLEASE PLACE A MARK (X) BY EACH THAT APPLIES.

   _____ (a) Albion College
   _____ (b) Central Michigan University
   _____ (c) Eastern Michigan University
   _____ (d) Madonna College
   _____ (e) Mercy College
   _____ (f) Michigan State University
   _____ (g) Northern Michigan University
   _____ (h) Wayne State University
   _____ (i) Western Michigan University
   _____ (j) Other (specify) _____

→ 7. How many years have you had student teachers? _____

→ 8. In what year did you complete each of your academic degrees and what major(s) and minor(s) did you have for each? PLEASE WRITE IN YEAR, MAJOR(S), AND MINOR(S).

	Degree	Year	Major(s)	Minor(s)
(a)	Bachelor's			
(b)	Master's			
(c)	Educational Specialist .			
(d)	Other (specify)_____			

9. In what year did you take your most recent college or university course in each of the areas listed below? PLEASE INDICATE YEAR FOR EACH BELOW. PLACE A ZERO (0) IN EACH CATEGORY WHICH DOES NOT APPLY.

	Course	Year
(a)	Home economics education . . .	
(b)	Home economics	
(c)	General education.	

10. What is the name and location of the institution from which you completed the program that qualified you for your initial home economics teaching certificate (e.g., bachelor's degree)? PLEASE COMPLETE BLANKS BELOW.

NAME OF INSTITUTION _____ CITY _____ STATE _____

11. What type of teaching certificate do you now hold? PLEASE MARK (X) ONE.

_____ (a) Secondary provisional
_____ (b) Secondary vocational provisional
_____ (c) Secondary permanent
_____ (d) Secondary vocational permanent
_____ (e) Special or temporary certificate
_____ (f) Other (specify) _____

GENERAL INFORMATION

12. What is the population of the community in which your school is located? PLEASE MARK (X) ONE.

_____ (a) Rural, unincorporated
_____ (b) Incorporated, under 1,000
_____ (c) 1,000 - 2,499
_____ (d) 2,500 - 4,999
_____ (e) 5,000 - 9,999
_____ (f) 10,000 - 49,999
_____ (g) 50,000 - 249,999
_____ (h) Over 250,000

13. What grade levels are included in your school building? PLEASE CIRCLE ALL THAT APPLY.

K 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th

14. What is the total number of girls in your school? _____

15. What is the total number of boys in your school? _____

16. What is the highest academic mark a student can earn in your school? _____

17. What is the academic mark and/or requirement for classification as an "honor roll" student in your school? _____

18. What is the total number of in-class clock hours that you now spend teaching all subjects (all home economics and all non-home economics class periods) during one full week of school? _____

19. What is the total number of in-class clock hours that you now spend teaching home economics (all class periods except occupational classes) during one full week of school? _____

20. Is home economics a required subject for either girls or boys in your school? PLEASE MARK (X) ONE.

(a) _____ No

(b) _____ Yes

21. What is the length of time that each class listed below is required for girls and for boys (e.g., 1 semester, 1 year)? PLEASE INDICATE THE AMOUNT OF TIME REQUIRED IN THE APPROPRIATE COLUMNS BELOW. PLACE A ZERO (0) IN EACH CATEGORY WHICH DOES NOT APPLY.

Home Economics Classes	Length of Time Required for Girls	Length of Time Required for Boys
(a) 7th Grade Homemaking		
(b) 8th Grade Homemaking		
(c) Home Economics I		
(d) Home Economics II.		
(e) Home Economics III		
(f) Home Economics IV.		
(g) Family Living.		
(h) Other (specify)_____		

22. Which of each of the following home economics related content categories are being offered this year by departments other than home economics in your school? PLEASE MARK (X) EACH RESPONSE WHICH APPLIES.

_____ (a) Grooming and personal care
_____ (b) Clothing and textiles
_____ (c) Foods and nutrition
_____ (d) Family health and home nursing
_____ (e) Home management
_____ (f) Consumer education
_____ (g) Housing and home furnishings
_____ (h) Family living
_____ (i) Human reproduction
_____ (j) Child care and development
_____ (k) Careers and world of work
_____ (l) Ecology
_____ (m) Other (specify) _____

PROFILE OF 1971-72 HOME ECONOMICS CLASS PERIODS

28-36. DIRECTIONS

PERIODS or CLASS PERIODS: Each column heading on the right side of the chart below represents a separate home economics class period which meets during the year at a given time in the school schedule.

For EACH period that you teach home economics, place the total number of students for that period who fit EACH of the separate characteristics listed on the left side of the chart.

SEMESTERS: If you have the same set of students in a given period during both semesters of the school year, then please write "same" under the "2nd semester" portion of the column.

If the student composition for the 2nd semester is different but the school period is the same, then supply total numbers for that group in the "2nd semester" portion of the column. If your classes change on a basis other than semester, please retitle the semester columns.

CLASSES: For item number 28, write the name of the class taught during each school period. For example, a class could be a year of Home Economics I, or it could be a semester of Family Living. One class could be taught during several periods. Please omit occupational classes. Include only those classes taught in the school written in on the front of the questionnaire.

EXAMPLE: The following example shows that "Period 1" is a Home Economics I class which consists of the same group of students throughout the year. "Period 2" is another Home Economics I class which meets at a different time period in the school schedule and has a different student composition each semester. "Period 3" is a semester class of Family Living which meets at still a different time and has the same total each semester, but the student composition is different for each semester.

	HOME ECONOMICS CLASS PERIODS 1971-72									
	Period 1		Period 2		Period 3		Period 4		Period 5	
	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.
Name of Class	Home Economics I		Home Economics I		Fam. Liv.	Fam. Liv.				
Total Number of Students	25	same	22	27	18	18				

FOR ITEM 28, PLEASE WRITE IN THE NAME OF THE CLASS FOR EACH CLASS PERIOD YOU TEACH.
FOR ITEM 29, PLEASE WRITE IN "YES" FOR EACH CLASS PERIOD WHICH IS TEAM TAUGHT. WRITE "NO" FOR EACH WHICH IS NOT.
FOR ITEMS 30-36, PLEASE WRITE IN NUMBERS OF STUDENTS WHO FIT THE CHARACTERISTICS LISTED FOR EACH CLASS PERIOD YOU TEACH. PLACE A ZERO (0) WHERE A CHARACTERISTIC DOES NOT APPLY.

CHARACTERISTICS	HOME ECONOMICS CLASS PERIODS 1971-72													
	Period 1		Period 2		Period 3		Period 4		Period 5		Period 6		Period 7	
	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.
28. Name of Class														
29. Team Taught														
30. Total Number of Students														
31. Academic Standing														
(a) Honors students														
(b) Special education														
32. Family Status														
(a) Married students														
(b) Unwed mothers														
33. Race														
(a) Black														
(b) Chicano														
(c) Indian														
(d) White														
(e) Other (specify) _____														
34. Sex														
(a) Female														
(b) Male														
35. Socioeconomic Status														
(a) Low														
(b) Middle														
(c) High														
36. Grade Levels														
(a) 7th														
(b) 8th														
(c) 9th														
(d) 10th														
(e) 11th														
(f) 12th														

HOME ECONOMICS CLASS CONTENT INFORMATION

37-53. DIRECTIONS: Following are 7 identical class content time charts. Use only as many content time charts as you need. The number will vary with different teachers.

Please complete a separate "class content time chart" for EACH different Home Economics class which you teach during the 1971-72 school year. For example, a class could be a year of Homemaking I, or it could be a semester of Child Development. Include classes for grades 7-12 only. Omit occupational classes.

Column A: For each content category taught or to be taught in a given class, please place the estimated number of clock hours spent or anticipated to be spent in class in the "in-class clock hours" column on the left side of the chart.

Since the school year is not completed, please estimate the amount of time you anticipate spending in those class content categories to be taught during the remainder of the year.

Please place a zero (0) in the "in-class clock hours" column for each content category which does not pertain to your teaching situation.

Column B: Under the "relative amount of time" heading on the right side of the chart, please place a mark (x) in the one column which best estimates the relative amount of time spent or anticipated to be spent on each descriptive aspect within each content category.

EXAMPLE: The following example shows that the teacher is in the midst of teaching "Grooming and Personal Care." Five hours have already been spent in class and another 5 are anticipated to be spent in this content category. She estimates that "lots" of time is spent on the descriptive aspect of "complexion and hair care," whereas "some" time is spent on "cleanliness habits" in her particular teaching situation.

Column A		HOME ECONOMICS CLASS CONTENT TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
5	5	GROOMING AND PERSONAL CARE			
		(a) Complexion and hair care			X
		(b) Cleanliness habits		X	
		(c) Other (specify) _____			

PLEASE COMPLETE ONE FOR EACH CLASS THAT YOU TEACH.

CLASS 1

37. Class title _____
(Omit occupational classes)

38. Number of periods to which this class is taught: _____

39. Number of weeks this class is taught: _____

40. Number of in-class clock hours spent teaching this class during one home economics period within one full week of school: _____

Column A		HOME ECONOMICS CLASS CONTENT TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		41. GROOMING AND PERSONAL CARE			
		(a) Complexion and hair care.			
		(b) Cleanliness habits.			
		(c) Other (specify) _____			
		42. CLOTHING AND TEXTILES			
		(a) Color, line, and design			
		(b) Clothing selection and buying . .			
		(c) Storage, care, and repair of clothing.			
		(d) Use of textiles			
		(e) Use and care of sewing tools. . .			
		(f) Operation of sewing machine . . .			
		(g) Pattern layout.			
		(h) Pattern marking			
		(i) Clothing construction			
		(j) Clothing alterations.			
		(k) Tailoring			
		(l) Other (specify) _____			
		43. FOODS AND NUTRITION			
		(a) Nutrition			
		(b) Meal planning			
		(c) Cultural foods.			
		(d) Attitudes affecting food choices.			
		(e) Food preservation			
		(f) Food selection and buying			
		(g) Food storage.			
		(h) Food preparation.			
		(i) Convenience foods			
		(j) Entertaining, table setting and service, manners.			
		(k) Other (specify) _____			
		44. FAMILY HEALTH AND HOME NURSING			
		(a) Physical health and diseases. . .			
		(b) Health and safety habits.			
		(c) First aid			
		(d) Mental and emotional health . . .			
		(e) Other (specify) _____			
		45. HOME MANAGEMENT			
		(a) Values and goals.			
		(b) Decision-making			
		(c) Resources (time, money, energy) .			
		(d) Work simplification (time and motion)			
		(e) Other (specify) _____			
		46. CONSUMER EDUCATION			
		(a) Saving and spending (e.g., habits, budget, banking). . . .			
		(b) Investments			
		(c) Credit and installment buying . .			
		(d) Insurance			
		(e) Consumer responsibilities (e.g., tags, labels, advertising). . .			
		(f) Consumer protection (e.g., laws).			
		(g) Role of the consumer.			
		(h) Other (specify) _____			

PLEASE COMPLETE REVERSE SIDE OF PAGE

Column A		HOME ECONOMICS CLASS CONTENT TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		47. CAREERS AND WORK (OF M & W) (a) Occupational opportunities (b) Careers in home economics (c) Work interests and attitudes (d) Employer relationships (e) Self-assessment (f) Job qualifications and skills (g) Educational requirements (h) Income and salary (i) Dual role of homemaker (j) Other (specify) _____			
		48. HOUSING AND HOME FURNISHINGS (a) Housing needs (b) Home ownership (c) Home maintenance and care (d) Housing alternatives (e.g., apartments, mobile homes) (e) Making floor plans (f) Color, line, and design (g) Room arrangement (h) Furniture types and styles (i) Buying furnishings (j) Care of furnishings (k) Household accessories (e.g., linens, tableware) (l) Household equipment (m) Refinishing furniture (n) Other (specify) _____			
		49. FAMILY LIVING (a) Male and female roles (b) Understanding self (c) Understanding family members (d) Understanding friends (e) Dating (f) Mate selection and engagement (g) Marriage (e.g., weddings, customs, laws) (h) Human reproduction and development (i) Family life cycle (j) Planning a family (k) Crisis situations (e.g., drugs, divorce, alcoholism) (l) Resolving conflict (m) Unmarried or single living (n) Relating the family system to other social systems (o) Other (specify) _____			
		50. CHILD CARE AND DEVELOPMENT (a) Babysitting (b) Play things and space (c) Prenatal care and development (d) Financing a child (e) Infant and child care (f) Developmental ages and stages (g) Physical development (h) Mental development (i) Emotional development (j) Social development (k) Basic needs of children (l) Observing children (m) Other (specify) _____			
		51. ECOLOGY (CONSERVATION OF NATURAL RESOURCES) (a) Air, land, people (b) Glass, paper, water (c) Other (specify) _____			
		52. LEISURE TIME CRAFTS (a) Knitting (b) Macramé (c) Needlework (d) Tie dyeing (e) Other (specify) _____			
		53. OTHER (specify) _____ (a) _____ (b) _____			

PLEASE COMPLETE ONE FOR EACH CLASS THAT YOU TEACH.

CLASS II

37. Class title: _____
(Omit occupational classes)

38. Number of periods to which this class is taught: _____

39. Number of weeks this class is taught: _____

40. Number of in-class clock hours spent teaching this class during one home economics period within one full week of school: _____

Column A		HOME ECONOMICS CLASS CONTENT TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		41. GROOMING AND PERSONAL CARE (a) Complexion and hair care. . . . . (b) Cleanliness habits. . . . . . (c) Other (specify) _____			
		42. CLOTHING AND TEXTILES (a) Color, line, and design . . . . . (b) Clothing selection and buying . . (c) Storage, care, and repair of clothing. . . . . . (d) Use of textiles . . . . . . (e) Use and care of sewing tools. . . (f) Operation of sewing machine . . . (g) Pattern layout. . . . . . (h) Pattern marking . . . . . . (i) Clothing construction . . . . . (j) Clothing alterations. . . . . . (k) Tailoring . . . . . . (l) Other (specify) _____			
		43. FOODS AND NUTRITION (a) Nutrition . . . . . . (b) Meal planning . . . . . . (c) Cultural foods. . . . . . (d) Attitudes affecting food choices. (e) Food preservation . . . . . . (f) Food selection and buying . . . . (g) Food storage. . . . . . (h) Food preparation. . . . . . (i) Convenience foods . . . . . . (j) Entertaining, table setting and service, manners. . . . . . (k) Other (specify) _____			
		44. FAMILY HEALTH AND HOME NURSING (a) Physical health and diseases. . . (b) Health and safety habits. . . . . (c) First aid . . . . . . (d) Mental and emotional health . . . (e) Other (specify) _____			
		45. HOME MANAGEMENT (a) Values and goals. . . . . . (b) Decision-making . . . . . . (c) Resources (time, money, energy) . (d) Work simplification (time and motion) . . . . . . (e) Other (specify) _____			
		46. CONSUMER EDUCATION (a) Saving and spending (e.g., habits, budget, banking). . . . (b) Investments . . . . . . (c) Credit and installment buying . . (d) Insurance . . . . . . (e) Consumer responsibilities (e.g., tags, labels, advertising). . . (f) Consumer protection (e.g., laws). (g) Role of the consumer. . . . . . (h) Other (specify) _____			

PLEASE COMPLETE REVERSE SIDE OF PAGE

Column A		HOME ECONOMICS CLASS CONTENT TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		47. CAREERS AND WORLD OF WORK (a) Occupational opportunities. . . . . (b) Careers in home economics . . . . . (c) Work interests and attitudes. . . . (d) Employee relationships. . . . . . (e) Self-assessment . . . . . . (f) Job qualifications and skills . . . (g) Educational requirements. . . . . . (h) Income and salary . . . . . . (i) Dual role of homemaker. . . . . . (j) Other (specify) _____			
		48. HOUSING AND HOME FURNISHINGS (a) Housing needs . . . . . . (b) Home ownership. . . . . . (c) Home maintenance and care . . . . . (d) Housing alternatives (e.g., apartments, mobile homes) . . . . (e) Making floor plans. . . . . . (f) Color, line, and design . . . . . . (g) Room arrangement. . . . . . (h) Furniture types and styles. . . . . (i) Buying furnishings. . . . . . (j) Care of furnishings . . . . . . (k) Household accessories (e.g., linens, tableware). . . . . . (l) Household equipment . . . . . . (m) Refinishing furniture . . . . . . (n) Other (specify) _____			
		49. FAMILY LIVING (a) Male and female roles . . . . . . (b) Understanding self. . . . . . (c) Understanding family members. . . . (d) Understanding friends . . . . . . (e) Dating. . . . . . (f) Mate selection and engagement . . . (g) Marriage (e.g., weddings, customs, laws) . . . . . . (h) Human reproduction and development. (i) Family life cycle . . . . . . (j) Financing a family. . . . . . (k) Crisis situations (e.g., drugs, divorce, alcoholism). . . . . . (l) Resolving conflict. . . . . . (m) Unmarried or single living. . . . . (n) Relating the family system to other social systems. . . . . . (o) Other (specify) _____			
		50. CHILD CARE AND DEVELOPMENT (a) Babysitting . . . . . . (b) Play things and space . . . . . . (c) Prenatal care and development . . . (d) Financing a child . . . . . . (e) Infant and child care . . . . . . (f) Developmental ages and stages . . . (g) Physical development. . . . . . (h) Mental development. . . . . . (i) Emotional development . . . . . . (j) Social development. . . . . . (k) Basic needs of children . . . . . . (l) Observing children. . . . . . (m) Other (specify) _____			
		51. ECOLOGY (CONSERVATION OF NATURAL RESOURCES) (a) Air, land, people . . . . . . (b) Glass, paper, water . . . . . . (c) Other (specify) _____			
		52. LEISURE TIME CRAFTS (a) Knitting. . . . . . (b) Macramé . . . . . . (c) Needlework. . . . . . (d) Tie dyeing. . . . . . (e) Other (specify) _____			
		53. OTHER (specify) _____ (a) _____ (b) _____			

PLEASE COMPLETE ONE FOR EACH CLASS THAT YOU TEACH.

CLASS III

37. Class title _____
(Omit occupational classes)

38. Number of periods to which this class is taught: _____

39. Number of weeks this class is taught: _____

40. Number of in class clock hours spent teaching this class during one home economics period within one full week of school: _____

Column A		HOME ECONOMICS CLASS CONTENT TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		41. GROOMING AND PERSONAL CARE			
		(a) Complexion and hair care.			
		(b) Cleanliness habits.			
		(c) Other (specify) _____			
		42. CLOTHING AND TEXTILES			
		(a) Color, line, and design			
		(b) Clothing selection and buying . .			
		(c) Storage, care, and repair of clothing.			
		(d) Use of textiles			
		(e) Use and care of sewing tools. . .			
		(f) Operation of sewing machine . . .			
		(g) Pattern layout.			
		(h) Pattern marking			
		(i) Clothing construction			
		(j) Clothing alterations.			
		(k) Tailoring			
		(l) Other (specify) _____			
		43. FOODS AND NUTRITION			
		(a) Nutrition			
		(b) Meal planning			
		(c) Cultural foods.			
		(d) Attitudes affecting food choices.			
		(e) Food preservation			
		(f) Food selection and buying			
		(g) Food storage.			
		(h) Food preparation.			
		(i) Convenience foods			
		(j) Entertaining, table setting and service, manners.			
		(k) Other (specify) _____			
		44. FAMILY HEALTH AND HOME NURSING			
		(a) Physical health and diseases. . .			
		(b) Health and safety habits.			
		(c) First aid			
		(d) Mental and emotional health . . .			
		(e) Other (specify) _____			
		45. HOME MANAGEMENT			
		(a) Values and goals.			
		(b) Decision-making			
		(c) Resources (time, money, energy) .			
		(d) Work simplification (time and motion)			
		(e) Other (specify) _____			
		46. CONSUMER EDUCATION			
		(a) Saving and spending (e.g., habits, budget, banking). . . .			
		(b) Investments			
		(c) Credit and installment buying . .			
		(d) Insurance			
		(e) Consumer responsibilities (e.g., tags, labels, advertising). . .			
		(f) Consumer protection (e.g., laws).			
		(g) Role of the consumer.			
		(h) Other (specify) _____			

PLEASE COMPLETE REVERSE SIDE OF PAGE

HOME ECONOMICS CLASS CONTENT TIME CHART

Column A: Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Column B: Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		47. CAREERS AND WORLD OF WORK			
		(a) Occupational opportunities			
		(b) Careers in home economics			
		(c) Work interests and attitudes			
		(d) Employee relationships			
		(e) Self-assessment			
		(f) Job qualifications and skills			
		(g) Educational requirements			
		(h) Income and salary			
		(i) Dual role of homemaker			
		(j) Other (specify) _____			
		48. HOUSING AND HOME FURNISHINGS			
		(a) Housing needs			
		(b) Home ownership			
		(c) Home maintenance and care			
		(d) Housing alternatives (e.g., apartments, mobile homes)			
		(e) Making floor plans			
		(f) Color, line, and design			
		(g) Room arrangement			
		(h) Furniture types and styles			
		(i) Buying furnishings			
		(j) Care of furnishings			
		(k) Household accessories (e.g., linens, tableware)			
		(l) Household equipment			
		(m) Refinishing furniture			
		(n) Other (specify) _____			
		49. FAMILY LIVING			
		(a) Male and female roles			
		(b) Understanding self			
		(c) Understanding family members			
		(d) Understanding friends			
		(e) Dating			
		(f) Mate selection and engagement			
		(g) Marriage (e.g., weddings, customs, laws)			
		(h) Human reproduction and development			
		(i) Family life cycle			
		(j) Financing a family			
		(k) Crisis situations (e.g., drugs, divorce, alcoholism)			
		(l) Resolving conflict			
		(m) Unmarried or single living			
		(n) Relating the family system to other social systems			
		(o) Other (specify) _____			
		50. CHILD CARE AND DEVELOPMENT			
		(a) Babysitting			
		(b) Play things and space			
		(c) Prenatal care and development			
		(d) Financing a child			
		(e) Infant and child care			
		(f) Developmental ages and stages			
		(g) Physical development			
		(h) Mental development			
		(i) Emotional development			
		(j) Social development			
		(k) Basic needs of children			
		(l) Observing children			
		(m) Other (specify) _____			
		51. ECOLOGY (CONSERVATION OF NATURAL RESOURCES)			
		(a) Air, land, people			
		(b) Glass, paper, water			
		(c) Other (specify) _____			
		52. LEISURE TIME CRAFTS			
		(a) Knitting			
		(b) Macramé			
		(c) Needlework			
		(d) Tie dyeing			
		(e) Other (specify) _____			
		53. OTHER (specify) _____			
		(a) _____			
		(b) _____			

PLEASE COMPLETE ONE FOR EACH CLASS THAT YOU TEACH.

CLASS IV

37. Class title: _____
(Omit occupational classes)

38. Number of periods to which this class is taught: _____

39. Number of weeks this class is taught: _____

40. Number of in-class clock hours spent teaching this class during one home economics period within one full week of school: _____

Column A		HOME ECONOMICS CLASS CONTENT TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		41. GROOMING AND PERSONAL CARE			
		(a) Complexion and hair care.			
		(b) Cleanliness habits.			
		(c) Other (specify) _____			
		42. CLOTHING AND TEXTILES			
		(a) Color, line, and design			
		(b) Clothing selection and buying . .			
		(c) Storage, care, and repair of clothing.			
		(d) Use of textiles			
		(e) Use and care of sewing tools. . .			
		(f) Operation of sewing machine . . .			
		(g) Pattern layout.			
		(h) Pattern marking			
		(i) Clothing construction			
		(j) Clothing alterations.			
		(k) Tailoring			
		(l) Other (specify) _____			
		43. FOODS AND NUTRITION			
		(a) Nutrition			
		(b) Meal planning			
		(c) Cultural foods.			
		(d) Attitudes affecting food choices.			
		(e) Food preservation			
		(f) Food selection and buying			
		(g) Food storage.			
		(h) Food preparation.			
		(i) Convenience foods			
		(j) Entertaining, table setting and service, manners.			
		(k) Other (specify) _____			
		44. FAMILY HEALTH AND HOME NURSING			
		(a) Physical health and diseases. . .			
		(b) Health and safety habits.			
		(c) First aid			
		(d) Mental and emotional health . . .			
		(e) Other (specify) _____			
		45. HOME MANAGEMENT			
		(a) Values and goals.			
		(b) Decision-making			
		(c) Resources (time, money, energy) .			
		(d) Work simplification (time and motion)			
		(e) Other (specify) _____			
		46. CONSUMER EDUCATION			
		(a) Saving and spending (e.g., habits, budget, banking). . . .			
		(b) Investments			
		(c) Credit and installment buying . .			
		(d) Insurance			
		(e) Consumer responsibilities (e.g., tags, labels, advertising). . .			
		(f) Consumer protection (e.g., laws).			
		(g) Role of the consumer.			
		(h) Other (specify) _____			

PLEASE COMPLETE REVERSE SIDE OF PAGE

Column A		HOME ECONOMICS CLASS ACTIVITY TIME GUIDE	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		47. CAREERS AND WORLD OF WORK			
		(a) Occupational opportunities			
		(b) Careers in home economics			
		(c) Work interests and attitudes			
		(d) Employee relationships			
		(e) Self-assessment			
		(f) Job qualifications and skills			
		(g) Educational requirements			
		(h) Income and salary			
		(i) Dual role of homemaker			
		(j) Other (specify) _____			
		48. HOUSING AND HOME FURNISHINGS			
		(a) Housing needs			
		(b) Home ownership			
		(c) Home maintenance and care			
		(d) Housing alternatives (e.g., apartments, mobile homes)			
		(e) Making floor plans			
		(f) Color, line, and design			
		(g) Room arrangement			
		(h) Furniture types and styles			
		(i) Buying furnishings			
		(j) Care of furnishings			
		(k) Household accessories (e.g., linens, tableware)			
		(l) Household equipment			
		(m) Refinishing furniture			
		(n) Other (specify) _____			
		49. FAMILY LIVING			
		(a) Male and female roles			
		(b) Understanding self			
		(c) Understanding family members			
		(d) Understanding friends			
		(e) Dating			
		(f) Mate selection and engagement			
		(g) Marriage (e.g., weddings, customs, laws)			
		(h) Human reproduction and development			
		(i) Family life cycle			
		(j) Financing a family			
		(k) Crisis situations (e.g., drugs, divorce, alcoholism)			
		(l) Resolving conflicts			
		(m) Unmarried or single living			
		(n) Relating the family system to other social systems			
		(o) Other (specify) _____			
		50. CHILD CARE AND DEVELOPMENT			
		(a) Babysitting			
		(b) Play things and space			
		(c) Prenatal care and development			
		(d) Financing a child			
		(e) Infant and child care			
		(f) Developmental ages and stages			
		(g) Physical development			
		(h) Mental development			
		(i) Emotional development			
		(j) Social development			
		(k) Basic needs of children			
		(l) Observing children			
		(m) Other (specify) _____			
		51. ECOLOGY (CONSERVATION OF NATURAL RESOURCES)			
		(a) Air, land, people			
		(b) Glass, paper, water			
		(c) Other (specify) _____			
		52. LEISURE TIME CRAFTS			
		(a) Knitting			
		(b) Macramé			
		(c) Needlework			
		(d) Tie dyeing			
		(e) Other (specify) _____			
		53. OTHER (specify) _____			
		(a) _____			
		(b) _____			

PLEASE COMPLETE ONE FOR EACH CLASS THAT YOU TEACH.

CLASS V

37. Class title: _____
(Omit occupational classes)

38. Number of periods to which this class is taught: _____

39. Number of weeks this class is taught _____

40. Number of in-class clock hours spent teaching this class during one home economics period within one full week of school _____

Column A		HOME ECONOMICS CLASS CONTENT TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		41. GROOMING AND PERSONAL CARE			
		(a) Complexion and hair care.			
		(b) Cleanliness habits.			
		(c) Other (specify) _____			
		42. CLOTHING AND TEXTILES			
		(a) Color, line, and design			
		(b) Clothing selection and buying . .			
		(c) Storage, care, and repair of clothing.			
		(d) Use of textiles			
		(e) Use and care of sewing tools. . .			
		(f) Operation of sewing machine . . .			
		(g) Pattern layout.			
		(h) Pattern marking			
		(i) Clothing construction			
		(j) Clothing alterations.			
		(k) Tailoring			
		(l) Other (specify) _____			
		43. FOODS AND NUTRITION			
		(a) Nutrition			
		(b) Meal planning			
		(c) Cultural foods.			
		(d) Attitudes affecting food choices.			
		(e) Food preservation			
		(f) Food selection and buying			
		(g) Food storage.			
		(h) Food preparation.			
		(i) Convenience foods			
		(j) Entertaining, table setting and service, manners.			
		(k) Other (specify) _____			
		44. FAMILY HEALTH AND HOME NURSING			
		(a) Physical health and diseases. . .			
		(b) Health and safety habits.			
		(c) First aid			
		(d) Mental and emotional health . . .			
		(e) Other (specify) _____			
		45. HOME MANAGEMENT			
		(a) Values and goals.			
		(b) Decision-making			
		(c) Resources (time, money, energy) .			
		(d) Work simplification (time and motion)			
		(e) Other (specify) _____			
		46. CONSUMER EDUCATION			
		(a) Saving and spending (e.g., habits, budget, banking). . . .			
		(b) Investments			
		(c) Credit and installment buying . .			
		(d) Insurance			
		(e) Consumer responsibilities (e.g., tags, labels, advertising). . .			
		(f) Consumer protection (e.g., laws).			
		(g) Role of the consumer.			
		(h) Other (specify) _____			

PLEASE COMPLETE REVERSE SIDE OF PAGE

Column A		HOME ECONOMICS CLASS CONTENT TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		47. CAREERS AND WORLD OF WORK (a) Occupational opportunities (b) Careers in home economics (c) Work interests and attitudes (d) Employee relationships (e) Self-assessment (f) Job qualifications and skills (g) Educational requirements (h) Income and salary (i) Dual role of homemaker (j) Other (specify) _____			
		48. HOUSING AND HOME FURNISHINGS (a) Housing needs (b) Home ownership (c) Home maintenance and care (d) Housing alternatives (e.g., apartments, mobile homes) (e) Making floor plans (f) Color, line, and design (g) Room arrangement (h) Furniture types and styles (i) Buying furnishings (j) Care of furnishings (k) Household accessories (e.g., linens, tableware) (l) Household equipment (m) Refinishing furniture (n) Other (specify) _____			
		49. FAMILY LIVING (a) Male and female roles (b) Understanding self (c) Understanding family members (d) Understanding friends (e) Dating (f) Mate selection and engagement (g) Marriage (e.g., weddings, customs, laws) (h) Human reproduction and development (i) Family life cycle (j) Financing a family (k) Crisis situations (e.g., drugs, divorce, alcoholism) (l) Resolving conflict (m) Unmarried or single living (n) Relating the family system to other social systems (o) Other (specify) _____			
		50. CHILD CARE AND DEVELOPMENT (a) Babysitting (b) Play things and space (c) Prenatal care and development (d) Financing a child (e) Infant and child care (f) Developmental ages and stages (g) Physical development (h) Mental development (i) Emotional development (j) Social development (k) Basic needs of children (l) Observing children (m) Other (specify) _____			
		51. ECOLOGY (CONSERVATION OF NATURAL RESOURCES) (a) Air, land, people (b) Glass, paper, water (c) Other (specify) _____			
		52. LEISURE TIME CRAFTS (a) Knitting (b) Macramé (c) Needlework (d) Tie dyeing (e) Other (specify) _____			
		53. OTHER (specify) _____ (a) _____ (b) _____			

PLEASE COMPLETE ONE FOR EACH CLASS THAT YOU TEACH.

CLASS VI

37. Class title: _____
(Omit occupational classes)

38. Number of periods to which this class is taught: _____

39. Number of weeks this class is taught: _____

40. Number of in-class clock hours spent teaching this class during one home economics period within one full week of school: _____

Column A		HOME ECONOMICS CLASS CONTENT TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		41. GROOMING AND PERSONAL CARE			
		(a) Complexion and hair care.			
		(b) Cleanliness habits.			
		(c) Other (specify) _____			
		42. CLOTHING AND TEXTILES			
		(a) Color, line, and design			
		(b) Clothing selection and buying . .			
		(c) Storage, care, and repair of clothing.			
		(d) Use of textiles			
		(e) Use and care of sewing tools. . .			
		(f) Operation of sewing machine . . .			
		(g) Pattern layout.			
		(h) Pattern marking			
		(i) Clothing construction			
		(j) Clothing alterations.			
		(k) Tailoring			
		(l) Other (specify) _____			
		43. FOODS AND NUTRITION			
		(a) Nutrition			
		(b) Meal planning			
		(c) Cultural foods.			
		(d) Attitudes affecting food choices.			
		(e) Food preservation			
		(f) Food selection and buying			
		(g) Food storage.			
		(h) Food preparation.			
		(i) Convenience foods			
		(j) Entertaining, table setting and service, manners.			
		(k) Other (specify) _____			
		44. FAMILY HEALTH AND HOME NURSING			
		(a) Physical health and diseases. . .			
		(b) Health and safety habits.			
		(c) First aid			
		(d) Mental and emotional health . . .			
		(e) Other (specify) _____			
		45. HOME MANAGEMENT			
		(a) Values and goals.			
		(b) Decision-making			
		(c) Resources (time, money, energy) .			
		(d) Work simplification (time and motion)			
		(e) Other (specify) _____			
		46. CONSUMER EDUCATION			
		(a) Saving and spending (e.g., habits, budget, banking). . . .			
		(b) Investments			
		(c) Credit and installment buying . .			
		(d) Insurance			
		(e) Consumer responsibilities (e.g., tags, labels, advertising). . .			
		(f) Consumer protection (e.g., laws).			
		(g) Role of the consumer.			
		(h) Other (specify) _____			

PLEASE COMPLETE REVERSE SIDE OF PAGE

Column A		HOME ECONOMICS CLASS CONTENT TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		47. CAREERS AND WORLD OF WORK (a) Occupational opportunities (b) Careers in home economics (c) Work interests and attitudes (d) Employee relationships (e) Self-assessment (f) Job qualifications and skills (g) Educational requirements (h) Income and salary (i) Dual role of homemaker (j) Other (specify) _____			
		48. HOUSING AND HOME FURNISHINGS (a) Housing needs (b) Home ownership (c) Home maintenance and care (d) Housing alternatives (e.g., apartments, mobile homes) (e) Making floor plans (f) Color, line, and design (g) Room arrangement (h) Furniture types and styles (i) Buying furnishings (j) Care of furnishings (k) Household accessories (e.g., linens, tableware) (l) Household equipment (m) Refinishing furniture (n) Other (specify) _____			
		49. FAMILY LIVING (a) Male and female roles (b) Understanding self (c) Understanding family members (d) Understanding friends (e) Dating (f) Mate selection and engagement (g) Marriage (e.g., weddings, customs, laws) (h) Human reproduction and development (i) Family life cycle (j) Financing a family (k) Crisis situations (e.g., drugs, divorce, alcoholism) (l) Resolving conflict (m) Unmarried or single living (n) Relating the family system to other social systems (o) Other (specify) _____			
		50. CHILD CARE AND DEVELOPMENT (a) Babysitting (b) Play things and space (c) Prenatal care and development (d) Financing a child (e) Infant and child care (f) Developmental ages and stages (g) Physical development (h) Mental development (i) Emotional development (j) Social development (k) Basic needs of children (l) Observing children (m) Other (specify) _____			
		51. ECOLOGY (CONSERVATION OF NATURAL RESOURCES) (a) Air, land, people (b) Glass, paper, water (c) Other (specify) _____			
		52. LEISURE TIME CRAFTS (a) Knitting (b) Macramé (c) Needlework (d) Tie dyeing (e) Other (specify) _____			
		53. OTHER (specify) _____ (a) _____ (b) _____			

PLEASE COMPLETE ONE FOR EACH CLASS THAT YOU TEACH.

CLASS VII

37. Class title: _____
(Omit occupational classes)

38. Number of periods to which this class is taught: _____

39. Number of weeks this class is taught: _____

40. Number of in-class clock hours spent teaching this class during one home economics period within one full week of school: _____

Column A		HOME ECONOMICS CLASS CONTENT TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		41. GROOMING AND PERSONAL CARE			
		(a) Complexion and hair care.			
		(b) Cleanliness habits.			
		(c) Other (specify) _____			
		42. CLOTHING AND TEXTILES			
		(a) Color, line, and design			
		(b) Clothing selection and buying . .			
		(c) Storage, care, and repair of clothing.			
		(d) Use of textiles			
		(e) Use and care of sewing tools. . .			
		(f) Operation of sewing machine . . .			
		(g) Pattern layout.			
		(h) Pattern marking			
		(i) Clothing construction			
		(j) Clothing alterations.			
		(k) Tailoring			
		(l) Other (specify) _____			
		43. FOODS AND NUTRITION			
		(a) Nutrition			
		(b) Meal planning			
		(c) Cultural foods.			
		(d) Attitudes affecting food choices.			
		(e) Food preservation			
		(f) Food selection and buying			
		(g) Food storage.			
		(h) Food preparation.			
		(i) Convenience foods			
		(j) Entertaining, table setting and service, manners.			
		(k) Other (specify) _____			
		44. FAMILY HEALTH AND HOME NURSING			
		(a) Physical health and diseases. . .			
		(b) Health and safety habits.			
		(c) First aid			
		(d) Mental and emotional health . . .			
		(e) Other (specify) _____			
		45. HOME MANAGEMENT			
		(a) Values and goals.			
		(b) Decision-making			
		(c) Resources (time, money, energy) .			
		(d) Work simplification (time and motion)			
		(e) Other (specify) _____			
		46. CONSUMER EDUCATION			
		(a) Saving and spending (e.g., habits, budget, banking). . . .			
		(b) Investments			
		(c) Credit and installment buying . .			
		(d) Insurance			
		(e) Consumer responsibilities (e.g., tags, labels, advertising). . .			
		(f) Consumer protection (e.g., laws).			
		(g) Role of the consumer.			
		(h) Other (specify) _____			

PLEASE COMPLETE REVERSE SIDE OF PAGE

Column A		HOME ECONOMICS CLASS CONTEST TIME CHART	Column B		
Number of In-class Clock Hours per Content Category		Content Category and Descriptive Aspects	Relative Amount of Time on Descriptive Aspects		
Spent	Anticipate Spending		None	Some	Lots
		47. CAREERS AND WORLD OF WORK (a) Occupational opportunities (b) Careers in home economics (c) Work interests and attitudes (d) Employee relationships (e) Self-assessment (f) Job qualifications and skills (g) Educational requirements (h) Income and salary (i) Dual role of homemaker (j) Other (specify) _____			
		48. HOUSING AND HOME FURNISHINGS (a) Housing needs (b) Home ownership (c) Home maintenance and care (d) Housing alternatives (e.g., apartments, mobile homes) (e) Making floor plans (f) Color, line, and design (g) Room arrangement (h) Furniture types and styles (i) Buying furnishings (j) Care of furnishings (k) Household accessories (e.g., linens, tableware) (l) Household equipment (m) Refinishing furniture (n) Other (specify) _____			
		49. FAMILY LIVING (a) Male and female roles (b) Understanding self (c) Understanding family members (d) Understanding friends (e) Dating (f) Mate selection and engagement (g) Marriage (e.g., weddings, customs, laws) (h) Human reproduction and development (i) Family life cycle (j) Financing a family (k) Crisis situations (e.g., drugs, divorce, alcoholism) (l) Resolving conflict (m) Unmarried or single living (n) Relating the family system to other social systems (o) Other (specify) _____			
		50. CHILD CARE AND DEVELOPMENT (a) Babysitting (b) Play things and space (c) Prenatal care and development (d) Financing a child (e) Infant and child care (f) Developmental ages and stages (g) Physical development (h) Mental development (i) Emotional development (j) Social development (k) Basic needs of children (l) Observing children (m) Other (specify) _____			
		51. ECOLOGY (CONSERVATION OF NATURAL RESOURCES) (a) Air, land, people (b) Glass, paper, water (c) Other (specify) _____			
		52. LEISURE TIME CRAFTS (a) Knitting (b) Macramé (c) Needlework (d) Tie dyeing (e) Other (specify) _____			
		53. OTHER (specify) _____ (a) _____ (b) _____			

BIBLIOGRAPHY

BIBLIOGRAPHY

Ack, Marvin. "Is Education Relevant?" Journal of Home Economics, LXII (November, 1970), 647-51.

American Association of School Administrators. Who's a Good Teacher? Washington, D. C.: National School Boards Association, 1961.

Anderson, G. Lester. "Theories of Behavior and Some Curriculum Issues," Educational Psychology: A Book of Readings, ed. Arthur P. Coladarci. New York: The Dryden Press, Inc., 1955.

Anderson, Vernon E. Principles and Procedures of Curriculum Improvement. 2d ed. New York: The Ronald Press Company, 1965.

Astin, A. W. The College Environment. Washington, D. C.: American Council on Education, 1968.

Barker, Roger G. Ecological Psychology: Concepts and Methods for Studying the Environment of Human Behavior. Stanford: Stanford University Press; 1968.

_____. "Explorations in Ecological Psychology," American Psychologist, XX (January, 1965), 1-14.

Barker, Roger G., and Paul V. Gump. Big School, Small School: High School Size and Student Behavior. Stanford: Stanford University Press; 1964.

Beller, E. Kuno. "Research on Organized Programs of Early Education," Second Handbook of Research on Teaching, ed. Robert M. W. Travers. Chicago: Rand McNally & Co., 1973, 530-600.

Belok, Michael V. "Teacher Freedom--How Much?" The Journal of Teacher Education, XVI (December, 1965), 450-52.

Berman, Louise M. New Priorities in the Curriculum. Columbus, Ohio: Charles E. Merrill Publishing Company, 1968.

Brickell, Henry M. Organizing New York State for Educational Change. Albany, New York: New York State Department of Education, 1961.

Buckley, Walter. Sociology and Modern Systems Theory. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967.

Burdin, Joel L., and Margaret T. Reagan (eds.). Performance-Based Certification of School Personnel. Washington, D. C.: ERIC Clearinghouse on Teacher Education and the Association of Teacher Educators, 1971.

Burrup, Percy E. The Teacher and the Public School System. 2d ed. New York: Harper & Row, Publishers, 1967.

Committee on Philosophy and Objectives of Home Economics. Home Economics New Directions: A Statement of Philosophy and Objectives. Dorothy D. Scott, chairman. Washington, D. C.: American Home Economics Association, 1959.

Compton, Norma H., and Olive A. Hall. Foundations of Home Economics Research: A Human Ecology Approach. Minneapolis: Burgess Publishing Company, 1972.

Coon, Beulah I. Home Economics in the Public Secondary Schools: A Report of a National Study. Washington, D. C.: U. S. Government Printing Office, 1962.

Deutsch, Morton. "Field Theory in Social Psychology," Handbook of Social Psychology. Vol. I. Theory and Method, ed. Gardner Lindzey. Reading, Mass.: Addison-Wesley Publishing Company, Inc., 1954.

Dobry, Alberta, and Norma Bobbitt. "The Development and Implementation of a Curriculum Approach for the Conceptual Reorientation of Secondary Home Economics Programs with Emphasis on Meeting Needs of Special Groups: Phase I." Unpublished report, Michigan State University, 1972.

Downie, N. M., and R. W. Heath. Basic Statistical Methods. 2d ed. New York: Harper & Row, Publishers, 1965.

Eastmond, Jefferson N. The Teacher and School Administration. Boston: Houghton Mifflin Company, 1959.

Ellis, Charles M. "Needs and Deficiencies of the Temporarily Certified Teacher in Florida." Unpublished Doctor's dissertation, University of Florida, 1955.

Erickson, Edsel L., Clifford E. Bryan, and Lewis Walker. "The Educability of Dominant Groups," Phi Delta Kappan, LIII (January, 1972), 319-21.

Fleck, Henrietta. Toward Better Teaching of Home Economics. New York: The Macmillan Company, 1968.

Foster, Herbert L. "The Inner-City Teacher and Violence: Suggestions for Action Research," Phi Delta Kappan, L (November, 1968), 172-75.

Gerlock, Donald E. "An Analysis of Administrators' Evaluations of Selected Professionally and Provisionally Certified Secondary School Teachers," The Journal of Teacher Education, XVI (June, 1965), 240-41.

Glass, Gene V., and Julian C. Stanley. Statistical Methods in Education and Psychology. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970.

Gray, Horace B. "A Study of the Outcomes of Pre-service Education Associated with Three Levels of Teacher Certification." Unpublished Doctor's dissertation, The Florida State University, 1962.

Gulliver, P. H. "Age Differentiation," International Encyclopedia of the Social Sciences. Vol. I, ed. David L. Sills. New York: The Macmillan Company & The Free Press, 1968, 157-62.

Hall, Calvin S., and Gardner Lindzey. Theories of Personality. 2d ed. New York: John Wiley & Sons, Inc., 1970.

Hall, Olive A., and Beatrice Paolucci. Teaching Home Economics. 2d ed. New York: John Wiley & Sons, Inc., 1970.

Hass, Glen. "Who Should Plan the Curriculum?" Educational Leadership, XIX (October, 1961), 2-4, 39.

Hays, William L. Statistics for Psychologists. New York: Holt, Rinehard and Winston, 1963.

Hill, Alberta D. "The Business of Teacher Education--Teaching Teachers," Home Economics Teacher Education--the State of the Art. Washington, D. C.: American Home Economics Association, 1970, 1-4.

Hurt, Mary Lee, and Margaret Alexander. "New Challenges for Home Economics Educators," Journal of Home Economics. LXI (December, 1969), 771-75.

Johansen, John H. "An Investigation of the Relationships between Teachers' Perceptions of Authoritative Influences in Local Curriculum Decision-Making and Curriculum Implementation." Unpublished Doctor's dissertation, Northwestern University, 1965.

Johnson, Lydia, and Mary R. Swope. "Facts about Curricula in Home Economics in Institutions of Higher Education," Journal of Home Economics, LXIV (February, 1972), 11-17.

Koontz, J. E. "A Study of the Relationship between the Problems of Arkansas Secondary School Teachers in Certain Selected Schools and the Factors of Professional Preparation, Teaching Experience, the Sex of the Teacher, and the Size of the School System." Unpublished Doctor's dissertation, University of Arkansas, 1963.

Leeper, Robert R. (ed.). Curricular Concerns in a Revolutionary Era. Washington, D. C.: Association for Supervision and Curriculum Development, 1971.

Levie, W. Howard. "The Analysis and Application of Media," Second Handbook of Research on Teaching, ed. Robert M. W. Travers. Chicago: Rand McNally & Company, 1973, 858-82.

Livingston, Wilbur D. "An Evaluation of Requirements for the Certification of Secondary School Teachers." Unpublished Doctor's dissertation, University of South Carolina, 1957.

McGrath, Earl J. "The Changing Mission of Home Economics," Journal of Home Economics, LX (February, 1968), 85-92.

_____. "The Imperatives of Change for Home Economics," Journal of Home Economics, LX (September, 1968), 505-11.

McKinney, Carolyn Dommer. "Professional Role Perceptions of Michigan Home Economics Teachers." Unpublished Doctor's dissertation, Michigan State University, 1972.

McLeish, John. Teachers' Attitudes: A Study of National and Other Differences. Cambridge: Cambridge Institute of Education, 1969.

Metcalf, Lawrence E., and Maurice P. Hunt. "Relevance and the Curriculum," Phi Delta Kappan, LI (March, 1970), 358-61.

Minot, Marion E. "To Prepare the Beginning Teacher as a Specialist," Home Economics Teacher Education--the State of the Art. Washington, D. C.: American Home Economics Association, 1970, 12-15.

Moeller, Gerald H. "Bureaucracy and Teachers' Sense of Power," Administrator's Notebook, XI (November, 1962).

National Education Association, Research Division. First-Year Teachers Evaluate Their Preparation for Teaching. Washington, D. C.: National Education Association, 1956.

National Education Association, Research Division. The Post-war Struggle to Provide Competent Teachers. Washington, D. C.: National Education Association, 1957.

Ostler, Ruth-Ellen. "A Survey of Beliefs and Practices Relative to Teaching Home Economics in New York State." Part 1. Unpublished Doctor's dissertation, Syracuse University, 1967.

Overholt, George, and Don Martin. "The Vendetta in the Schools: An Exercise in Ethnocentrism," Phi Delta Kappan, LIV (February, 1973), 409-10.

Pace, C. R. Analyses of a National Sample of College Environments. Final Report, Cooperative Research Project No. 50764. Washington, D. C.: Office of Education, U. S. Department of Health, Education, and Welfare, 1967.

Parker, John L., and Richard J. Withycombe. "Mediation in an Alternate Teacher Training Program," Phi Delta Kappan, LIV (March, 1973), 483-85.

Peterson, Warren A. "Age, Teacher's Role, and the Institutional Setting," Contemporary Research on Teacher Effectiveness, eds. Bruce J. Biddle, and William J. Ellena. New York: Holt, Rinehart and Winston, 1964, 264-315.

Prescott, E., E. Jones, and S. Kritchevsky. "Group Day Care as a Child-Rearing Environment:" Report to Children's Bureau, U. S. Department of Health, Education, and Welfare. Pasadena, Calif: Pacific Oaks College, 1967.

The Principals Look at the Schools. A Status Study of Selected Instructional Practices, A Working Paper Prepared for the Project on the Instructional Program of the Public Schools. Washington, D. C.: The National Education Association, 1962.

Ray, Elizabeth M. "Summary--The Art of the Possible," Home Economics Teacher Education--the State of the Art. Washington, D. C.: American Home Economics Association, 1970, 54-56.

Reichmann, W. J. Use and Abuse of Statistics. A Pelican Book. Baltimore: Penguin Books, Inc., 1964.

Robinson, Donald W. "Alternative Schools: Challenge to Traditional Education?" Phi Delta Kappan, LI (March, 1970), 374-75.

_____. "Alternate Schools: Do They Promise System Reform?" Phi Delta Kappan, LIV (March, 1973), 433, 443.

_____. "Alternate Schools: Is the Old Order Really Changing?" Educational Leadership, XXVIII (March, 1971), 604-607.

Ryans, David G. Characteristics of Teachers: Their Description, Comparison, and Appraisal. Washington, D. C.: American Council on Education, 1960.

Sasse, Edward B. "Teacher and Administrator Participation in Decision Making and Curriculum Development." Unpublished Doctor's dissertation, The University of Wisconsin, 1966.

Sax, Gilbert. Empirical Foundations of Educational Research. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1968.

Schwab, Joseph J. The Practical: A Language for Curriculum. Auxiliary Series, Schools for the 70's. Washington, D. C.: National Education Association Publications, 1970.

Sharp, Marian. "Factors Related to Participation of 121 Juniors in Extra-Curricular Activities." Unpublished Master's thesis, Ohio State University, 1956.

Shuster, Albert H., Jr. "A Study of the Advantages and Disadvantages of the Collegiate Certificate in Virginia." Unpublished Doctor's dissertation, University of Virginia, 1955.

Simpson, Elizabeth J. "Challenges in Curriculum Development in Home Economics." Journal of Home Economics, LX (December, 1968), 767-73.

Sincock, William R. "Teacher Reaction to Certain Practices in Curriculum Study Programs." Unpublished Doctor's dissertation, University of Chicago, 1959.

Smith, B. Othanel (ed.). Research in Teacher Education: A Symposium. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971.

Smith, B. Othanel, William O. Stanley, and J. Harlan Shores. Fundamentals of Curriculum Development. New York: World Book Company, 1950.

Steidle, Walter E. "The Preparation, Certification, and Teaching Employment of Graduates of Science Education Programs in Ohio, 1961-1963." Unpublished Doctor's dissertation, The Ohio State University, 1964.

Stephens, J. M. Educational Psychology: The Study of Educational Growth. rev. ed. New York: Henry Holt and Company, 1956.

Stiles, Lindley J. "Certification and Preparation of Educational Personnel in Massachusetts," Phi Delta Kappan, L (April, 1969), 477-80.

Stogner, Myrtle D. "Challenges for Home Economics Teachers in Secondary Education." New Directions for Vocational Home Economics. Washington, D. C.: American Vocational Association, April, 1971, 21-23.

Stuart, Alan. Basic Ideas of Scientific Sampling. Griffin's Statistical Monographs and Courses No. 4. New York: Hafner Publishing Company, 1968.

Taba, Hilda. Curriculum Development: Theory and Practice. New York: Harcourt, Brace & World, Inc., 1962.

Tanner, Daniel. Secondary Curriculum: Theory and Development. New York: The Macmillan Company, 1971.

Teacher Education Study Group. Teacher Demand and Supply in Michigan: 1954-1970. Ann Arbor, Michigan: J. W. Edwards, Publisher, Inc., 1956.

Turner, Richard L. "Conceptual Foundations of Research in Teacher Education," Research in Teacher Education: A Symposium, ed. B. Othanel Smith. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971, 10-36.

Turner, Richard L., and N. A. Fattu. Problem Solving Proficiency among Elementary Teachers: I: The Development of Criteria. Monograph of the Institute of Educational Research. Bloomington: Indiana University, May, 1960.

U.S. Department of Commerce, Bureau of the Census. The U. S. Book of Facts, Statistics & Information for 1970. New York: Grosset & Dunlap, 1969.

Wattenberg, William W. "Youth Education: A Psychophysical Perspective," Youth Education: Problems/Perspectives/Promises. Prepared by the ASCD 1968 Yearbook Committee. Washington, D. C.: Association for Supervision and Curriculum Development, NEA, 1968.

Woodworth, Robert S. Dynamics of Behavior. New York: Holt, Rinehart and Winston, 1958.

Ylvisaker, Paul N. "Beyond '72: Strategies for Schools," Saturday Review, LV (December, 1972), 33-34.